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Johnston Atoll Plutonium Contaminated Soil Cleanup Project

3rd Quarterly Report
7 Feb 94—30 Apr 94

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13. ABSTRACT (Maximum 200 words)

TMA/Eberline is the prime contractor for the Defense Nuclear Agency (DNA), responsible for the operation and maintenance of the Johnston Atoll Plutonium Contaminated Soil Cleanup Project. During this production period, the Scope of Work included movement of soil to and from the plant, processing contaminated soil through the Segmented Gate System (SGS) and Soil Washing System, packaging of waste soil for shipment, identification and implementation of process improvements, data collection and validation, and compliance with all applicable regulations governing environmental safety and health. The SGS utilizes arrays of sensitive radiation detectors coupled with sophisticated computer software to segregate contaminated soil from a moving feed supply on conveyor belts. Contaminated soil is diverted to a "hot" path for plutonium particles greater than 5000 Becquerels or to a supplemental soil washing process designed to remove dispersed low level contamination from a soil faction consisting of very small particles. Low to intermediate levels of contamination are removed from the soil to meet DNA's criteria for unrestricted use of less than 500 Becquerels per kilogram of soil, with no "hot" particles. The low level concentrate is expected to be packaged for shipment to an approved defense waste disposal site.

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SUMMARY

The Johnston Atoll Plutonium Soil Cleanup Project (JAPCSCP) is a partnership between the Defense Nuclear Agency (DNA) and Thermo Analytical Inc. (TMA), whose goal is the environmental restoration of a 24 acre area of Johnston Atoll. This area was contaminated with Plutonium during atmospheric nuclear testing in 1962. The project utilizes a combination of innovative radiation measurement technology and proven mining processes to identify and segregate Plutonium particles dispersed in coral sand. This project will benefit island residents and the environment by removing a radioactive hazard and by restoring valuable land to beneficial use.

TMA has operated the JAPCSCP under a prime contract to DNA since 06 August 1993. This contract calls for the processing of 100,000 metric tons of radioactively contaminated soil. This report summarizes JAPCSCP production, plant modifications and maintenance activities for the third quarter of the contract period.

The third quarter of the contract consisted of the period from 07 February 1994 until 30 April 1994. During this period, a total of 10,154 metric tons of soil were processed. Authorized delays for the quarter totaled 1,611 sorter hours, or 402.75 regular hours, resulting in an adjusted production quota of 10,051 metric tons for this reporting period. The 103 metric tons in excess of quota processed this quarter brings the project to a total of 1,320 metric tons ahead of schedule.

CONVERSION TABLE

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

MULTIPLY ----------> BY ----------> TO OBTAIN
TO OBTAIN <---------- BY <---------- DIVIDE

cm	3.2808 E -2	ft
m^2	3.861 E -7	sq mile
cm^3	1.602 E -2	ft^3/lb
g/cm^3	62.43	lb/ft^3
foot	3.048 000 X E -1	meter (m)
inch	2.540 000 X E -2	meter (m)
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)
liters/min	15.851	gal/hr
ounce	2.834 952 X E -2	kilogram (kg)
curie	3.700 000 X E 1	*giga Becquerel (GBq)
curies	3.7 E 10	dis/sec
curies	2.22 E 12	dis/min
curies	E 12	picocuries
Becquerel	2.703 E -11	curies
Becquerel	27.03	picocuries
rad (radiation dose absorbed)	1.000 000 X E -2	*Gray (Gy)

*The Gray (GY) is the SI unit of absorbed radiation.

TABLE OF CONTENTS

Section			Page
	SUMMARY		iii
	CONVERSION TABLE		iv
1	INTRODUCTION		1
	1.1	GENERAL.	1
	1.2	SCOPE.	1
	1.3	OBJECTIVES.	1
	1.4	PROJECT STAFF.	1
	1.4.1	Personnel Assigned During This Period	2
	1.4.2	Project Management.	2
2	PROJECT SCOPE		3
	2.1	STATEMENT OF WORK.	3
	2.2	GOVERNMENT FURNISHED SERVICES.	3
	2.3	MODIFICATION TO STATEMENT OF WORK.	3
3	PROJECT MANAGEMENT		4
	3.1	TMA PROJECT MANAGEMENT	4
	3.2	DEFENSE NUCLEAR AGENCY.	4
	3.3	TMA PERSONNEL ON-SITE	4
4	QUALITY CONTROL SAMPLING		5
	4.1	QUALITY CONTROL SAMPLING.	5
	4.2	DIRECT SURVEYS.	5
	4.3	GRAB SAMPLING.	5
5	SAFETY AND HEALTH		7
	5.1	SITE SAFETY AND HEALTH PROGRAM.	7
	5.2	AIRBORNE RADIOACTIVITY MONITORING.	7
	5.3	ROUTINE CONTAMINATION SURVEYS.	7
	5.4	PERSONNEL PROTECTIVE EQUIPMENT.	8
	5.5	PERSONNEL MONITORING.	8
	5.6	RECORDS AND REPORTS.	8
6	PLANT MODIFICATIONS AND MAINTENANCE		9
	6.1	PLANT MODIFICATIONS.	9
	6.1.1	Safety Modifications.	9
	6.1.2	Mechanical Modifications.	9

TABLE OF CONTENTS (Continued)

Section			Page
	6.1.3	Electrical Maintenance.	10
	6.1.4	Routine Preventive Maintenance.	10
6.2		TESTING AND SPECIAL EVOLUTIONS.	10
	6.2.1	Settling Pond Sampling.	10
	6.2.2	Settling Pond Sediment Removal	11
	6.2.3	Reprocessing of Distributed Contamination Material.	11
6.3		DOWN TIME.	11
6.4		DAILY OPERATIONAL CHECKS.	12
7		SOIL PRODUCTION	13
7.1		PRODUCTION TOTALS.	13
7.2		AUTHORIZED DELAYS.	13
7.3		PRODUCTION VERSUS QUOTA.	13
7.4		PRODUCTION RECORDS.	14
7.5		SUMMARY.	15

Attachments

1	STATEMENT OF WORK	16
2	GOVERNMENT FURNISHED SERVICES	24

Appendices

A	Quality Control Sample Results	A-1
B	Air Sampling Results	B-1
C	Soil Production Data	C-1
D	Acronyms and Symbols	D-1
E	Definitions	E-1

SECTION 1
INTRODUCTION

1.1 GENERAL.

The third quarterly report covers the period of 07 February 1994 to 30 April 1994. The report summarizes soil processing operations during the quarter and outlines major plant modifications and maintenance performed during the period.

1.2 SCOPE.

TMA is the prime contractor responsible for the operation and maintenance of the Johnston Atoll Plutonium Soil Cleanup Plant. Work scope for this project includes movement of soil to and from the plant, processing of contaminated soil through the Segmented Gate Sorter System (SGSS) and the Soil Wash System, packaging of waste soil for shipment, identification and implementation of process improvements, data collection and validation, compliance with all applicable regulations governing environmental safety and health, and preparation of documents and written reports for submittal to DNA.

1.3 OBJECTIVES.

The principal TMA objective is to process contaminated soil at the JAPCSCP in a manner that ensures the production quota is met and the best possible volume reduction is achieved. Other objectives of the project include continuously upgrading plant performance and insuring compliance with all applicable federal regulations.

1.4 PROJECT STAFF.

TMA is the prime contractor to DNA for operation and maintenance of the JAPCSCP. Permanently assigned project staff consists of the following positions:

PROJECT MANAGER
SITE MANAGER
QUALITY ASSURANCE/QUALITY CONTROL TECHNICIAN
HEALTH PHYSICS TECHNICIAN (2)

PLANT SUPERVISOR
PLANT ELECTRICIAN
TECHNICAL ASSISTANT
PLANT TECHNICIANS (4)

1.4.1 Personnel Assigned During This Period.

ASSIGNED	
BROWN, M.	LAW, D.
CORDOVA, J.	LONG, D.
CORDOVA, L.	MONTANO, R.
DELOVATO, A.	PARKER, S.
DOANE, R.	RICHARDSON, J.
GRANT, R.	WOODS, J.
HELLIER, C.	

Other personnel or subcontractor personnel may be assigned periodically on a temporary basis.

1.4.2 Project Management.

Project management and contract administration is provided by TMA, Oak Ridge. On site supervision and soil processing operations are conducted by the Site Manager.

SECTION 2
PROJECT SCOPE

2.1 STATEMENT OF WORK.

DNA Contract No. DNA 001-93-C-0148, Attachment 1, Statement of Work for Plutonium Contaminated Soil Cleanup Plant Operation, 24 March 1993, contains the scope, background, and objectives of the Statement of Work. Applicable documents, requirements (tasks), plant operations maintenance, waste disposal, plant decommissioning, safety and health, and engineering drawings are topics listed in the Statement of Work.

2.2 GOVERNMENT FURNISHED SERVICES.

DNA Contract No. DNA 001-93-C-0148, Attachment 2, Government Furnished Services contains all equipment, material, and services the Government will provide to the Contractor to operate and maintain the soil cleanup plant.

2.3 MODIFICATION TO STATEMENT OF WORK.

There were no modifications to the Statement of Work during this quarter.

SECTION 3

PROJECT MANAGEMENT

3.1 TMA PROJECT MANAGEMENT.

Project Manager - R. W. Doane
Contracting Officer - D. M. Robie

3.2 DEFENSE NUCLEAR AGENCY.

Contracting Officer - Mr. D. Gonzales
Assistant CO _ Ms. C. Kofa
Project Manager _ MAJ J. Kimbrell
Project Engineer _ MAJ M. Bower
Project NCOIC _ SFC D. Richter

3.3 TMA PERSONNEL ON-SITE.

Site Manager - R. Grant
Plant Supervisor - J. Richardson
QA/QC - M. Brown
Technical Assistant - A. DeLovato
Health Physics Tech - J. Woods
Health Physics Tech - S. Parker
Electrician - J. Cordova
Plant Technician - L. Cordova
Plant Technician - D. Long
Plant Technician - D. Law
Plant Technician - R. Montano

SECTION 4
QUALITY CONTROL SAMPLING

4.1 QUALITY CONTROL SAMPLING.

Quality Control (QC) Sampling measurements verify that the soil sorting process is in control by identifying any activity levels in the clean pile which approach DNA's release criteria of 500 Bq/kg transuranic (TRU) activity, with no particles in excess of 5,000 Bq. QC measurements were made both by direct Field Instrument for the Detection Of Low Energy Radiation (FIDLER) surveys and by the collection of grab samples from the clean pile for analysis with a shielded chamber FIDLER. Grab samples collected were split, with the split sample being analyzed by on-site DNA staff for independent verification. Appendix A contains QC sample results.

4.2 DIRECT SURVEYS.

Direct FIDLER surveys of the pile were conducted at approximately two hour intervals during plant operations using a calibrated FIDLER probe and an Eberline ESP II Ratemeter. The instrument was calibrated for the detection of the 60 keV photon from AM-241 and then corrected for total TRU using a known ratio. No background in the area for this instrument is 200-300 dps. The alarm setpoint for the ESP II when performing these surveys is set at 500 dps. This setpoint is nearly a factor of 20 below the required action level, however, any particles which cause an alarm are removed from the pile. No discrete particles in excess of 5,000 Bq were detected by these surveys.

4.3 GRAB SAMPLING.

Grab samples are taken from each clean pile as it is created at approximately two hour intervals. Samples are split for independent verification by DNA and analyzed in the on-site laboratory. A pre-determined mass is weighed and sealed in a petri dish and then analyzed. Samples are counted using a Bicron FIDLER in shielded

chamber, connected to an Eberline MS-2 Mini Scaler. Sample count times were increased to 20 minutes this quarter to improve counting statistics.

As processing began for LE-1 soil, the average activity of clean pile samples increased. Eight samples were found to exceed the DNA criteria of 500 Bq/kg. In each case, a backup sample was taken upon receipt of the sample above criteria. Seven of the eight backup samples were below criteria. The pile from which two consecutive samples above criteria were taken was returned for reprocessing. The samples which exceeded 500 Bq/kg were routinely split to determine if the activity in the sample was due to the presence of a particle above 500 Bq but less than 5,000 Bq as opposed to distributed contamination; this proved to be the case in every instance.

SECTION 5
SAFETY AND HEALTH

5.1 SITE SAFETY AND HEALTH PROGRAM.

The JAPCSCP has implemented a Site Safety and Health Program which addresses the safety hazards expected on the project such as standard industrial safety practices for work around heavy equipment, heat stress and radiological safety. No hazardous chemicals are expected on the project. The primary radiological hazard expected on the project is internal exposure of workers to transuranic radioactive materials. In order to insure protection of workers and island residents, a comprehensive Air Sampling and Contamination Control Program has been put in place.

5.2 AIRBORNE RADIOACTIVITY MONITORING.

Air samples are taken continuously at various locations around the plant during operation and analyzed on site. Air samples results are compared to the Pu-239 "Y" retention class criteria provided in 10 CFR 20, Appendix B, Table 1. The Derived Air Concentration (DAC) value for this isotope and retention class is 7 E-12 μci/ml. An administrative limit of 20% of the DAC value has been established to preclude the need for tracking DAC-Hours. Any areas which exceed 20% of the DAC value shall require a respirator for entry. Appendix B contains results for air samples performed during the quarter.

5.3 ROUTINE CONTAMINATION SURVEYS.

Weekly surveys were performed in building 795 for loose surface alpha contamination. No removable alpha contamination was noted by these surveys this quarter.

5.3.1 Daily FIDLER Surveys.

A scan survey is performed daily in all office, eating, drinking, smoking, and latrine areas in or adjacent to building 795. These surveys are performed using a calibrated FIDLER Probe with an Eberline

ESP II Survey Instrument set in the PHA mode with a 60 keV widow to detect the AM-241 photon. Any activity noted which exceeds two times the background is recorded on the daily survey and remediated. No contamination was noted in the clean area this quarter.

5.4 PERSONNEL PROTECTIVE EQUIPMENT.

Personnel Protective Equipment (PPE) such as Anti-Contamination Clothing, Safety Shoes, Safety Glasses, Hard Hats and Hearing Protection are issued to each worker. Specific PPE requirements for each work situation are dictated on a case by case basis.

5.5 PERSONNEL MONITORING.

Personnel monitoring for internal exposure to Plutonium is accomplished through routine urine samples submitted to DNA to forwarded to the US Air Force Radiological Health Laboratory. All samples submitted to date have contained less than minimum detectable Plutonium activity.

All personnel monitor for contamination prior to exiting the RCA or entering building 795. There were no personnel contaminations during the quarter.

5.6 RECORDS AND REPORTS.

Survey records are maintained on file at the TMA Project Office in Building 795.

SECTION 6

PLANT MODIFICATIONS AND MAINTENANCE

6.1 PLANT MODIFICATIONS.

Numerous plant upgrades were accomplished during this quarter in order to increase plant efficiency, reliability and improve worker safety. Various tests were also run in order to optimize plant operating conditions.

6.1.1 Safety Modifications.

TMA personnel continued to make modifications to the plant intended to improve worker safety. A belt guard was added to the Unit 3 and 4 Clean Stacker Motor. Work continued on items noted in a DNA safety inspection earlier in the year. Additional platforms were installed around Units 1 and 2 Charge Bins. Strips of belting material were attached to the Clean Stacker Discharges in order to minimize nuisance dust.

6.1.2 Mechanical Modifications.

Numerous mechanical improvements were made to the physical plant during the quarter. The most significant upgrade was the addition of the Hot Particle (HP) Belt to divert material containing hot particles from Units 1 and 2 to a truck, replacing the previous barrel and roller system. This required extensive modification to the conveyor parts available, including fabrication of a new motor mount, belt hood and alteration of belt length. Side boards were installed on the five ton dump truck initially used and cracks in the bed of the truck were weld repaired to prevent leakage. Problems were encountered with the drive chain and sprocket for the HP belt, requiring frequent repair.

Other modifications accomplished during this quarter included the installation of feed material guides on the sides on Units 1 and 2 Sorter Belts and the alteration of the Diversion Chutes on Units 3 and 4 to improve the flow of material. The roller system for barrels on Units 3 and 4 was also extended.

Modifications were also performed in support of plant testing. These included varying the height of the weir gate and side walls on the spiral classifier to test classifier performance at various flow rates, and the installation and removal of a temporary diversion chute to collect day bin material for testing through Units 3 and 4.

6.1.3 Electrical Maintenance.

Electrical maintenance was performed in support of plant modifications and as needed. Underground conduit was laid to supply the new HP belt. Wiring was also done on the belt and a controller for the belt was installed. Later in the quarter a short occurred in the controller requiring that it be replaced.

6.1.4 Routine Preventive Maintenance.

A regular preventive maintenance program was followed in order to minimize plant downtime. This program included daily and weekly lubrication of plant equipment, weekly cleaning of sorter belts and gates, and a weekly gate timing check. Corrosion control activities were performed on an as required basis. Sorter gate air hoses were replaced frequently as required. These hoses experience a high failure rate due to the harsh effects of the sun.

6.2 TESTING AND SPECIAL EVOLUTIONS.

A number of special evolutions or tests were performed during the quarter.

6.2.1 Settling Pond Sampling.

Samples of the settling pond sediment were obtained for radiological analysis. A grid system was set up to reference sample locations and a crane was brought in to provide access to the center of the ponds. Samples were collected form each grid, dried and analyzed for TRU content.

6.2.2 Settling Pond Sediment Removal.

Increased frequency of operation of the soil washing system (SWS) this quarter resulted in a rapid increase in the amount of sediment accumulated in the settling ponds. It was necessary to remove some of this material in order to maintain the required production rate for the SWS. TMA's subcontractor, Arrakis Inc., visited the island to review the wet-end set up and prepare a proposal for a system to dredge the ponds on an ongoing basis. Time constraints required that some interim measure be utilized to remove sediment until a dredging system is installed. In order to accomplish this the ponds were pumped down and material was removed using a backhoe and dump truck. The material was poured onto a concrete pad to dry. Enough material was removed in this fashion to allow continued operations of the SWS. The saturated slurry removed from the ponds was extremely difficult to handle and a large number of man hours were required to clean material spilled onto the ground.

6.2.3 Reprocessing of Distributed Contamination Material.

Reprocessing of screen classifier oversize material early in the quarter yielded a recovery rate of approximately 90%. A test was devised to verify that this recovery could be attributed to the washing process of the screw classifier and not to the improved counting statistics of sorting the distributed material a second time after removal of hot particles. A temporary chute was fabricated at the Hot Particle Diversion Gate to direct distributed contamination material to drums. Approximately 25 tons of material was collected and placed in the Feed Hopper for Units 3 and 4. The material was then run through Units 3 and 4 to determine recovery rates. Less than 5% of the material was found to meet DNA release criteria, indicating that the SWS process is effectively removing distributed contamination material from the day-bin material.

6.3 DOWN TIME.

Down Time is defined as that portion of the normal 60 hour per week work schedule in which soil processing is not accomplished due to plant maintenance or repair. Normal start-up and shut-down time, time

spent on modifications or testing required by DNA or other delay time authorized by DNA does not count as down time. There were 36.1 hours or 5% devoted to plant maintenance and unscheduled repairs this quarter. The contract requires that downtime be maintained less than 40%.

6.4 DAILY OPERATIONAL CHECKS.

Daily and weekly operational checks are performed on each unit in order to verify proper function of the system. Prior to start-up each day background count levels are checked on each sorter, a source check is performed on each individual detector to verify that it is functioning and a source check is run to verify that the gate actuates at the proper time to catch a simulated hot particle. The sorter belt speed is timed twice per day during operation to verify that it is within specification. Source checks are performed again twice per day during operation. Gate actuation times are checked each week and the sorter belts are checked each week and the sorter belts are washed down to prevent a gradual increase in background which would reduce system efficiency. Semiannual electronic calibrations and efficiency determinations are also performed to insure continued safe and efficient plant performance. These operational checks, combined with the daily clean pile surveys and samples discussed earlier, serve to provide quality assurance for the program.

SECTION 7
SOIL PRODUCTION

7.1 PRODUCTION TOTALS.

During the third quarter of the contract period, 10,154 metric tons of soil were processed. This total included 7,592 metric tons of soil which met DNA release criteria and 2,562 metric tons of soil which were diverted for further processing. The average weight reduction for soil processed this quarter was 74.8%. Detailed data on soil production for the quarter is included in Appendix C.

7.2 AUTHORIZED DELAYS.

Authorized delays include halts in soil processing due to inclement weather, performance of DNA required testing or modifications and non-availability of government furnished equipment. Weekly reports listed delay periods for each week as approved by the DNA Project Engineer. Delays for each week adjusted the contract specified production quota requirement of 1,900 metric tons weekly. Each sorter-hour of authorized delay reduced the weekly quota by 7.9 metric tons. For example, if rain resulted in a full days loss of production, then 40 sorter hours would be lost (4 sorters x 10 hour). This would result in a reduction of the weekly quota by 316 metric tons (40 sorter-hours x 7.9 tons per sorter per hour). Adjusted weekly quotas are depicted in Appendix B, Table 1 and Figure 1.

A total of 40.3 days were recorded during the quarter as authorized delays. The weekly production quota was adjusted to allow for authorized delays as approved by the on-site DNA Project Engineer.

7.3 PRODUCTION VERSUS QUOTA.

Total soil processed during the third quarter exceeded the adjusted quota for the period by 104 metric tons. The total production for the contract to date exceeds the adjusted contract quota by 1,321 metric tons.

7.4 PRODUCTION RECORDS.

Appendix C contains the daily production records for the third quarter, including the Daily Work History totals and the JA Soil Cleanup Log Overall Summary Report.

These records provide day-by-day information on plant operations and performance. Data detailing mass of soil processed as recorded by the computer and by the plants mechanical weigh scales is included. Comparison of these two sources continued to indicate some discrepancies, which we believe to be caused by varying density values for the various feed material sources. All weigh scales are scheduled for recalibration early in the fourth quarter, and a new procedure shall be implemented for soil density measurements in order to correct this problem.

Information on activity diverted indicated that the distribution of particle activity (which is an indicator of particle size) remained consistent with previous quarters. The total activity diverted for the quarter increased significantly. In the first quarter, a total of 2,193 MBq of activity was diverted. In the second quarter, 652 MBq activity was diverted. In the third quarter, as LE-1 soil began to be processed, 9,239 MBq of activity was diverted. It is anticipated that these levels will continue to be processed in subsequent quarters.

This high level of activity places the SGS near the limits of its capabilities. The high number of particles present in the field cause a large number of mass diverts, which reduces our volume production. This necessitates further processing to achieve the desired reduction. Possible alternatives include reprocessing the concentrated hot particle material using a dry screening process, diverting more material to the day bin for increased use of the SWS or slowing the belt speed on the SGS to improve counting statistics. These options will be explored more thoroughly in the future.

7.5 SUMMARY.

The Plutonium Soil Cleanup Project at Johnston Atoll continued to progress during the third quarter of the contract. The malfunction of the rock crusher resulted in a significantly reduced quota for the quarter, however, repairs should be completed during the fourth quarter. Numerous tests were conducted which provided substantial assistance in fine tuning plant operations.

As we move into the fourth quarter of the Project, significant progress has been made. We have gained valuable insight on how the plant will process the higher activity LE-1 soil and made good progress on soil production in relation to quotas. Challenges remaining include returning the rock crusher to service, implementation of the pond dredging system, development of methods to further volume reduce the hot particle material generated in LE-1 and preparation of waste for final shipment. We look forward to meeting these and other challenges as we continually seek to enhance project performance on the only full scale Plutonium Contaminated Soil Cleanup Project of its kind in the world.

ATTACHMENT 1

STATEMENT OF WORK

FOR 24 MAR 93

PLUTONIUM CONTAMINATED SOIL CLEANUP PLANT OPERATION

1.0 SCOPE

The required work is to maintain and operate the Johnston Atoll (JA) plutonium contaminated soil cleanup plant. It includes hauling soil to and from the plant, processing contaminated soil, removing clean soil, packaging waste, recommending and making process improvements, developing data to demonstrate the process is under control, operating safely and efficiently, and preparing written reports. It requires development and maintenance of a decommissioning plan and implementing the plan at project completion.

1.1 Background

a. The Defense Nuclear Agency (DNA) has built a unique plant to clean plutonium contaminated soil that is at Johnston Atoll (JA). The plant was constructed in 1989 and significantly improved in 1991. It combines conventional mining technology with sophisticated radiation detection equipment. By mining, most of the soil becomes suitable for use without radiological restrictions.

b. Johnston Atoll is 800 miles southwest of Honolulu, Hawaii. In 1962, nuclear weapon tests contaminated a significant portion of the island with plutonium. The contamination now is in a complex and uncertain pattern throughout a 24-acre area. It is present as both isolated point sources ("hot particles") and volume sources ("dispersed contamination") in otherwise clean soil. (Hot particles are much larger than particles making up dispersed contamination.) The soil enclosing the contamination totals about 100,000 cy.

c. The Government performs in situ radiological surveys to pinpoint the location of contaminated soil. It uses earth moving equipment to excavate the contaminated soil and haul it to a stockpile area downwind of the cleanup plant. It screens the soil to separate minus 1/2 inch from plus 1/2 inch. The oversize soil is inherently clean, but it must be reduced to minus 1/2 inch for processing through the plant to ensure it is clean. The contractor processes the plus 1/2 fraction through a crushing system in the stockpile area to reduce it to minus 1/2 inch. The crushed soil (mostly clean) is processed through the plant separate from the minus 1/2 inch soil (some contamination) to prevent cleanup by dilution.

d. The cleanup plant has two process paths. The Contractor feeds the minus 1/2 inch contaminated soil into a hopper at the start of path one. The hopper underflow conveys

beneath magnets to remove any steel rubble and onto a vibrating screen to remove any plus 0.5-in gravel which may be present. The minus 0.5-in soil splits and conveys in a thin layer on two 3-foot wide flat belts beneath radiation detectors. A computer processes radiation signals and controls the position of eight gates across each conveyor end. In one position a gate allows soil to fill to a conveyor for removal to a clean soil pile. In the other position a gate diverts soil to a "hot soil" conveyor for further processing. Each gate can remain in either position for as little as two seconds. These conveyor systems are called sorter 1 and sorter 2.

e. The hot soil conveyor has a single gate at its end. The computer gates soil with hot particles to a waste container and dispersed contamination through a surge bin to a spiral classifier. The classifier mixes water and soil, and it decants suspended fine particles while simultaneously draining and conveying coarse particles out of the classifier. The fine particles, rich with dispersed contamination, are pumped to a settling pond. Pond sediment can be removed and recycled or packaged as waste. The coarse and predominantly clean soil from the classifier is discharged to the ground for air drying and subsequent sorting to verify cleanliness.

f. The second process path also has a hopper, splitter, and two multi-gate soil sorters. These sorters are called sorter 3 and sorter 4. The Contractor uses this path primarily for processing crushed oversize soil and soil which has been washed of fines. The path is also used for special work such as reprocessing hot particle concentrate. The hot soil conveyor from sorters 3 and 4 connects to the conveyor which sends contaminated soil to the surge bin.

g. The plant has numerous weigh scales and mass and volume flow meters. It has speed controllers for precisely regulating speed of sorting conveyors, and controls for testing sorter gate response times. Soil density gages and feed soil radiation monitors are to be installed.

h. The plant is controlled from a computer console in an office adjacent to the plant. The computer records data on plant performance including summaries of radiation measurements every 20 seconds. Data are processed by personal computer and analyzed for assuring process control and material balance.

i. The improved mining plant was tested and made operational in 1992. To 13 Mar 93, 115 days were devoted to processing soil on a production basis. These 10-hr workdays averaged 1.9 hrs for plant startup, 6.0 hrs of processing, 1.4 hrs for shutdown, and 0.7 hrs for system pause. About 10,800 tons of soil were processed. This is equivalent to 8,600 cy of soil in the ground. The daily processing rate averaged about 94 tons, but the trend was increasing and several days exceeded 180 tons. All soil fed to the plant came from contaminated ground, and 98 percent was clean at less than 500 Bq/kg after processing. The average specific activity for clean soil was 59 Bq/kg. The plutonium recovered totalled 980 MBq and 300 mg. Performance statistics were developed from 270,000 radiation count records produced by the plant computer.

j. The plant is still being perfected. The computer program which controls gates has progressed to version 10.0. An independent verification and certification of the program identified some bugs and opportunities for program improvement. Some inconsistencies persist concerning material balance. Additional diagnostic instruments are needed. (Section 1.1.g.) The rock crushing system is being replaced. The JA environment is harsh, and the remote location creates logistics problems. Some research and development is in process, and the results may suggest the need for plant or cleanup process modifications.

k. The cleanup of plutonium contaminated soil at JA may be completed as early as 1995. The effort will eliminate a radiological hazard and improve the environment. The small amount of waste will be sent to an approved waste handling facility. The clean soil will be returned to the ground and used in construction projects for fill or bedding.

1.2 Objectives

This Statement of Work (SOW) lists specific tasks and services required by the Contractor in support of the Johnston Atoll plutonium contaminated soil cleanup project. The principal Contractor work involves processing contaminated soil through the soil cleanup plant.

2.0 APPLICABLE DOCUMENTS

a. Johnston Atoll TRU Soil Cleanup-Up Project, Assembly & Demonstration of the "TRUclean" Soil Clean-up Plant, (Phase One DRAFT), 17 Aug 89.

b. Johnston Atoll Plutonium Contaminated Soil Cleanup Project, Annual Report, Phase Two, Plant Modification, Performance Testing, and Operation, October 15, 1992.

c. Johnston Atoll Plutonium Contaminated Soil Cleanup Project, Annual Report, Option Period One, December 31, 1992.

d. Contamination Monitor Technical Manual for Johnston Atoll Conveyor System, TMA/Eberline, October 1991, Revised to version 8.0.

e. JA Soil Cleanup Plant Computer Source Code and Operations Manual.

f. JA Soil Cleanup Plant Project Management Plan.

g. JA Soil Cleanup Quality Assurance Plan.

h. JA Soil Cleanup Plant Operating Procedures.

i. Memorandum for TMA, Subject: Guidance for Plant Decommissioning and Maintenance, September 15, 1992.

j. JA Soil Cleanup Plant Decommissioning Plan.

3.0 REQUIREMENTS (TASKS)

The Contractor shall accomplish the tasks listed under the following task categories. The contractor shall revise the Project Management Plan to detail its approach to fulfilling these tasks and other contract requirements. (CDRL, 4)

3.1 Work Periods

a. Work will commence at Johnston Atoll within 15 days after contract award. A new contractor will have no more than two weeks at the work site for familiarization with the soil cleanup plant. Additional time will be allowed for a new contractor who cannot receive instruction from the incumbent contractor, or in the event the plant has been idle for an extended period at contract award and repairs or abnormal maintenance is necessary.

b. The normal workweek at Johnston Atoll will be from Monday through Saturday. Weekly production quotas stated below are for the period Monday through Saturday. The quotas will be prorated for short weeks due to holidays, plant modifications and modification tests approved by the DNA project manager which cause lost time, and at the start and end of operations as for the week when there is no more contaminated soil to process.

c. For determining weekly production and percent downtime (no production as a percent of available hours), (1) "production hours" are the greatest net sorting hours reported by the plant computer for sorter 1, sorter 2, or sorter 4, and (2) "available hours" are the actual work hours reduced by any hours for scheduled plant modifications and testing of modifications. "Net sorting hours" are obtained from the plant daily log summary after exclusion of records which do not reflect true production. Excluded records include those reported when the sorter conveyor is empty or when a system test is conducted.

3.2 Plant Operations

(For quantities with "tons" as a mass unit in this section, the ton is metric and equal to 1,000 kilograms (kg).)

a. Furnish equipment operators to haul soil from the feed-soil stockpile area and feed soil to the cleanup plant. Process soil through the plant until DNA decides there is no more soil to process. DNA will remove clean soil from the plant to the lay-down area toward the east of the plant.

(1) Process the minus ½-inch predominantly contaminated soil through sorter 1 and sorter 2. The minimum weekly production rate for both sorters is 900 tons total. (Section 3.1.) This rate applies for the type of soil which has been processed to date and which leads to a weight reduction over 90 percent.

(2) Process the plus ½-inch predominantly clean soil through sorter 4. This oversize soil is first crushed in the sizing/crushing system. The minimum weekly production rate for sorter 4 is 400 tons as long as there is a supply of crushed soil. (Section 3.1.)

(3) Remove hot soil diverted from the plant at the hot particle gate to a storage area for subsequent treatment. For hot soil not diverted, process soil through the washing loop to remove fine particles before the 80-ton surge tank fills. Remove the washed soil to a storage area for subsequent treatment.

(4) Reprocess soil from the storage areas in (3) above through sorter 3. Assay the concentrate after recycle and package for waste disposal. Sorter 3 may also be used to process crushed oversize soil to reduce backlogs and improve performance.

(5) Manage the settling ponds which receive fine soil removed by the soil washing loop. Remove sediment when necessary to prevent exceeding pond capacity. Assay the sediment and package for waste disposal. In the event research and development by others leads to a beneficial method for concentrating plutonium in sediment, process sediment by that method before packaging for waste disposal.

b. Maintain an efficient operation which has downtime for primary sorters 1 and 2 of less than 40 percent. (Section 3.1.)

c. Continue processing or reprocessing soil until waste mass is reduced to the point of diminishing returns where the cost of additional cleanup exceeds the cost of disposal or the waste mass is sufficiently small and concentrated that it may be stored securely on Johnston Island pending disposal at an approved transuranic element waste disposal facility. Based on the estimated volume of soil to be processed (100,000 cy or 125,000 tons), estimated disposal costs, and programmed budget, at least a 98 percent weight reduction overall is required. ("Weight reduction" is ratio of clean soil mass to process soil mass expressed as a percent.)

d. Produce definitive data on a regular basis to demonstrate the plant process is under control. Data shall include measured weights and volumes. If data do not show material balance, determine the cause and remedy the deficiency. (CDRL, 3)

e. Provide definitive data on a routine basis that clean soil meets contract specifications, production meets or exceeds quotas, time utilization holds downtime to less than 40 percent, and sorting records from the daily log are complete with inconsistencies either absent or being corrected. (CDRL, 3)

f. Revise and maintain plant operating procedures as necessary so the written procedures accurately state the steps necessary for operating the plant safely and properly. (Section 2.g.)

g. Revise and maintain the quality assurance (QA) plan (Section 2.f) as necessary to provide assurance the QA objectives, stated in the project management plan (section 2.e), are fulfilled in compliance with DOE Order 5700.6A. Obtain approval from the DNA project manager before implementing changes.

h. Perform other tasks as required to make soil cleanup efficient and satisfactory within the scope of this Statement of Work. (CDRL, 5)

3.3 Plant Maintenance

a. Maintain the plant including hardware and software. Provide personnel with adequate skills to identify and diagnose problems and correct the problems or cause them to be corrected.

b. Develop and implement a preventive maintenance and corrosion control program which aids in reducing plant downtime and repair costs, and extends plant life at least until the total inventory of JA contaminated soil is processed. Maintain all assigned government furnished property, including any which is inactive or removed from the plant and placed in storage at the operating site.

c. Maintain a spare parts inventory to minimize downtime. Identify critical spare parts, considering mean time between failures, by nomenclature, quantity, vendor, and estimated costs. Submit purchase requests for spare parts to the DNA project manager to avoid production delays due to lack of spare parts. Allow sufficient lead time on purchase requests for compliance with Federal Acquisition Regulations. Provide a list of suggested suppliers, estimated costs, and estimates of weight and cube for use in determining transportation costs. (CDRL 9, 10)

3.4 Plant Improvements

a. Evaluate ways to improve the plant as part of continuous process improvement. Present concepts to the DNA project manager for approval. (CDRL, 6) When approved, proceed with planning for the improvements.

b. For improvements which require procurement of components, prepare procurement packages listing salient features and minimum requirements, estimated costs, and suggested suppliers. Submit procurement packages to the DNA project manager for procurement. Allow sufficient lead time on purchase requests for compliance with Federal Acquisition Regulations. Provide estimates of weight and cube for use in determining transportation costs, and spare parts and support requirements. (CDRL, 9)

c. Develop schedules for implementing improvements and detail any support services and equipment needed for the implementation.

d. Continue to perfect the plant computer program and submit the revised code and software user's manual to the DNA project manager. (CDRL, 5)

3.5 Waste Disposal

a. Assay and package waste soil and other radioactive waste for transport and in compliance with Departments of Transportation (DOT) and Agriculture (USDA) rules and regulations.

b. Place any packaged waste soil in dry cargo freight containers or other storage facilities as directed by the DNA project manager for interim storage pending removal from JA.

c. Prepare shipping papers as required to transport waste soil from JA to a radioactive waste disposal facility. The papers should be complete and accurate to prevent penalty to DNA from violations of rules and regulations.

d. When directed by the DNA project manager, prepare documents as necessary for compliance with waste disposal regulations so that waste is accepted at the disposal facility without penalty to DNA due to violation of rules and regulations.

3.6 Plant Decommissioning

a. Revise as necessary the plant decommissioning plan so it is up to date and ready for implementation (Sections 2.h and 2.i.)

b. For components prematurely retired from the plant with useful life remaining, prepare the components for disposition when removed. Preparations may include decontamination, application of protective materials, packaging, and removal from the JA radiological controlled area.

c. When directed by DNA, implement the decommissioning plan. NOTE: Decommissioning is not expected until the JA plutonium contaminated soil cleanup project is complete.

3.7 Safety and Health

a. Provide for the safety of personnel within the radiological control area in compliance with the Occupational Safety and Health Standards, US Code of Federal Regulations, Title 29, Part 1910.

b. Maintain a radiation safety program to ensure control of contamination and personnel doses below limits and as low as is reasonably achievable.

3.8 Engineering Drawings

a. Maintain a complete library of engineering drawings and instruction and service manuals for components of the plant at the work-site. (CDRL, 1) Update engineering drawings as necessary to show "as is" conditions.

b. For plant modifications, develop engineering drawings (CDRL, 1).

c. Maintain a current index of engineering drawings and manuals.

3.9 Reports

a. Prepare and submit written work according to requirements of the contract data requirements list (CDRL). Reports including documents, logs, memoranda, correspondences, and other written materials are critical to ensuring success of the cleanup project. They must contain accurate and true data. They must be well organized and written in English with good grammar and style. Where deadlines exist, they must be submitted on time. (CDRL, 7)

b. In addition to financial reports required elsewhere by the Contract, prepare Funds and Man-hour Expenditure Reports and submit to the DNA project manager and DNA contracting officer. (CDRL, 2)

ATTACHMENT 2

GOVERNMENT FURNISHED SERVICES

The Government will provide all equipment and material to operate and maintain the soil cleanup plant, and

a. Furnish electricity and water service for the soil cleanup plant.

b. Provide subsistence and quarters and related support for contractor personnel assigned full-time to the project.

c. Provide billeting for occasional Contractor top management visitors. The contractor is to provide an estimate of travel to include number of individuals, how long, and purpose. Government transportation will be made available if necessary. (Costs are to be paid by Contractor.)

d. Provide a fork-lift and front end loader capable of lifting palettes and other general work for use by contractor certified operators.

e. Provide overall radiation safety support, exclusive of plant operations, to include protective clothing, respirators and equipment for plant personnel, liquid nitrogen to operate germanium detectors, and dosimetry services. (The cleanup contractor will be responsible for packaging contaminated clothing for disposal and for laundering noncontaminated protective clothing.)

f. Provide repairs, common supplies as requested by the contractor (to exclude routine office supplies), and other support services as necessary and subject to the approval of DNA.

g. Deliver contaminated soil to the vicinity of the cleanup plant feed point so as to sustain a rate of 1,000 tons per week.

h. Remove clean soil from the plant service area and the RCA. As much as 2,000 tons may accumulate in piles at either stacker boom before it must be relocated.

i. Provide containers and palettes as necessary for handling radioactive waste.

j. Remove packaged radioactive waste from the RCA and load to ship for sealift to a CONUS disposal facility. A single shipment is expected at project completion.

k. Grade and contour areas after contaminated soil has been removed for cleanup.

l. Provide accounting services for on-island support.

m. Provide routine US postal services. (Costs are to be borne by the Contractor.)

n. Provide custodial services for office spaces in Building 795, the plant control facility.

o. Provide available health services for Contractor personnel. (Costs are to be borne by the Contractor.)

p. Provide available packing and crating service as requested by the Contractor and approved by DNA. This requirement is not expected to be frequent, but only in instances when plant components must be returned to vendors for repairs pertaining to the operations of the plant.

q. Provide scheduling, ticketing, orders for AMC flights and other routine transportation services for Contractor personnel. (Costs are to be borne by the Contractor.)

r. Provide services for transport of oversized waste containers as approved by DNA.

s. Provide cargo palette service, including off and on loading of liquid nitrogen containers transported weekly between Hickam, AFB and JA.

t. Provide aircraft cargo services for plant components (repair and replacement parts) as required.

u. Provide routine services and general maintenance as necessary for Building 795 and grounds.

v. Provide routine refuse disposal from the RCA.

w. Provide JA internal mail distribution.

x. Provide and maintain at least one telephone hookup in Building 795. Currently two numbers (2011 and 2033) are provided, and one is available for FAX transmission.

y. Handle message traffic from the Contractor.

z. Provide morale, welfare and recreation services for contractor personnel as provided for other island personnel.

aa. Provide office furnishings within Building 795 as available and approved by DNA.

ab. Provide POL for vehicle(s) operated by the Contractor.

ac. Provide one van for contractor use to deliver and pickup supplies and perform other routine work.

ad. Provide protective masks for contractor personnel as long as chemical agents are present on JA.

Appendix A

Quality Control Sample Results

QA SAMPLE RESULTS													
February 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2065		01-Feb-94	539	10	0.1136	53.9	0.0666	52.0	10	<	104		76
2066			477	10	0.1136	47.7	0.0666	52.0	10	<	76		76
2067			512	10	0.1136	51.2	0.0666	52.0	10	<	76		76
2068			506	10	0.1136	50.6	0.0666	52.0	10	<	76		76
2069			498	10	0.1136	49.8	0.0666	52.0	10	<	76		76
2070			490	10	0.1136	49.0	0.0666	52.0	10	<	76		76
2071			516	10	0.1136	51.6	0.0666	52.0	10	<	76		76
2072			482	10	0.1136	48.2	0.0666	52.0	10	<	76		76
2073			505	10	0.1136	50.5	0.0666	49.1	10	<	95		74
2074			569	10	0.1136	56.9	0.0666	49.1	10		112	92	74
2075		02-Feb-94	508	10	0.1136	50.8	0.0666	49.1	10	<	99		74
2076			543	10	0.1136	54.3	0.0666	49.1	10		75	90	74
2077			499	10	0.1136	49.9	0.0666	49.1	10	<	86		74
2078			508	10	0.1136	50.8	0.0666	49.1	10	<	99		74
2079			506	10	0.1136	50.6	0.0666	49.1	10	<	96		74
2080			429	10	0.1136	42.9	0.0666	49.1	10	<	74		74
2081		02-Feb-94	496	10	0.1136	49.6	0.0666	52.1	10	<	76		76
2082			504	10	0.1136	50.4	0.0666	52.1	10	<	76		76
2083			523	10	0.1136	52.3	0.0666	52.1	10	<	79		76
2084			503	10	0.1136	50.3	0.0666	52.1	10	<	76		76
2085			502	10	0.1136	50.2	0.0666	52.1	10	<	76		76
2086		03-Feb-94	484	10	0.1136	48.4	0.0666	52.1	10	<	76		76
2087			529	10	0.1136	52.9	0.0666	52.1	10	<	88		76
2088			500	10	0.1136	50.0	0.0666	52.1	10	<	76		76
2089		04-Feb-94	502	10	0.1136	50.2	0.0666	51.3	10	<	76		76
2090			418	10	0.1136	41.8	0.0666	51.3	10	<	76		76
2091			513	10	0.1136	51.3	0.0666	51.3	10	<	76		76
2092			517	10	0.1136	51.7	0.0666	51.3	10	<	82		76
2093			557	10	0.1136	55.7	0.0666	51.3	10	<	141		76
2094			551	10	0.1136	55.1	0.0666	51.3	10	<	132		76
2095			534	10	0.1136	53.4	0.0666	51.3	10	<	107		76

QA SAMPLE RESULTS													
February 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2096		04-Feb-94	545	10	0.1136	54.5	0.0666	51.3	10	<	123		76
2097		05-Feb-94	523	10	0.1136	52.3	0.0666	48.4	10	<	131		74
2098			510	10	0.1136	51.0	0.0666	48.4	10	<	112		74
2099			587	10	0.1136	58.7	0.0666	48.4	10		148	92	74
2100			499	10	0.1136	49.9	0.0666	48.4	10	<	96		74
2101		07-Feb-94	553	10	0.1136	55.3	0.0666	50.9	10	<	140		75
2102			530	10	0.1136	53.0	0.0666	50.9	10	<	106		75
2103			496	10	0.1136	49.6	0.0666	50.9	10	<	75		75
2104			497	10	0.1136	49.7	0.0666	50.9	10	<	75		75
2105			482	10	0.1136	48.2	0.0666	50.9	10	<	75		75
2106			507	10	0.1136	50.7	0.0666	50.9	10	<	75		75
2107			554	10	0.1136	55.4	0.0666	50.9	10	<	142		75
2108			522	10	0.1136	52.2	0.0666	50.9	10	<	95		75
2109		08-Feb-94	533	10	0.1136	53.3	0.0666	52.5	10	<	88		77
2110			511	10	0.1136	51.1	0.0666	52.5	10	<	77		77
2111			545	10	0.1136	54.5	0.0666	52.5	10	<	106		77
2112			499	10	0.1136	49.9	0.0666	52.5	10	<	77		77
2113			509	10	0.1136	50.9	0.0666	52.5	10	<	77		77
2114			560	10	0.1136	56.0	0.0666	52.5	10	<	128		77
2115			548	10	0.1136	54.8	0.0666	52.5	10	<	110		77
2116			518	10	0.1136	51.8	0.0666	52.5	10	<	77		77
2117			519	10	0.1136	51.9	0.0666	53.4	10	<	77		77
2118			473	10	0.1136	47.3	0.0666	53.4	10	<	77		77
2119		09-Feb-94	567	10	0.1136	56.7	0.0666	53.4	10	<	126		77
2120			533	10	0.1136	53.3	0.0666	53.4	10	<	77		77
2121			502	10	0.1136	50.2	0.0666	53.4	10	<	77		77
2122			518	10	0.1136	51.8	0.0666	53.4	10	<	77		77
2123			494	10	0.1136	49.4	0.0666	53.4	10	<	77		77
2124			522	10	0.1136	52.2	0.0666	53.4	10	<	77		77
2125		10-Feb-94	493	10	0.1136	49.3	0.0666	51.5	10	<	76		76
2126			513	10	0.1136	51.3	0.0666	51.5	10	<	76		76

QA SAMPLE RESULTS														
February 1994														
			SAMPLE	SAMPLE	SAMPLE	SAMPLE		BKG.	BKG.		RESULTS	STD.	
QA#		DATE	COUNTS	C.T.	WT.(kg.)	CPM	EFF.	CPM	C.T.		Bq./kg.	DEV.	MDA
2127		10-Feb-94	558	10	0.1136	55.8	0.0666	51.5	10	<	139		76
2128			488	10	0.1136	48.8	0.0666	51.5	10	<	76		76
2129			549	10	0.1136	54.9	0.0666	51.5	10	<	126		76
2130			492	10	0.1136	49.2	0.0666	51.5	10	<	76		76
2131			501	10	0.1136	50.1	0.0666	51.5	10	<	76		76
2132			516	10	0.1136	51.6	0.0666	51.5	10	<	77		76
2133		14-Feb-94	497	10	0.1136	49.7	0.0666	55.5	10	<	79		79
2134			518	10	0.1136	51.8	0.0666	55.5	10	<	79		79
2135		14-Feb-94	576	10	0.1136	57.6	0.0666	54.5	10	<	124		78
2136			494	10	0.1136	49.4	0.0666	54.5	10	<	78		78
2137		15-Feb-94	524	10	0.1136	52.4	0.0666	54.5	10	<	78		78
2138			511	10	0.1136	51.1	0.0666	54.5	10	<	78		78
2139			559	10	0.1136	55.9	0.0666	54.5	10	<	99		78
2140			510	10	0.1136	51.0	0.0666	54.5	10	<	78		78
2141			545	10	0.1136	54.5	0.0666	54.5	10	<	78		78
2142			533	10	0.1136	53.3	0.0666	54.5	10	<	78		78
2143		15-Feb-94	514	10	0.1136	51.4	0.0666	53.9	10	<	78		78
2144			517	10	0.1136	51.7	0.0666	53.9	10	<	78		78
2145		17-Feb-94	537	10	0.1136	53.7	0.0666	53.1	10	<	86		77
2146			525	10	0.1136	52.5	0.0666	53.1	10	<	77		77
2147			509	10	0.1136	50.9	0.0666	53.1	10	<	77		77
2148			562	10	0.1136	56.2	0.0666	53.1	10	<	123		77
2149			527	10	0.1136	52.7	0.0666	53.1	10	<	77		77
2150			514	10	0.1136	51.4	0.0666	53.1	10	<	77		77
2151		18-Feb-94	526	10	0.1136	52.6	0.0666	50.8	10	<	102		75
2152			540	10	0.1136	54.0	0.0666	50.8	10	<	122		75
2153			546	10	0.1136	54.6	0.0666	50.8	10	<	131		75
2154			549	10	0.1136	54.9	0.0666	50.8	10	<	135		75
2155		18-Feb-94	540	10	0.1136	54.0	0.0666	54.1	10	<	78		78
2156		19-Feb-94	524	10	0.1136	52.4	0.0666	54.1	10	<	78		78
2157			549	10	0.1136	54.9	0.0666	54.1	10	<	90		78

QA SAMPLE RESULTS February 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2158		19-Feb-94	523	10	0.1136	52.3	0.0666	54.1	10	<	78		78
2159		26-Feb-94	519	10	0.1136	51.9	0.0666	49.5	10	<	110		74
2160			547	10	0.1136	54.7	0.0666	49.5	10		75	91	74
2161			519	10	0.1136	51.9	0.0666	49.5	10	<	110		74
2162			565	10	0.1136	56.5	0.0666	49.5	10		100	92	74
2163			653	10	0.1136	65.3	0.0666	49.5	10		227	95	74
2164		28-Feb-94	498	10	0.1136	49.8	0.0666	51.8	10	<	76		76
2165			561	10	0.1136	56.1	0.0666	51.8	10	<	139		76
2166			562	10	0.1136	56.2	0.0666	51.8	10	<	141		76
2167			568	10	0.1136	56.8	0.0666	51.8	10	<	150		76
2168			620	10	0.1136	62.0	0.0666	51.8	10		146	95	76
2169													
2170													
2171													
2172													
2173													
2174													
2175													
2176													
2177													
2178													
2179													
2180													
2181													
2182													
2183													
2184													
2185													
2186													
2187													
2188													

QA SAMPLE RESULTS													
March 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2169		01-Mar-94	573	10	0.1136	57.3	0.0666	53.5	10	<	133		77
2170			536	10	0.1136	53.6	0.0666	53.5	10	<	79		77
2171			575	10	0.1136	57.5	0.0666	53.5	10	<	136		77
2172			521	10	0.1136	52.1	0.0666	53.5	10	<	77		77
2173			571	10	0.1136	57.1	0.0666	53.5	10	<	130		77
2174		02-Mar-94	553	10	0.1136	55.3	0.0666	53.3	10	<	107		77
2175			561	10	0.1136	56.1	0.0666	53.3	10	<	118		77
2176			568	10	0.1136	56.8	0.0666	53.3	10	<	129		77
2177			527	10	0.1136	52.7	0.0666	53.3	10	<	77		77
2178			539	10	0.1136	53.9	0.0666	53.3	10	<	86		77
2179		03-Mar-94	551	10	0.1136	55.1	0.0666	50.2	10	<	147		75
2180			556	10	0.1136	55.6	0.0666	50.2	10		77	91	75
2181			918	10	0.1136	91.8	0.0666	50.2	10		597	106	75
2182			485	10	0.1136	48.5	0.0666	50.2	10	<	75		75
2183			550	10	0.1136	55.0	0.0666	50.2	10	<	146		75
2184		04-Mar-94	531	10	0.1136	53.1	0.0666	54.5	10	<	78		78
2185			803	10	0.1136	80.3	0.0666	54.5	10		370	103	78
2186			607	10	0.1136	60.7	0.0666	54.5	10		89	95	78
2187			565	10	0.1136	56.5	0.0666	54.5	10	<	108		78
2188		05-Mar-94	497	10	0.1136	49.7	0.0666	52.3	10	<	77		77
2189		11-Mar-94	549	10	0.1136	54.9	0.0666	55.1	10	<	79		79
2190			504	10	0.1136	50.4	0.0666	55.1	10	<	79		79
2191			503	10	0.1136	50.3	0.0666	55.1	10	<	79		79
2192			560	10	0.1136	56.0	0.0666	55.1	10	<	92		79
2193		15-Mar-94	784	10	0.1136	78.4	0.0666	49.4	10		416	100	74
2194			608	10	0.1136	60.8	0.0666	49.4	10		163	93	74
2195			655	10	0.1136	65.5	0.0666	49.4	10		231	95	74
2196			630	10	0.1136	63.0	0.0666	49.4	10		195	94	74
2197		16-Mar-94	951	10	0.1136	95.1	0.0666	53.2	10		601	108	77
2198			569	10	0.1136	56.9	0.0666	53.2	10	<	132		77
2199			595	10	0.1136	59.5	0.0666	53.2	10		90	94	77

QA SAMPLE RESULTS March 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2200		16-Mar-94	588	10	0.1136	58.8	0.0666	53.2	10		80	94	77
2201		17-Mar-94	512	10	0.1136	51.2	0.0666	49.5	10	<	99		74
2202			662	10	0.1136	66.2	0.0666	49.5	10		239	96	74
2203			911	10	0.1136	91.1	0.0666	49.5	10		597	105	74
2204			606	10	0.1136	60.6	0.0666	49.5	10		159	93	74
2205			560	10	0.1136	56.0	0.0666	49.5	10		93	91	74
2206		18-Mar-94	560	10	0.1136	56.0	0.0666	53.7	10	<	111		78
2207			567	10	0.1136	56.7	0.0666	53.7	10	<	122		78
2208			503	10	0.1136	50.3	0.0666	53.7	10	<	78		78
2209		19-Mar-94	538	10	0.1136	53.8	0.0666	48.5	10		76	90	74
2210			546	10	0.1136	54.6	0.0666	48.5	10		87	90	74
2211			591	10	0.1136	59.1	0.0666	48.5	10		152	92	74
2212		21-Mar-94	562	10	0.1136	56.2	0.0666	49.8	10		92	92	75
2213			679	10	0.1136	67.9	0.0666	49.8	10		260	96	75
2214			551	10	0.1136	55.1	0.0666	49.8	10		76	91	75
2215			534	10	0.1136	53.4	0.0666	49.8	10	<	128		75
2216		22-Mar-94	577	10	0.1136	57.7	0.0666	49.9	10		112	92	75
2217			599	10	0.1136	59.9	0.0666	49.9	10		143	93	75
2218			566	10	0.1136	56.6	0.0666	49.9	10		96	92	75
2219			603	10	0.1136	60.3	0.0666	49.9	10		149	93	75
2220		23-Mar-94	529	10	0.1136	52.9	0.0666	52.9	10	<	77		77
2221			578	10	0.1136	57.8	0.0666	52.9	10	<	149		77
2222			549	10	0.1136	54.9	0.0666	52.9	10	<	106		77
2223			807	10	0.1136	80.7	0.0666	52.9	10		399	103	77
2224		24-Mar-94	633	10	0.1136	63.3	0.0666	54.0	10		133	96	78
2225			583	10	0.1136	58.3	0.0666	54.0	10	<	141		78
2226			566	10	0.1136	56.6	0.0666	54.0	10	<	116		78
2227			578	10	0.1136	57.8	0.0666	54.0	10	<	134		78
2228			594	10	0.1136	59.4	0.0666	54.0	10	<	157		78
2229		25-Mar-94	543	10	0.1136	54.3	0.0666	48.6	10		82	90	74
2230			548	10	0.1136	54.8	0.0666	48.6	10		89	90	74

QA SAMPLE RESULTS													
March 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2231		25-Mar-94	524	10	0.1136	52.4	0.0666	48.6	10	<	130		74
2232			552	10	0.1136	55.2	0.0666	48.6	10		95	91	74
2233		26-Mar-94	557	10	0.1136	55.7	0.0666	50.9	10	<	146		75
2234			549	10	0.1136	54.9	0.0666	50.9	10	<	134		75
2235		28-Mar-94	679	10	0.1136	67.9	0.0666	49.2	10		268	96	74
2236			644	10	0.1136	64.4	0.0666	49.2	10		218	95	74
2237			591	10	0.1136	59.1	0.0666	49.2	10		142	93	74
2238			861	10	0.1136	86.1	0.0666	49.2	10		529	103	74
2239			536	10	0.1136	53.6	0.0666	49.2	10	<	139		74
2240		30-Mar-94	704	10	0.1136	70.4	0.0666	50.0	10		293	98	75
2241			576	10	0.1136	57.6	0.0666	50.0	10		109	92	75
2242			616	10	0.1136	61.6	0.0666	50.0	10		166	94	75
2243		31-Mar-94	532	10	0.1136	53.2	0.0666	51.4	10	<	102		76
2244			523	10	0.1136	52.3	0.0666	51.4	10	<	89		76
2245			583	10	0.1136	58.3	0.0666	51.4	10		99	93	76
2246			647	10	0.1136	64.7	0.0666	51.4	10		191	96	76

QA SAMPLE RESULTS April 1994													
QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2247		01-Apr-94	1021	20	0.1136	51.1	0.0666	52.4	20	<	54		54
2248			1162	20	0.1136	58.1	0.0666	52.4	20		82	66	54
2249			1219	20	0.1136	61.0	0.0666	52.4	20		123	67	54
2250			1163	20	0.1136	58.2	0.0666	52.4	20		82	66	54
2251		02-Apr-94	1106	20	0.1136	55.3	0.0666	50.9	20		63	65	53
2252			1161	20	0.1136	58.1	0.0666	50.9	20		103	66	53
2253			1158	20	0.1136	57.9	0.0666	50.9	20		100	66	53
2254		05-Apr-94	1042	20	0.1136	52.1	0.0666	51.7	20	<	60		54
2255			1032	20	0.1136	51.6	0.0666	51.7	20	<	54		54
2256			1015	20	0.1136	50.8	0.0666	51.7	20	<	54		54
2257			1199	20	0.1136	60.0	0.0666	51.7	20		118	66	54
2258		06-Apr-94	1344	20	0.1136	67.2	0.0666	53.4	20		198	69	55
2259			1347	20	0.1136	67.4	0.0666	53.4	20		200	69	55
2260			1430	20	0.1136	71.5	0.0666	53.4	20		260	70	55
2261			1388	20	0.1136	69.4	0.0666	53.4	20		229	70	55
2262		07-Apr-94	1398	20	0.1136	69.9	0.0666	52.8	20		245	70	54
2263			1262	20	0.1136	63.1	0.0666	52.8	20		148	68	54
2264		08-Apr-94	1274	20	0.1136	63.7	0.0666	51.0	20		182	67	53
2265			1265	20	0.1136	63.3	0.0666	51.0	20		176	67	53
2266			1055	20	0.1136	52.8	0.0666	51.0	20	<	79		53
2267		09-Apr-94	1449	20	0.1136	72.5	0.0666	52.0	20		293	70	54
2268			1219	20	0.1136	61.0	0.0666	52.0	20		128	67	54
2269		11-Apr-94	1079	20	0.1136	54.0	0.0666	51.4	20	<	91		54
2270			1081	20	0.1136	54.1	0.0666	51.4	20	<	92		54
2271			1190	20	0.1136	59.5	0.0666	51.4	20		116	66	54
2272		11-Apr-94	1196	20	0.1136	59.8	0.0666	50.6	20		132	66	53
2273		12-Apr-94	1152	20	0.1136	57.6	0.0666	50.6	20		100	65	53
2274			1314	20	0.1136	65.7	0.0666	50.6	20		217	68	53
2275		13-Apr-94	1224	20	0.1136	61.2	0.0666	53.9	20		105	67	55
2276			1388	20	0.1136	69.4	0.0666	53.9	20		222	70	55
2277			1054	20	0.1136	52.7	0.0666	53.9	20	<	55		55
2278		14-Apr-94	1199	20	0.1136	60.0	0.0666	51.6	20		120	66	54

QA SAMPLE RESULTS													
April 1994													
			SAMPLE	SAMPLE	SAMPLE	SAMPLE		BKG.	BKG.		RESULTS	STD.	
QA#		DATE	COUNTS	C.T.	WT.(kg.)	CPM	EFF.	CPM	C.T.		Bq./kg.	DEV.	MDA
2279		15-Apr-94	1222	20	0.1136	61.1	0.0666	50.1	20		158	66	53
2280			2669	20	0.1136	133.5	0.0666	50.1	20		1195	85	53
2281		15-Apr-94	1365	20	0.1136	68.3	0.0666	50.2	20		259	68	53
2282			1358	20	0.1136	67.9	0.0666	50.2	20		254	68	53
2283			1314	20	0.1136	65.7	0.0666	50.2	20		222	68	53
2284		16-Apr-94	1559	20	0.1136	78.0	0.0666	50.2	20		398	71	53
2285			1226	20	0.1136	61.3	0.0666	50.2	20		159	66	53
2286			1265	20	0.1136	63.3	0.0666	50.2	20		187	67	53
2287		18-Apr-94	1025	20	0.1136	51.3	0.0666	52.5	20	<	54		54
2288			1153	20	0.1136	57.7	0.0666	52.5	20		74	66	54
2289			1186	20	0.1136	59.3	0.0666	52.5	20		98	66	54
2290			1152	20	0.1136	57.6	0.0666	52.5	20		73	66	54
2291		19-Apr-94	1132	20	0.1136	56.6	0.0666	52.9	20	<	108		54
2292			1380	20	0.1136	69.0	0.0666	52.9	20		231	69	54
2293			2087	20	0.1136	104.4	0.0666	52.9	20		738	79	54
2294			1425	20	0.1136	71.3	0.0666	52.9	20		263	70	54
2295			1437	20	0.1136	71.9	0.0666	52.9	20		272	70	54
2296		20-Apr-94	1280	20	0.1136	64.0	0.0666	55.3	20		125	69	56
2297			1244	20	0.1136	62.2	0.0666	55.3	20		99	68	56
2298			1189	20	0.1136	59.5	0.0666	55.3	20		60	67	56
2299			1267	20	0.1136	63.4	0.0666	55.3	20		115	68	56
2300		21-Apr-94	1564	20	0.1136	78.2	0.0666	52.0	20		376	72	54
2301			1160	20	0.1136	58.0	0.0666	52.0	20		86	66	54
2302			1168	20	0.1136	58.4	0.0666	52.0	20		92	66	54
2303			1194	20	0.1136	59.7	0.0666	52.0	20		110	66	54
2304		22-Apr-94	1183	20	0.1136	59.2	0.0666	53.4	20		82	67	55
2305			1334	20	0.1136	66.7	0.0666	53.4	20		191	69	55
2306			1469	20	0.1136	73.5	0.0666	53.4	20		288	71	55
2307			3669	20	0.1136	183.5	0.0666	53.4	20		1865	97	55
2308			4000	20	0.1136	200.0	0.0666	53.4	20		2102	100	55
2309		22-Apr-94	1277	20	0.1136	63.9	0.0666	53.4	20		150	68	55
2310			1291	20	0.1136	64.6	0.0666	53.4	20		160	68	55

QA SAMPLE RESULTS
April 1994

QA#		DATE	SAMPLE COUNTS	SAMPLE C.T.	SAMPLE WT.(kg.)	SAMPLE CPM	EFF.	BKG. CPM	BKG. C.T.		RESULTS Bq./kg.	STD. DEV.	MDA
2311			1273	20	0.1136	63.7	0.0666	53.4	20		147	68	55
2312		23-Apr-94	1194	20	0.1136	59.7	0.0666	54.1	20		80	67	55
2313			1164	20	0.1136	58.2	0.0666	54.1	20		59	67	55
2314		25-Apr-94	1629	20	0.1136	81.5	0.0666	50.4	20		445	72	53
2315		26-Apr-94	1292	20	0.1136	64.6	0.0666	55.5	20		131	69	56
2316			1121	20	0.1136	56.1	0.0666	55.5	20	<	64		56
2317			1055	20	0.1136	52.8	0.0666	55.5	20	<	56		56
2318			1057	20	0.1136	52.9	0.0666	55.5	20	<	56		56
2319		27-Apr-94	1056	20	0.1136	52.8	0.0666	51.4	20	<	74		54
2320			1136	20	0.1136	56.8	0.0666	51.4	20		77	65	54
2321			1317	20	0.1136	65.9	0.0666	51.4	20		207	68	54
2322			1132	20	0.1136	56.6	0.0666	51.4	20		75	65	54
2323		28-Apr-94	1104	20	0.1136	55.2	0.0666	54.2	20	<	70		55
2324			1124	20	0.1136	56.2	0.0666	54.2	20	<	84		55
2325			1090	20	0.1136	54.5	0.0666	54.2	20	<	59		55
2326			1157	20	0.1136	57.9	0.0666	54.2	20	<	108		55
2337	*	29-Apr-94	1150	20	0.1136	57.5	0.0666	55.0	20	<	92		55
2338			1152	20	0.1136	57.6	0.0666	55.0	20	<	93		55
2339			1147	20	0.1136	57.4	0.0666	55.0	20	<	90		55
2340			1075	20	0.1136	53.8	0.0666	55.0	20	<	55		55
2341			1303	20	0.1136	65.2	0.0666	55.0	20		146	69	55
2342			1152	20	0.1136	57.6	0.0666	55.0	20	<	93		55
2343			1176	20	0.1136	58.8	0.0666	55.0	20	<	111		55
2344			1018	20	0.1136	50.9	0.0666	55.0	20	<	55		55
2345		30-Apr-94	1165	20	0.1136	58.3	0.0666	53.9	20		62	67	55
2346			1781	20	0.1136	89.1	0.0666	53.9	20		504	75	55
2347			1134	20	0.1136	56.7	0.0666	53.9	20	<	96		55
2348			1136	20	0.1136	56.8	0.0666	53.9	20	<	97		55
2349			1265	20	0.1136	63.3	0.0666	53.9	20		134	68	55
2350			1213	20	0.1136	60.7	0.0666	53.9	20		97	67	55

*Sample numbers 2327 through 2336 ommited from numbering system

Appendix B

Air Sampling Results

TMA/EBERLINE-JOHNSTON ATOLL GROSS ALPHA RADIOACTIVITY IN AIR TEST RESULTS FOR THE MONTH OF FEBRUARY 1994

THIS REPORT WAS REVIEWED BY: _____ DATE: 4 APR 94
JOHNSTON ATOLL SITE MANAGER

The current 10CFR PART 20 "Standards for Protection Against Radiation" limits of concentration in air for Pu-239 are as follows:

Occupational Limit = 7 E-12 uCi/ml

INSTRUMENT NO.1: MS-2/RD-14 SN: 354/407
CAL DUE DATE: 08/JUN/94
INSTRUMENT NO.2: ESP-2/43-1 SN:964/PR033568
CAL DUE DATE: 05/JUL/94
EFF INSTR NO.1 = 0.355 4 pi
EFF INSTR NO.2 = 0.258 4 pi
BKG COUNT TIMES = 50 min
SAMPLE CNT TIMES = 50 min

SITE NAME: JOHNSTON ATOLL
REPORT DATE: MAR/01/94
COMPILED BY: S. PARKER SP
J. WOODS JW

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
01/FEB/94	04/FEB/94	150	16.5	7.01E+04	1	5	65	2.2E-14	5.9E-15	1.9E-15	SOUTH SIDE OF S1 #7219
01/FEB/94	04/FEB/94	417	16.2	1.91E+05	1	5	46	5.4E-15	1.9E-15	6.9E-16	SOUTH SIDE OF S1 #7219
01/FEB/94	04/FEB/94	420	15.6	1.86E+05	2	2	38	6.8E-15	2.3E-16	6.2E-16	S1/2 FEED BELT AREA #1082
01/FEB/94	04/FEB/94	148	17.7	7.42E+04	2	2	26	1.1E-14	4.9E-16	1.6E-15	S1/2 FEED BELT AREA #1082
01/FEB/94	04/FEB/94	144	13.8	5.63E+04	2	2	47	2.8E-14	8.5E-16	2.0E-15	WEST PERIMETER #7218
01/FEB/94	04/FEB/94	199	14.6	8.23E+04	2	2	34	1.4E-14	5.0E-16	1.4E-15	WEST PERIMETER #7218
01/FEB/94	04/FEB/94	113	9.2	2.94E+04	2	2	30	3.3E-14	1.3E-15	3.9E-15	DRESSER PAY LOADER #9112
01/FEB/94	04/FEB/94	133	8.7	3.28E+04	2	2	29	2.9E-14	1.2E-15	3.5E-15	DRESSER PAY LOADER #9112
01/FEB/94	04/FEB/94	103	9.2	2.68E+04	1	5	44	3.7E-14	1.3E-14	4.9E-15	DRESSER PAY LOADER #9112
01/FEB/94	04/FEB/94	131	9.2	3.41E+04	2	2	24	2.3E-14	1.0E-15	3.4E-15	DRESSER PAY LOADER #9112
01/FEB/94	04/FEB/94	138	9.2	3.60E+04	1	5	60	3.9E-14	1.1E-14	3.7E-15	DRESSER PAY LOADER #9112
01/FEB/94	04/FEB/94	91	14.7	3.79E+04	1	5	45	2.7E-14	9.3E-15	3.5E-15	S1/2 BARREL AREA #18083N
01/FEB/94	04/FEB/94	67	14.8	2.81E+04	2	2	29	3.4E-14	1.4E-15	4.1E-15	S1/2 BARREL AREA #18083N
02/FEB/94	05/FEB/94	116	16.4	5.39E+04	2	2	32	1.9E-14	7.4E-16	2.1E-15	SOUTH SIDE OF S1 #7219
02/FEB/94	05/FEB/94	251	16.2	1.15E+05	1	6	50	9.7E-15	3.2E-15	1.3E-15	SOUTH SIDE OF S1 #7219
02/FEB/94	05/FEB/94	138	16.4	6.41E+04	2	5	25	1.1E-14	5.8E-16	2.8E-15	SOUTH SIDE OF S1 #7219
02/FEB/94	05/FEB/94	232	17.3	1.14E+05	1	6	39	7.4E-15	2.9E-15	1.3E-15	S1/2 FEED BELT AREA #1082
02/FEB/94	05/FEB/94	358	16.6	1.68E+05	2	2	28	5.4E-15	2.2E-16	6.8E-16	S1/2 FEED BELT AREA #1082
02/FEB/94	05/FEB/94	142	13.6	5.47E+04	1	3	57	2.5E-14	7.0E-15	1.9E-15	WEST PERIMETER #7218
02/FEB/94	05/FEB/94	199	13.8	7.78E+04	2	2	35	1.5E-14	5.4E-16	1.5E-15	WEST PERIMETER #7218
02/FEB/94	05/FEB/94	248	13.6	9.55E+04	2	2	31	1.1E-14	4.1E-16	1.2E-15	WEST PERIMETER #7218
02/FEB/94	05/FEB/94	103	9.1	2.65E+04	1	6	46	3.8E-14	1.4E-14	5.5E-15	DRESSER PAY LOADER #9112
02/FEB/94	05/FEB/94	225	8.8	5.61E+04	1	6	59	2.4E-14	7.2E-15	2.6E-15	DRESSER PAY LOADER #9112
02/FEB/94	05/FEB/94	133	9.2	3.47E+04	1	6	54	3.5E-14	1.1E-14	4.2E-15	DRESSER PAY LOADER #9112
02/FEB/94	05/FEB/94	98	9.0	2.50E+04	2	2	21	2.7E-14	1.3E-15	4.6E-15	DRESSER PAY LOADER #9112
02/FEB/94	05/FEB/94	98	14.0	3.89E+04	2	2	33	2.8E-14	1.0E-15	3.0E-15	S1/2 BARREL AREA #18083N
02/FEB/94	05/FEB/94	69	14.3	2.79E+04	1	6	54	4.4E-14	1.4E-14	5.2E-15	S1/2 BARREL AREA #18083N

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
02/FEB/94	07/FEB/94	78	14.8	3.27E+04	1	3	43	3.1E-14	1.0E-14	3.1E-15	S1/2 BARREL AREA #18083N
03/FEB/94	07/FEB/94	320	16.4	1.49E+05	1	3	52	8.4E-15	2.5E-15	6.9E-16	SOUTH SIDE OF S1 #7219
03/FEB/94	07/FEB/94	178	15.7	7.91E+04	2	5	32	1.2E-14	5.3E-16	2.3E-15	SOUTH SIDE OF S1 #7219
03/FEB/94	07/FEB/94	495	15.5	2.17E+05	2	5	34	4.7E-15	2.0E-16	8.4E-16	S1/2 FEED BELT AREA #1082
03/FEB/94	07/FEB/94	146	13.5	5.58E+04	1	3	47	2.0E-14	6.3E-15	1.8E-15	WEST PERIMETER #7218
03/FEB/94	07/FEB/94	178	13.6	6.86E+04	1	3	47	1.6E-14	5.1E-15	1.5E-15	WEST PERIMETER #7218
03/FEB/94	07/FEB/94	173	13.5	6.61E+04	1	3	46	1.6E-14	5.3E-15	1.6E-15	WEST PERIMETER #7218
03/FEB/94	07/FEB/94	95	9.0	2.42E+04	2	5	34	4.2E-14	1.8E-15	7.5E-15	DRESSER PAY LOADER #9112
03/FEB/94	07/FEB/94	195	8.7	4.80E+04	1	3	55	2.7E-14	7.9E-15	2.1E-15	DRESSER PAY LOADER #9112
03/FEB/94	07/FEB/94	93	8.7	2.29E+04	2	5	28	3.5E-14	1.7E-15	8.0E-15	DRESSER PAY LOADER #9112
03/FEB/94	07/FEB/94	138	9.3	3.63E+04	2	5	26	2.0E-14	1.0E-15	5.0E-15	DRESSER PAY LOADER #9112
03/FEB/94	07/FEB/94	154	14.3	6.24E+04	2	5	31	1.5E-14	6.6E-16	2.9E-15	S1/2 BARREL AREA #18083N
03/FEB/94	07/FEB/94	84	14.0	3.33E+04	1	3	46	3.3E-14	1.0E-14	3.1E-15	S1/2 BARREL AREA #18083N
04/FEB/94	08/FEB/94	212	16.4	9.85E+04	1	4	37	8.5E-15	3.2E-15	1.2E-15	SOUTH SIDE OF S1 #7219
04/FEB/94	08/FEB/94	509	16.2	2.34E+05	2	6	29	3.4E-15	1.7E-16	8.5E-16	SOUTH SIDE OF S1 #7219
04/FEB/94	08/FEB/94	211	16.5	9.86E+04	2	6	32	9.2E-15	4.3E-16	2.0E-15	S1/2 FEED BELT AREA #1082
04/FEB/94	08/FEB/94	392	17.1	1.90E+05	1	4	44	5.3E-15	1.8E-15	6.2E-16	S1/2 FEED BELT AREA #1082
04/FEB/94	08/FEB/94	271	13.1	1.01E+05	2	6	41	1.2E-14	4.7E-16	2.0E-15	WEST PERIMETER #7218
04/FEB/94	08/FEB/94	210	13.4	7.97E+04	1	4	50	1.5E-14	4.6E-15	1.5E-15	WEST PERIMETER #7218
04/FEB/94	08/FEB/94	121	13.3	4.56E+04	2	6	25	1.5E-14	8.4E-16	4.4E-15	WEST PERIMETER #7218
04/FEB/94	08/FEB/94	101	13.8	3.95E+04	2	6	30	2.1E-14	1.0E-15	5.1E-15	S1/2 BARREL AREA #18083N
04/FEB/94	08/FEB/94	102	14.3	4.13E+04	1	4	35	1.9E-14	7.5E-15	2.9E-15	S1/2 BARREL AREA #18083N
04/FEB/94	08/FEB/94	124	8.4	2.95E+04	1	4	46	3.6E-14	1.2E-14	4.0E-15	DRESSER PAY LOADER #9112
04/FEB/94	08/FEB/94	118	8.8	2.94E+04	2	6	38	3.8E-14	1.5E-15	6.8E-15	DRESSER PAY LOADER #9112
04/FEB/94	08/FEB/94	146	8.7	3.60E+04	2	6	29	2.2E-14	1.1E-15	5.5E-15	DRESSER PAY LOADER #9112
05/FEB/94	09/FEB/94	273	16.4	1.27E+05	2	4	31	7.4E-15	3.2E-16	1.3E-15	SOUTH SIDE OF S1 #7219
05/FEB/94	09/FEB/94	275	17.2	1.34E+05	1	6	53	8.9E-15	2.9E-15	1.1E-15	S1/2 FEED BELT AREA #1082
05/FEB/94	09/FEB/94	88	13.7	3.41E+04	1	6	42	2.7E-14	1.0E-14	4.2E-15	WEST PERIMETER #7218
05/FEB/94	09/FEB/94	126	13.5	4.82E+04	1	6	42	1.9E-14	7.2E-15	3.0E-15	WEST PERIMETER #7218
05/FEB/94	09/FEB/94	94	8.9	2.37E+04	1	6	52	4.9E-14	1.6E-14	6.1E-15	DRESSER PAY LOADER #9112
05/FEB/94	09/FEB/94	50	8.8	1.25E+04	2	4	31	7.6E-14	3.2E-15	1.3E-14	DRESSER PAY LOADER #9112
05/FEB/94	09/FEB/94	170	8.8	4.24E+04	1	6	47	2.5E-14	8.5E-15	3.4E-15	DRESSER PAY LOADER #9112
05/FEB/94	09/FEB/94	122	8.7	3.01E+04	2	4	25	2.4E-14	1.2E-15	5.4E-15	DRESSER PAY LOADER #9112
05/FEB/94	09/FEB/94	58	14.3	2.35E+04	2	4	40	5.4E-14	1.9E-15	6.9E-15	S1/2 BARREL AREA #18083N
05/FEB/94	09/FEB/94	88	14.8	3.69E+04	2	4	44	3.8E-14	1.3E-15	4.4E-15	S1/2 BARREL AREA #18083N
07/FEB/94	10/FEB/94	594	16.4	2.76E+05	2	7	36	3.7E-15	1.6E-16	7.8E-16	SOUTH SIDE OF S1 #7219
07/FEB/94	10/FEB/94	593	17.3	2.91E+05	1	1	51	4.4E-15	1.2E-15	2.0E-16	S1/2 FEED BELT AREA #1082
07/FEB/94	10/FEB/94	192	14.8	8.05E+04	2	7	33	1.1E-14	5.4E-16	2.7E-15	WEST PERIMETER #7218
07/FEB/94	10/FEB/94	202	13.7	7.84E+04	1	1	54	1.7E-14	4.7E-15	7.6E-16	WEST PERIMETER #7218
07/FEB/94	10/FEB/94	204	13.8	7.97E+04	2	7	33	1.1E-14	5.4E-16	2.7E-15	WEST PERIMETER #7218
07/FEB/94	10/FEB/94	176	8.8	4.39E+04	1	1	48	2.7E-14	7.9E-15	1.4E-15	DRESSER PAY LOADER #9112
07/FEB/94	10/FEB/94	138	8.9	3.48E+04	2	7	20	1.3E-14	1.0E-15	6.2E-15	DRESSER PAY LOADER #9112
07/FEB/94	10/FEB/94	133	8.8	3.31E+04	2	7	38	3.3E-14	1.4E-15	6.5E-15	DRESSER PAY LOADER #9112
07/FEB/94	10/FEB/94	60	13.5	2.29E+04	1	1	65	7.1E-14	1.8E-14	2.6E-15	S1/2 BARREL AREA #18083N
07/FEB/94	10/FEB/94	70	14.0	2.78E+04	1	1	47	4.2E-14	1.2E-14	2.1E-15	S1/2 BARREL AREA #18083N
07/FEB/94	10/FEB/94	62	13.5	2.37E+04	1	1	55	5.8E-14	1.6E-14	2.5E-15	S1/2 BARREL AREA #18083N
08/FEB/94	14/FEB/94	228	16.5	1.07E+05	2	8	32	7.9E-15	4.1E-16	2.2E-15	SOUTH SIDE OF S1 #7219
08/FEB/94	15/FEB/94	340	16.4	1.58E+05	2	8	40	7.1E-15	3.0E-16	1.5E-15	SOUTH SIDE OF S1 #7219
08/FEB/94	14/FEB/94	230	17.0	1.11E+05	1	2	51	1.1E-14	3.3E-15	7.6E-16	S1/2 FEED BELT AREA #1082
08/FEB/94	15/FEB/94	338	17.2	1.65E+05	1	5	47	6.5E-15	2.2E-15	8.0E-16	S1/2 FEED BELT AREA #1082
08/FEB/94	15/FEB/94	229	14.3	9.27E+04	2	8	32	9.0E-15	4.7E-16	2.5E-15	WEST PERIMETER #7218
08/FEB/94	14/FEB/94	181	14.0	7.18E+04	2	8	27	9.2E-15	5.6E-16	3.2E-15	WEST PERIMETER #7218

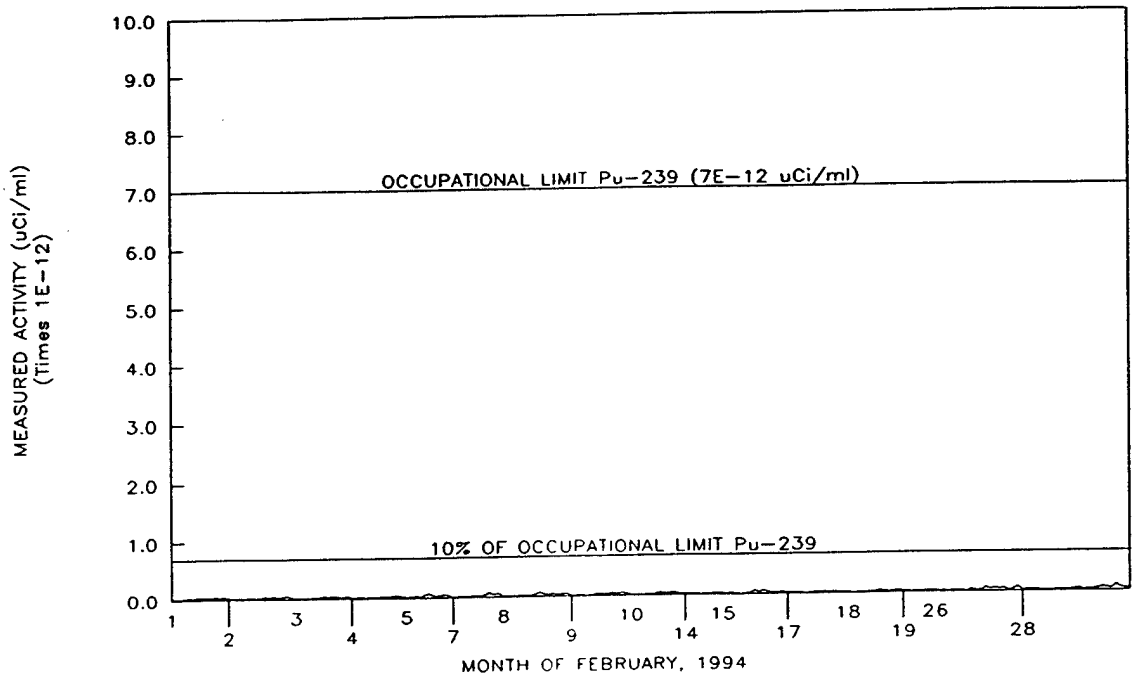
Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
08/FEB/94	14/FEB/94	156	14.1	6.23E+04	2	8	24	9.0E-15	6.2E-16	3.7E-15	WEST PERIMETER #7218
08/FEB/94	14/FEB/94	134	8.8	3.34E+04	1	2	45	3.3E-14	1.0E-14	2.5E-15	DRESSER PAY LOADER #9112
08/FEB/94	14/FEB/94	64	8.2	1.49E+04	1	2	43	7.0E-14	2.2E-14	5.6E-15	DRESSER PAY LOADER #9112
08/FEB/94	14/FEB/94	118	8.8	2.94E+04	1	2	41	3.4E-14	1.1E-14	2.8E-15	DRESSER PAY LOADER #9112
08/FEB/94	14/FEB/94	115	8.8	2.87E+04	2	8	27	2.3E-14	1.4E-15	8.0E-15	DRESSER PAY LOADER #9112
08/FEB/94	15/FEB/94	144	8.0	3.26E+04	1	5	65	4.7E-14	1.3E-14	4.1E-15	DRESSER PAY LOADER #9112
08/FEB/94	14/FEB/94	72	14.8	3.02E+04	1	2	39	3.1E-14	1.1E-14	2.8E-15	S1/2 BARREL AREA #18083N
08/FEB/94	14/FEB/94	50	14.0	1.98E+04	2	8	29	3.7E-14	2.1E-15	1.2E-14	S1/2 BARREL AREA #18083N
08/FEB/94	15/FEB/94	50	13.7	1.94E+04	1	5	46	5.4E-14	1.8E-14	6.8E-15	S1/2 BARREL AREA #18083N
09/FEB/94	15/FEB/94	245	16.4	1.14E+05	2	8	26	5.5E-15	3.5E-16	2.0E-15	SOUTH SIDE OF S1 #7219
09/FEB/94	15/FEB/94	325	16.4	1.51E+05	1	5	47	7.1E-15	2.4E-15	8.8E-16	SOUTH SIDE OF S1 #7219
09/FEB/94	15/FEB/94	242	16.3	1.12E+05	1	5	62	1.3E-14	3.6E-15	1.2E-15	S1/2 FEED BELT AREA #1082
09/FEB/94	15/FEB/94	336	13.8	1.31E+05	2	8	24	4.3E-15	2.9E-16	1.8E-15	WEST PERIMETER #7218
09/FEB/94	15/FEB/94	230	14.6	9.51E+04	2	8	27	7.0E-15	4.3E-16	2.4E-15	WEST PERIMETER #7218
09/FEB/94	15/FEB/94	112	8.8	2.79E+04	2	8	31	2.9E-14	1.5E-15	8.3E-15	DRESSER PAY LOADER #9112
09/FEB/94	15/FEB/94	126	8.6	3.07E+04	2	8	42	3.9E-14	1.6E-15	7.5E-15	DRESSER PAY LOADER #9112
09/FEB/94	16/FEB/94	145	8.7	3.57E+04	2	8	40	3.1E-14	1.3E-15	6.5E-15	DRESSER PAY LOADER #9112
09/FEB/94	15/FEB/94	92	8.4	2.19E+04	2	8	26	2.9E-14	1.8E-15	1.1E-14	DRESSER PAY LOADER #9112
09/FEB/94	15/FEB/94	98	8.6	2.39E+04	2	8	39	4.5E-14	2.0E-15	9.7E-15	DRESSER PAY LOADER #9112
09/FEB/94	15/FEB/94	100	14.0	3.96E+04	1	5	51	2.9E-14	9.4E-15	3.3E-15	S1/2 BARREL AREA #18083N
09/FEB/94	15/FEB/94	57	14.0	2.26E+04	1	5	48	4.8E-14	1.6E-14	5.9E-15	S1/2 BARREL AREA #18083N
09/FEB/94	15/FEB/94	55	14.2	2.21E+04	1	5	42	4.2E-14	1.5E-14	6.0E-15	S1/2 BARREL AREA #18083N
10/FEB/94	17/FEB/94	250	17.5	1.24E+05	1	6	48	8.6E-15	3.0E-15	1.2E-15	SOUTH SIDE OF S1 #7219
10/FEB/94	16/FEB/94	323	16.4	1.50E+05	2	8	33	5.8E-15	2.9E-16	1.5E-15	SOUTH SIDE OF S1 #7219
10/FEB/94	17/FEB/94	245	16.0	1.11E+05	2	4	39	1.1E-14	4.0E-16	1.5E-15	S1/2 FEED BELT AREA #108
10/FEB/94	16/FEB/94	324	16.2	1.49E+05	2	8	36	6.6E-15	3.1E-16	1.6E-15	S1/2 FEED BELT AREA #108
10/FEB/94	17/FEB/94	143	13.7	5.55E+04	1	6	41	1.6E-14	6.1E-15	2.6E-15	WEST PERIMETER #7218
10/FEB/94	17/FEB/94	300	14.8	1.26E+05	1	6	48	8.5E-15	2.9E-15	1.2E-15	WEST PERIMETER #7218
10/FEB/94	16/FEB/94	129	13.5	4.93E+04	1	4	70	3.4E-14	8.7E-15	2.4E-15	WEST PERIMETER #7218
10/FEB/94	16/FEB/94	135	8.7	3.33E+04	1	4	52	3.7E-14	1.1E-14	3.6E-15	DRESSER PAY LOADER #9112
10/FEB/94	17/FEB/94	105	9.0	2.68E+04	2	4	27	3.0E-14	1.4E-15	6.1E-15	DRESSER PAY LOADER #9112
10/FEB/94	17/FEB/94	122	8.1	2.80E+04	1	6	50	4.0E-14	1.3E-14	5.2E-15	DRESSER PAY LOADER #9112
10/FEB/94	16/FEB/94	123	8.6	3.00E+04	1	4	54	4.2E-14	1.3E-14	4.0E-15	DRESSER PAY LOADER #9112
10/FEB/94	17/FEB/94	75	14.3	3.04E+04	2	4	21	2.0E-14	1.1E-15	5.4E-15	S1/2 BARREL AREA #18083N
14/FEB/94	17/FEB/94	180	16.2	8.26E+04	1	6	40	1.0E-14	4.1E-15	1.8E-15	SOUTH SIDE OF S1 #7219
14/FEB/94	17/FEB/94	240	17.0	1.16E+05	1	6	52	1.0E-14	3.3E-15	1.3E-15	SOUTH SIDE OF S1 #7219
14/FEB/94	17/FEB/94	183	16.4	8.50E+04	2	4	27	9.4E-15	4.5E-16	1.9E-15	S1/2 FEED BELT AREA #1082
14/FEB/94	17/FEB/94	237	16.3	1.09E+05	2	4	23	6.1E-15	3.3E-16	1.5E-15	S1/2 FEED BELT AREA #1082
14/FEB/94	17/FEB/94	197	13.8	7.70E+04	2	4	21	7.7E-15	4.4E-16	2.1E-15	WEST PERIMETER #7218
14/FEB/94	17/FEB/94	224	13.8	8.75E+04	1	6	41	1.0E-14	3.9E-15	1.7E-15	WEST PERIMETER #7218
14/FEB/94	17/FEB/94	122	12.4	4.28E+04	2	4	25	1.7E-14	8.6E-16	3.8E-15	DRESSER PAY LOADER #9112
14/FEB/94	17/FEB/94	129	8.4	3.07E+04	2	4	27	2.6E-14	1.2E-15	5.3E-15	DRESSER PAY LOADER #9112
15/FEB/94	18/FEB/94	159	16.4	7.38E+04	1	6	39	1.1E-14	4.5E-15	2.0E-15	SOUTH SIDE OF S1 #7219
15/FEB/94	19/FEB/94	228	16.7	1.08E+05	2	2	27	8.1E-15	3.4E-16	1.1E-15	SOUTH SIDE OF S1 #7219
15/FEB/94	18/FEB/94	190	18.1	9.74E+04	1	6	50	1.1E-14	3.8E-15	1.5E-15	SOUTH SIDE OF S1 #7219
15/FEB/94	18/FEB/94	250	16.4	1.16E+05	2	3	27	7.2E-15	3.2E-16	1.2E-15	S1/2 FEED BELT AREA #1082
15/FEB/94	18/FEB/94	450	15.5	1.98E+05	2	3	19	2.8E-15	1.6E-16	7.1E-16	S1/2 FEED BELT AREA #1082
15/FEB/94	19/FEB/94	326	13.8	1.27E+05	2	2	32	8.2E-15	3.1E-16	9.0E-16	WEST PERIMETER #7218
15/FEB/94	18/FEB/94	250	13.8	9.77E+04	1	6	44	9.9E-15	3.6E-15	1.5E-15	WEST PERIMETER #7218
15/FEB/94	18/FEB/94	95	8.6	2.31E+04	2	3	39	5.4E-14	1.9E-15	6.1E-15	DRESSER PAY LOADER #9112
15/FEB/94	18/FEB/94	165	8.8	4.11E+04	1	6	48	2.6E-14	8.9E-15	3.5E-15	DRESSER PAY LOADER #9112
15/FEB/94	18/FEB/94	115	8.8	2.87E+04	2	3	49	5.6E-14	1.7E-15	4.9E-15	DRESSER PAY LOADER #9112

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
15/FEB/94	18/FEB/94	120	8.8	2.99E+04	2	3	25	2.6E-14	1.2E-15	4.7E-15	DRESSER PAY LOADER #9112
15/FEB/94	18/FEB/94	120	14.5	4.93E+04	1	6	32	1.3E-14	6.2E-15	2.9E-15	S1/2 BARREL AREA #18083N
15/FEB/94	18/FEB/94	125	15.6	5.52E+04	1	6	44	1.7E-14	6.4E-15	2.6E-15	S1/2 BARREL AREA #18083N
15/FEB/94	19/FEB/94	95	16.5	4.44E+04	1	7	51	2.5E-14	8.5E-15	3.5E-15	S1/2 BARREL AREA #18083N
17/FEB/94	21/FEB/94	232	16.4	1.08E+05	1	7	47	9.4E-15	3.4E-15	1.5E-15	SOUTH SIDE OF S1 #7219
17/FEB/94	21/FEB/94	130	17.2	6.33E+04	1	7	48	1.6E-14	5.8E-15	2.5E-15	SOUTH SIDE OF S1 #7219
17/FEB/94	21/FEB/94	217	16.4	1.01E+05	2	7	37	1.0E-14	4.5E-16	2.1E-15	SOUTH SIDE OF S1 #7219
17/FEB/94	21/FEB/94	135	16.2	6.19E+04	1	7	25	7.4E-15	4.5E-15	2.5E-15	S1/2 FEED BELT AREA #1082
17/FEB/94	21/FEB/94	444	16.3	2.05E+05	2	7	35	4.8E-15	2.2E-16	1.1E-15	S1/2 FEED BELT AREA #1082
17/FEB/94	22/FEB/94	260	14.4	1.06E+05	2	5	25	6.6E-15	3.5E-16	1.7E-15	WEST PERIMETER #7218
17/FEB/94	21/FEB/94	133	13.7	5.16E+04	1	7	55	2.4E-14	7.6E-15	3.0E-15	WEST PERIMETER #7218
17/FEB/94	21/FEB/94	199	8.4	4.73E+04	1	7	37	1.6E-14	7.0E-15	3.3E-15	DRESSER PAY LOADER #9112
17/FEB/94	21/FEB/94	137	8.8	3.41E+04	2	7	27	2.0E-14	1.2E-15	6.3E-15	DRESSER PAY LOADER #9112
17/FEB/94	21/FEB/94	336	8.0	7.61E+04	1	7	47	1.3E-14	4.8E-15	2.1E-15	DRESSER PAY LOADER #9112
17/FEB/94	21/FEB/94	104	8.5	2.50E+04	2	7	26	2.7E-14	1.6E-15	8.6E-15	DRESSER PAY LOADER #9112
17/FEB/94	21/FEB/94	121	16.0	5.48E+04	2	7	25	1.1E-14	7.1E-16	3.9E-15	S1/2 BARREL AREA #18083N
17/FEB/94	21/FEB/94	120	14.0	4.76E+04	2	7	34	2.0E-14	9.2E-16	4.5E-15	S1/2 BARREL AREA #18083N
18/FEB/94	22/FEB/94	244	16.3	1.13E+05	1	5	48	9.7E-15	3.2E-15	1.2E-15	SOUTH SIDE OF S1 #7219
18/FEB/94	22/FEB/94	345	16.3	1.59E+05	2	5	35	6.6E-15	2.7E-16	1.1E-15	SOUTH SIDE OF S1 #7219
18/FEB/94	22/FEB/94	242	16.3	1.12E+05	2	5	20	4.7E-15	3.1E-16	1.6E-15	S1/2 FEED BELT AREA #1082
18/FEB/94	22/FEB/94	324	16.3	1.50E+05	1	5	58	9.0E-15	2.6E-15	8.9E-16	S1/2 FEED BELT AREA #1082
18/FEB/94	22/FEB/94	223	14.3	9.03E+04	2	5	29	9.3E-15	4.4E-16	2.0E-15	WEST PERIMETER #7218
18/FEB/94	22/FEB/94	239	14.0	9.48E+04	1	5	68	1.7E-14	4.5E-15	1.4E-15	WEST PERIMETER #7218
18/FEB/94	22/FEB/94	328	14.4	1.34E+05	1	5	57	9.9E-15	2.9E-15	9.9E-16	WEST PERIMETER #7218
18/FEB/94	22/FEB/94	96	8.7	2.37E+04	1	5	43	4.1E-14	1.5E-14	5.6E-15	DRESSER PAY LOADER #9112
18/FEB/94	22/FEB/94	191	7.8	4.22E+04	2	5	32	2.2E-14	9.9E-16	4.3E-15	DRESSER PAY LOADER #9112
18/FEB/94	22/FEB/94	223	13.3	8.40E+04	1	5	53	1.5E-14	4.5E-15	1.6E-15	DRESSER PAY LOADER #9112
18/FEB/94	22/FEB/94	125	8.5	3.01E+04	2	5	25	2.3E-14	1.2E-15	6.1E-15	DRESSER PAY LOADER #9112
18/FEB/94	22/FEB/94	71	16.6	3.34E+04	1	5	54	3.7E-14	1.1E-14	4.0E-15	S1/2 BARREL AREA #18083N
19/FEB/94	25/FEB/94	217	16.2	9.96E+04	1	5	53	1.2E-14	3.8E-15	1.3E-15	SOUTH SIDE OF S1 #7219
19/FEB/94	23/FEB/94	157	15.5	6.89E+04	1	5	48	1.6E-14	5.3E-15	1.9E-15	SOUTH SIDE OF S1 #7219
19/FEB/94	23/FEB/94	218	15.6	9.63E+04	2	5	27	8.0E-15	4.0E-16	1.9E-15	S1/2 FEED BELT AREA #1082
19/FEB/94	24/FEB/94	155	15.1	6.63E+04	2	7	31	1.3E-14	6.4E-16	3.3E-15	S1/2 FEED BELT AREA #1082
19/FEB/94	24/FEB/94	270	13.7	1.05E+05	1	6	42	8.7E-15	3.3E-15	1.4E-15	WEST PERIMETER #7218
19/FEB/94	24/FEB/94	263	8.4	6.26E+04	1	6	49	1.7E-14	5.9E-15	2.3E-15	DRESSER PAY LOADER #9112
19/FEB/94	23/FEB/94	126	8.8	3.14E+04	2	5	26	2.3E-14	1.2E-15	5.8E-15	DRESSER PAY LOADER #9112
26/FEB/94	01/MAR/94	170	15.5	7.46E+04	2	5	45	1.9E-14	6.5E-16	2.4E-15	SOUTH SIDE OF S1 #7219
26/FEB/94	01/MAR/94	115	15.5	5.05E+04	1	2	38	1.8E-14	6.2E-15	1.7E-15	SOUTH SIDE OF S1 #7219
26/FEB/94	01/MAR/94	188	15.5	8.25E+04	1	2	53	1.6E-14	4.5E-15	1.0E-15	SOUTH SIDE OF S1 #7219
26/FEB/94	01/MAR/94	145	15.2	6.24E+04	2	5	24	1.1E-14	5.9E-16	2.9E-15	SOUTH SIDE OF S1 #7219
26/FEB/94	01/MAR/94	213	16.5	9.95E+04	2	5	39	1.2E-14	4.6E-16	1.8E-15	S1/2 FEED BELT AREA #1082
26/FEB/94	01/MAR/94	206	16.0	9.33E+04	1	2	39	1.0E-14	3.4E-15	9.0E-16	S1/2 FEED BELT AREA #1082
26/FEB/94	01/MAR/94	144	16.2	6.61E+04	1	2	42	1.5E-14	5.0E-15	1.3E-15	S1/2 FEED BELT AREA #1082
26/FEB/94	01/MAR/94	215	13.6	8.28E+04	2	5	25	8.4E-15	4.5E-16	2.2E-15	WEST PERIMETER #7218
26/FEB/94	01/MAR/94	72	13.6	2.77E+04	1	2	44	3.8E-14	1.2E-14	3.0E-15	WEST PERIMETER #7218
26/FEB/94	01/MAR/94	192	14.0	7.61E+04	2	5	27	1.0E-14	5.1E-16	2.4E-15	WEST PERIMETER #7218
26/FEB/94	01/MAR/94	142	13.6	5.47E+04	1	2	37	1.6E-14	5.7E-15	1.5E-15	WEST PERIMETER #7218
26/FEB/94	01/MAR/94	88	8.4	2.09E+04	1	2	58	6.8E-14	1.8E-14	4.0E-15	DRESSER PAY LOADER #9112
26/FEB/94	01/MAR/94	131	8.3	3.08E+04	2	5	37	3.6E-14	1.4E-15	5.9E-15	DRESSER PAY LOADER #9112
26/FEB/94	01/MAR/94	98	8.1	2.25E+04	2	5	44	6.1E-14	2.1E-15	8.1E-15	DRESSER PAY LOADER #9112
26/FEB/94	02/MAR/94	154	7.3	3.18E+04	2	6	42	3.9E-14	1.5E-15	6.3E-15	DRESSER PAY LOADER #9112
26/FEB/94	02/MAR/94	91	7.2	1.86E+04	1	6	47	5.6E-14	2.0E-14	7.8E-15	DRESSER PAY LOADER #9112

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
26/FEB/94	02/MAR/94	164	14.7	6.83E+04	1	6	58	1.9E-14	5.8E-15	2.1E-15	S1/2 BARREL AREA #18083N
26/FEB/94	02/MAR/94	70	14.5	2.87E+04	2	6	34	3.4E-14	1.5E-15	6.9E-15	S1/2 BARREL AREA #18083N
26/FEB/94	02/MAR/94	45	13.4	1.71E+04	1	6	60	8.0E-14	2.4E-14	8.5E-15	S1/2 BARREL AREA #18083N
28/FEB/94	02/MAR/94	134	15.5	5.88E+04	2	6	33	1.6E-14	7.3E-16	3.4E-15	SOUTH SIDE OF S1 #7219
28/FEB/94	02/MAR/94	119	16.3	5.49E+04	1	6	56	2.3E-14	7.1E-15	2.6E-15	SOUTH SIDE OF S1 #7219
28/FEB/94	03/MAR/94	72	15.5	3.16E+04	2	4	32	3.1E-14	1.3E-15	5.2E-15	SOUTH SIDE OF S1 #7219
28/FEB/94	03/MAR/94	108	15.3	4.68E+04	1	7	56	2.7E-14	8.4E-15	3.3E-15	SOUTH SIDE OF S1 #7219
28/FEB/94	03/MAR/94	161	15.5	7.07E+04	1	7	39	1.1E-14	4.8E-15	2.2E-15	SOUTH SIDE OF S1 #7219
28/FEB/94	02/MAR/94	135	16.3	6.23E+04	1	6	55	2.0E-14	6.2E-15	2.3E-15	S1/2 FEED BELT AREA #1082
28/FEB/94	02/MAR/94	120	16.0	5.44E+04	1	6	44	1.8E-14	6.5E-15	2.7E-15	S1/2 FEED BELT AREA #1082
28/FEB/94	03/MAR/94	72	15.2	3.10E+04	2	4	21	1.9E-14	1.1E-15	5.3E-15	S1/2 FEED BELT AREA #1082
28/FEB/94	03/MAR/94	109	15.5	4.78E+04	1	7	51	2.3E-14	7.9E-15	3.3E-15	S1/2 FEED BELT AREA #1082
28/FEB/94	03/MAR/94	157	15.7	6.98E+04	1	7	52	1.6E-14	5.5E-15	2.2E-15	S1/2 FEED BELT AREA #1082
28/FEB/94	02/MAR/94	138	14.0	5.47E+04	2	6	31	1.6E-14	7.6E-16	3.6E-15	WEST PERIMETER #7218
28/FEB/94	02/MAR/94	118	13.5	4.51E+04	2	6	34	2.2E-14	9.6E-16	4.4E-15	WEST PERIMETER #7218
28/FEB/94	03/MAR/94	72	13.8	2.81E+04	2	4	39	4.3E-14	1.6E-15	5.8E-15	WEST PERIMETER #7218
28/FEB/94	03/MAR/94	107	13.5	4.09E+04	2	4	27	2.0E-14	9.3E-16	4.0E-15	WEST PERIMETER #7218
28/FEB/94	03/MAR/94	151	13.6	5.82E+04	2	4	41	2.2E-14	7.9E-16	2.8E-15	WEST PERIMETER #7218
28/FEB/94	02/MAR/94	116	8.3	2.73E+04	1	6	35	2.7E-14	1.2E-14	5.3E-15	DRESSER PAY LOADER #9112
28/FEB/94	02/MAR/94	118	8.3	2.77E+04	2	6	31	3.1E-14	1.5E-15	7.2E-15	DRESSER PAY LOADER #9112
28/FEB/94	02/MAR/94	87	7.7	1.90E+04	1	6	49	5.8E-14	1.9E-14	7.6E-15	DRESSER PAY LOADER #9112
28/FEB/94	03/MAR/94	107	7.5	2.27E+04	1	7	46	4.4E-14	1.6E-14	6.9E-15	DRESSER PAY LOADER #9112
28/FEB/94	02/MAR/94	108	7.5	2.29E+04	2	6	32	4.0E-14	1.8E-15	8.7E-15	DRESSER PAY LOADER #9112
28/FEB/94	03/MAR/94	48	8.4	1.14E+04	2	4	37	1.0E-13	3.8E-15	1.4E-14	DRESSER PAY LOADER #9112
28/FEB/94	02/MAR/94	66	14.0	2.62E+04	1	6	51	4.4E-14	1.4E-14	5.5E-15	S1/2 BARREL AREA #18083N
28/FEB/94	02/MAR/94	60	13.9	2.36E+04	2	6	34	4.1E-14	1.8E-15	8.5E-15	S1/2 BARREL AREA #18083N
28/FEB/94	03/MAR/94	85	14.5	3.49E+04	2	4	31	2.7E-14	1.2E-15	4.7E-15	S1/2 BARREL AREA #18083N

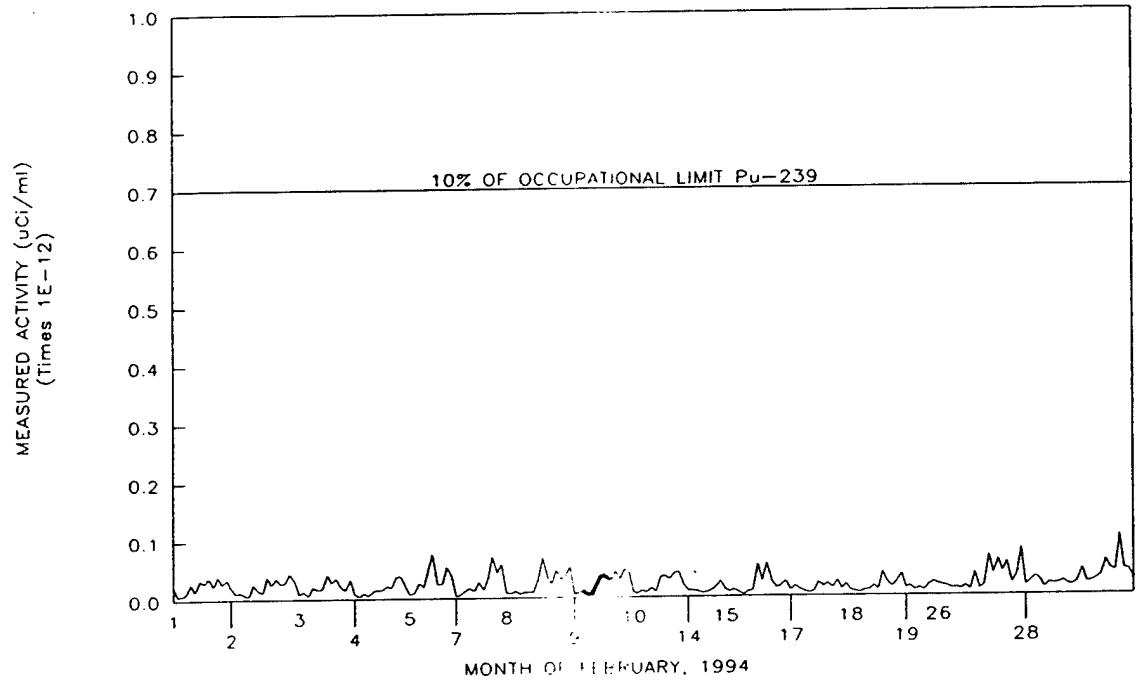
JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



TMA/EBERLINE-JOHNSTON ATOLL GROSS ALPHA RADIOACTIVITY IN AIR TEST RESULTS FOR THE MONTH OF MARCH, 1994

THIS REPORT WAS REVIEWED BY: _____ DATE: 4 APR 94
JOHNSTON ATOLL SITE MANAGER

The current 10CFR PART 20 "Standards for Protection Against Radiation" limits of concentration in air for Pu-239 are as follows:

Occupational Limit = 7 E-12 uCi/ml

INSTRUMENT NO.1 MS-2/RD-14 SN: 354/407
CAL DUE DATE: 08-JUN-94
INSTRUMENT NO.2 ESP-2/43-1 SN:964/PR033568
CAL DUE DATE: 05-JUL-94
EFF INSTR NO.1 = 0.355 4 pi RECALIBRATED 08-MAR-94 CAL DUE: 08-SEP-94 EFF= 0.375 4 pi
EFF INSTR NO.2 = 0.258 4 pi RECALIBRATED 08-MAR-94 CAL DUE: 08-SEP-94 EFF= 0.294 4 pi
BKG COUNT TIME: 50 min
SAMPLE CNT TIME: 50 min

SITE NAME: JOHNSTON ATOLL
REPORT DATE: 06-APR-94
COMPILED BY: S. PARKER/J. WOODS
SP JW

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
01/MAR/94	03/MAR/94	260	15.1	1.11E+05	2	4	32	8.8E-15	3.7E-16	1.5E-15	SOUTH SIDE OF S1 #7219
01/MAR/94	04/MAR/94	311	15.8	1.39E+05	1	6	55	8.9E-15	2.8E-15	1.0E-15	SOUTH SIDE OF S1 #7219
01/MAR/94	04/MAR/94	261	13.3	9.83E+04	1	6	50	1.1E-14	3.8E-15	1.5E-15	S1/2 FEED BELT AREA #1082
01/MAR/94	04/MAR/94	311	15.5	1.37E+05	1	6	54	8.9E-15	2.8E-15	1.1E-15	S1/2 FEED BELT AREA #1082
01/MAR/94	04/MAR/94	260	10.7	7.88E+04	2	7	23	7.1E-15	4.8E-16	2.7E-15	WEST PERIMETER #7218
01/MAR/94	04/MAR/94	309	13.3	1.16E+05	2	7	36	8.7E-15	3.9E-16	1.9E-15	WEST PERIMETER #7218
01/MAR/94	03/MAR/94	98	7.8	2.16E+04	2	4	37	5.3E-14	2.0E-15	7.5E-15	DRESSER PAYLOADER #9112
01/MAR/94	03/MAR/94	195	8.1	4.47E+04	1	7	57	2.8E-14	8.9E-15	3.5E-15	DRESSER PAYLOADER #9112
01/MAR/94	04/MAR/94	95	8.0	2.15E+04	2	7	38	5.0E-14	2.1E-15	1.0E-14	DRESSER PAYLOADER #9112
01/MAR/94	04/MAR/94	124	7.2	2.53E+04	1	6	65	5.9E-14	1.7E-14	5.7E-15	DRESSER PAYLOADER #9112
01/MAR/94	04/MAR/94	76	7.5	1.61E+04	2	7	31	5.2E-14	2.6E-15	1.3E-14	DRESSER PAYLOADER #9112
01/MAR/94	03/MAR/94	99	14.3	4.01E+04	1	7	47	2.5E-14	9.1E-15	3.9E-15	HOT BARREL AREA #18083N
02/MAR/94	04/MAR/94	302	15.3	1.31E+05	2	7	31	6.4E-15	3.2E-16	1.6E-15	SOUTH SIDE OF S1 #7219
02/MAR/94	05/MAR/94	252	14.8	1.06E+05	1	6	46	9.6E-15	3.4E-15	1.4E-15	SOUTH SIDE OF S1 #7219
02/MAR/94	04/MAR/94	308	12.6	1.10E+05	1	6	50	1.0E-14	3.4E-15	1.3E-15	S1/2 FEED BELT AREA #1082
02/MAR/94	05/MAR/94	250	15.2	1.08E+05	1	6	46	9.4E-15	3.3E-15	1.3E-15	S1/2 FEED BELT AREA #1082
02/MAR/94	04/MAR/94	313	13.5	1.20E+05	2	7	20	3.8E-15	3.0E-16	1.8E-15	WEST PERIMETER #7218
02/MAR/94	05/MAR/94	248	13.6	9.55E+04	2	8	21	4.8E-15	3.9E-16	2.4E-15	WEST PERIMETER #7218
02/MAR/94	04/MAR/94	103	7.6	2.22E+04	1	6	54	5.5E-14	1.7E-14	6.5E-15	DRESSER PAYLOADER #9112
02/MAR/94	04/MAR/94	140	7.9	3.13E+04	1	6	56	4.1E-14	1.3E-14	4.6E-15	DRESSER PAYLOADER #9112
02/MAR/94	05/MAR/94	199	7.2	4.06E+04	2	8	27	1.6E-14	1.0E-15	5.7E-15	DRESSER PAYLOADER #9112
02/MAR/94	05/MAR/94	109	7.6	2.35E+04	2	8	28	3.0E-14	1.8E-15	9.8E-15	DRESSER PAYLOADER #9112
02/MAR/94	04/MAR/94	110	14.5	4.52E+04	2	7	27	1.5E-14	8.8E-16	4.8E-15	HOT BARREL AREA #18083N
02/MAR/94	04/MAR/94	125	14.0	4.96E+04	1	6	51	2.3E-14	7.6E-15	2.9E-15	HOT BARREL AREA #18083N
03/MAR/94	05/MAR/94	537	14.6	2.22E+05	2	8	47	6.1E-15	2.3E-16	1.0E-15	SOUTH SIDE OF S1 #7219
03/MAR/94	05/MAR/94	537	10.8	1.64E+05	2	8	25	3.6E-15	2.4E-16	1.4E-15	S1/2 FEED BELT AREA #1082
03/MAR/94	05/MAR/94	537	12.4	1.89E+05	2	8	42	6.3E-15	2.6E-16	1.2E-15	WEST PERIMETER #7218

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
03/MAR/94	04/MAR/94	102	8.1	2.34E+04	2	7	51	6.6E-14	2.2E-15	9.2E-15	DRESSER PAYLOADER #9112
03/MAR/94	05/MAR/94	145	7.9	3.24E+04	2	8	26	1.9E-14	1.2E-15	7.1E-15	DRESSER PAYLOADER #9112
03/MAR/94	05/MAR/94	177	6.8	3.41E+04	1	6	69	4.7E-14	1.3E-14	4.3E-15	DRESSER PAYLOADER #9112
03/MAR/94	05/MAR/94	114	7.2	2.32E+04	1	6	53	5.1E-14	1.6E-14	6.2E-15	DRESSER PAYLOADER #9112
03/MAR/94	05/MAR/94	125	13.9	4.92E+04	1	6	63	2.9E-14	8.4E-15	2.9E-15	HOT BARREL AREA #18083N
03/MAR/94	05/MAR/94	92	13.0	3.39E+04	1	6	70	4.8E-14	1.3E-14	4.3E-15	HOT BARREL AREA #18083N
04/MAR/94	09/MAR/94	267	15.3	1.16E+05	2	8	78	1.9E-14	4.8E-16	1.7E-15	SOUTH SIDE OF S1 #7219
04/MAR/94	08/MAR/94	273	15.3	1.18E+05	2	7	37	7.8E-15	3.4E-16	1.6E-15	SOUTH SIDE OF S1 #7219
04/MAR/94	09/MAR/94	271	15.2	1.17E+05	1	7	64	1.2E-14	3.4E-15	1.3E-15	S1/2 FEED BELT AREA #1082
04/MAR/94	08/MAR/94	272	15.0	1.16E+05	2	7	23	4.2E-15	2.8E-16	1.6E-15	S1/2 FEED BELT AREA #1082
04/MAR/94	09/MAR/94	272	13.5	1.04E+05	2	8	40	9.4E-15	4.0E-16	1.9E-15	WEST PERIMETER #7218
04/MAR/94	08/MAR/94	268	13.1	9.94E+04	2	7	26	5.9E-15	3.5E-16	1.9E-15	WEST PERIMETER #7218
04/MAR/94	09/MAR/94	105	8.6	2.56E+04	2	8	35	3.2E-14	1.5E-15	7.9E-15	DRESSER PAYLOADER #9112
04/MAR/94	09/MAR/94	134	8.4	3.19E+04	2	8	35	2.6E-14	1.2E-15	6.3E-15	DRESSER PAYLOADER #9112
04/MAR/94	09/MAR/94	180	7.9	4.03E+04	1	7	70	3.8E-14	1.0E-14	3.7E-15	DRESSER PAYLOADER #9112
04/MAR/94	08/MAR/94	118	7.9	2.64E+04	2	7	23	1.9E-14	1.2E-15	7.2E-15	DRESSER PAYLOADER #9112
04/MAR/94	09/MAR/94	195	13.6	7.51E+04	1	7	67	1.9E-14	5.4E-15	2.0E-15	HOT BARREL AREA #18083N
04/MAR/94	09/MAR/94	120	12.9	4.38E+04	2	8	48	2.8E-14	1.0E-15	4.6E-15	HOT BARREL AREA #18083N
05/MAR/94	09/MAR/94	138	15.5	6.06E+04	2	8	32	1.2E-14	6.3E-16	3.3E-15	SOUTH SIDE OF S1 #7219
05/MAR/94	09/MAR/94	140	15.2	6.03E+04	1	7	38	1.2E-14	5.2E-15	2.5E-15	S1/2 FEED BELT AREA #1082
05/MAR/94	09/MAR/94	135	13.5	5.16E+04	1	7	40	1.5E-14	6.3E-15	2.9E-15	WEST PERIMETER #7218
05/MAR/94	09/MAR/94	140	9.5	3.77E+04	1	7	61	3.4E-14	1.0E-14	3.9E-15	DRESSER PAYLOADER #9112
05/MAR/94	09/MAR/94	140	13.2	5.23E+04	2	8	31	1.3E-14	7.2E-16	3.9E-15	HOT BARREL AREA #18083N
11/MAR/94	15/MAR/94	170	15.2	7.32E+04	2	6	39	1.4E-14	5.5E-16	2.4E-15	SOUTH SIDE OF S1 #7219
11/MAR/94	15/MAR/94	175	15.1	7.48E+04	1	9	43	1.1E-14	4.5E-15	2.2E-15	S1/2 FEED BELT AREA #1082
11/MAR/94	15/MAR/94	77	13.0	2.83E+04	1	9	55	3.9E-14	1.3E-14	5.9E-15	WEST PERIMETER #7218
11/MAR/94	15/MAR/94	120	14.0	4.76E+04	2	6	32	1.7E-14	7.8E-16	3.7E-15	WEST PERIMETER #7218
11/MAR/94	15/MAR/94	104	14.0	4.12E+04	2	6	32	1.9E-14	9.0E-16	4.2E-15	DRESSER PAYLOADER #9112
11/MAR/94	15/MAR/94	162	8.4	3.85E+04	1	9	73	4.0E-14	1.1E-14	4.4E-15	DRESSER PAYLOADER #9112
11/MAR/94	15/MAR/94	165	13.5	6.31E+04	1	9	54	1.7E-14	5.9E-15	2.7E-15	HOT BARREL AREA #18083N
15/MAR/94	17/MAR/94	104	15.5	4.57E+04	1	1	56	2.9E-14	7.8E-15	1.2E-15	SOUTH SIDE OF S1 #7219
15/MAR/94	17/MAR/94	165	14.8	6.92E+04	2	9	29	8.9E-15	5.4E-16	3.1E-15	SOUTH SIDE OF S1 #7219
15/MAR/94	18/MAR/94	128	14.0	5.07E+04	1	11	51	1.9E-14	7.3E-15	3.7E-15	SOUTH SIDE OF S1 #7219
15/MAR/94	17/MAR/94	105	16.0	4.76E+04	1	1	55	2.7E-14	7.4E-15	1.2E-15	S1/2 FEED BELT AREA #1082
15/MAR/94	18/MAR/94	207	14.5	8.50E+04	2	6	30	8.7E-15	4.2E-16	2.1E-15	S1/2 FEED BELT AREA #1082
15/MAR/94	17/MAR/94	83	14.5	3.41E+04	1	1	47	3.2E-14	9.6E-15	1.6E-15	S1/2 FEED BELT AREA #1082
15/MAR/94	18/MAR/94	70	13.0	2.58E+04	1	11	50	3.6E-14	1.4E-14	7.2E-15	WEST PERIMETER #7218
15/MAR/94	17/MAR/94	106	11.5	3.45E+04	2	9	43	3.0E-14	1.3E-15	6.2E-15	WEST PERIMETER #7218
15/MAR/94	17/MAR/94	88	12.5	3.12E+04	1	1	59	4.5E-14	1.2E-14	1.8E-15	WEST PERIMETER #7218
15/MAR/94	17/MAR/94	44	12.5	1.56E+04	1	1	49	7.4E-14	2.1E-14	3.6E-15	WEST PERIMETER #7218
15/MAR/94	18/MAR/94	68	14.3	2.75E+04	2	6	35	3.2E-14	1.4E-15	6.4E-15	WEST PERIMETER #7218
15/MAR/94	16/MAR/94	90	8.1	2.06E+04	1	10	53	5.0E-14	1.8E-14	8.6E-15	DRESSER PAYLOADER #9112
15/MAR/94	17/MAR/94	84	8.4	2.00E+04	2	9	26	2.6E-14	1.8E-15	1.1E-14	DRESSER PAYLOADER #9112
15/MAR/94	18/MAR/94	77	8.4	1.83E+04	2	6	25	3.2E-14	1.8E-15	9.6E-15	DRESSER PAYLOADER #9112
15/MAR/94	18/MAR/94	43	8.4	1.02E+04	1	11	55	1.0E-13	3.7E-14	1.8E-14	DRESSER PAYLOADER #9112
15/MAR/94	17/MAR/94	60	7.8	1.33E+04	2	9	33	5.5E-14	2.9E-15	1.6E-14	DRESSER PAYLOADER #9112
15/MAR/94	18/MAR/94	57	8.6	1.39E+04	1	11	55	7.6E-14	2.8E-14	1.3E-14	DRESSER PAYLOADER #9112
15/MAR/94	18/MAR/94	68	7.8	1.50E+04	1	11	75	1.0E-13	2.9E-14	1.2E-14	DRESSER PAYLOADER #9112
15/MAR/94	17/MAR/94	61	14.0	2.42E+04	1	1	53	5.2E-14	1.4E-14	2.3E-15	HOT BELT AREA #18083N
15/MAR/94	17/MAR/94	74	15.5	3.25E+04	2	9	37	2.6E-14	1.3E-15	6.6E-15	HOT BELT AREA #18083N
15/MAR/94	17/MAR/94	52	14.3	2.11E+04	1	1	37	4.1E-14	1.4E-14	2.7E-15	HOT BELT AREA #18083N
15/MAR/94	17/MAR/94	56	14.5	2.30E+04	2	9	36	3.6E-14	1.8E-15	9.3E-15	HOT BELT AREA #18083N

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
15/MAR/94	18/MAR/94	53	14.0	2.10E+04	2	6	25	2.8E-14	1.6E-15	8.3E-15	HOT BELT AREA #18083N
16/MAR/94	19/MAR/94	130	15.0	5.52E+04	1	2	43	1.8E-14	5.7E-15	1.4E-15	SOUTH SIDE OF S1 #7219
16/MAR/94	19/MAR/94	170	14.8	7.13E+04	1	2	47	1.5E-14	4.6E-15	1.1E-15	SOUTH SIDE OF S1 #7219
16/MAR/94	18/MAR/94	142	15.0	6.03E+04	1	11	40	1.2E-14	5.6E-15	3.1E-15	SOUTH SIDE OF S1 #7219
16/MAR/94	19/MAR/94	136	15.5	5.97E+04	1	2	47	1.8E-14	5.5E-15	1.3E-15	S1/2 FEED BELT AREA #1082
16/MAR/94	18/MAR/94	170	15.0	7.22E+04	2	6	33	1.1E-14	5.2E-16	2.4E-15	S1/2 FEED BELT AREA #1082
16/MAR/94	18/MAR/94	139	15.0	5.90E+04	2	6	30	1.2E-14	6.1E-16	3.0E-15	S1/2 FEED BELT AREA #1082
16/MAR/94	19/MAR/94	137	16.2	6.29E+04	2	6	25	9.3E-15	5.3E-16	2.8E-15	WEST PERIMETER #7218
16/MAR/94	19/MAR/94	130	15.9	5.85E+04	1	2	61	2.4E-14	6.4E-15	1.4E-15	WEST PERIMETER #7218
16/MAR/94	18/MAR/94	89	15.2	3.83E+04	2	6	19	1.0E-14	7.8E-16	4.6E-15	WEST PERIMETER #7218
16/MAR/94	18/MAR/94	88	15.0	3.74E+04	1	11	48	2.4E-14	9.7E-15	5.0E-15	WEST PERIMETER #7218
16/MAR/94	19/MAR/94	131	8.1	3.01E+04	1	6	27	1.7E-14	9.0E-15	4.6E-15	DRESSER PAYLOADER #9112
16/MAR/94	19/MAR/94	84	7.9	1.88E+04	2	6	32	4.2E-14	2.0E-15	9.3E-15	DRESSER PAYLOADER #9112
16/MAR/94	18/MAR/94	79	7.8	1.75E+04	2	6	34	4.9E-14	2.2E-15	1.0E-14	DRESSER PAYLOADER #9112
16/MAR/94	18/MAR/94	99	7.7	2.16E+04	1	11	65	6.0E-14	1.9E-14	8.6E-15	DRESSER PAYLOADER #9112
16/MAR/94	19/MAR/94	118	13.9	4.65E+04	2	6	26	1.3E-14	7.3E-16	3.8E-15	HOT BELT AREA #18083N
16/MAR/94	19/MAR/94	42	14.0	1.67E+04	1	2	54	7.5E-14	2.1E-14	4.8E-15	HOT BELT AREA #18083N
16/MAR/94	18/MAR/94	81	15.0	3.44E+04	1	11	41	2.1E-14	9.9E-15	5.4E-15	HOT BELT AREA #18083N
17/MAR/94	22/MAR/94	131	14.9	5.53E+04	1	5	34	1.3E-14	5.3E-15	2.3E-15	SOUTH SIDE OF S1 #7219
17/MAR/94	19/MAR/94	184	15.5	8.08E+04	1	2	54	1.5E-14	4.4E-15	9.8E-16	SOUTH SIDE OF S1 #7219
17/MAR/94	21/MAR/94	179	15.5	7.86E+04	1	7	39	9.8E-15	4.1E-15	1.9E-15	SOUTH SIDE OF S1 #7219
17/MAR/94	21/MAR/94	132	15.0	5.61E+04	2	7	24	9.3E-15	6.0E-16	3.4E-15	S1/2 FEED BELT AREA #1082
17/MAR/94	19/MAR/94	360	15.3	1.56E+05	2	6	33	5.3E-15	2.4E-16	1.1E-15	S1/2 FEED BELT AREA #1082
17/MAR/94	21/MAR/94	155	13.8	6.06E+04	1	7	52	1.8E-14	6.0E-15	2.4E-15	WEST PERIMETER #7218
17/MAR/94	19/MAR/94	120	13.2	4.49E+04	2	6	46	2.7E-14	9.7E-16	3.9E-15	WEST PERIMETER #7218
17/MAR/94	21/MAR/94	63	13.9	2.48E+04	2	7	25	2.2E-14	1.4E-15	7.6E-15	WEST PERIMETER #7218
17/MAR/94	21/MAR/94	157	13.5	6.00E+04	1	7	46	1.6E-14	5.7E-15	2.5E-15	WEST PERIMETER #7218
17/MAR/94	19/MAR/94	61	8.1	1.40E+04	2	6	55	1.1E-13	3.4E-15	1.3E-14	DRESSER PAYLOADER #9112
17/MAR/94	19/MAR/94	119	7.8	2.63E+04	1	2	57	5.0E-14	1.4E-14	3.0E-15	DRESSER PAYLOADER #9112
17/MAR/94	21/MAR/94	107	8.1	2.45E+04	2	7	58	6.4E-14	2.0E-15	7.7E-15	DRESSER PAYLOADER #9112
17/MAR/94	21/MAR/94	63	8.1	1.45E+04	1	7	46	6.5E-14	2.4E-14	1.0E-14	DRESSER PAYLOADER #9112
17/MAR/94	21/MAR/94	82	8.3	1.93E+04	2	7	28	3.3E-14	1.8E-15	9.8E-15	DRESSER PAYLOADER #9112
17/MAR/94	21/MAR/94	71	8.2	1.65E+04	2	7	31	4.5E-14	2.2E-15	1.1E-14	DRESSER PAYLOADER #9112
17/MAR/94	21/MAR/94	58	8.3	1.36E+04	1	7	48	7.2E-14	2.6E-14	1.1E-14	DRESSER PAYLOADER #9112
17/MAR/94	19/MAR/94	106	14.8	4.44E+04	1	2	65	3.4E-14	8.7E-15	1.8E-15	HOT BELT AREA #18083N
17/MAR/94	19/MAR/94	54	15.5	2.37E+04	2	6	35	3.7E-14	1.6E-15	7.4E-15	HOT BELT AREA #18083N
17/MAR/94	19/MAR/94	51	15.0	2.17E+04	1	2	51	5.4E-14	1.6E-14	3.7E-15	HOT BELT AREA #18083N
17/MAR/94	21/MAR/94	58	14.4	2.37E+04	1	7	44	3.8E-14	1.4E-14	6.3E-15	HOT BELT AREA #18083N
17/MAR/94	21/MAR/94	55	15.1	2.35E+04	2	7	22	2.0E-14	1.4E-15	8.0E-15	HOT BELT AREA #18083N
17/MAR/94	21/MAR/94	65	14.3	2.63E+04	1	7	54	4.3E-14	1.4E-14	5.6E-15	HOT BELT AREA #18083N
18/MAR/94	22/MAR/94	97	19.0	5.22E+04	2	3	34	1.8E-14	7.0E-16	2.4E-15	SOUTH SIDE OF S1 #7219
18/MAR/94	22/MAR/94	88	19.0	4.74E+04	1	5	46	2.1E-14	7.1E-15	2.6E-15	SOUTH SIDE OF S1 #7219
18/MAR/94	22/MAR/94	85	15.5	3.73E+04	2	3	20	1.4E-14	7.7E-16	3.3E-15	S1/2 FEED BELT AREA #1082
18/MAR/94	22/MAR/94	98	15.0	4.16E+04	2	3	23	1.5E-14	7.4E-16	3.0E-15	S1/2 FEED BELT AREA #1082
18/MAR/94	22/MAR/94	51	14.8	2.14E+04	1	5	40	3.9E-14	1.5E-14	5.9E-15	WEST PERIMETER #7218
18/MAR/94	22/MAR/94	97	13.5	3.71E+04	2	3	33	2.5E-14	9.7E-16	3.3E-15	WEST PERIMETER #7218
18/MAR/94	22/MAR/94	76	13.0	2.80E+04	1	5	41	3.1E-14	1.1E-14	4.5E-15	WEST PERIMETER #7218
18/MAR/94	22/MAR/94	64	15.0	2.72E+04	1	5	65	5.3E-14	1.4E-14	4.6E-15	HOT BELT AREA #18083N-CP-
18/MAR/94	22/MAR/94	30	16.0	1.36E+04	2	3	23	4.5E-14	2.3E-15	9.1E-15	HOT BELT AREA #18083N-CP-
18/MAR/94	22/MAR/94	35	14.5	1.44E+04	1	5	46	6.9E-14	2.3E-14	8.7E-15	HOT BELT AREA #18083N-CP-
18/MAR/94	21/MAR/94	59	15.6	2.61E+04	1	7	62	5.1E-14	1.5E-14	5.7E-15	HOT BELT AREA #18083N-CP-
18/MAR/94	21/MAR/94	62	14.5	2.55E+04	2	7	34	3.2E-14	1.5E-15	7.4E-15	HOT BELT AREA #18083N-CP-

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
19/MAR/94	23/MAR/94	109	15.5	4.78E+04	1	6	50	2.2E-14	7.4E-15	2.9E-15	SOUTH SIDE OF S1 #7219
19/MAR/94	23/MAR/94	119	15.9	5.36E+04	1	6	47	1.8E-14	6.4E-15	2.6E-15	SOUTH SIDE OF S1 #7219
19/MAR/94	23/MAR/94	64	15.5	2.81E+04	2	3	27	2.6E-14	1.2E-15	4.4E-15	SOUTH SIDE OF S1 #7219
19/MAR/94	23/MAR/94	108	14.9	4.56E+04	1	6	44	2.0E-14	7.3E-15	3.0E-15	S1/2 FEED BELT AREA #1082
19/MAR/94	22/MAR/94	182	15.2	7.83E+04	1	5	66	1.9E-14	5.1E-15	1.6E-15	S1/2 FEED BELT AREA #1082
19/MAR/94	23/MAR/94	97	12.9	3.54E+04	2	6	33	2.3E-14	1.1E-15	4.9E-15	WEST PERIMETER #7218
19/MAR/94	22/MAR/94	80	14.2	3.22E+04	2	3	26	2.2E-14	1.0E-15	3.8E-15	WEST PERIMETER #7218
19/MAR/94	22/MAR/94	119	13.6	4.58E+04	1	5	42	1.9E-14	7.0E-15	2.7E-15	WEST PERIMETER #7218
19/MAR/94	23/MAR/94	45	14.0	1.78E+04	2	6	43	6.4E-14	2.4E-15	9.8E-15	BLDG 714 ENTRANCE #18083N
19/MAR/94	23/MAR/94	92	14.5	3.78E+04	2	6	30	1.9E-14	9.5E-16	4.6E-15	BLDG 714 ENTRANCE #18083N
19/MAR/94	22/MAR/94	35	14.5	1.44E+04	1	5	47	7.0E-14	2.4E-14	8.7E-15	HOT BELT AREA #18083N
19/MAR/94	22/MAR/94	37	14.0	1.47E+04	1	5	59	8.8E-14	2.6E-14	8.5E-15	HOT BELT AREA #18083N
19/MAR/94	22/MAR/94	45	13.9	1.77E+04	2	3	19	2.8E-14	1.6E-15	7.0E-15	HOT BELT AREA #18083N-CP-
19/MAR/94	22/MAR/94	30	15.0	1.27E+04	1	5	46	7.7E-14	2.6E-14	9.8E-15	HOT BELT AREA #18083N-CP-
21/MAR/94	24/MAR/94	80	15.5	3.51E+04	1	4	61	3.9E-14	1.1E-14	3.2E-15	SOUTH SIDE OF S1 #7219
21/MAR/94	24/MAR/94	120	14.8	5.03E+04	1	4	56	2.5E-14	7.3E-15	2.2E-15	SOUTH SIDE OF S1 #7219
21/MAR/94	24/MAR/94	44	16.2	2.02E+04	2	5	30	3.8E-14	1.8E-15	7.9E-15	SOUTH SIDE OF S1 #7219
21/MAR/94	23/MAR/94	161	15.9	7.25E+04	1	6	57	1.7E-14	5.2E-15	1.9E-15	SOUTH SIDE OF S1 #7219
21/MAR/94	23/MAR/94	82	15.5	3.60E+04	2	6	24	1.5E-14	9.1E-16	4.9E-15	SOUTH SIDE OF S1 #7219
21/MAR/94	24/MAR/94	122	15.0	5.18E+04	2	5	21	9.5E-15	5.9E-16	3.1E-15	S1/2 FEED BELT AREA #1082
21/MAR/94	24/MAR/94	82	15.2	3.53E+04	1	4	50	3.1E-14	9.8E-15	3.2E-15	S1/2 FEED BELT AREA #1082
21/MAR/94	23/MAR/94	164	15.7	7.29E+04	2	6	35	1.2E-14	5.3E-16	2.4E-15	S1/2 FEED BELT AREA #1082
21/MAR/94	23/MAR/94	45	15.0	1.91E+04	2	5	28	3.7E-14	1.8E-15	8.4E-15	S1/2 FEED BELT AREA #1082
21/MAR/94	23/MAR/94	79	15.9	3.56E+04	1	6	55	3.3E-14	1.0E-14	3.9E-15	S1/2 FEED BELT AREA #1082
21/MAR/94	24/MAR/94	131	12.5	4.64E+04	2	5	43	2.5E-14	9.0E-16	3.4E-15	WEST PERIMETER #7218
21/MAR/94	24/MAR/94	120	12.9	4.38E+04	1	4	42	2.1E-14	7.3E-15	2.6E-15	WEST PERIMETER #7218
21/MAR/94	23/MAR/94	33	13.5	1.26E+04	2	6	25	4.6E-14	2.7E-15	1.4E-14	WEST PERIMETER #7218
21/MAR/94	23/MAR/94	169	13.8	6.60E+04	1	6	50	1.6E-14	5.3E-15	2.1E-15	WEST PERIMETER #7218
21/MAR/94	23/MAR/94	34	14.0	1.35E+04	2	6	87	1.8E-13	4.3E-15	1.3E-14	HOT BELT AREA #18083N
21/MAR/94	24/MAR/94	45	14.3	1.82E+04	1	4	58	7.1E-14	2.0E-14	6.2E-15	HOT BELT AREA #18083N
21/MAR/94	23/MAR/94	30	15.1	1.28E+04	1	6	240	4.4E-13	5.8E-14	1.1E-14	HOT BELT AREA #18083N
21/MAR/94	23/MAR/94	30	14.7	1.25E+04	1	6	48	8.1E-14	2.8E-14	1.1E-14	HOT BELT AREA #18083N
21/MAR/94	23/MAR/94	103	14.3	4.17E+04	2	6	178	1.3E-13	2.0E-15	4.2E-15	HOT BELT AREA #18083N
21/MAR/94	24/MAR/94	30	15.5	1.32E+04	2	4	34	7.0E-14	2.8E-15	1.1E-14	HOT BELT AREA #18083N
21/MAR/94	23/MAR/94	37	15.0	1.57E+04	1	6	71	9.9E-14	2.6E-14	8.7E-15	HOT BELT AREA #18083N
21/MAR/94	23/MAR/94	39	14.7	1.62E+04	2	6	65	1.1E-13	3.1E-15	1.1E-14	HOT BELT AREA #18083N
22/MAR/94	25/MAR/94	71	14.8	2.98E+04	2	7	38	3.2E-14	1.4E-15	6.4E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	25/MAR/94	66	15.6	2.92E+04	2	7	41	3.6E-14	1.4E-15	6.5E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	25/MAR/94	66	15.5	2.90E+04	2	7	31	2.5E-14	1.3E-15	6.5E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	25/MAR/94	151	15.3	6.54E+04	1	9	53	1.6E-14	5.7E-15	2.6E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	25/MAR/94	69	15.3	2.99E+04	2	7	36	3.0E-14	1.3E-15	6.3E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	25/MAR/94	101	15.3	4.38E+04	1	9	89	4.4E-14	1.1E-14	3.8E-15	SOUTH SIDE OF S1 #7219
22/MAR/94	26/MAR/94	72	15.5	3.16E+04	2	6	29	2.2E-14	1.1E-15	5.5E-15	S1/2 FEED BELT AREA #1082
22/MAR/94	25/MAR/94	67	15.2	2.88E+04	2	7	33	2.8E-14	1.3E-15	6.6E-15	S1/2 FEED BELT AREA #1082
22/MAR/94	25/MAR/94	66	15.0	2.80E+04	1	9	57	4.1E-14	1.4E-14	6.0E-15	S1/2 FEED BELT AREA #1082
22/MAR/94	25/MAR/94	203	14.9	8.57E+04	1	9	349	9.5E-14	1.0E-14	2.0E-15	S1/2 FEED BELT AREA #1082
22/MAR/94	25/MAR/94	117	14.9	4.94E+04	2	7	40	2.0E-14	8.3E-16	3.8E-15	S1/2 FEED BELT AREA #1082
22/MAR/94	25/MAR/94	77	13.7	2.99E+04	1	9	46	3.0E-14	1.2E-14	5.6E-15	WEST PERIMETER #7218
22/MAR/94	25/MAR/94	64	13.6	2.46E+04	1	9	78	6.7E-14	1.8E-14	6.8E-15	WEST PERIMETER #7218
22/MAR/94	24/MAR/94	65	13.6	2.50E+04	1	4	51	4.5E-14	1.4E-14	4.5E-15	WEST PERIMETER #7218
22/MAR/94	25/MAR/94	202	14.0	8.01E+04	1	9	67	1.7E-14	5.1E-15	2.1E-15	WEST PERIMETER #7218
22/MAR/94	25/MAR/94	109	13.6	4.20E+04	2	7	48	3.0E-14	1.1E-15	4.5E-15	WEST PERIMETER #7218

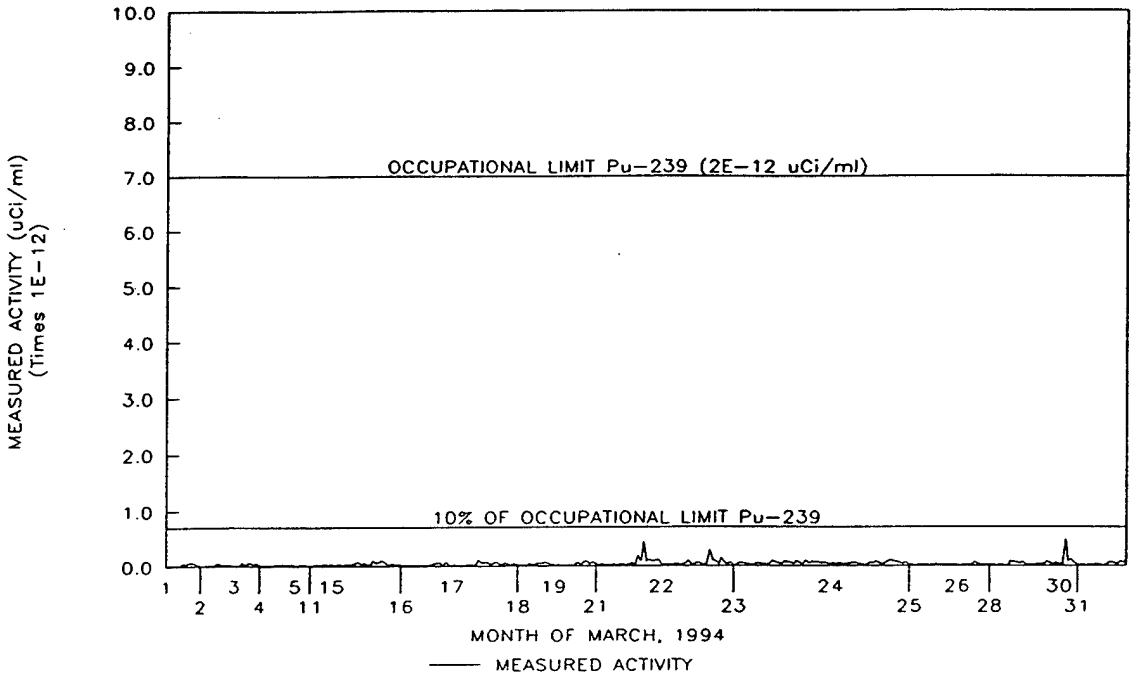
Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
22/MAR/94	25/MAR/94	60	13.8	2.34E+04	1	9	289	2.9E-13	3.5E-14	7.2E-15	HOT BELT AREA #18083N
22/MAR/94	25/MAR/94	47	14.2	1.89E+04	2	7	67	9.7E-14	2.7E-15	1.0E-14	HOT BELT AREA #18083N
22/MAR/94	24/MAR/94	41	13.5	1.57E+04	1	4	60	8.6E-14	2.4E-14	7.2E-15	HOT BELT AREA #18083N
22/MAR/94	26/MAR/94	75	14.5	3.08E+04	1	10	50	3.1E-14	1.2E-14	5.8E-15	HOT BELT AREA #18083N
22/MAR/94	24/MAR/94	56	13.9	2.20E+04	2	5	109	1.4E-13	2.9E-15	7.3E-15	HOT BELT AREA #18083N
22/MAR/94	25/MAR/94	57	14.2	2.29E+04	1	9	55	4.8E-14	1.6E-14	7.3E-15	HOT BELT AREA #18083N
22/MAR/94	25/MAR/94	61	14.2	2.45E+04	2	7	30	2.9E-14	1.5E-15	7.7E-15	HOT BELT AREA #18083N
22/MAR/94	25/MAR/94	38	14.8	1.59E+04	2	7	38	6.0E-14	2.5E-15	1.2E-14	HOT BELT AREA #18083N
23/MAR/94	26/MAR/94	107	15.5	4.70E+04	2	6	28	1.4E-14	7.5E-16	3.7E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	26/MAR/94	103	15.0	4.38E+04	2	6	39	2.3E-14	9.2E-16	4.0E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	26/MAR/94	38	15.4	1.66E+04	1	10	46	5.2E-14	2.1E-14	1.1E-14	SOUTH SIDE OF S1 #7219
23/MAR/94	28/MAR/94	48	15.5	2.11E+04	1	9	54	5.1E-14	1.8E-14	8.0E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	28/MAR/94	55	15.5	2.41E+04	2	7	40	4.2E-14	1.7E-15	7.8E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	28/MAR/94	67	15.5	2.94E+04	2	7	41	3.5E-14	1.4E-15	6.4E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	28/MAR/94	99	14.8	4.15E+04	1	9	46	2.1E-14	8.4E-15	4.1E-15	SOUTH SIDE OF S1 #7219
23/MAR/94	26/MAR/94	113	15.0	4.80E+04	2	6	39	2.1E-14	8.4E-16	3.6E-15	S1/2 FEED BELT AREA #1082
23/MAR/94	26/MAR/94	31	15.0	1.32E+04	2	6	27	4.9E-14	2.6E-15	1.3E-14	S1/2 FEED BELT AREA #1082
23/MAR/94	28/MAR/94	107	15.0	4.55E+04	2	7	67	4.0E-14	1.1E-15	4.2E-15	S1/2 FEED BELT AREA #1082
23/MAR/94	28/MAR/94	50	15.0	2.12E+04	1	9	39	3.4E-14	1.5E-14	7.9E-15	S1/2 FEED BELT AREA #1082
23/MAR/94	29/MAR/94	116	15.5	5.09E+04	1	6	66	2.8E-14	7.8E-15	2.7E-15	S1/2 FEED BELT AREA #1082
23/MAR/94	28/MAR/94	100	15.0	4.25E+04	1	9	73	3.6E-14	1.0E-14	4.0E-15	S1/2 FEED BELT AREA #1082
23/MAR/94	26/MAR/94	29	14.0	1.15E+04	2	7	41	9.1E-14	3.6E-15	1.6E-14	DUMP TRUCK AREA #7218
23/MAR/94	26/MAR/94	53	13.8	2.07E+04	1	10	66	6.5E-14	2.0E-14	8.6E-15	DUMP TRUCK AREA #7218
23/MAR/94	26/MAR/94	55	13.8	2.15E+04	1	10	55	5.0E-14	1.8E-14	8.2E-15	DUMP TRUCK AREA #7218
23/MAR/94	26/MAR/94	118	13.8	4.61E+04	1	10	68	3.0E-14	9.0E-15	3.8E-15	DUMP TRUCK AREA #7218
23/MAR/94	26/MAR/94	30	13.8	1.17E+04	1	10	47	7.6E-14	3.0E-14	1.5E-14	DUMP TRUCK AREA #7218
23/MAR/94	28/MAR/94	43	13.6	1.66E+04	1	9	55	6.7E-14	2.3E-14	1.0E-14	DUMP TRUCK AREA #7218
23/MAR/94	28/MAR/94	27	13.8	1.06E+04	2	7	27	5.8E-14	3.3E-15	1.8E-14	DUMP TRUCK AREA #7218
23/MAR/94	28/MAR/94	60	13.8	2.34E+04	2	7	30	3.0E-14	1.6E-15	8.1E-15	DUMP TRUCK AREA #7218
23/MAR/94	28/MAR/94	39	13.8	1.52E+04	1	9	63	8.5E-14	2.6E-14	1.1E-14	DUMP TRUCK AREA #7218
23/MAR/94	28/MAR/94	38	13.8	1.49E+04	2	7	32	5.2E-14	2.5E-15	1.3E-14	DUMP TRUCK AREA #7218
23/MAR/94	26/MAR/94	98	14.2	3.94E+04	1	10	58	2.9E-14	9.9E-15	4.5E-15	HOT BELT AREA #18083N
23/MAR/94	26/MAR/94	40	14.0	1.59E+04	2	6	55	9.5E-14	3.0E-15	1.1E-14	HOT BELT AREA #18083N
23/MAR/94	26/MAR/94	45	14.0	1.78E+04	1	10	41	4.2E-14	1.9E-14	9.9E-15	HOT BELT AREA #18083N
23/MAR/94	26/MAR/94	46	14.3	1.86E+04	2	6	55	8.1E-14	2.5E-15	9.4E-15	HOT BELT AREA #18083N
23/MAR/94	26/MAR/94	32	14.3	1.30E+04	2	6	35	6.9E-14	3.0E-15	1.4E-14	HOT BELT AREA #18083N
23/MAR/94	28/MAR/94	33	14.0	1.31E+04	1	9	52	7.9E-14	2.8E-14	1.3E-14	HOT BELT AREA #18083N
23/MAR/94	28/MAR/94	60	14.0	2.38E+04	1	9	49	4.0E-14	1.5E-14	7.1E-15	HOT BELT AREA #18083N
23/MAR/94	28/MAR/94	32	14.0	1.27E+04	2	7	32	6.0E-14	3.0E-15	1.5E-14	HOT BELT AREA #18083N
23/MAR/94	28/MAR/94	54	14.0	2.14E+04	2	7	36	4.2E-14	1.8E-15	8.8E-15	HOT BELT AREA #18083N
24/MAR/94	29/MAR/94	88	15.8	3.94E+04	2	3	44	3.2E-14	1.0E-15	3.1E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	58	15.3	2.51E+04	1	6	57	4.9E-14	1.5E-14	5.5E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	55	15.5	2.41E+04	2	3	33	3.8E-14	1.5E-15	5.1E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	66	15.5	2.90E+04	1	6	72	5.5E-14	1.4E-14	4.7E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	111	15.5	4.87E+04	1	6	66	3.0E-14	8.2E-15	2.8E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	30/MAR/94	69	15.8	3.09E+04	2	9	39	3.0E-14	1.3E-15	6.9E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	44	16.5	2.06E+04	2	3	30	4.0E-14	1.7E-15	6.0E-15	SOUTH SIDE OF S1 #7219
24/MAR/94	29/MAR/94	87	15.2	3.75E+04	2	3	59	4.6E-14	1.3E-15	3.3E-15	S1/2 FEED BELT AREA #1082
24/MAR/94	29/MAR/94	50	15.0	2.12E+04	1	6	60	6.1E-14	1.8E-14	6.5E-15	S1/2 FEED BELT AREA #1082
24/MAR/94	29/MAR/94	59	15.0	2.51E+04	2	3	36	4.0E-14	1.5E-15	4.9E-15	S1/2 FEED BELT AREA #1082
24/MAR/94	29/MAR/94	72	15.0	3.06E+04	2	3	37	3.4E-14	1.2E-15	4.0E-15	S1/2 FEED BELT AREA #1082
24/MAR/94	28/MAR/94	108	15.0	4.59E+04	2	7	30	1.5E-14	8.0E-16	4.1E-15	S1/2 FEED BELT AREA #1082

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
24/MAR/94	30/MAR/94	109	15.0	4.63E+04	1	5	54	2.5E-14	7.8E-15	2.7E-15	S1/2 FEED BELT AREA #1082
24/MAR/94	29/MAR/94	39	14.0	1.55E+04	1	6	45	6.1E-14	2.2E-14	8.9E-15	DUMP TRUCK AREA #7218
24/MAR/94	29/MAR/94	45	14.0	1.78E+04	2	3	28	4.3E-14	1.9E-15	6.9E-15	DUMP TRUCK AREA #7218
24/MAR/94	29/MAR/94	57	13.8	2.23E+04	1	6	86	8.6E-14	2.0E-14	6.2E-15	DUMP TRUCK AREA #7218
24/MAR/94	29/MAR/94	78	13.8	3.05E+04	2	3	58	5.5E-14	1.5E-15	4.1E-15	DUMP TRUCK AREA #7218
24/MAR/94	30/MAR/94	60	13.8	2.34E+04	1	5	42	3.8E-14	1.4E-14	5.3E-15	DUMP TRUCK AREA #7218
24/MAR/94	30/MAR/94	41	13.8	1.60E+04	1	5	39	5.1E-14	1.9E-14	7.8E-15	DUMP TRUCK AREA #7218
24/MAR/94	29/MAR/94	30	14.6	1.24E+04	1	6	53	9.1E-14	2.9E-14	1.1E-14	DUMP TRUCK AREA #7218
24/MAR/94	29/MAR/94	35	14.2	1.41E+04	2	3	54	1.1E-13	3.2E-15	8.8E-15	HOT BELT AREA #18083N
24/MAR/94	29/MAR/94	49	14.0	1.94E+04	2	3	49	7.3E-14	2.2E-15	6.4E-15	HOT BELT AREA #18083N
24/MAR/94	29/MAR/94	42	14.0	1.67E+04	1	6	58	7.5E-14	2.3E-14	8.2E-15	HOT BELT AREA #18083N
24/MAR/94	29/MAR/94	60	14.3	2.43E+04	1	6	60	5.3E-14	1.6E-14	5.7E-15	HOT BELT AREA #18083N
24/MAR/94	30/MAR/94	57	14.2	2.29E+04	2	9	42	4.4E-14	1.9E-15	9.4E-15	HOT BELT AREA #18083N
24/MAR/94	29/MAR/94	33	14.2	1.33E+04	1	6	39	6.0E-14	2.4E-14	1.0E-14	HOT BELT AREA #18083N
25/MAR/94	30/MAR/94	74	16.7	3.50E+04	1	5	43	2.6E-14	9.3E-15	3.6E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	30/MAR/94	90	16.5	4.21E+04	1	5	40	2.0E-14	7.5E-15	3.0E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	30/MAR/94	66	16.5	3.08E+04	2	9	22	1.3E-14	1.1E-15	7.0E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	30/MAR/94	124	16.5	5.79E+04	2	9	28	1.0E-14	6.3E-16	3.7E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	31/MAR/94	92	16.5	4.30E+04	1	8	48	2.2E-14	8.2E-15	3.7E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	31/MAR/94	62	16.5	2.90E+04	1	8	37	2.4E-14	1.1E-14	5.5E-15	SOUTH SIDE OF S1 #7219
25/MAR/94	31/MAR/94	70	17.0	3.37E+04	2	5	27	2.0E-14	1.0E-15	4.7E-15	S1/2 FEED BELT AREA #1082
25/MAR/94	30/MAR/94	96	16.8	4.57E+04	2	9	20	7.4E-15	7.1E-16	4.7E-15	S1/2 FEED BELT AREA #1082
25/MAR/94	30/MAR/94	99	16.2	4.54E+04	1	5	47	2.2E-14	7.5E-15	2.8E-15	S1/2 FEED BELT AREA #1082
25/MAR/94	31/MAR/94	71	16.2	3.26E+04	1	8	51	3.2E-14	1.1E-14	4.9E-15	S1/2 FEED BELT AREA #1082
25/MAR/94	30/MAR/94	65	14.5	2.67E+04	2	9	24	1.7E-14	1.3E-15	8.0E-15	DUMP TRUCK AREA #7218
25/MAR/94	30/MAR/94	95	14.5	3.90E+04	1	5	35	1.8E-14	7.6E-15	3.2E-15	DUMP TRUCK AREA #7218
25/MAR/94	30/MAR/94	64	14.9	2.70E+04	1	5	35	2.7E-14	1.1E-14	4.6E-15	DUMP TRUCK AREA #7218
25/MAR/94	30/MAR/94	125	14.5	5.13E+04	1	5	42	1.7E-14	6.3E-15	2.4E-15	DUMP TRUCK AREA #7218
25/MAR/94	31/MAR/94	96	15.1	4.11E+04	2	5	27	1.6E-14	8.3E-16	3.9E-15	DUMP TRUCK AREA #7218
25/MAR/94	30/MAR/94	84	15.1	3.59E+04	2	9	27	1.5E-14	1.0E-15	6.0E-15	HOT BELT AREA #18083N
26/MAR/94	01/APR/94	111	16.5	5.19E+04	2	3	19	9.5E-15	5.4E-16	2.4E-15	SOUTH SIDE OF S1 #7219
26/MAR/94	28/MAR/94	130	16.5	6.07E+04	1	8	46	1.5E-14	5.7E-15	2.6E-15	SOUTH SIDE OF S1 #7219
26/MAR/94	01/APR/94	111	17.5	5.50E+04	1	9	41	1.4E-14	6.1E-15	3.1E-15	S1/2 FEED BELT AREA #1082
26/MAR/94	31/MAR/94	64	16.0	2.90E+04	2	5	27	2.3E-14	1.2E-15	5.5E-15	S1/2 FEED BELT AREA #1082
26/MAR/94	31/MAR/94	66	16.2	3.03E+04	1	8	38	2.4E-14	1.1E-14	5.2E-15	S1/2 FEED BELT AREA #1082
26/MAR/94	01/APR/94	112	15.0	4.76E+04	1	9	43	1.7E-14	7.1E-15	3.5E-15	DUMP TRUCK AREA #7218
26/MAR/94	31/MAR/94	63	15.5	2.77E+04	1	8	89	7.0E-14	1.7E-14	5.7E-15	DUMP TRUCK AREA #7218
26/MAR/94	31/MAR/94	61	15.5	2.68E+04	2	5	30	2.9E-14	1.3E-15	6.0E-15	DUMP TRUCK AREA #7218
26/MAR/94	31/MAR/94	51	14.5	2.09E+04	1	8	33	2.9E-14	1.4E-14	7.6E-15	HOT BELT AREA #18083N
26/MAR/94	31/MAR/94	51	14.5	2.09E+04	1	8	28	2.3E-14	1.3E-14	7.6E-15	HOT BELT AREA #18083N
26/MAR/94	31/MAR/94	56	14.5	2.30E+04	2	5	28	3.1E-14	1.5E-15	7.0E-15	HOT BELT AREA #18083N
28/MAR/94	01/APR/94	121	16.5	5.65E+04	1	9	47	1.6E-14	6.2E-15	3.0E-15	SOUTH SIDE OF S1 #7219
28/MAR/94	01/APR/94	65	14.5	2.67E+04	1	9	37	2.5E-14	1.2E-14	6.3E-15	SOUTH SIDE OF S1 #7219
28/MAR/94	02/APR/94	103	16.5	4.81E+04	2	4	16	7.6E-15	5.6E-16	3.0E-15	SOUTH SIDE OF S1 #7219
28/MAR/94	01/APR/94	72	17.1	3.49E+04	2	3	18	1.3E-14	7.9E-16	3.6E-15	S1/2 FEED BELT AREA #1082
28/MAR/94	02/APR/94	86	17.0	4.14E+04	1	6	41	2.0E-14	7.8E-15	3.3E-15	S1/2 FEED BELT AREA #1082
28/MAR/94	01/APR/94	171	17.1	8.28E+04	2	3	32	1.1E-14	4.3E-16	1.5E-15	S1/2 FEED BELT AREA #1082
28/MAR/94	02/APR/94	185	16.6	8.70E+04	1	6	43	1.0E-14	3.8E-15	1.6E-15	S1/2 FEED BELT AREA #1082
28/MAR/94	01/APR/94	64	15.0	2.72E+04	2	3	76	8.2E-14	2.0E-15	4.6E-15	DUMP TRUCK AREA #7218
28/MAR/94	01/APR/94	40	15.0	1.70E+04	1	9	56	6.6E-14	2.2E-14	9.9E-15	DUMP TRUCK AREA #7218
28/MAR/94	01/APR/94	36	15.0	1.53E+04	1	9	46	5.8E-14	2.3E-14	1.1E-14	DUMP TRUCK AREA #7218
28/MAR/94	01/APR/94	47	15.0	2.00E+04	1	6	43	4.5E-14	1.7E-14	6.9E-15	DUMP TRUCK AREA #7218

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
28/MAR/94	01/APR/94	38	15.0	1.61E+04	2	3	44	7.8E-14	2.6E-15	7.7E-15	DUMP TRUCK AREA #7218
28/MAR/94	01/APR/94	109	15.0	4.63E+04	1	9	44	1.8E-14	7.4E-15	3.6E-15	DUMP TRUCK AREA #7218
28/MAR/94	01/APR/94	56	15.0	2.38E+04	2	3	22	2.4E-14	1.3E-15	5.2E-15	DUMP TRUCK AREA #7218
28/MAR/94	02/APR/94	48	15.3	2.08E+04	2	4	29	3.7E-14	1.7E-15	6.9E-15	DUMP TRUCK AREA #7218
28/MAR/94	02/APR/94	64	15.5	2.81E+04	1	6	36	2.6E-14	1.1E-14	4.9E-15	DUMP TRUCK AREA #7218
28/MAR/94	02/APR/94	51	15.0	2.17E+04	2	4	29	3.5E-14	1.6E-15	6.6E-15	HOT BELT AREA #18083N-1-
28/MAR/94	01/APR/94	60	14.8	2.51E+04	1	9	45	3.4E-14	1.4E-14	6.7E-15	HOT BELT AREA #18083N-1-
28/MAR/94	01/APR/94	32	14.5	1.31E+04	2	3	17	3.3E-14	2.0E-15	9.4E-15	HOT BELT AREA #18083N-2-
28/MAR/94	01/APR/94	31	14.8	1.30E+04	2	3	36	7.8E-14	2.9E-15	9.5E-15	HOT BELT AREA #18083N-3-
28/MAR/94	01/APR/94	51	15.5	2.24E+04	1	9	57	5.2E-14	1.7E-14	7.5E-15	HOT BELT AREA #18083N-4-
28/MAR/94	02/APR/94	40	14.8	1.68E+04	1	6	33	3.9E-14	1.8E-14	8.2E-15	HOT BELT AREA #18083N-4-
28/MAR/94	01/APR/94	32	15.1	1.37E+04	1	9	39	5.3E-14	2.4E-14	1.2E-14	HOT BELT AREA #18083N-5-
30/MAR/94	02/APR/94	80	15.3	3.47E+04	1	6	60	3.7E-14	1.1E-14	4.0E-15	SOUTH SIDE OF S1 #7219
30/MAR/94	02/APR/94	78	15.1	3.34E+04	1	6	54	3.5E-14	1.1E-14	4.1E-15	S1/2 FEED BELT AREA #1082
30/MAR/94	02/APR/94	78	14.0	3.09E+04	2	4	491	4.8E-13	4.3E-15	4.6E-15	DUMP TRUCK AREA #7218
30/MAR/94	02/APR/94	39	14.2	1.57E+04	1	6	55	7.5E-14	2.3E-14	8.8E-15	HOT BELT AREA #18083N
30/MAR/94	02/APR/94	26	14.0	1.03E+04	1	6	60	1.3E-13	3.7E-14	1.3E-14	HOT BELT AREA #18083N
30/MAR/94	02/APR/94	30	14.3	1.21E+04	2	4	24	5.0E-14	2.6E-15	1.2E-14	HOT BELT AREA #18083N
31/MAR/94	04/APR/94	68	14.8	2.85E+04	2	6	25	2.0E-14	1.2E-15	6.1E-15	SOUTH SIDE OF S1 #7219
31/MAR/94	04/APR/94	81	15.5	3.56E+04	2	6	31	2.2E-14	1.0E-15	4.9E-15	SOUTH SIDE OF S1 #7219
31/MAR/94	04/APR/94	101	15.0	4.29E+04	2	6	32	1.9E-14	8.6E-16	4.1E-15	SOUTH SIDE OF S1 #7219
31/MAR/94	04/APR/94	176	15.5	7.73E+04	1	6	41	1.1E-14	4.2E-15	1.8E-15	SOUTH SIDE OF S1 #7219
31/MAR/94	04/APR/94	139	14.5	5.71E+04	2	6	37	1.7E-14	6.9E-16	3.1E-15	S1/2 FEED BELT AREA #1082
31/MAR/94	02/APR/94	169	14.5	6.94E+04	1	6	54	1.7E-14	5.3E-15	2.0E-15	S1/2 FEED BELT AREA #1082
31/MAR/94	04/APR/94	62	14.4	2.53E+04	2	6	33	3.3E-14	1.5E-15	6.9E-15	DUMP TRUCK AREA #7218
31/MAR/94	04/APR/94	74	14.0	2.93E+04	1	6	50	3.6E-14	1.2E-14	4.7E-15	DUMP TRUCK AREA #7218
31/MAR/94	04/APR/94	108	14.0	4.28E+04	2	6	22	1.1E-14	7.4E-16	4.1E-15	DUMP TRUCK AREA #7218
31/MAR/94	02/APR/94	170	14.0	6.74E+04	2	4	33	1.3E-14	5.4E-16	2.1E-15	DUMP TRUCK AREA #7218
31/MAR/94	04/APR/94	31	16.8	1.47E+04	1	6	35	4.7E-14	2.0E-14	9.3E-15	HOT BELT AREA #18083N
31/MAR/94	04/APR/94	39	14.5	1.60E+04	1	6	49	6.5E-14	2.2E-14	8.6E-15	HOT BELT AREA #18083N-1-
31/MAR/94	04/APR/94	40	14.0	1.59E+04	1	6	39	5.0E-14	2.0E-14	8.7E-15	HOT BELT AREA #18083N-2-
31/MAR/94	04/APR/94	93	14.5	3.82E+04	1	6	51	2.8E-14	9.3E-15	3.6E-15	HOT BELT AREA #18083N-4-
31/MAR/94	04/APR/94	30	14.2	1.21E+04	1	6	51	9.0E-14	2.9E-14	1.1E-14	HOT BELT AREA #18083N-4-
31/MAR/94	04/APR/94	48	14.5	1.97E+04	2	6	39	5.1E-14	2.0E-15	8.9E-15	HOT BELT AREA #18083N-1-
31/MAR/94	04/APR/94	34	14.0	1.35E+04	1	6	70	1.1E-13	3.0E-14	1.0E-14	HOT BELT AREA #18083N-1-

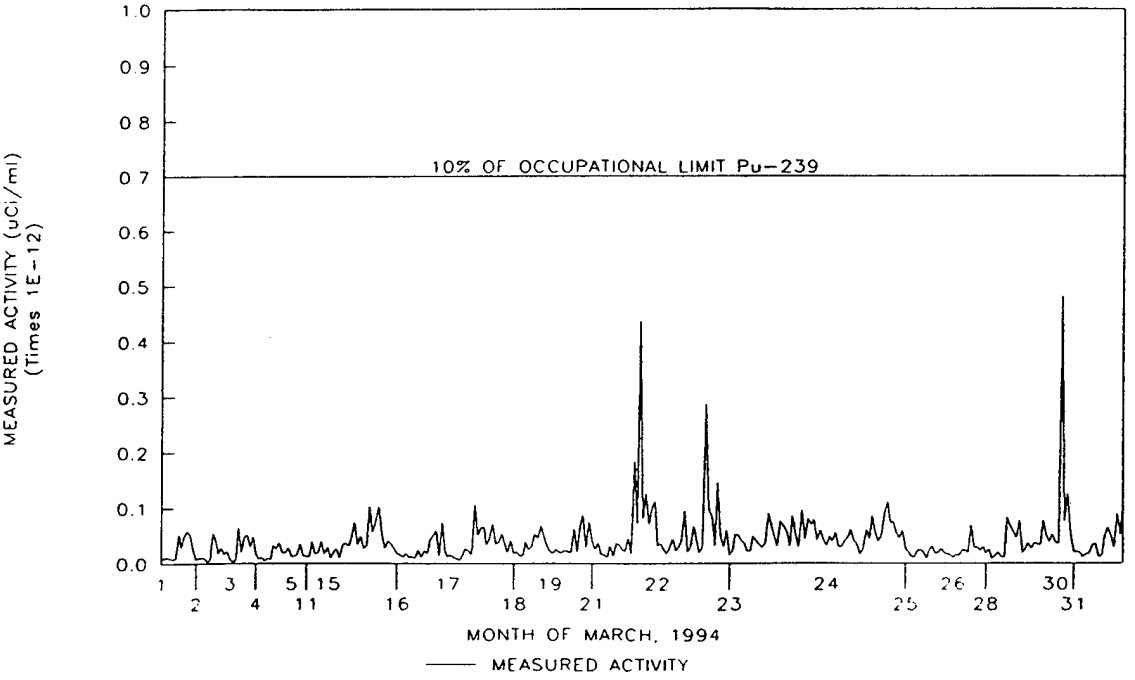
JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



TMA/EBERLINE-JOHNSTON ATOLL GROSS ALPHA RADIOACTIVITY IN AIR TEST RESULTS FOR THE MONTH OF APRIL 1994

THIS REPORT WAS REVIEWED BY: _____ DATE: 4 APR 94
JOHNSTON ATOLL SITE MANAGER

The current 10CFR PART 20 "Standards for Protection Against Radiation" limits of concentration in air for Pu-239 are as follows:

Occupational Limit = 7 E-12 uCi/ml

INSTRUMENT NO.1 MS-2/RD-14 SN: 354/407
CAL DUE DATE: 08/SEP/94
INSTRUMENT NO.2 ESP-2/43-1 SN:964/PR033568
CAL DUE DATE: 08/SEP/94
EFF INSTR NO.1 0.375 4 pi
EFF INSTR NO.2 0.294 4 pi
BKG COUNT TIME: 50 min
SAMPLE CNT TIME: 50 min

SITE NAME: JOHNSTON ATOLL
REPORT DATE: 01/MAY/94
COMPILED BY: S. PARKER SP
J. WOODS JW

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
01/APR/94	06/APR/94	161	16.4	7.48E+04	2	7	41	1.4E-14	5.6E-16	2.5E-15	SOUTH SIDE OF S1 #7219
01/APR/94	05/APR/94	106	15.0	4.50E+04	2	8	55	3.2E-14	1.1E-15	4.5E-15	SOUTH SIDE OF S1 #7219
01/APR/94	05/APR/94	131	14.8	5.49E+04	1	3	47	1.9E-14	6.1E-15	1.8E-15	SOUTH SIDE OF S1 #7219
01/APR/94	05/APR/94	147	15.3	6.37E+04	1	3	131	4.8E-14	8.6E-15	1.5E-15	SOUTH SIDE OF S1 #7219
01/APR/94	06/APR/94	103	14.0	4.08E+04	1	4	43	2.3E-14	7.9E-15	2.7E-15	S1/2 FEED BELT #7218
01/APR/94	05/APR/94	98	14.0	3.89E+04	2	8	27	1.5E-14	9.1E-16	5.2E-15	S1/2 FEED BELT #7218
01/APR/94	05/APR/94	200	13.6	7.70E+04	1	3	48	1.4E-14	4.4E-15	1.3E-15	S1/2 FEED BELT #7218
01/APR/94	04/APR/94	145	14.0	5.75E+04	2	6	47	2.2E-14	7.6E-16	3.0E-15	S1/2 FEED BELT #7218
01/APR/94	06/APR/94	162	14.5	6.65E+04	1	4	46	1.5E-14	5.0E-15	1.7E-15	S1/2 GATE AREA #1082
01/APR/94	05/APR/94	104	13.5	3.98E+04	1	3	51	2.9E-14	8.7E-15	2.4E-15	S1/2 GATE AREA #1082
01/APR/94	05/APR/94	134	13.6	5.16E+04	2	8	34	1.5E-14	7.5E-16	3.9E-15	S1/2 GATE AREA #1082
01/APR/94	05/APR/94	147	13.9	5.79E+04	2	8	38	1.6E-14	7.0E-16	3.5E-15	S1/2 GATE AREA #1082
01/APR/94	05/APR/94	22	12.8	7.97E+03	1	3	289	8.6E-13	1.0E-13	1.2E-14	S1/2 HOT BELT #18083N-1-
01/APR/94	06/APR/94	60	14.0	2.38E+04	1	4	53	4.9E-14	1.5E-14	4.7E-15	S1/2 HOT BELT #18083N-1-
01/APR/94	06/APR/94	43	14.0	1.70E+04	2	7	25	3.2E-14	2.0E-15	1.1E-14	S1/2 HOT BELT #18083N-2-
01/APR/94	06/APR/94	41	14.0	1.63E+04	1	4	49	6.7E-14	2.1E-14	6.9E-15	S1/2 HOT BELT #18083N-3-
01/APR/94	05/APR/94	50	13.6	1.93E+04	1	3	723	9.0E-13	6.6E-14	5.0E-15	S1/2 HOT BELT #18083N-1-
01/APR/94	05/APR/94	58	14.0	2.30E+04	1	3	54	5.3E-14	1.5E-14	4.2E-15	S1/2 HOT BELT #18083N-3-
01/APR/94	07/APR/94	67	14.5	2.75E+04	1	5	60	4.8E-14	1.4E-14	4.6E-15	S1/2 HOT BELT #18083N-4-
01/APR/94	05/APR/94	32	13.2	1.20E+04	2	8	188	4.6E-13	7.0E-15	1.7E-14	S1/2 HOT BELT #18083N-4-
02/APR/94	06/APR/94	150	15.5	6.58E+04	2	7	45	1.8E-14	6.6E-16	2.9E-15	SOUTH SIDE OF S1 #7219
02/APR/94	06/APR/94	118	15.5	5.18E+04	1	4	51	2.2E-14	6.7E-15	2.2E-15	SOUTH SIDE OF S1 #7219
02/APR/94	07/APR/94	153	15.1	6.54E+04	1	5	53	1.8E-14	5.5E-15	1.9E-15	SOUTH SIDE OF S1 #7219
02/APR/94	06/APR/94	134	14.5	5.50E+04	1	4	46	1.8E-14	6.1E-15	2.0E-15	S1/2 GATE AREA #1082
02/APR/94	06/APR/94	156	14.5	6.41E+04	1	4	40	1.4E-14	4.9E-15	1.8E-15	S1/2 GATE AREA #1082
02/APR/94	07/APR/94	119	15.0	5.06E+04	1	5	41	1.7E-14	6.3E-15	2.5E-15	S1/2 GATE AREA #1082
02/APR/94	06/APR/94	91	14.5	3.74E+04	1	4	48	2.8E-14	9.1E-15	3.0E-15	S1/2 FEED BELT #7218

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
02/APR/94	06/APR/94	119	14.0	4.72E+04	1	4	48	2.2E-14	7.2E-15	2.4E-15	S1/2 FEED BELT #7218
02/APR/94	07/APR/94	202	13.8	7.89E+04	2	7	37	1.2E-14	5.0E-16	2.4E-15	S1/2 FEED BELT #7218
02/APR/94	06/APR/94	43	14.3	1.74E+04	2	7	22	2.6E-14	1.9E-15	1.1E-14	S1/2 HOT BELT #18083N-4-
02/APR/94	06/APR/94	53	13.7	2.06E+04	2	7	56	7.3E-14	2.3E-15	9.2E-15	S1/2 HOT BELT #18083N-4-
02/APR/94	06/APR/94	89	14.0	3.53E+04	2	7	45	3.3E-14	1.2E-15	5.4E-15	S1/2 HOT BELT #18083N-1-
02/APR/94	06/APR/94	75	14.0	2.97E+04	2	7	57	5.2E-14	1.6E-15	6.4E-15	S1/2 HOT BELT #18083N-3-
02/APR/94	06/APR/94	34	13.5	1.30E+04	2	7	30	5.4E-14	2.8E-15	1.5E-14	S1/2 HOT BELT #18083N-1-
05/APR/94	07/APR/94	78	15.0	3.31E+04	1	5	39	2.5E-14	9.4E-15	3.8E-15	SOUTH SIDE OF S1 #7219
05/APR/94	07/APR/94	192	15.0	8.16E+04	1	5	44	1.1E-14	4.0E-15	1.5E-15	SOUTH SIDE OF S1 #7219
05/APR/94	07/APR/94	140	14.7	5.83E+04	2	7	31	1.3E-14	6.4E-16	3.2E-15	SOUTH SIDE OF S1 #7219
05/APR/94	08/APR/94	146	14.5	6.00E+04	1	6	49	1.7E-14	5.8E-15	2.3E-15	SOUTH SIDE OF S1 #7219
05/APR/94	07/APR/94	179	13.8	7.00E+04	2	7	28	9.2E-15	5.1E-16	2.7E-15	S1/2 GATE AREA #1082
05/APR/94	07/APR/94	322	13.8	1.26E+05	1	5	41	6.9E-15	2.5E-15	1.0E-15	S1/2 GATE AREA #1082
05/APR/94	07/APR/94	187	14.3	7.57E+04	2	7	24	6.9E-15	4.4E-16	2.5E-15	S1/2 FEED BELT #7218
05/APR/94	08/APR/94	149	13.7	5.78E+04	2	5	25	1.1E-14	5.7E-16	2.8E-15	S1/2 FEED BELT #7218
05/APR/94	07/APR/94	142	14.0	5.63E+04	1	5	48	1.8E-14	6.1E-15	2.2E-15	S1/2 FEED BELT #7218
05/APR/94	07/APR/94	37	14.3	1.50E+04	2	7	33	5.3E-14	2.5E-15	1.3E-14	S1/2 ROPE AREA #18083N-2-
05/APR/94	07/APR/94	33	14.0	1.31E+04	2	7	34	6.3E-14	2.9E-15	1.4E-14	S1/2 ROPE AREA #18083N-2-
05/APR/94	07/APR/94	30	13.5	1.15E+04	1	5	47	8.8E-14	3.0E-14	1.1E-14	S1/2 ROPE AREA #18083N-2-
05/APR/94	07/APR/94	50	13.0	1.84E+04	1	5	41	4.7E-14	1.7E-14	6.8E-15	S1/2 ROPE AREA #18083N-1-
05/APR/94	07/APR/94	35	13.5	1.34E+04	2	7	34	6.2E-14	2.9E-15	1.4E-14	S1/2 ROPE AREA #18083N-1-
06/APR/94	08/APR/94	200	15.0	8.50E+04	1	6	82	2.1E-14	5.2E-15	1.6E-15	SOUTH SIDE OF S1 #7219
06/APR/94	08/APR/94	231	15.5	1.01E+05	1	6	56	1.2E-14	3.7E-15	1.4E-15	SOUTH SIDE OF S1 #7219
06/APR/94	08/APR/94	119	15.0	5.06E+04	1	6	52	2.2E-14	7.1E-15	2.7E-15	SOUTH SIDE OF S1 #7219
06/APR/94	08/APR/94	204	14.0	8.09E+04	1	6	53	1.4E-14	4.5E-15	1.7E-15	S1/2 GATE AREA #1082
06/APR/94	08/APR/94	350	14.5	1.44E+05	2	5	34	6.2E-15	2.6E-16	1.1E-15	S1/2 GATE AREA #1082
06/APR/94	08/APR/94	202	14.0	8.01E+04	2	5	49	1.7E-14	5.5E-16	2.0E-15	S1/2 FEED BELT #7218
06/APR/94	08/APR/94	156	14.0	6.19E+04	2	5	38	1.6E-14	6.4E-16	2.6E-15	S1/2 FEED BELT #7218
06/APR/94	08/APR/94	195	13.8	7.62E+04	1	6	65	1.9E-14	5.2E-15	1.8E-15	S1/2 FEED BELT #7218
06/APR/94	08/APR/94	47	13.5	1.80E+04	1	6	78	9.6E-14	2.4E-14	7.6E-15	JUNCTION BOX #18083N
06/APR/94	08/APR/94	35	13.5	1.34E+04	2	5	35	6.9E-14	2.8E-15	1.2E-14	S1/2 ROPE AREA #18083N-1-
06/APR/94	08/APR/94	48	14.0	1.90E+04	1	6	42	4.5E-14	1.7E-14	7.2E-15	S1/2 ROPE AREA #18083N-2-
06/APR/94	08/APR/94	36	14.0	1.43E+04	2	5	87	1.8E-13	4.0E-15	1.1E-14	S1/2 ROPE AREA #18083N-2-
06/APR/94	08/APR/94	41	14.0	1.63E+04	2	5	27	4.1E-14	2.1E-15	9.8E-15	S1/2 ROPE AREA #18083N-2-
06/APR/94	08/APR/94	30	13.5	1.15E+04	1	6	56	1.0E-13	3.2E-14	1.2E-14	S1/2 ROPE AREA #18083N-1-
06/APR/94	08/APR/94	30	13.8	1.17E+04	2	5	34	7.6E-14	3.2E-15	1.4E-14	S1/2 ROPE AREA #18083N-3-
07/APR/94	09/APR/94	160	15.4	6.98E+04	1	11	107	3.3E-14	7.3E-15	2.7E-15	SOUTH SIDE OF S1 #7219
07/APR/94	09/APR/94	255	14.9	1.08E+05	1	11	78	1.5E-14	4.1E-15	1.7E-15	SOUTH SIDE OF S1 #7219
07/APR/94	09/APR/94	131	15.1	5.60E+04	1	11	64	2.3E-14	7.3E-15	3.3E-15	SOUTH SIDE OF S1 #7219
07/APR/94	09/APR/94	548	14.4	2.23E+05	2	4	46	5.8E-15	1.9E-16	6.4E-16	S1/2 GATE AREA #1082
07/APR/94	09/APR/94	72	13.8	2.81E+04	1	11	73	5.3E-14	1.5E-14	6.6E-15	S1/2 FEED BELT #7218
07/APR/94	09/APR/94	217	14.4	8.85E+04	2	4	34	1.0E-14	4.2E-16	1.6E-15	S1/2 FEED BELT #7218
07/APR/94	09/APR/94	256	14.1	1.02E+05	2	4	62	1.7E-14	4.8E-16	1.4E-15	S1/2 FEED BELT #7218
07/APR/94	09/APR/94	41	13.5	1.57E+04	1	6	82	1.2E-13	2.8E-14	8.8E-15	S1/2 HOT BELT #18083N-6-
07/APR/94	09/APR/94	41	12.8	1.49E+04	2	4	44	8.2E-14	2.8E-15	9.6E-15	S1/2 HOT BELT #18083N-6-
07/APR/94	09/APR/94	37	13.5	1.41E+04	2	4	22	3.9E-14	2.2E-15	1.0E-14	S1/2 HOT BELT #18083N-6-
07/APR/94	09/APR/94	40	13.5	1.53E+04	1	11	82	1.1E-13	3.0E-14	1.2E-14	S1/2 HOT BELT #18083N-4-
07/APR/94	09/APR/94	38	14.0	1.51E+04	2	4	38	6.9E-14	2.6E-15	9.5E-15	S1/2 HOT BELT #18083N-4-
07/APR/94	09/APR/94	39	14.4	1.59E+04	2	4	84	1.5E-13	3.5E-15	9.0E-15	CONTROL PANEL #18083N
07/APR/94	09/APR/94	50	13.5	1.91E+04	1	11	60	6.2E-14	2.1E-14	9.7E-15	CONTROL PANEL #18083N
08/APR/94	11/APR/94	117	15.1	5.00E+04	1	5	48	2.1E-14	6.9E-15	2.5E-15	SOUTH SIDE OF S1 #7219
08/APR/94	11/APR/94	159	14.5	6.53E+04	2	3	48	2.1E-14	6.6E-16	1.9E-15	SOUTH SIDE OF S1 #7219

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
08/APR/94	11/APR/94	75	15.5	3.29E+04	2	3	29	2.4E-14	1.0E-15	3.8E-15	SOUTH SIDE OF S1 #7219
08/APR/94	11/APR/94	182	15.6	8.04E+04	1	5	64	1.8E-14	4.9E-15	1.6E-15	SOUTH SIDE OF S1 #7219
08/APR/94	11/APR/94	569	15.0	2.42E+05	2	3	30	3.4E-15	1.4E-16	5.1E-16	S1/2 GATE AREA #1082
08/APR/94	09/APR/94	111	13.8	4.34E+04	1	11	108	5.4E-14	1.2E-14	4.3E-15	S1/2 FEED BELT #7218
08/APR/94	11/APR/94	284	14.0	1.13E+05	2	3	65	1.7E-14	4.4E-16	1.1E-15	S1/2 FEED BELT #7218
08/APR/94	11/APR/94	174	14.0	6.90E+04	1	5	95	3.1E-14	6.8E-15	1.8E-15	S1/2 FEED BELT #7218
08/APR/94	11/APR/94	41	13.8	1.60E+04	2	3	30	5.2E-14	2.2E-15	7.7E-15	S1/2 HOT BELT #18083N-4-
08/APR/94	11/APR/94	82	13.5	3.14E+04	1	5	56	3.9E-14	1.2E-14	4.0E-15	S1/2 HOT BELT #18083N-4-
08/APR/94	11/APR/94	42	13.8	1.64E+04	1	5	73	1.0E-13	2.5E-14	7.6E-15	S1/2 HOT BELT #18083N-4-
08/APR/94	11/APR/94	62	12.4	2.18E+04	1	5	41	4.0E-14	1.5E-14	5.8E-15	S1/2 HOT BELT #18083N-4-
08/APR/94	11/APR/94	36	13.5	1.38E+04	2	3	25	4.9E-14	2.3E-15	9.0E-15	S1/2 HOT BELT #18083N-5-
08/APR/94	11/APR/94	50	13.5	1.91E+04	2	3	32	4.6E-14	1.9E-15	6.5E-15	JUNCTION BOX #18083N
09/APR/94	12/APR/94	154	14.8	6.45E+04	1	8	100	3.4E-14	7.6E-15	2.5E-15	SOUTH SIDE OF S1 #7219
09/APR/94	12/APR/94	213	15.0	9.05E+04	1	8	97	2.4E-14	5.3E-15	1.8E-15	SOUTH SIDE OF S1 #7219
09/APR/94	12/APR/94	343	14.0	1.36E+05	1	8	85	1.4E-14	3.3E-15	1.2E-15	S1/2 GATE AREA #1082
09/APR/94	12/APR/94	212	12.6	7.56E+04	2	3	54	2.1E-14	6.0E-16	1.6E-15	S1/2 FEED BELT #7218
09/APR/94	12/APR/94	155	13.8	6.06E+04	2	3	135	6.7E-14	1.2E-15	2.0E-15	S1/2 FEED BELT #7218
09/APR/94	11/APR/94	35	12.5	1.24E+04	2	3	28	6.2E-14	2.7E-15	1.0E-14	S1/2 HOT BELT #18083N-6-
09/APR/94	11/APR/94	57	12.5	2.02E+04	1	5	52	5.6E-14	1.8E-14	6.2E-15	S1/2 HOT BELT #18083N-6-
09/APR/94	12/APR/94	32	13.8	1.25E+04	2	3	32	7.1E-14	2.8E-15	9.9E-15	S1/2 HOT BELT #18083N-6-
09/APR/94	12/APR/94	52	13.5	1.99E+04	1	8	63	6.6E-14	2.0E-14	8.0E-15	S1/2 HOT BELT #18083N-6-
11/APR/94	13/APR/94	93	15.0	3.95E+04	2	3	45	3.3E-14	1.1E-15	3.1E-15	SOUTH SIDE OF S1 #7219
11/APR/94	13/APR/94	62	15.0	2.63E+04	1	3	34	2.8E-14	1.1E-14	3.7E-15	SOUTH SIDE OF S1 #7219
11/APR/94	12/APR/94	92	15.0	3.91E+04	2	3	105	8.0E-14	1.6E-15	3.2E-15	SOUTH SIDE OF S1 #7219
11/APR/94	12/APR/94	80	15.2	3.44E+04	1	8	249	1.7E-13	2.2E-14	4.6E-15	SOUTH SIDE OF S1 #7219
11/APR/94	13/APR/94	164	14.8	6.87E+04	2	3	214	9.4E-14	1.3E-15	1.8E-15	SOUTH SIDE OF S1 #7219
11/APR/94	13/APR/94	62	14.5	2.55E+04	2	3	31	3.4E-14	1.4E-15	4.9E-15	S1/2 GATE AREA #1082
11/APR/94	12/APR/94	74	13.8	2.89E+04	1	8	456	3.7E-13	3.5E-14	5.5E-15	S1/2 FEED BELT #7218
11/APR/94	12/APR/94	193	13.7	7.49E+04	1	10	4102	1.3E-12	4.0E-14	2.4E-15	S1/2 FEED BELT #7218
11/APR/94	12/APR/94	96	13.6	3.70E+04	2	3	85	6.8E-14	1.5E-15	3.3E-15	S1/2 FEED BELT #7218
11/APR/94	13/APR/94	181	15.0	7.69E+04	2	3	57	2.2E-14	6.1E-16	1.6E-15	S1/2 FEED BELT #7218
11/APR/94	13/APR/94	64	13.7	2.48E+04	1	10	522	5.0E-13	4.4E-14	7.1E-15	S1/2 FEED BELT #7218
11/APR/94	13/APR/94	31	12.4	1.09E+04	1	10	62	1.1E-13	3.7E-14	1.6E-14	S1/2 HOT BELT #18083N-4-
11/APR/94	13/APR/94	39	13.1	1.45E+04	1	10	74	1.1E-13	3.0E-14	1.2E-14	S1/2 HOT BELT #18083N-4-
11/APR/94	12/APR/94	37	12.6	1.32E+04	1	8	65	1.0E-13	3.0E-14	1.2E-14	S1/2 HOT BELT #18083N-6-
11/APR/94	12/APR/94	33	13.8	1.29E+04	2	3	52	1.2E-13	3.5E-15	9.6E-15	S1/2 HOT BELT #18083N-6-
11/APR/94	13/APR/94	67	13.5	2.56E+04	2	6	75	8.3E-14	2.1E-15	6.8E-15	JUNCTION BOX #18083N
11/APR/94	12/APR/94	28	12.8	1.01E+04	2	8	57	1.5E-13	4.8E-15	2.0E-14	JUNCTION BOX #18083N
11/APR/94	13/APR/94	44	12.8	1.59E+04	1	10	76	9.9E-14	2.7E-14	1.1E-14	JUNCTION BOX #18083N
12/APR/94	14/APR/94	63	14.5	2.59E+04	2	8	50	5.0E-14	1.8E-15	7.8E-15	SOUTH SIDE OF S1 #7219
12/APR/94	14/APR/94	137	15.1	5.86E+04	1	11	58	1.9E-14	6.7E-15	3.2E-15	SOUTH SIDE OF S1 #7219
12/APR/94	14/APR/94	63	15.1	2.69E+04	2	8	85	8.8E-14	2.1E-15	7.5E-15	SOUTH SIDE OF S1 #7219
12/APR/94	14/APR/94	97	14.8	4.07E+04	1	11	127	6.9E-14	1.4E-14	4.6E-15	SOUTH SIDE OF S1 #7219
12/APR/94	14/APR/94	63	14.3	2.55E+04	1	11	537	5.0E-13	4.3E-14	7.3E-15	SOUTH SIDE OF S1 #7219
12/APR/94	14/APR/94	225	15.0	9.56E+04	1	11	63	1.3E-14	4.2E-15	1.9E-15	S1/2 GATE AREA #1082
12/APR/94	14/APR/94	53	13.8	2.07E+04	2	8	61	7.8E-14	2.4E-15	9.8E-15	S1/2 FEED BELT #7218
12/APR/94	14/APR/94	47	14.0	1.86E+04	1	11	950	1.2E-12	7.8E-14	1.0E-14	S1/2 FEED BELT #7218
12/APR/94	14/APR/94	32	13.8	1.25E+04	2	8	95	2.1E-13	4.9E-15	1.6E-14	S1/2 FEED BELT #7218
12/APR/94	14/APR/94	58	15.0	2.46E+04	1	11	80	6.7E-14	1.8E-14	7.5E-15	S1/2 FEED BELT #7218
12/APR/94	14/APR/94	56	13.5	2.14E+04	2	8	75	9.6E-14	2.6E-15	9.4E-15	S1/2 FEED BELT #7218
12/APR/94	13/APR/94	53	17.0	2.55E+04	2	3	58	6.6E-14	1.8E-15	4.9E-15	CRUSHER GENERATOR #7218
12/APR/94	13/APR/94	30	17.0	1.44E+04	1	10	78	1.1E-13	3.1E-14	1.2E-14	CRUSHER GENERATOR #7218

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
12/APR/94	14/APR/94	46	12.6	1.64E+04	1	11	90	1.2E-13	2.9E-14	1.1E-14	S1/2 HOT BELT #18083N-4-
12/APR/94	14/APR/94	47	13.5	1.80E+04	2	8	49	7.0E-14	2.5E-15	1.1E-14	S1/2 HOT BELT #18083N-4-
12/APR/94	14/APR/94	55	13.8	2.15E+04	1	11	90	8.8E-14	2.2E-14	8.6E-15	S1/2 HOT BELT #18083N-6-
12/APR/94	14/APR/94	40	12.8	1.45E+04	2	8	68	1.3E-13	3.6E-15	1.4E-14	S1/2 HOT BELT #18083N-6-
12/APR/94	14/APR/94	32	14.0	1.27E+04	2	8	50	1.0E-13	3.6E-15	1.6E-14	CONTROL PANEL #18083N
13/APR/94	15/APR/94	94	14.5	3.86E+04	2	5	28	1.8E-14	8.9E-16	4.1E-15	SOUTH SIDE OF S1 #7219
13/APR/94	15/APR/94	131	15.3	5.68E+04	2	5	25	1.1E-14	5.8E-16	2.8E-15	SOUTH SIDE OF S1 #7219
13/APR/94	15/APR/94	98	14.7	4.08E+04	2	5	29	1.8E-14	8.6E-16	3.9E-15	SOUTH SIDE OF S1 #7219
13/APR/94	14/APR/94	137	15.1	5.86E+04	1	11	58	1.9E-14	6.7E-15	3.2E-15	SOUTH SIDE OF S1 #7219
13/APR/94	14/APR/94	278	15.0	1.18E+05	2	8	36	7.3E-15	3.4E-16	1.7E-15	S1/2 GATE AREA #1082
13/APR/94	15/APR/94	44	14.5	1.81E+04	1	5	39	4.5E-14	1.7E-14	6.9E-15	S1/2 GATE AREA #1082
13/APR/94	15/APR/94	85	15.2	3.66E+04	1	5	36	2.0E-14	8.2E-15	3.4E-15	S1/2 GATE AREA #1082
13/APR/94	15/APR/94	31	17.0	1.49E+04	1	5	35	4.8E-14	2.0E-14	8.4E-15	CRUSHER GENERATOR #7218
13/APR/94	15/APR/94	28	17.0	1.35E+04	1	5	41	6.4E-14	2.4E-14	9.3E-15	CRUSHER GENERATOR #7218
13/APR/94	15/APR/94	43	17.0	2.07E+04	1	5	50	5.2E-14	1.7E-14	6.1E-15	CRUSHER GENERATOR #7218
13/APR/94	15/APR/94	39	17.0	1.88E+04	2	5	21	2.6E-14	1.6E-15	8.5E-15	CRUSHER GENERATOR #7218
13/APR/94	15/APR/94	43	16.7	2.03E+04	1	5	54	5.8E-14	1.8E-14	6.2E-15	CRUSHER GENERATOR #7218
13/APR/94	14/APR/94	30	15.0	1.27E+04	1	11	65	1.0E-13	3.2E-14	1.5E-14	S1/2 FEED BELT #18083N
13/APR/94	15/APR/94	26	14.0	1.03E+04	2	5	30	7.4E-14	3.4E-15	1.6E-14	S1/2 FEED BELT #18083N
14/APR/94	18/APR/94	48	15.0	2.04E+04	2	6	48	6.3E-14	2.2E-15	8.6E-15	SOUTH SIDE OF S1 #7219
14/APR/94	18/APR/94	48	15.1	2.05E+04	1	3	84	9.5E-14	2.1E-14	4.7E-15	SOUTH SIDE OF S1 #7219
14/APR/94	18/APR/94	97	14.5	3.98E+04	2	6	30	1.8E-14	9.0E-16	4.4E-15	S1/2 GATE AREA #1082
14/APR/94	18/APR/94	48	16.4	2.23E+04	2	6	37	4.3E-14	1.8E-15	7.9E-15	CRUSHER GENERATOR #7218
14/APR/94	18/APR/94	44	12.5	1.56E+04	1	3	164	2.5E-13	3.9E-14	6.2E-15	S1/2 FEED BELT #18083N
14/APR/94	18/APR/94	41	15.0	1.74E+04	2	3	59	9.9E-14	2.7E-15	7.1E-15	S1/2 FEED BELT #18083N
15/APR/94	18/APR/94	37	15.0	1.57E+04	1	3	112	1.7E-13	3.2E-14	6.2E-15	S1/2 FEED BELT #18083N
15/APR/94	18/APR/94	36	15.4	1.57E+04	2	6	380	7.3E-13	7.5E-15	1.1E-14	S1/2 FEED BELT #18083N
15/APR/94	18/APR/94	45	14.8	1.89E+04	2	6	82	1.2E-13	3.0E-15	9.3E-15	SOUTH SIDE OF S1 #7219
15/APR/94	18/APR/94	80	15.0	3.40E+04	2	6	79	6.6E-14	1.6E-15	5.2E-15	SOUTH SIDE OF S1 #7219
15/APR/94	18/APR/94	206	14.0	8.17E+04	1	3	49	1.4E-14	4.2E-15	1.2E-15	S1/2 GATE AREA #1082
15/APR/94	18/APR/94	30	16.5	1.40E+04	2	6	32	5.7E-14	2.6E-15	1.2E-14	CRUSHER GENERATOR #7218
15/APR/94	18/APR/94	30	16.5	1.40E+04	1	3	73	1.2E-13	2.9E-14	6.9E-15	CRUSHER GENERATOR #7218
15/APR/94	18/APR/94	42	16.5	1.96E+04	1	3	47	5.4E-14	1.7E-14	4.9E-15	CRUSHER GENERATOR #7218
15/APR/94	18/APR/94	37	16.7	1.75E+04	1	3	58	7.6E-14	2.1E-14	5.5E-15	CRUSHER GENERATOR #7218
18/APR/94	19/APR/94	57	14.5	2.34E+04	2	7	24	2.2E-14	1.4E-15	8.1E-15	SOUTH SIDE OF S1 #7219
18/APR/94	19/APR/94	111	15.3	4.81E+04	2	7	31	1.5E-14	7.7E-16	3.9E-15	SOUTH SIDE OF S1 #7219
18/APR/94	19/APR/94	207	14.8	8.68E+04	2	7	47	1.4E-14	5.1E-16	2.2E-15	SOUTH SIDE OF S1 #7219
18/APR/94	19/APR/94	191	15.9	8.60E+04	1	4	56	1.5E-14	4.2E-15	1.3E-15	SOUTH SIDE OF S1 #7219
18/APR/94	19/APR/94	574	14.5	2.36E+05	1	4	83	8.1E-15	1.9E-15	4.8E-16	S1/2 GATE AREA #1082
18/APR/94	19/APR/94	58	13.8	2.27E+04	1	4	51	5.0E-14	1.5E-14	4.9E-15	S/2 STEPS #7218
18/APR/94	19/APR/94	35	13.5	1.34E+04	1	4	49	8.1E-14	2.6E-14	8.4E-15	S/2 STEPS #7218
18/APR/94	19/APR/94	63	13.8	2.46E+04	2	7	52	5.6E-14	1.9E-15	7.7E-15	S/2 STEPS #7218
18/APR/94	19/APR/94	107	13.8	4.18E+04	2	7	33	1.9E-14	9.1E-16	4.5E-15	S/2 STEPS #7218
18/APR/94	19/APR/94	74	13.8	2.89E+04	1	4	54	4.2E-14	1.2E-14	3.9E-15	S/2 STEPS #7218
18/APR/94	19/APR/94	58	15.1	2.48E+04	1	4	44	3.9E-14	1.3E-14	4.5E-15	S/1 STEPS #18083N
18/APR/94	19/APR/94	61	16.0	2.76E+04	2	7	31	2.7E-14	1.3E-15	6.8E-15	S/1 STEPS #18083N
18/APR/94	19/APR/94	64	16.5	2.99E+04	1	4	53	3.9E-14	1.2E-14	3.7E-15	S/1 STEPS #18083N
18/APR/94	19/APR/94	31	15.0	1.32E+04	2	7	36	6.7E-14	3.0E-15	1.4E-14	S/1 STEPS #18083N
19/APR/94	20/APR/94	184	14.7	7.66E+04	2	6	43	1.5E-14	5.5E-16	2.3E-15	SOUTH SIDE OF S1 #7219
19/APR/94	20/APR/94	126	14.5	5.17E+04	2	6	40	2.0E-14	7.9E-16	3.4E-15	SOUTH SIDE OF S1 #7219
19/APR/94	20/APR/94	141	14.8	5.91E+04	1	5	42	1.5E-14	5.5E-15	2.1E-15	SOUTH SIDE OF S1 #7219
19/APR/94	20/APR/94	341	14.5	1.40E+05	2	6	42	7.9E-15	3.0E-16	1.3E-15	S1/2 GATE AREA #1082

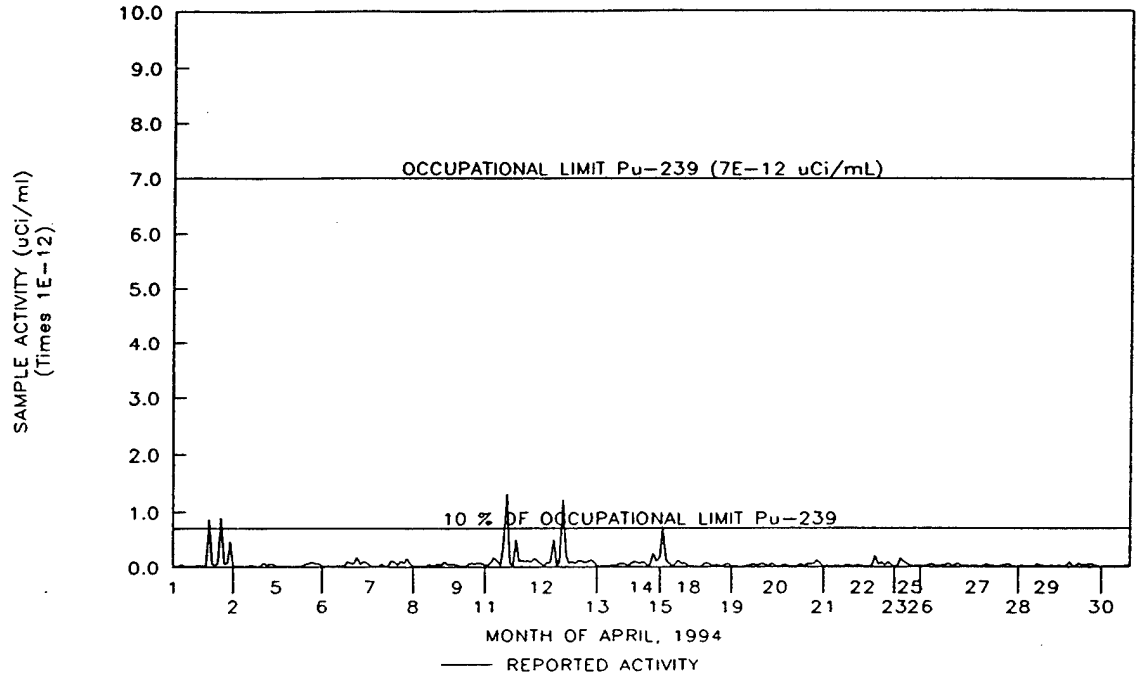
Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
19/APR/94	20/APR/94	222	15.0	9.43E+04	2	6	35	9.4E-15	4.1E-16	1.9E-15	S1/2 GATE AREA #1082
19/APR/94	20/APR/94	75	13.8	2.93E+04	1	5	45	3.3E-14	1.1E-14	4.3E-15	S/2 STEPS #7218
19/APR/94	20/APR/94	95	13.8	3.71E+04	1	5	60	3.6E-14	1.0E-14	3.4E-15	S/2 STEPS #7218
19/APR/94	20/APR/94	54	13.8	2.11E+04	1	5	46	4.7E-14	1.6E-14	5.9E-15	S/2 STEPS #7218
19/APR/94	20/APR/94	72	13.6	2.77E+04	1	5	49	3.8E-14	1.2E-14	4.5E-15	S/2 STEPS #7218
19/APR/94	20/APR/94	108	13.8	4.22E+04	1	5	74	3.9E-14	9.9E-15	3.0E-15	S/2 STEPS #7218
19/APR/94	20/APR/94	32	15.5	1.40E+04	2	6	37	6.8E-14	2.8E-15	1.2E-14	S/1 STEPS #18083N
19/APR/94	20/APR/94	68	16.0	3.08E+04	2	6	36	3.0E-14	1.3E-15	5.7E-15	S/1 STEPS #18083N
19/APR/94	20/APR/94	56	15.5	2.46E+04	2	6	33	3.4E-14	1.5E-15	7.1E-15	S/1 STEPS #18083N
19/APR/94	20/APR/94	52	15.5	2.28E+04	1	5	60	5.8E-14	1.7E-14	5.5E-15	S/1 STEPS #18083N
20/APR/94	21/APR/94	186	15.3	8.06E+04	1	4	56	1.6E-14	4.5E-15	1.4E-15	SOUTH SIDE OF S1 #7219
20/APR/94	21/APR/94	193	14.8	8.09E+04	1	4	53	1.5E-14	4.4E-15	1.4E-15	SOUTH SIDE OF S1 #7219
20/APR/94	21/APR/94	163	14.5	6.69E+04	2	5	40	1.6E-14	6.0E-16	2.4E-15	SOUTH SIDE OF S1 #7219
20/APR/94	22/APR/94	86	15.6	3.80E+04	2	2	66	5.2E-14	1.3E-15	2.7E-15	SOUTH SIDE OF S1 #7219
20/APR/94	21/APR/94	180	14.5	7.39E+04	1	4	49	1.5E-14	4.6E-15	1.5E-15	S1/2 GATE AREA #1082
20/APR/94	21/APR/94	182	14.5	7.47E+04	2	5	43	1.6E-14	5.6E-16	2.1E-15	S1/2 GATE AREA #1082
20/APR/94	21/APR/94	185	13.5	7.07E+04	2	5	32	1.2E-14	5.2E-16	2.3E-15	S/2 STEPS #7218
20/APR/94	21/APR/94	135	13.8	5.28E+04	2	5	38	1.9E-14	7.5E-16	3.0E-15	S/2 STEPS #7218
20/APR/94	21/APR/94	58	13.8	2.27E+04	1	4	58	5.7E-14	1.6E-14	4.9E-15	S/2 STEPS #7218
20/APR/94	22/APR/94	164	13.8	6.41E+04	1	9	49	1.5E-14	5.6E-15	2.6E-15	S/2 STEPS #7218
20/APR/94	22/APR/94	57	15.0	2.42E+04	2	7	52	5.7E-14	1.9E-15	7.8E-15	S/1 STEPS #18083N
20/APR/94	21/APR/94	54	15.5	2.37E+04	2	5	45	5.2E-14	1.8E-15	6.7E-15	S/1 STEPS #18083N
20/APR/94	21/APR/94	43	15.5	1.89E+04	1	4	46	5.3E-14	1.8E-14	5.9E-15	S/1 STEPS #18083N
20/APR/94	21/APR/94	67	15.0	2.85E+04	2	5	119	1.2E-13	2.3E-15	5.6E-15	S/1 STEPS #18083N
20/APR/94	21/APR/94	51	15.5	2.24E+04	1	4	55	5.5E-14	1.6E-14	5.0E-15	S/1 STEPS #18083N
21/APR/94	23/APR/94	228	14.7	9.49E+04	2	8	41	1.1E-14	4.4E-16	2.1E-15	SOUTH SIDE OF S1 #7219
21/APR/94	23/APR/94	173	14.7	7.20E+04	1	8	58	1.7E-14	5.3E-15	2.2E-15	SOUTH SIDE OF S1 #7219
21/APR/94	23/APR/94	177	14.7	7.37E+04	2	8	30	9.1E-15	5.0E-16	2.7E-15	SOUTH SIDE OF S1 #7219
21/APR/94	23/APR/94	275	14.5	1.13E+05	2	8	27	5.2E-15	3.1E-16	1.8E-15	S1/2 GATE AREA #1082
21/APR/94	22/APR/94	143	14.5	5.87E+04	2	7	37	1.6E-14	6.8E-16	3.2E-15	S1/2 GATE AREA #1082
21/APR/94	23/APR/94	168	13.5	6.42E+04	1	8	37	1.1E-14	4.9E-15	2.5E-15	S/2 STEPS #7218
21/APR/94	22/APR/94	256	13.2	9.57E+04	1	9	56	1.2E-14	4.0E-15	1.8E-15	S/2 STEPS #7218
21/APR/94	22/APR/94	98	13.8	3.83E+04	1	9	70	3.8E-14	1.1E-14	4.4E-15	S/2 STEPS #7218
21/APR/94	23/APR/94	42	15.5	1.84E+04	1	8	42	4.4E-14	1.8E-14	8.6E-15	S/1 STEPS #18083N
21/APR/94	23/APR/94	112	15.5	4.92E+04	2	8	30	1.4E-14	7.5E-16	4.1E-15	S/1 STEPS #18083N
21/APR/94	23/APR/94	73	15.1	3.12E+04	1	8	55	3.6E-14	1.2E-14	5.1E-15	S/1 STEPS #18083N
21/APR/94	23/APR/94	55	15.5	2.41E+04	2	8	39	3.9E-14	1.7E-15	8.4E-15	S/1 STEPS #18083N
22/APR/94	25/APR/94	190	15.6	8.39E+04	2	5	30	9.1E-15	4.2E-16	1.9E-15	SOUTH SIDE OF S1 #7219
22/APR/94	26/APR/94	162	14.8	6.79E+04	2	2	35	1.5E-14	5.4E-16	1.5E-15	SOUTH SIDE OF S1 #7219
22/APR/94	26/APR/94	157	13.8	6.14E+04	1	4	39	1.4E-14	5.0E-15	1.8E-15	S/2 STEPS #7218
22/APR/94	23/APR/94	189	13.5	7.23E+04	1	8	60	1.7E-14	5.4E-15	2.2E-15	S/2 STEPS #7218
22/APR/94	25/APR/94	88	13.3	3.31E+04	1	4	289	2.1E-13	2.4E-14	3.4E-15	S/2 STEPS #7218
22/APR/94	26/APR/94	46	15.5	2.02E+04	1	4	41	4.4E-14	1.6E-14	5.6E-15	S1/2 SFB ROPE #18083N
22/APR/94	26/APR/94	35	15.6	1.55E+04	1	4	59	8.5E-14	2.4E-14	7.3E-15	S1/2 SFB ROPE #18083N
22/APR/94	26/APR/94	56	15.1	2.39E+04	2	2	25	2.9E-14	1.3E-15	4.2E-15	S1/2 SFB ROPE #18083N
22/APR/94	25/APR/94	30	15.4	1.31E+04	1	4	54	9.2E-14	2.7E-14	8.6E-15	S1/2 SFB ROPE #18083N
22/APR/94	25/APR/94	53	15.9	2.39E+04	2	5	36	4.0E-14	1.6E-15	6.7E-15	S1/2 SFB ROPE #18083N
23/APR/94	26/APR/94	179	15.2	7.71E+04	2	2	37	1.4E-14	4.9E-16	1.3E-15	SOUTH SIDE OF S1 #7219
23/APR/94	26/APR/94	137	14.0	5.43E+04	1	4	56	2.3E-14	6.7E-15	2.1E-15	S/2 STEPS #7218
23/APR/94	26/APR/94	30	15.0	1.27E+04	1	4	85	1.5E-13	3.5E-14	8.8E-15	S1/2 SFB ROPE #18083N
23/APR/94	26/APR/94	29	15.5	1.27E+04	1	4	59	1.0E-13	2.9E-14	8.8E-15	S1/2 SFB ROPE #18083N
23/APR/94	26/APR/94	35	15.0	1.49E+04	2	2	27	5.2E-14	2.2E-15	6.8E-15	S1/2 SFB ROPE #18083N

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
25/APR/94	26/APR/94	90	13.5	3.44E+04	2	2	35	2.9E-14	1.1E-15	2.9E-15	S/2 STEPS #7218
25/APR/94	27/APR/94	92	16.0	4.17E+04	1	6	45	2.2E-14	8.1E-15	3.3E-15	SOUTH SIDE OF S1 #7219
25/APR/94	27/APR/94	78	15.0	3.31E+04	2	6	36	2.8E-14	1.2E-15	5.3E-15	S/1 STEPS #18083N
26/APR/94	27/APR/94	88	15.0	3.74E+04	2	6	33	2.2E-14	1.0E-15	4.7E-15	SOUTH SIDE OF S1 #7219
26/APR/94	27/APR/94	104	15.1	4.45E+04	1	6	54	2.6E-14	8.2E-15	3.1E-15	SOUTH SIDE OF S1 #7219
26/APR/94	27/APR/94	74	15.1	3.16E+04	2	6	25	1.8E-14	1.1E-15	5.5E-15	SOUTH SIDE OF S1 #7219
26/APR/94	27/APR/94	39	17.4	1.92E+04	2	6	33	4.3E-14	2.0E-15	9.1E-15	SOUTH SIDE OF S1 #7219
26/APR/94	28/APR/94	69	14.8	2.89E+04	1	5	60	4.6E-14	1.3E-14	4.3E-15	SOUTH SIDE OF S1 #7219
26/APR/94	28/APR/94	114	17.0	5.49E+04	1	5	62	2.5E-14	7.0E-15	2.3E-15	SOUTH SIDE OF S1 #7219
26/APR/94	27/APR/94	195	13.6	7.51E+04	1	6	61	1.8E-14	5.1E-15	1.8E-15	S/2 STEPS #7218
26/APR/94	27/APR/94	73	13.3	2.75E+04	2	6	35	3.2E-14	1.4E-15	6.4E-15	S/2 STEPS #7218
26/APR/94	27/APR/94	71	13.6	2.73E+04	1	6	56	4.4E-14	1.4E-14	5.0E-15	S/2 STEPS #7218
26/APR/94	28/APR/94	51	12.5	1.81E+04	1	5	49	5.9E-14	1.9E-14	6.9E-15	S/2 STEPS #7218
26/APR/94	28/APR/94	131	13.4	4.97E+04	2	6	50	2.7E-14	9.0E-16	3.5E-15	S/2 STEPS #7218
26/APR/94	27/APR/94	52	14.8	2.18E+04	1	6	44	4.2E-14	1.5E-14	6.3E-15	S/1 STEPS #18083N
26/APR/94	27/APR/94	35	16.4	1.63E+04	2	6	37	5.8E-14	2.4E-15	1.1E-14	S/1 STEPS #18083N
26/APR/94	27/APR/94	36	16.0	1.63E+04	2	6	16	1.9E-14	1.7E-15	1.1E-14	S/1 STEPS #18083N
26/APR/94	27/APR/94	52	15.1	2.22E+04	1	6	35	3.1E-14	1.4E-14	6.2E-15	S/1 STEPS #18083N
26/APR/94	27/APR/94	74	15.0	3.14E+04	1	6	37	2.4E-14	9.8E-15	4.4E-15	S/1 STEPS #18083N
26/APR/94	28/APR/94	60	15.5	2.63E+04	2	6	22	1.9E-14	1.2E-15	6.7E-15	S/1 STEPS #18083N
26/APR/94	28/APR/94	63	15.5	2.77E+04	2	6	33	3.0E-14	1.4E-15	6.3E-15	S/1 STEPS #18083N
27/APR/94	28/APR/94	102	15.2	4.39E+04	2	6	39	2.3E-14	9.2E-16	4.0E-15	SOUTH SIDE OF S1 #7219
27/APR/94	28/APR/94	99	15.1	4.23E+04	2	6	33	2.0E-14	8.9E-16	4.1E-15	SOUTH SIDE OF S1 #7219
27/APR/94	29/APR/94	72	16.2	3.30E+04	1	7	42	2.5E-14	1.0E-14	4.5E-15	SOUTH SIDE OF S1 #7219
27/APR/94	29/APR/94	223	15.1	9.54E+04	1	7	189	4.6E-14	6.9E-15	1.6E-15	SOUTH SIDE OF S1 #7219
27/APR/94	28/APR/94	99	13.8	3.87E+04	1	5	64	3.7E-14	1.0E-14	3.2E-15	S/2 STEPS #7218
27/APR/94	28/APR/94	103	12.9	3.76E+04	2	6	37	2.5E-14	1.0E-15	4.7E-15	S/2 STEPS #7218
27/APR/94	28/APR/94	80	14.8	3.35E+04	1	5	31	1.9E-14	8.4E-15	3.7E-15	S/2 STEPS #7218
27/APR/94	29/APR/94	173	13.5	6.61E+04	1	7	46	1.4E-14	5.2E-15	2.2E-15	S/2 STEPS #7218
27/APR/94	28/APR/94	53	15.5	2.33E+04	1	5	47	4.3E-14	1.5E-14	5.4E-15	S1/2 HOT BELT #18083N-6-
27/APR/94	28/APR/94	51	15.5	2.24E+04	2	6	37	4.2E-14	1.8E-15	7.8E-15	S1/2 HOT BELT #18083N-6-
27/APR/94	28/APR/94	44	15.5	1.93E+04	1	5	51	5.7E-14	1.8E-14	6.5E-15	S1/2 HOT BELT #18083N-6-
27/APR/94	29/APR/94	69	16.0	3.13E+04	2	5	28	2.3E-14	1.1E-15	5.1E-15	S1/2 HOT BELT #18083N-6-
27/APR/94	29/APR/94	65	16.0	2.95E+04	2	5	18	1.4E-14	9.8E-16	5.4E-15	S1/2 HOT BELT #18083N-6-
28/APR/94	29/APR/94	107	15.1	4.58E+04	2	5	21	1.1E-14	6.7E-16	3.5E-15	SOUTH SIDE OF S1 #7219
28/APR/94	29/APR/94	78	16.0	3.53E+04	1	7	49	2.9E-14	1.0E-14	4.2E-15	SOUTH SIDE OF S1 #7219
28/APR/94	29/APR/94	240	16.1	1.09E+05	1	7	78	1.6E-14	4.0E-15	1.4E-15	SOUTH SIDE OF S1 #7219
28/APR/94	29/APR/94	110	14.0	4.36E+04	1	7	42	1.9E-14	7.6E-15	3.4E-15	S/2 STEPS #7218
28/APR/94	29/APR/94	76	14.5	3.12E+04	2	5	28	2.3E-14	1.1E-15	5.1E-15	S/2 STEPS #7218
28/APR/94	29/APR/94	241	14.5	9.90E+04	2	5	38	1.0E-14	4.0E-16	1.6E-15	S/2 STEPS #7218
28/APR/94	29/APR/94	31	15.5	1.36E+04	1	7	33	4.6E-14	2.2E-14	1.1E-14	S1/2 HOT BELT #18083N-6-
28/APR/94	29/APR/94	73	16.3	3.37E+04	2	5	36	2.8E-14	1.1E-15	4.7E-15	S1/2 HOT BELT #18083N-6-
28/APR/94	29/APR/94	70	19.0	3.77E+04	2	5	26	1.7E-14	8.9E-16	4.2E-15	S1/2 HOT BELT #18083N-6-
29/APR/94	30/APR/94	95	16.5	4.44E+04	2	4	26	1.5E-14	7.4E-16	3.2E-15	SOUTH SIDE OF S1 #7219
29/APR/94	30/APR/94	86	16.2	3.95E+04	1	6	45	2.4E-14	8.5E-15	3.5E-15	SOUTH SIDE OF S1 #7219
29/APR/94	30/APR/94	41	16.1	1.87E+04	2	4	24	3.3E-14	1.7E-15	7.6E-15	SOUTH SIDE OF S1 #7219
29/APR/94	30/APR/94	177	15.6	7.82E+04	2	4	33	1.1E-14	4.7E-16	1.8E-15	SOUTH SIDE OF S1 #7219
29/APR/94	30/APR/94	86	15.0	3.65E+04	1	6	48	2.8E-14	9.5E-15	3.8E-15	SOUTH SIDE OF S1 #7219
29/APR/94	30/APR/94	93	14.5	3.82E+04	1	6	26	1.3E-14	7.0E-15	3.6E-15	S/2 STEPS #7218
29/APR/94	30/APR/94	83	14.0	3.29E+04	2	4	28	2.2E-14	1.0E-15	4.3E-15	S/2 STEPS #7218
29/APR/94	30/APR/94	43	14.3	1.74E+04	1	6	65	8.1E-14	2.3E-14	7.9E-15	S/2 STEPS #7218
29/APR/94	30/APR/94	164	13.9	6.46E+04	1	6	60	2.0E-14	5.9E-15	2.1E-15	S/2 STEPS #7218

Sample Date	Count Date	Sample Time (min)	Flow Rate (cfm)	Sample Volume (liters)	Instr No.	Gross Bkg Cnt	Gross Sample Cnt	Reported Activity (uCi/ml)	2 Std Dev.+/-	Critical Level (uCi/ml)	Sample Area Description
29/APR/94	30/APR/94	93	14.6	3.85E+04	2	4	27	1.8E-14	8.7E-16	3.7E-15	S/2 STEPS #7218
29/APR/94	30/APR/94	57	15.4	2.49E+04	1	6	72	6.4E-14	1.7E-14	5.5E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	31	17.2	1.51E+04	1	6	29	3.7E-14	1.8E-14	9.1E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	46	13.8	1.80E+04	1	6	38	4.3E-14	1.7E-14	7.6E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	33	17.5	1.64E+04	2	4	25	3.9E-14	2.0E-15	8.7E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	51	18.4	2.66E+04	1	6	66	5.4E-14	1.5E-14	5.2E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	49	18.1	2.51E+04	2	4	36	3.9E-14	1.5E-15	5.7E-15	S1/2 HOT BELT #18083N-4-
29/APR/94	30/APR/94	72	17.9	3.65E+04	1	6	35	1.9E-14	8.3E-15	3.8E-15	S1/2 HOT BELT #18083N-4-
30/APR/94	02/MAY/94	118	16.2	5.41E+04	2	3	25	1.2E-14	5.9E-16	2.3E-15	SOUTH SIDE OF S1 #7219
30/APR/94	30/APR/94	181	16.2	8.30E+04	2	4	51	1.7E-14	5.4E-16	1.7E-15	SOUTH SIDE OF S1 #7219
30/APR/94	02/MAY/94	82	15.9	3.69E+04	2	3	33	2.5E-14	9.8E-16	3.4E-15	SOUTH SIDE OF S1 #7219
30/APR/94	02/MAY/94	117	13.9	4.61E+04	1	9	55	2.4E-14	8.2E-15	3.7E-15	S/2 STEPS #7218
30/APR/94	02/MAY/94	182	13.8	7.11E+04	1	9	46	1.2E-14	4.9E-15	2.4E-15	S/2 STEPS #7218
30/APR/94	02/MAY/94	83	13.8	3.24E+04	1	9	44	2.6E-14	1.1E-14	5.2E-15	S/2 STEPS #7218
30/APR/94	02/MAY/94	61	18.1	3.13E+04	2	3	28	2.5E-14	1.1E-15	4.0E-15	S1/2 HOT BELT #18083N-4-
30/APR/94	02/MAY/94	64	18.3	3.32E+04	1	9	46	2.7E-14	1.1E-14	5.1E-15	S1/2 HOT BELT #18083N-4-
30/APR/94	02/MAY/94	57	17.5	2.82E+04	2	3	37	3.7E-14	1.3E-15	4.4E-15	S1/2 HOT BELT #18083N-4-
30/APR/94	02/MAY/94	51	18.1	2.61E+04	1	9	60	4.7E-14	1.5E-14	6.4E-15	S1/2 HOT BELT #18083N-4-

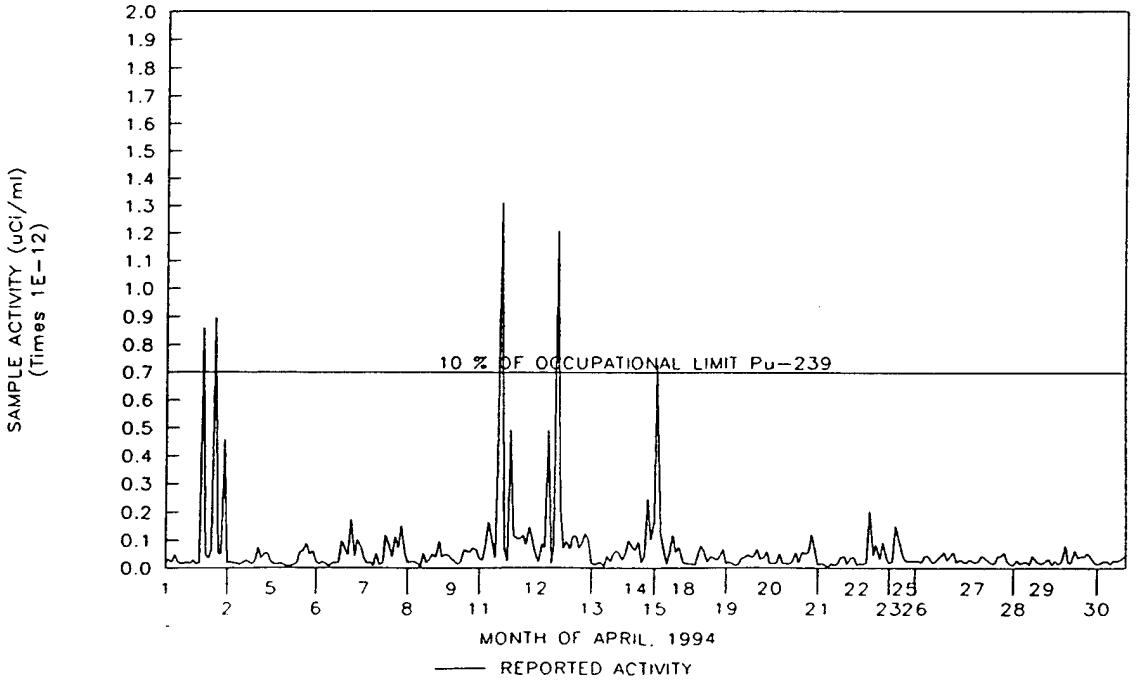
JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



JA PLUTONIUM SITE

GROSS ALPHA RADIOACTIVITY IN AIR



Appendix C

Soil Production Data

JA SOIL CLEANUP PLANT LOG OVERALL SUMMARY REPORT--COMBINED SORTERS

DAY	DATE	SORTERS	HOT (ton)	CLEAN (ton)	WR (%)	AP (MBq)	AH (MBq)	AC (MBq)	SA (Bq/kg)	UP (hr)	DN (hr)	RUN (hr)	USE (%)	PRD (%)	VOL (cy)	REC (#)	SORT (sec)	WS3 (ton)
300	07-Feb	S1234	2.88	382.50	99.3	8.6	6.3	24.2	63	0.3	0.3	9.6	93	91	305	7,406	382	189
301	08-Feb	S1234	1.88	384.68	99.5	12.6	7.1	25.9	67	0.3	0.4	9.6	93	91	306	7,584	348	186
302	09-Feb	S1234	1.63	392.59	99.6	15.4	7.9	23.0	58	0.5	0.5	9.8	90	90	312	7,425	585	189
303	10-Feb	S1234	1.75	391.95	99.6	30.4	12.3	23.7	61	0.3	0.4	9.8	93	91	312	7,526	432	199
304	14-Feb	S1234	1.60	230.07	99.3	6.2	5.8	16.8	68	0.6	0.5	5.7	76	54	184	4,292	597	124
305	15-Feb	S1234	1.88	321.62	99.4	4.6	4.8	24.2	79	0.8	1.0	8.0	78	77	256	6,128	458	191
306	17-Feb	S1234	0.91	248.62	99.6	7.7	4.0	15.2	51	0.4	0.4	6.2	85	59	198	4,883	462	200
307	18-Feb	S12	0.87	194.78	99.6	8.4	4.0	11.5	59	0.3	0.3	9.7	94	93	155	3,958	201	196
308	19-Feb	S12	0.21	121.48	99.8	0.7	0.6	5.9	49	0.4	0.3	6.0	90	58	96	2,224	1321	118
309	26-Feb	S12	17.46	148.60	89.5	54.8	29.0	10.3	54	0.5	0.6	8.3	83	79	132	6,231	25	0
310	28-Feb	S12	0.99	191.59	99.5	24.0	7.5	12.8	67	0.6	0.3	9.6	91	90	153	4,736	73	0
311	01-Mar	S12	2.08	190.39	98.9	41.7	13.7	23.6	124	0.3	0.4	9.6	93	91	153	5,314	50	0
312	02-Mar	S12	1.64	193.67	99.2	40.8	13.1	22.5	116	0.2	0.4	9.7	96	95	155	5,413	51	0
313	03-Mar	S12	2.16	186.62	98.9	58.5	19.2	24.0	129	0.6	0.4	9.4	90	88	150	5,479	44	210
314	04-Mar	S12	2.69	178.60	98.5	39.7	13.4	24.9	139	0.8	0.4	9.0	88	86	144	5,548	40	187
315	05-Mar	S12	0.35	52.02	99.3	10.0	3.1	6.1	118	0.5	0.4	2.6	74	26	42	1,422	54	54
316	11-Mar	S12	28.30	102.91	78.4	124.8	55.7	19.0	185	0.7	0.3	6.5	87	62	104	5,029	24	111
317	15-Mar	S12	24.05	117.63	83.0	78.2	47.6	30.2	258	0.9	0.6	7.0	69	67	112	5,745	22	126
318	16-Mar	S12	6.31	139.10	95.7	122.3	39.8	27.2	196	1.2	0.3	7.2	79	69	115	4,801	34	149
319	17-Mar	S12	2.33	189.74	98.8	54.4	18.3	24.2	127	0.3	0.4	9.5	93	91	152	5,306	52	202
320	18-Mar	S12	1.32	128.09	99.0	35.0	11.2	15.5	121	3.2	0.4	6.4	63	61	103	3,649	48	135
321	19-Mar	S12	0.53	117.48	99.6	19.8	6.4	9.2	78	0.4	0.2	5.9	90	59	94	2,829	85	117
322	21-Mar	S12	67.56	88.76	56.8	184.4	122.2	11.3	127	0.5	0.3	7.8	76	74	124	11,178	10	80
323	22-Mar	S12	60.45	127.00	67.8	188.2	109.8	29.6	233	0.3	0.1	9.3	92	89	149	11,467	12	120
324	23-Mar	S12	90.66	81.18	47.2	216.2	153.9	17.6	216	0.5	0.4	8.5	83	81	136	15,104	8	77
325	24-Mar	S12	64.68	113.47	63.7	110.6	87.6	25.8	227	0.6	0.4	8.9	85	84	141	10,144	13	108
326	25-Mar	S12	24.54	163.96	87.0	33.3	22.7	13.0	79	0.6	0.3	9.4	90	89	149	4,444	87	154
327	26-Mar	S12	4.40	87.67	95.2	8.5	5.3	10.4	119	0.3	0.4	4.6	87	46	73	2,153	88	84
328	28-Mar	S12	58.46	120.50	67.3	64.4	57.5	16.7	137	0.7	0.3	8.9	85	85	142	6,210	29	108
329	30-Mar	S1234	34.33	99.71	74.4	23.8	30.2	18.5	146	1.0	0.3	3.3	67	32	106	4,289	34	23
330	31-Mar	S12	49.67	126.71	71.8	59.7	56.2	7.9	62	0.6	0.4	8.8	83	83	140	6,926	24	109
331	01-Apr	S12	38.35	141.88	78.7	72.9	58.3	8.3	58	0.2	0.2	9.0	89	85	143	7,397	23	118
332	02-Apr	S12	27.69	114.13	80.5	64.2	40.6	11.2	99	0.2	0.3	7.0	92	67	112	5,502	24	103
333	05-Apr	S12	20.66	170.92	89.2	72.6	40.9	12.3	72	0.1	0.2	9.5	92	91	152	6,207	35	158
334	06-Apr	S12	134.45	41.08	23.4	319.0	226.0	5.9	144	0.3	0.3	8.7	86	83	139	16,552	7	35

JA SOIL CLEANUP PLANT LOG OVERALL SUMMARY REPORT--COMBINED SORTERS

DAY	DATE	SORTERS	HOT (ton)	CLEAN (ton)	WR (%)	AP (MBq)	AH (MBq)	AC (MBq)	SA (Bq/kg)	UP (hr)	DN (hr)	RUN (hr)	USE (%)	PRD (%)	VOL (cy)	REC (#)	SORT (sec)	WS3 (ton)
335	07-Apr	S12	161.36	17.13	9.6	319.9	282.3	(0.0)	(6)	0.1	0.3	8.9	89	84	141	18,486	6	6
336	08-Apr	S12	80.74	100.85	55.5	128.9	95.6	22.0	218	0.4	0.3	9.0	87	86	144	11,812	11	102
337	09-Apr	S12	58.08	71.19	55.1	118.1	80.1	16.0	224	0.2	0.2	6.4	91	64	102	10,128	8	73
338	11-Apr	S12	83.54	50.22	37.5	137.6	97.6	10.4	210	0.3	0.1	6.6	71	66	106	10,217	8	48
339	12-Apr	S12	81.73	15.88	16.3	97.7	81.3	3.8	227	0.2	0.4	4.9	77	48	77	7,846	8	15
340	13-Apr	S12	14.35	141.90	90.8	25.6	18.7	24.5	173	0.7	0.2	7.8	76	74	124	5,174	30	140
341	14-Apr	S12	37.45	10.45	21.8	85.5	53.0	3.1	273	0.3	0.2	2.4	79	24	38	4,525	7	11
342	15-Apr	S12	47.05	17.68	27.3	60.2	49.3	4.2	192	0.4	0.2	3.2	74	32	51	5,212	8	17
343	16-Apr	S12	117.87	31.67	21.2	208.7	151.2	4.6	126	0.3	0.2	7.4	88	71	119	10,885	9	23
344	18-Apr	S12	92.51	94.59	50.6	159.5	121.9	24.3	257	0.5	0.3	9.3	90	89	148	11,022	12	100
345	19-Apr	S12	166.89	16.08	8.8	434.2	291.5	0.7	(1)	0.3	0.3	9.1	89	87	145	19,778	6	8
346	20-Apr	S12	160.63	26.64	14.2	192.1	168.9	7.5	258	0.3	0.3	9.3	91	89	148	12,305	11	25
347	21-Apr	S12	76.82	111.57	59.2	122.4	86.8	31.8	282	0.3	0.2	9.4	93	89	149	10,182	14	102
348	22-Apr	S12	115.26	48.98	29.8	149.6	128.9	14.1	283	0.4	0.2	8.2	85	82	130	11,683	10	39
349	23-Apr	S12	51.56	39.67	43.5	103.0	70.0	10.2	254	0.4	0.3	4.5	62	45	72	5,984	11	35
350	25-Apr	S12	57.27	3.34	5.5	115.3	90.4	0.4	117	0.2	0.3	3.0	86	13	48	6,779	6	2
351	26-Apr	S12	80.90	91.00	52.9	143.0	114.1	6.5	72	0.2	0.3	8.5	88	85	136	10,860	12	80
352	27-Apr	S12	62.77	103.20	62.2	166.7	104.2	12.7	123	0.3	0.3	8.2	87	82	132	8,799	15	91
353	28-Apr	S12	42.10	126.94	75.1	76.9	54.1	14.4	113	0.2	0.3	8.4	87	84	134	6,386	25	118
354	29-Apr	S1234	124.38	206.29	62.4	270.1	188.4	32.8	186	0.3	0.3	8.2	84	82	262	16,910	41	41
355	30-Apr	S1234	69.05	185.05	72.8	140.7	96.6	32.0	186	0.3	0.3	6.3	81	63	201	11,007	27	60
TOTAL			2,562	7,592		5,472	3,767	884							8,049	436,481		5,296
DAY/WK AVG			45.75	136	69.8				138	0.5	0.3	7.6	85	73			108	
NUMB DAYS/WKS			56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
TOTAL			2,562	7,592														
GRAND TOTAL				10,154														
HOT SOIL/WEEK				2,562.01														
CLEAN SOIL/WEEK				7,592.01	10154.													
WR%/WEEK				74.77%														

JA SOIL CLEANUP PLANT LOG OVERALL SUMMARY REPORT--COMBINED SORTERS

WS1 (ton)	WS2 (ton)	WS4 (ton)	WS5 (ton)	WS6 (ton)	WS7 (ton)	WS8 (ton)	OVR (ton)	H+C (ton)	H+C-WS2 (ton)	OVR (%)	AVL (hr)	WEEKLY H+C (ton)	WEEKLY WS2 (ton)	Date
259	187	181	0	0	0	55	72	178	(8)	28	9			07-Apr
276	214	97	0	0	0	54	62	182	(32)	22	10			08-Apr
175	151	71	0	0	0	58	24	129	(22)	14	7	856.47	928.47	09-Apr
189	166	109	0	0	0	36	23	134	(32)	12	7			11-Apr
145	123	105	0	0	0	0	22	98	(26)	15	5			12-Apr
180	167	19	0	0	0	0	13	156	(11)	7	9			13-Apr
71	61	48	0	0	0	37	11	48	(13)	15	3			14-Apr
93	59	62	0	0	0	0	33	65	5	36	4			15-Apr
216	160	134	0	0	0	0	56	150	(10)	26	8	649.80	735.95	16-Apr
237	235	106	0	0	0	0	2	187	(48)	1	10			18-Apr
260	197	185	0	0	0	0	64	183	(14)	24	10			19-Apr
285	210	185	0	0	0	0	75	187	(23)	26	10			20-Apr
232	186	79	0	0	0	0	46	188	2	20	10			21-Apr
217	168	127	0	0	0	0	48	164	(4)	22	9			22-Apr
114	94	56	0	0	0	0	20	91	(3)	18	5	1001.36	1090.26	23-Apr
93	68	64	0	0	0	36	25	61	(7)	27	4			25-Apr
243	175	91	0	0	0	69	68	172	(4)	28	9			26-Apr
231	166	69	0	0	0	34	65	166	(1)	28	9			27-Apr
248	173	48	0	0	0	16	75	169	(4)	30	9			28-Apr
178	181	138	150	147	0	126	-3	331	150	-1	9			29-Apr
165	136	74	112	107	0	77	29	254	118	17	7	1152.28	899.19	30-Apr
12,637	9,251	3,177	1,198	1,174	0	596	3,373	10,154	984		473	10,154	9,251	TOTAL
										26	8.4	846	771	DAY/WK AVG
56	56	56	56	56	56	56	56	56	56	56	56	12	12	NUMB DAYS/WKS

JA SOIL CLEANUP PLANT LOG OVERALL SUMMARY REPORT--COMBINED SORTERS

WS1 (ton)	WS2 (ton)	WS4 (ton)	WS5 (ton)	WS6 (ton)	WS7 (ton)	WS8 (ton)	OVR (ton)	H+C (ton)	H+C-WS2 (ton)	OVR (%)	AVL (hr)	WEEKLY H+C (ton)	WEEKLY WS2 (ton)	Date
297	201	3	160	161	0	0	96	385	184	32	10.2			07-Feb
283	197	2	155	156	0	0	86	387	190	31	10.3			08-Feb
290	199	2	160	160	0	0	91	394	195	31	10.8			09-Feb
308	212	3	156	158	0	0	96	394	182	31	10.5	1559.85	808.70	10-Feb
192	133	1	80	79	0	0	59	232	99	31	6.9			14-Feb
307	204	2	105	104	0	0	103	324	119	33	9.8			15-Feb
316	215	2	39	41	0	0	101	250	34	32	6.9			17-Feb
269	208	2	0	0	0	0	60	196	(13)	22	10.3			18-Feb
136	125	1	0	0	0	0	11	122	(4)	8	6.8	1122.05	885.79	19-Feb
236	169	19	0	0	0	0	66	166	(3)	28	9.3	166.06	169.17	26-Feb
290	206	3	0	0	0	0	84	193	(14)	29	10			28-Feb
299	217	3	0	0	0	0	81	192	(25)	27	10			01-Mar
290	206	4	0	0	0	0	84	195	(11)	29	10			02-Mar
287	195	4	0	0	0	0	92	189	(6)	32	10			03-Mar
279	202	5	0	0	0	0	77	181	(21)	28	10			04-Mar
80	58	1	0	0	0	0	22	52	(6)	28	4	1002.80	1085.07	05-Mar
219	150	35	0	0	0	0	70	131	(18)	32	7	131.20	149.50	11-Mar
274	161	289	0	0	0	0	114	142	(19)	41	8			15-Mar
238	165	8	0	0	0	0	80	145	(71)	27	9			16-Mar
296	216	4	0	0	0	0	68	192	47	32	10			17-Mar
213	145	3	0	0	0	0	51	129	6	29	10			18-Mar
175	124	1	0	0	0	0	70	118	(40)	31	7	726.58	809.91	19-Mar
228	158	75	0	0	0	0	77	156	(35)	29	9			21-Mar
268	191	66	0	0	0	0	67	187	5	27	10			22-Mar
249	182	104	0	0	0	0	77	172	(12)	30	9			23-Mar
261	184	72	0	0	0	0	104	178	(9)	36	10			24-Mar
292	188	27	0	0	0	0	52	188	95	36	10			25-Mar
145	93	5	0	0	0	0	52	92	(1)	36	5	974.32	995.45	26-Mar
257	172	59	0	0	0	0	84	179	7	33	10			28-Mar
61	43	19	83	60	0	0	17	134	91	29	5			30-Mar
238	169	54	0	0	0	0	69	176	7	29	10			31-Mar
238	168	43	0	0	0	0	69	180	12	29	9			01-Apr
196	140	31	0	0	0	0	56	142	2	29	8	811.42	693.29	02-Apr
263	186	24	0	0	0	0	76	192	5	29	10			05-Apr
261	190	153	0	0	0	0	80	176	(6)	31	9			06-Apr

WORK HISTORY – JA SOIL CLEANUP PLANT 07–Feb–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	10.3 hr	10.3 hr	41.0 hr
SORTER START–UP	06:00	06:00	06:00	06:00	
START SOIL PROCESSING	06:14	06:14	06:20	06:20	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.3 hr	0.3 hr	1.2 hr
SORTER SHUT–DOWN	16:15	16:15	16:15	16:15	
END SOIL PROCESSING	15:48	15:49	16:01	15:58	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.2 hr	0.3 hr	1.4 hr
ACTUAL PROCESS HOURS	9.5 hr	9.6 hr	9.7 hr	9.5 hr	38.3 hr
DOWN–TIME	0.8 hr	0.7 hr	0.6 hr	0.7 hr	2.7 hr
SYSTEM PAUSE	0.1 hr	0.0 hr	0.0 hr	0.1 hr	0.2 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	0.2 hr	0.2 hr	1.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					93.4%
PRODUCTIVTY					91.2%

PRODUCTIVITY

Date	07–Feb–94
Contract day (from 6 Sep)	121
Current Contract week	21
Soil production for Day	385 MT
Cumlative Soil Production for Week	385 MT
Total Soil production for contract	
Since 6 Sep 93	30,871 MT
Since 6 Aug 93	32,462 MT
Total Soil production for project	58,748 MT

Excused Delays for day (sorter–hrs)	0 hr
Excused delays for contract (sorter–hrs)	1,601 hr
Excused delay days (plant–days)	40 days
Excused delay months (plant–month)	1.54 months
Percent of contract completed	32.5%
Tons Ahead or Behind Schedule	1,426 MT
Days ahead or behind schedule	5 days

MT = metric tons

File Report1 Printed on 08-Feb-94 at 10:48:38 AM

SORTER 1

07-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	94.7 tons	95.4 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	0.6 yd³	75.0 yd³	75.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,288 kBq	1,040 kBq	3,634 kBq
MAXIMUM/SORT	121 kBq	67 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,351 Bq/kg	38 Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,707		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			11				
NONE (AD=0 & MD=0 & MND>0)			1,567			None	08:43
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			129				
UNEXPLAINED RECORDS			0				
0<AD<1kBq & MD>0			0				
AD=0 & MD>0			0				
AD<0 & MD >0			0				
2-SEC COUNT PERIODS					17,070		
2-SEC RECORDS WITH SORTS			116				
2-SEC RECORDS WITHOUT SORTS			16,954				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					1,823		
NONPROCESSING RECORDS (Test, calibration, etc)					4		
2-SEC SORT DETECTORS							
1 DET	87	75.0%		5 DET	0	0.0%	
2 DET	27	23.3%		6 DET	0	0.0%	
3 DET	2	1.7%		7 DET	0	0.0%	
4 DET	0	0.0%		8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			392.4 sec				

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	0	0.0%
2	4	7.0%
3	9	15.8%
4	6	10.5%
5	15	26.3%
6	10	17.5%
7	11	19.3%
8	2	3.5%
TOTAL	57	

2-GATE SORTS DET	SORTS	FREQ%
9	1	1.7%
10	6	10.2%
11	13	22.0%
12	7	11.9%
13	16	27.1%
14	11	18.6%
15	5	8.5%
TOTAL	59	

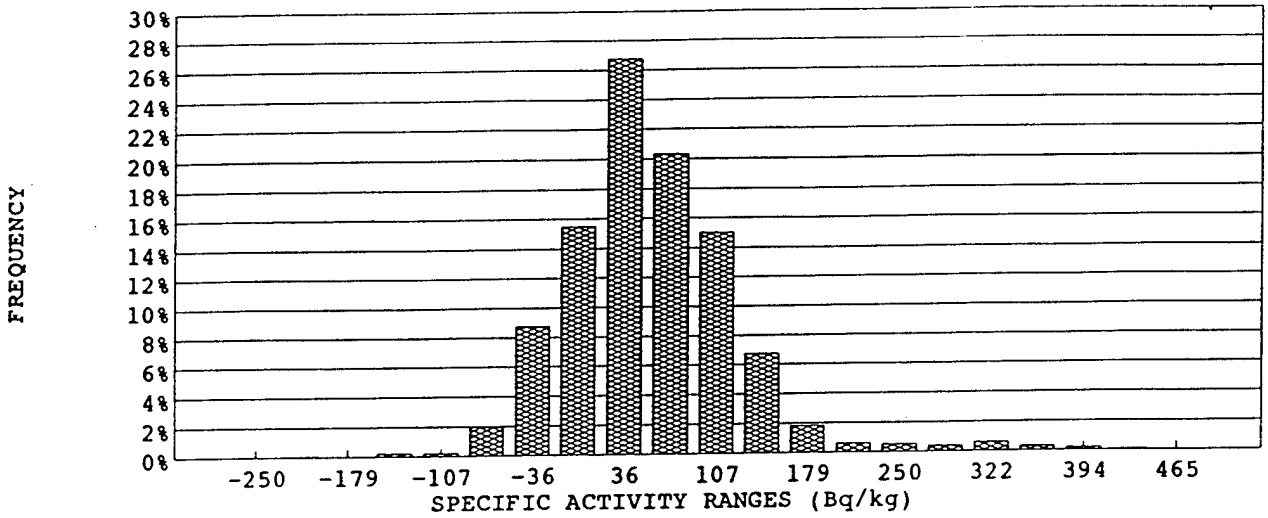
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	7	6.0%
-12000	1	-215	0.1%	8	67	57.8%
-10000	0	-179	0.0%	12	18	15.5%
-8000	4	-143	0.2%	16	8	6.9%
-6000	4	-107	0.2%	20	4	3.4%
-4000	33	-72	1.9%	24	3	2.6%
-2000	150	-36	8.8%	28	1	0.9%
0	265	0	15.5%	32	1	0.9%
2000	458	36	26.8%	36	0	0.0%
4000	348	72	20.3%	40	1	0.9%
6000	257	107	15.0%	44	1	0.9%
8000	115	143	6.7%	48	2	1.7%
10000	31	179	1.8%	52	0	0.0%
12000	10	215	0.6%	56	0	0.0%
14000	9	250	0.5%	60	0	0.0%
16000	7	286	0.4%	64	0	0.0%
18000	10	322	0.6%	68	1	0.9%
20000	5	358	0.3%	72	1	0.9%
22000	3	394	0.2%	76	0	0.0%
24000	1	429	0.1%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	1	0.9%
TOTAL	1,711			TOTAL	116	

EVENT TYPES HPE 119 MPE 182 DISE 800

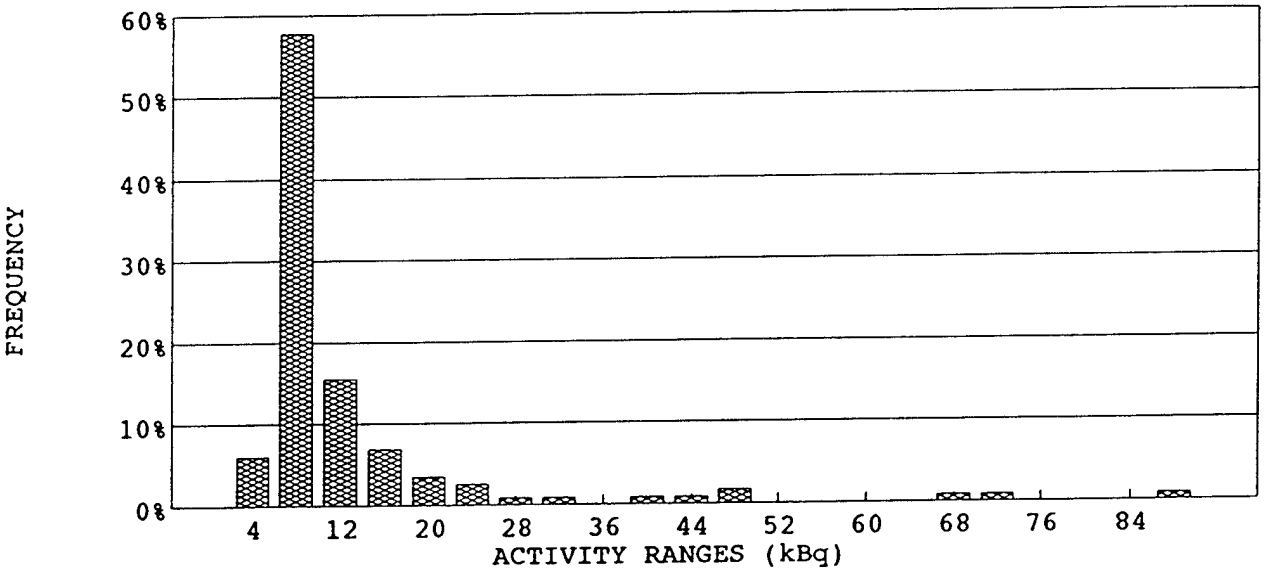
SORTER 1

07-Feb-94

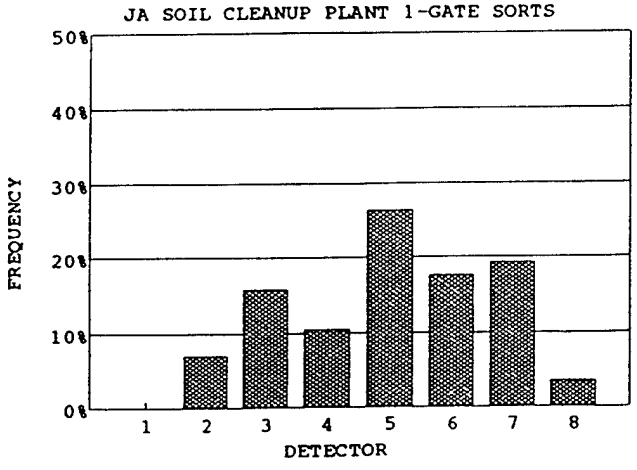
JA CLEAN SOIL SPECIFIC ACTIVITY



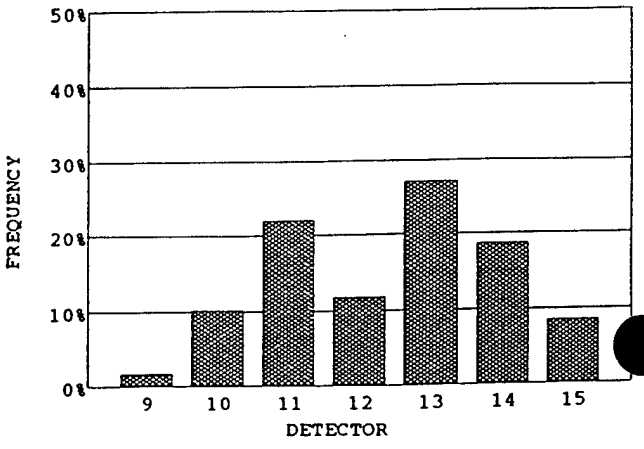
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

07-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.2 tons	95.2 tons	96.4 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
VOLUME IN-GROUND	1.0 yd³	75.5 yd³	76.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,184 kBq	1,861 kBq	2,501 kBq
MAXIMUM/SORT	76 kBq	73 kBq	18 kBq
MINIMUM/SORT	2 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,520 Bq/kg	26 Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,725		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			12			None	None
NONE (AD=0 & MD=0 & MND>0)			1,138				
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			575				
UNEXPLAINED RECORDS			0				
0<AD<1kBq & MD>0			0				
AD=0 & MD>0			0				
AD<0 & MD >0			0				
2-SEC COUNT PERIODS					17,250		
2-SEC RECORDS WITH SORTS			87				
2-SEC RECORDS WITHOUT SORTS			17,163				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					1,812		
NONPROCESSING RECORDS (Test, calibration, etc)					3		
2-SEC SORT DETECTORS							
1 DET	69	79.3%		5 DET	0	0.0%	
2 DET	16	18.4%		6 DET	0	0.0%	
3 DET	2	2.3%		7 DET	0	0.0%	
4 DET	0	0.0%		8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			500.0 sec				

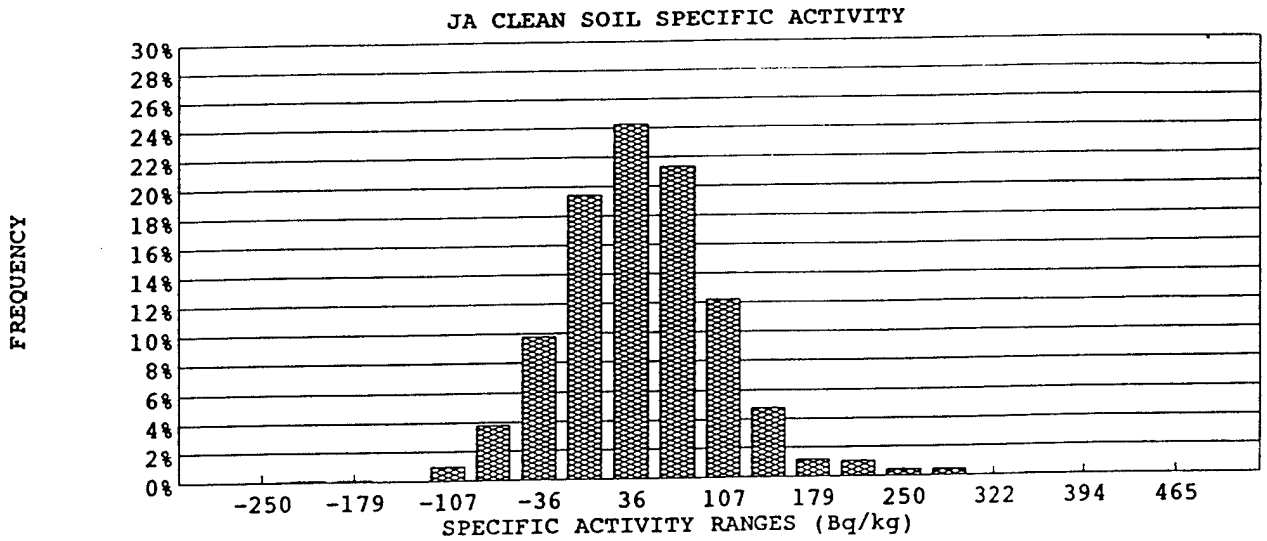
FREQUENCY DISTRIBUTIONS

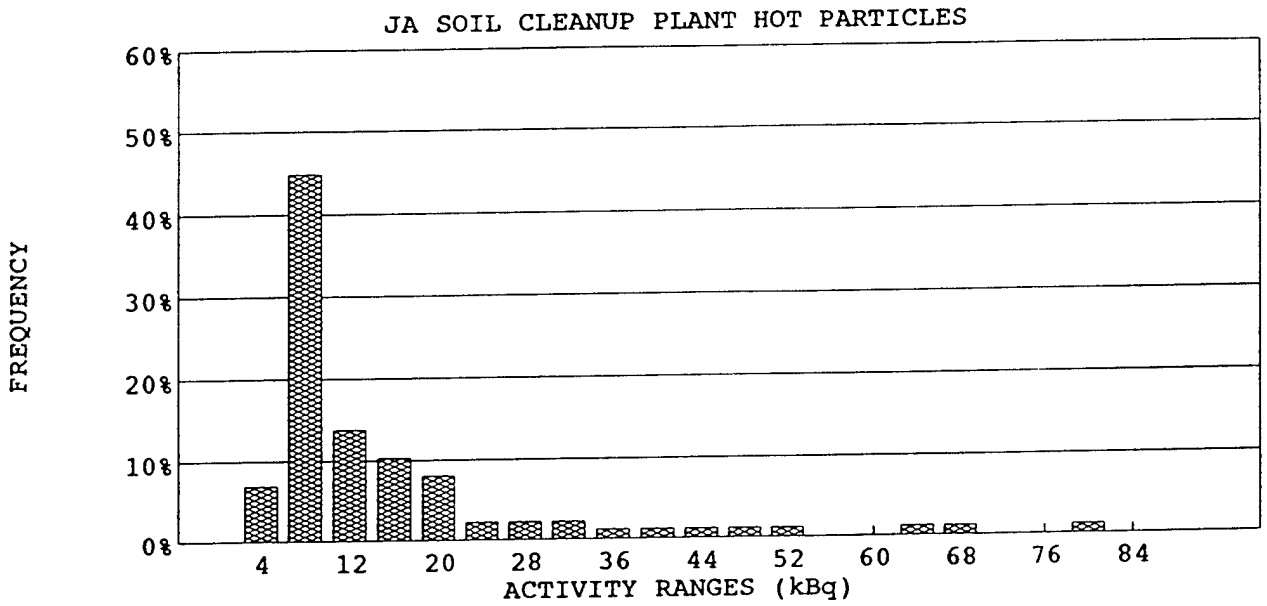
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	3	6.8%	-14000	0	-250	0.0%	4	6	6.9%
2	13	29.5%	-12000	2	-215	0.1%	8	39	44.8%
3	9	20.5%	-10000	2	-179	0.1%	12	12	13.8%
4	6	13.6%	-8000	0	-143	0.0%	16	9	10.3%
5	4	9.1%	-6000	17	-107	1.0%	20	7	8.0%
6	7	15.9%	-4000	65	-72	3.8%	24	2	2.3%
7	2	4.5%	-2000	169	-36	9.8%	28	2	2.3%
8	0	0.0%	0	336	0	19.4%	32	2	2.3%
TOTAL	44		2000	419	36	24.2%	36	1	1.1%
			4000	369	72	21.4%	40	1	1.1%
2-GATE SORTS			6000	211	107	12.2%	44	1	1.1%
DET	SORTS	FREQ%	8000	82	143	4.7%	48	1	1.1%
9	8	18.6%	10000	21	179	1.2%	52	1	1.1%
10	13	30.2%	12000	18	215	1.0%	56	0	0.0%
11	7	16.3%	14000	8	250	0.5%	60	0	0.0%
12	4	9.3%	16000	8	286	0.5%	64	1	1.1%
13	6	14.0%	18000	0	322	0.0%	68	1	1.1%
14	4	9.3%	20000	1	358	0.1%	72	0	0.0%
15	1	2.3%	22000	0	394	0.0%	76	0	0.0%
TOTAL	43		24000	0	429	0.0%	80	1	1.1%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	0	0.0%
			TOTAL	1,728			TOTAL	87	

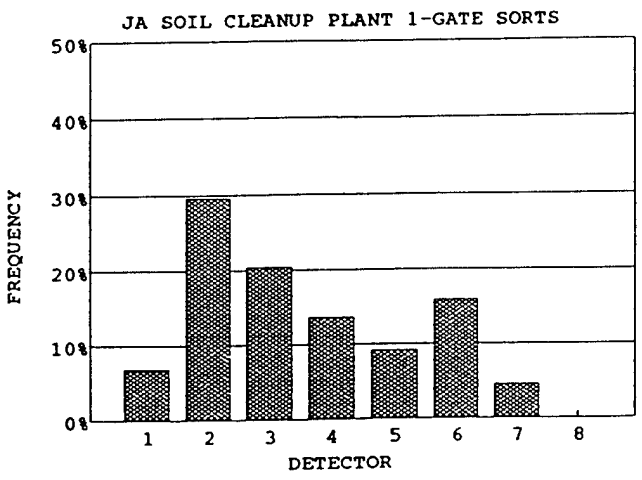
EVENT TYPES	HPE	96	MPE	880	DISE	775

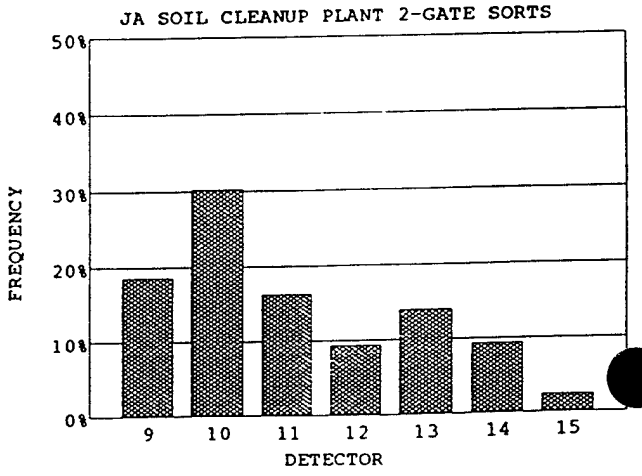
SORTER 2

07-Feb-94









SORTER 3

07-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.62 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	97.3 tons	97.5 tons
MAXIMUM/SORT	3.5 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	52.4 kg	
VOLUME IN-GROUND	0.2 yd³	77.1 yd³	77.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	2,882 kBq	1,379 kBq	2,809 kBq
MAXIMUM/SORT	230 kBq	180 kBq	15 kBq
MINIMUM/SORT	3 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		5,050 Bq/kg	29 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,745		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0		None	None
NONE (AD=0 & MD=0 & MND>0)	1,469			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	276			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,450		
2-SEC RECORDS WITH SORTS	147			
2-SEC RECORDS WITHOUT SORTS	17,303			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,892		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

1 DET	109	74.1%	5 DET	0	0.0%
2 DET	35	23.8%	6 DET	0	0.0%
3 DET	3	2.0%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 320.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	2	2.8%
2	2	2.8%
3	4	5.6%
4	10	14.1%
5	14	19.7%
6	28	39.4%
7	11	15.5%
8	0	0.0%
TOTAL	71	

2-GATE SORTS

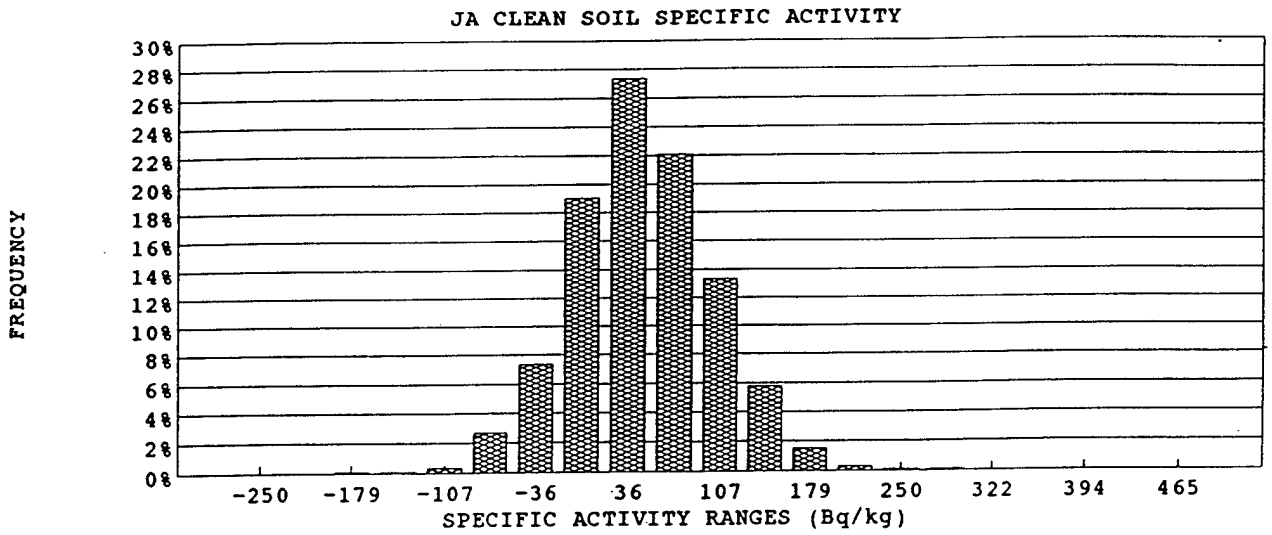
DET	SORTS	FREQ%
9	5	6.6%
10	3	3.9%
11	7	9.2%
12	13	17.1%
13	21	27.6%
14	23	30.3%
15	4	5.3%
TOTAL	76	

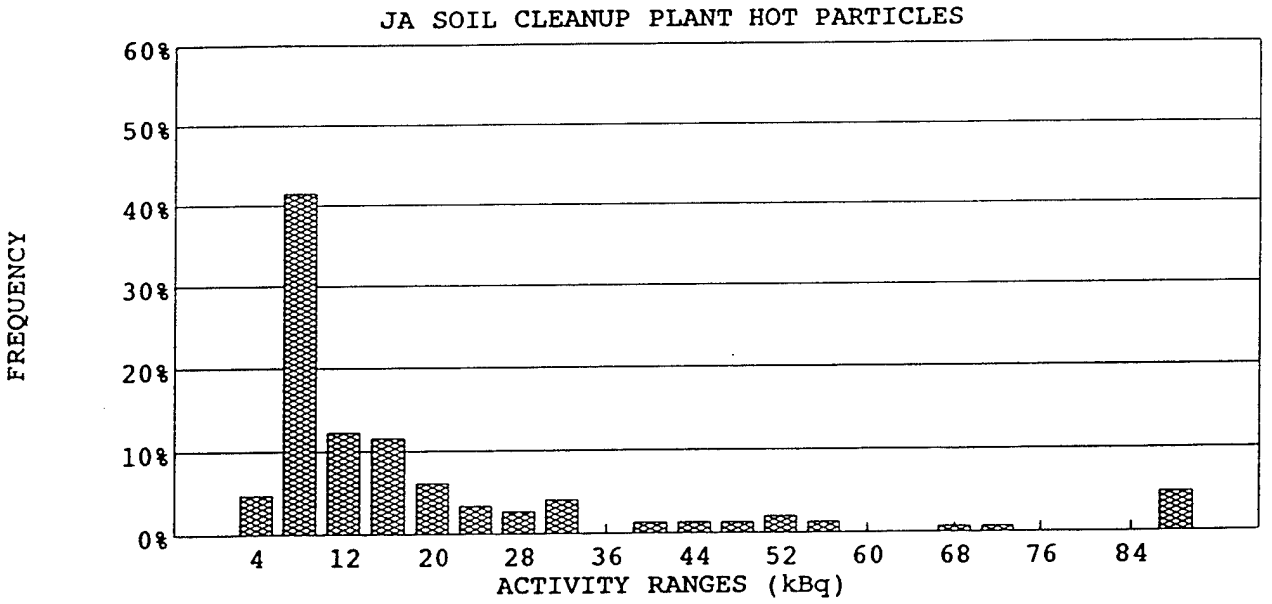
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	7	4.8%
-12000	0	-215	0.0%	8	61	41.5%
-10000	1	-179	0.1%	12	18	12.2%
-8000	1	-143	0.1%	16	17	11.6%
-6000	6	-107	0.3%	20	9	6.1%
-4000	47	-72	2.7%	24	5	3.4%
-2000	129	-36	7.4%	28	4	2.7%
0	332	0	19.0%	32	6	4.1%
2000	478	36	27.3%	36	0	0.0%
4000	386	72	22.1%	40	2	1.4%
6000	233	107	13.3%	44	2	1.4%
8000	101	143	5.8%	48	2	1.4%
10000	27	179	1.5%	52	3	2.0%
12000	5	215	0.3%	56	2	1.4%
14000	1	250	0.1%	60	0	0.0%
16000	1	286	0.1%	64	0	0.0%
18000	0	322	0.0%	68	1	0.7%
20000	0	358	0.0%	72	1	0.7%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	7	4.8%
TOTAL	1,748			TOTAL	147	

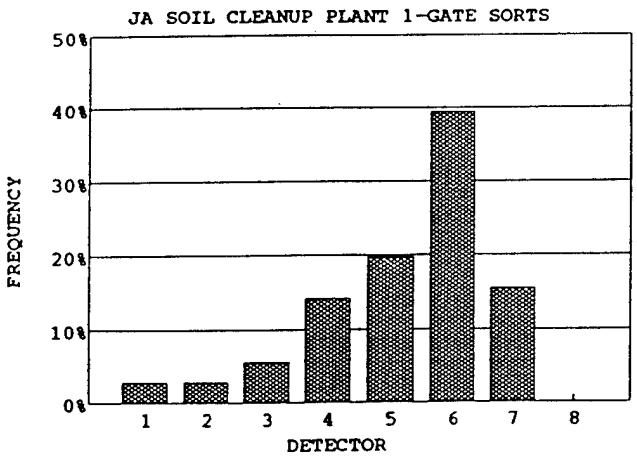
EVENT TYPES HPE 153 MPE 237 DISE 0

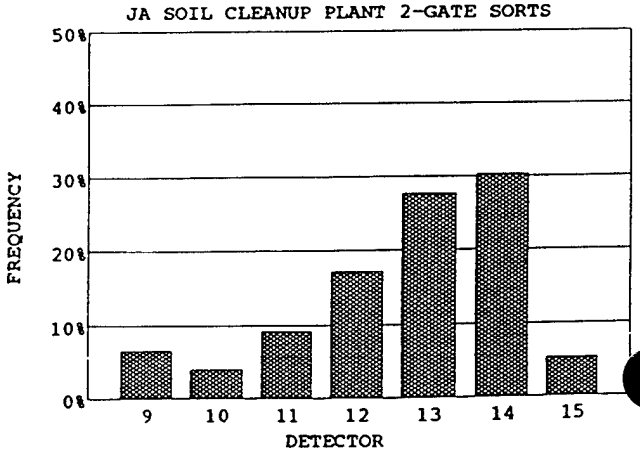
SORTER 3

07-Feb-04









SORTER 4

07-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.59 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	95.4 tons	96.0 tons
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.5 yd³	75.6 yd³	76.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,241 kBq	2,039 kBq	15,270 kBq
MAXIMUM/SORT	317 kBq	270 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-1 kBq
SPECIFIC ACTIVITY		3,350 Bq/kg	160 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,717		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2			
NONE (AD=0 & MD=0 & MND>0)	1,211		None	06:26
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	504			07:36
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,170		
2-SEC RECORDS WITH SORTS	162			
2-SEC RECORDS WITHOUT SORTS	17,008			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,879		
NONPROCESSING RECORDS (Test, calibration, etc)		0		

2-SEC SORT DETECTORS

1 DET	109	67.3%	5 DET	2	1.2%
2 DET	37	22.8%	6 DET	0	0.0%
3 DET	10	6.2%	7 DET	0	0.0%
4 DET	4	2.5%	8 DET	0	0.0%

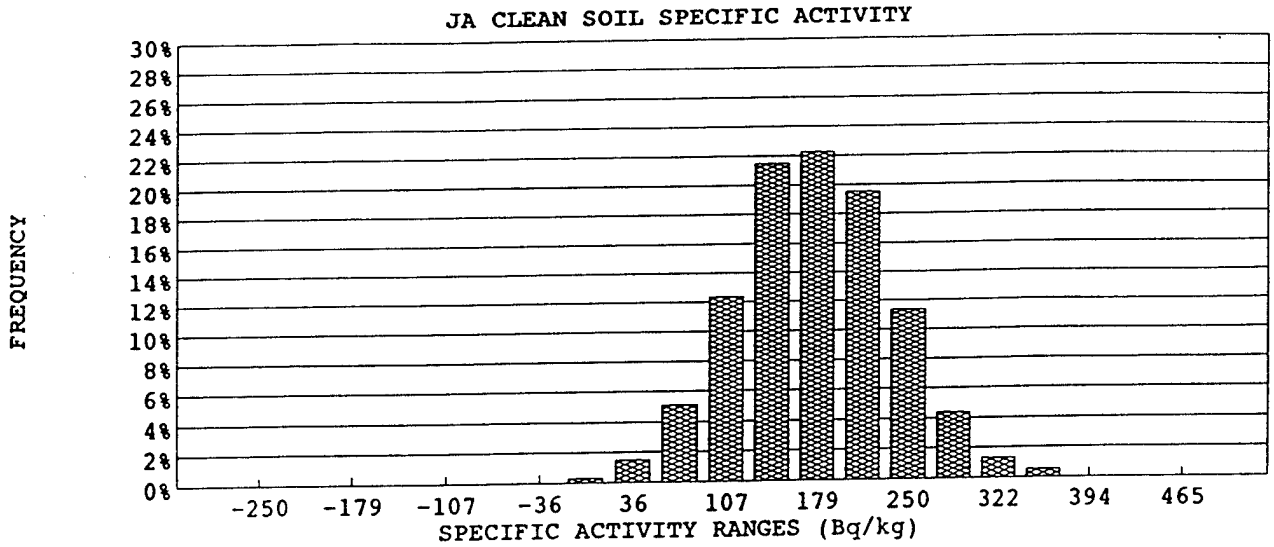
AVERAGE TIME BETWEEN 2-SEC SORTS 315.0 sec

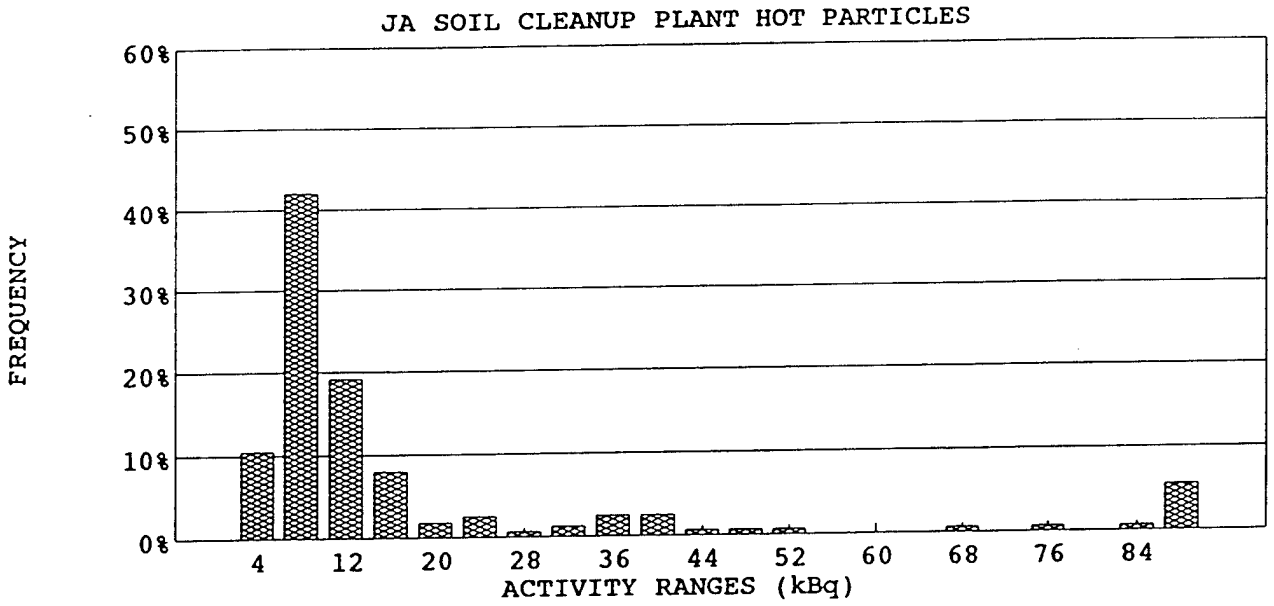
FREQUENCY DISTRIBUTIONS

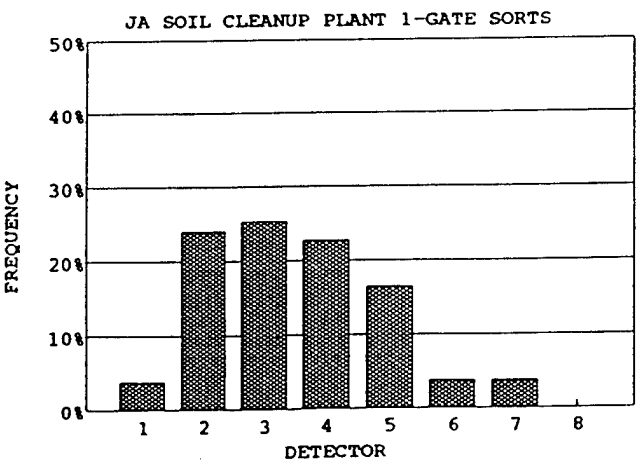
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	3	3.8%	-14000	0	-250	0.0%	4	17	10.5%
2	19	24.1%	-12000	0	-215	0.0%	8	68	42.0%
3	20	25.3%	-10000	0	-179	0.0%	12	31	19.1%
4	18	22.8%	-8000	0	-143	0.0%	16	13	8.0%
5	13	16.5%	-6000	0	-107	0.0%	20	3	1.9%
6	3	3.8%	-4000	0	-72	0.0%	24	4	2.5%
7	3	3.8%	-2000	0	-36	0.0%	28	1	0.6%
8	0	0.0%	0	5	0	0.3%	32	2	1.2%
TOTAL	79		2000	25	36	1.5%	36	4	2.5%
			4000	88	72	5.1%	40	4	2.5%
2-GATE SORTS			6000	212	107	12.3%	44	1	0.6%
DET	SORTS	FREQ%	8000	369	143	21.5%	48	1	0.6%
9	7	8.4%	10000	382	179	22.2%	52	1	0.6%
10	25	30.1%	12000	335	215	19.5%	56	0	0.0%
11	22	26.5%	14000	195	250	11.4%	60	0	0.0%
12	17	20.5%	16000	75	286	4.4%	64	0	0.0%
13	7	8.4%	18000	22	322	1.3%	68	1	0.6%
14	5	6.0%	20000	9	358	0.5%	72	0	0.0%
15	0	0.0%	22000	0	394	0.0%	76	1	0.6%
TOTAL	83		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	1	0.6%
			>28000	0	0	0.0%	>84	9	5.6%
			TOTAL	1,717			TOTAL	162	
EVENT TYPES		HPE	161	MPE	545	DISE	163		

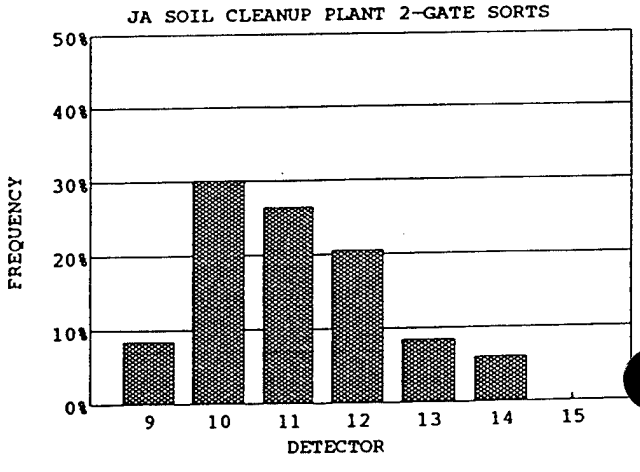
SORTER 4

07-Feb-94









WORK HISTORY – JA SOIL CLEANUP PLANT 08–Feb–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	10.3 hr	10.3 hr	41.3 hr
SORTER START–UP	06:00	06:00	06:00	06:00	
START SOIL PROCESSING	06:17	06:17	06:17	06:17	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.3 hr	0.3 hr	1.2 hr
SORTER SHUT–DOWN	16:20	16:20	16:20	16:20	
END SOIL PROCESSING	15:49	15:48	16:03	16:04	
TIME REQUIRED TO SHUT DOWN	0.5 hr	0.5 hr	0.3 hr	0.3 hr	1.6 hr
ACTUAL PROCESS HOURS	9.5 hr	9.5 hr	9.8 hr	9.7 hr	38.4 hr
DOWN–TIME	0.8 hr	0.9 hr	0.6 hr	0.7 hr	2.9 hr
SYSTEM PAUSE	0.0 hr	0.1 hr	0.0 hr	0.1 hr	0.2 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	0.2 hr	0.2 hr	0.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					92.9%
PRODUCTIVTY					91.5%

PRODUCTIVITY

Date	08–Feb–94
Contract day (from 6 Sep)	122
Current Contract week	21
Soil production for Day	387 MT
Cumlative Soil Production for Week	772 MT
Total Soil production for contract	
Since 6 Sep 93	31,257 MT
Since 6 Aug 93	32,848 MT
Total Soil production for project	59,135 MT

Excused Delays for day (sorter–hrs)	0 hr
Excused delays for contract (sorter–hrs)	1,601 hr
Excused delay days (plant–days)	40 days
Excused delay months (plant–month)	1.54 months
Percent of contract completed	32.8%
Tons Ahead or Behind Schedule	1,496 MT
Days ahead or behind schedule	5 days

MT = metric tons

File Report1 Printed on 10-Feb-94 at 08:29:02 AM

SORTER 1

08-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	95.7 tons	95.9 tons
MAXIMUM/SORT	3.5 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	52.4 kg	
VOLUME IN-GROUND	0.1 yd³	75.9 yd³	76.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,185 kBq	543 kBq	4,187 kBq
MAXIMUM/SORT	116 kBq	48 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	-17 kBq
SPECIFIC ACTIVITY		4,287 Bq/kg	44 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,715		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0			
NONE (AD=0 & MD=0 & MND>0)			1,597		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			118			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,150		
2-SEC RECORDS WITH SORTS			83			
2-SEC RECORDS WITHOUT SORTS			17,067			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,798		
NONPROCESSING RECORDS (Test, calibration, etc)				7		
2-SEC SORT DETECTORS						
1 DET	66	79.5%	5 DET	0	0.0%	
2 DET	12	14.5%	6 DET	0	0.0%	
3 DET	3	3.6%	7 DET	0	0.0%	
4 DET	2	2.4%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			519.7 sec			

FREQUENCY DISTRIBUTIONS

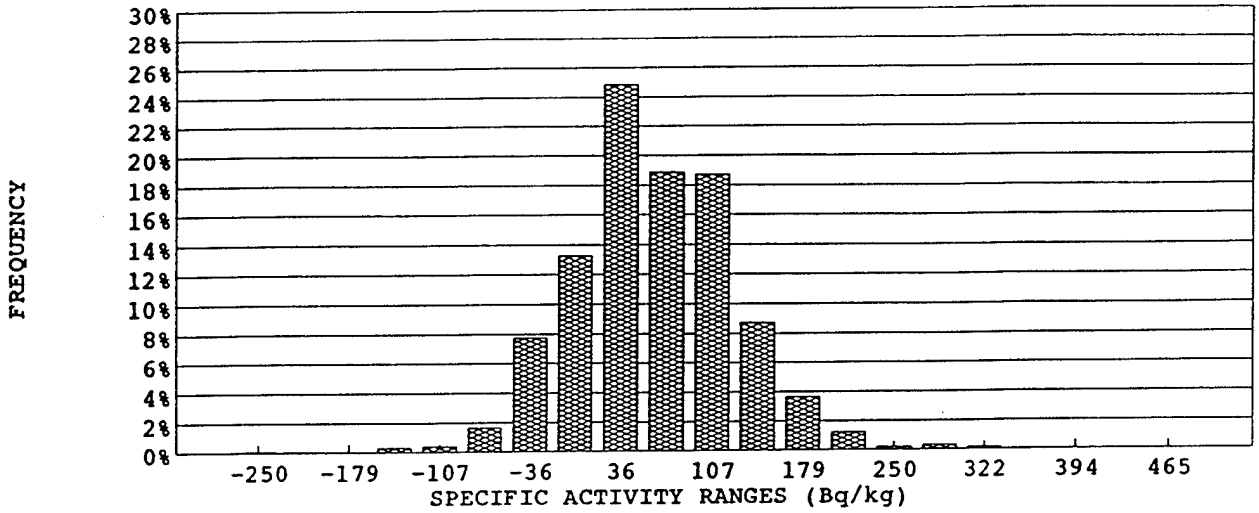
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	3	7.5%	-14000	1	-250	0.1%	4	2	2.4%
2	5	12.5%	-12000	1	-215	0.1%	8	41	49.4%
3	7	17.5%	-10000	0	-179	0.0%	12	17	20.5%
4	6	15.0%	-8000	5	-143	0.3%	16	6	7.2%
5	11	27.5%	-6000	7	-107	0.4%	20	4	4.8%
6	7	17.5%	-4000	28	-72	1.6%	24	2	2.4%
7	1	2.5%	-2000	133	-36	7.7%	28	0	0.0%
8	0	0.0%	0	228	0	13.2%	32	3	3.6%
TOTAL	40		2000	428	36	24.9%	36	1	1.2%
			4000	325	72	18.9%	40	0	0.0%
2-GATE SORTS			6000	322	107	18.7%	44	1	1.2%
DET	SORTS	FREQ%	8000	150	143	8.7%	48	0	0.0%
9	5	11.6%	10000	63	179	3.7%	52	1	1.2%
10	6	14.0%	12000	21	215	1.2%	56	0	0.0%
11	6	14.0%	14000	3	250	0.2%	60	1	1.2%
12	10	23.3%	16000	5	286	0.3%	64	1	1.2%
13	13	30.2%	18000	2	322	0.1%	68	2	2.4%
14	3	7.0%	20000	0	358	0.0%	72	0	0.0%
15	0	0.0%	22000	0	394	0.0%	76	0	0.0%
TOTAL	43		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	1	1.2%
			TOTAL	1,722			TOTAL	83	

EVENT TYPES HPE 89 MPE 92 DISE 0

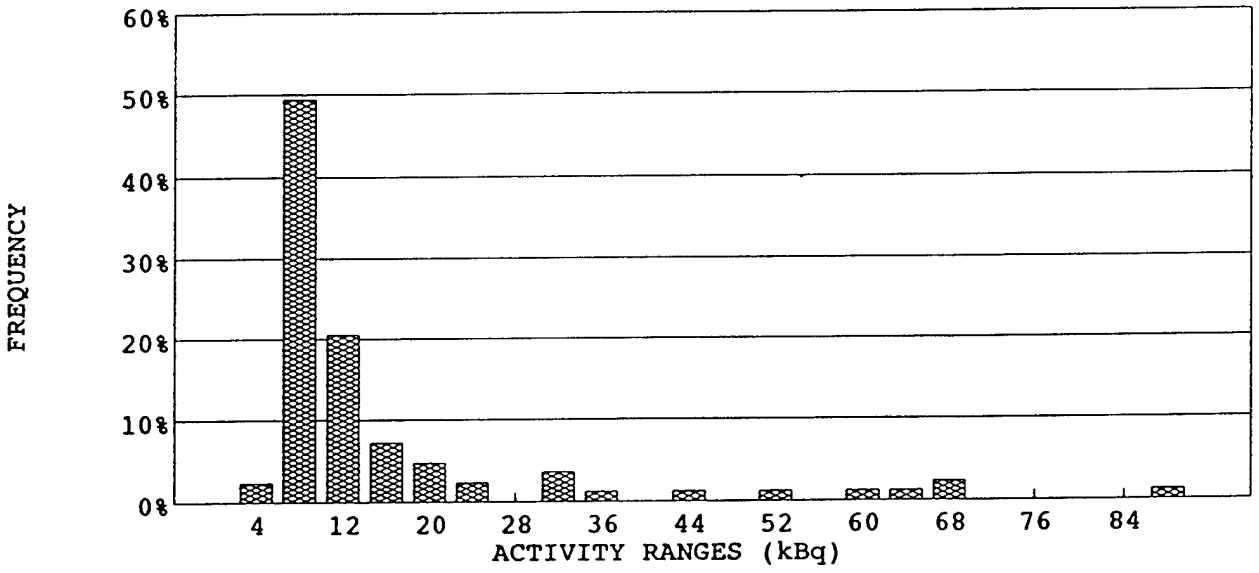
SORTER 1

08-Feb-94

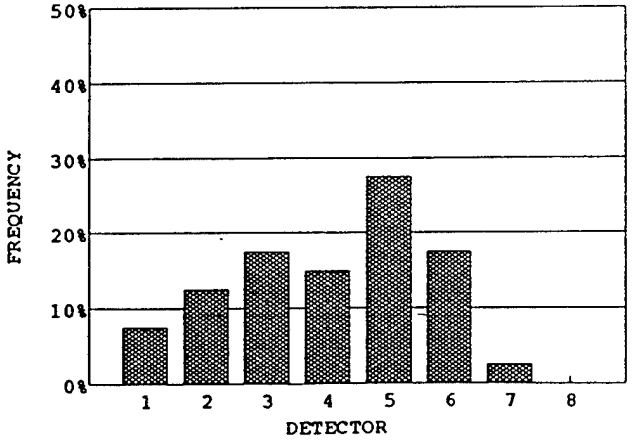
JA CLEAN SOIL SPECIFIC ACTIVITY



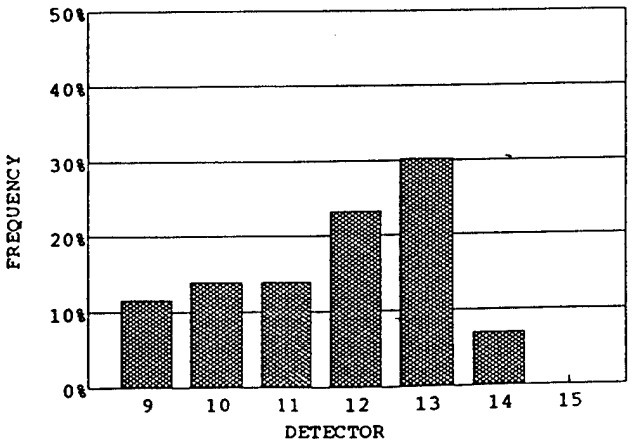
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

08-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	94.5 tons	95.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.5 yd³	74.9 yd³	75.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	2,653 kBq	1,775 kBq	2,288 kBq
MAXIMUM/SORT	635 kBq	319 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		2,894 Bq/kg	24 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,702		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1			
NONE (AD=0 & MD=0 & MND>0)			1,131		None	15:41
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			570			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,020		
2-SEC RECORDS WITH SORTS			92			
2-SEC RECORDS WITHOUT SORTS			16,928			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,794		
NONPROCESSING RECORDS (Test, calibration, etc)				6		
2-SEC SORT DETECTORS						
1 DET	70	76.1%	5 DET	0	0.0%	
2 DET	18	19.6%	6 DET	0	0.0%	
3 DET	4	4.3%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			486.3 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	4	8.5%
2	13	27.7%
3	8	17.0%
4	4	8.5%
5	8	17.0%
6	6	12.8%
7	3	6.4%
8	1	2.1%
TOTAL	47	

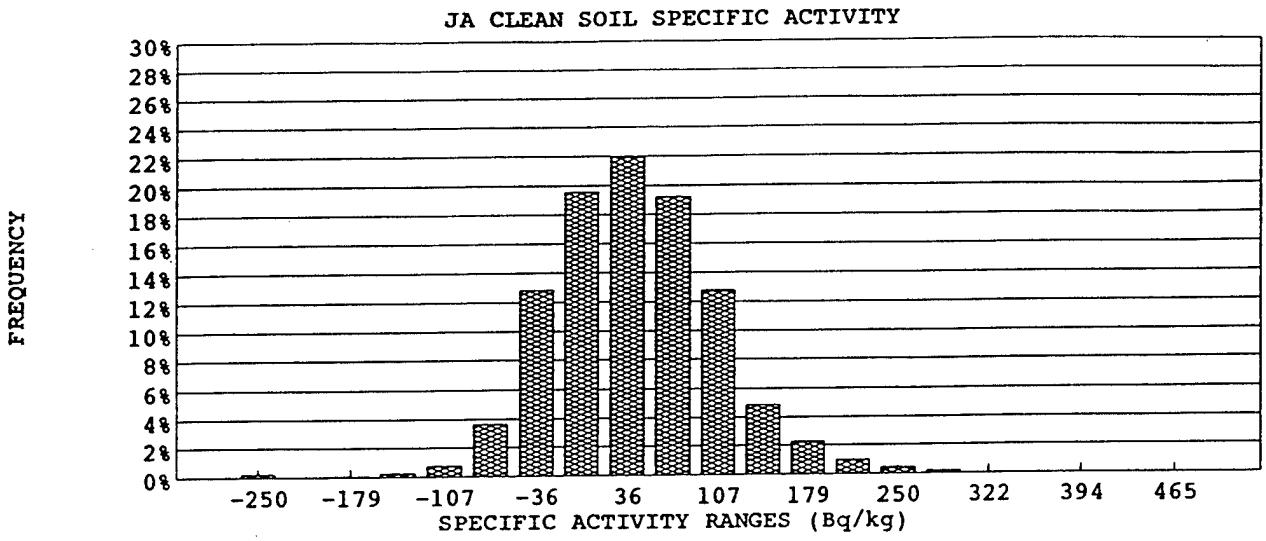
2-GATE SORTS DET	SORTS	FREQ%
9	8	17.8%
10	11	24.4%
11	4	8.9%
12	11	24.4%
13	7	15.6%
14	2	4.4%
15	2	4.4%
TOTAL	45	

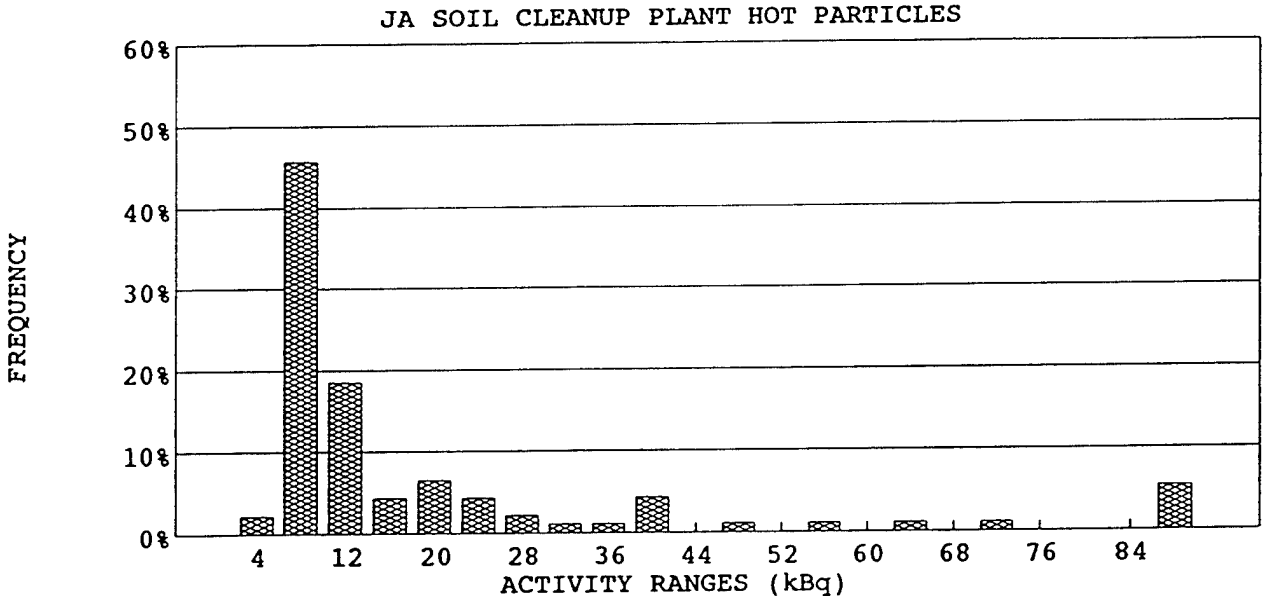
ACT_ND (Bq)	NUM (#)
-14000	4
-12000	0
-10000	1
-8000	5
-6000	13
-4000	62
-2000	219
0	334
2000	374
4000	328
6000	218
8000	83
10000	39
12000	17
14000	8
16000	3
18000	0
20000	0
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,708

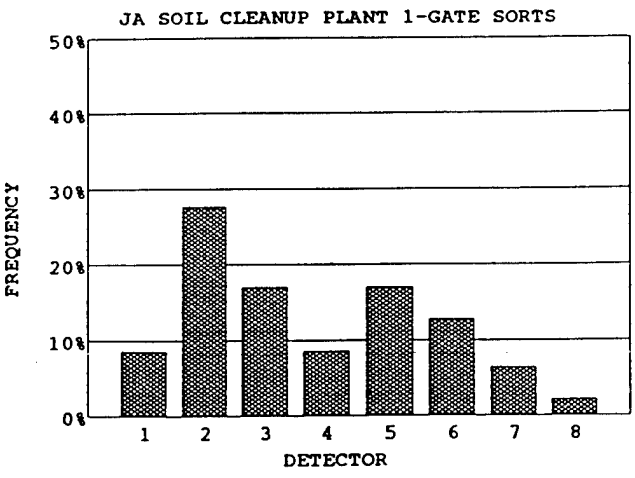
SPEC_A (Bq/kg)	FREQ%
-250	0.2%
-215	0.0%
-179	0.1%
-143	0.3%
-107	0.8%
-72	3.6%
-36	12.8%
0	19.6%
36	21.9%
72	19.2%
107	12.8%
143	4.9%
179	2.3%
215	1.0%
250	0.5%
286	0.2%
322	0.0%
358	0.0%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

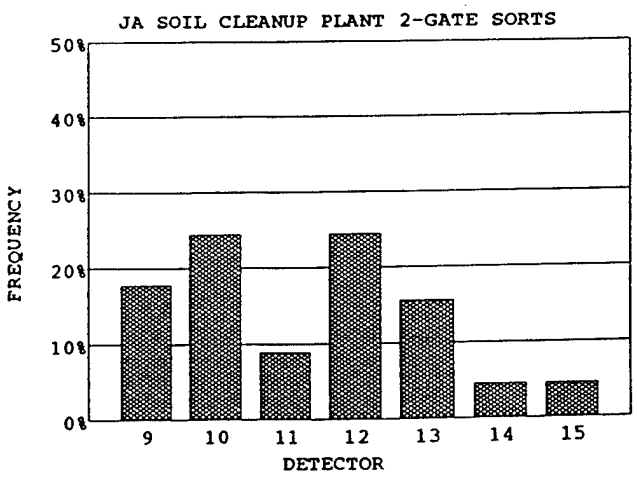
ACT_P (kBq)	NUM (#)	FREQ%
4	2	2.2%
8	42	45.7%
12	17	18.5%
16	4	4.3%
20	6	6.5%
24	4	4.3%
28	2	2.2%
32	1	1.1%
36	1	1.1%
40	4	4.3%
44	0	0.0%
48	1	1.1%
52	0	0.0%
56	1	1.1%
60	0	0.0%
64	1	1.1%
68	0	0.0%
72	1	1.1%
76	0	0.0%
80	0	0.0%
84	0	0.0%
>84	5	5.4%
TOTAL	92	

EVENT TYPES HPE 96 MPE 697 DISE 83


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 3

08-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.62 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	97.8 tons	98.2 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.3 yd³	77.5 yd³	77.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	2,504 kBq	1,555 kBq	5,287 kBq
MAXIMUM/SORT	79 kBq	51 kBq	15 kBq
MINIMUM/SORT	3 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		3,531 Bq/kg	54 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,757		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			1,318			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			439			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,570		
2-SEC RECORDS WITH SORTS			205			
2-SEC RECORDS WITHOUT SORTS			17,365			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,962		
NONPROCESSING RECORDS (Test, calibration, etc)				3		
2-SEC SORT DETECTORS						
1 DET	156	76.1%	5 DET	0	0.0%	
2 DET	45	22.0%	6 DET	0	0.0%	
3 DET	4	2.0%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS	225.3 sec					

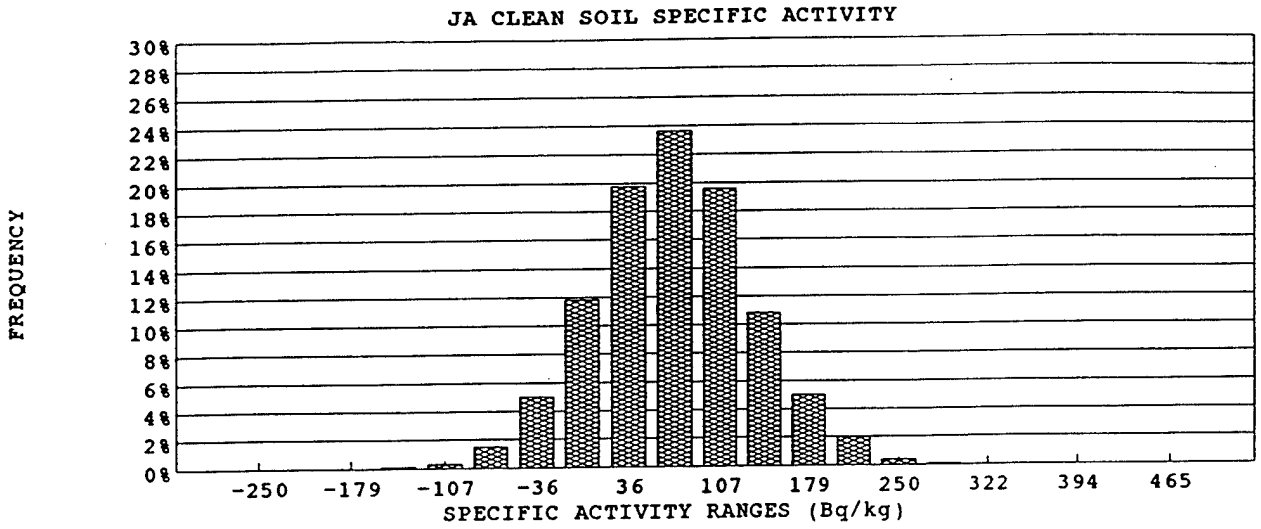
FREQUENCY DISTRIBUTIONS

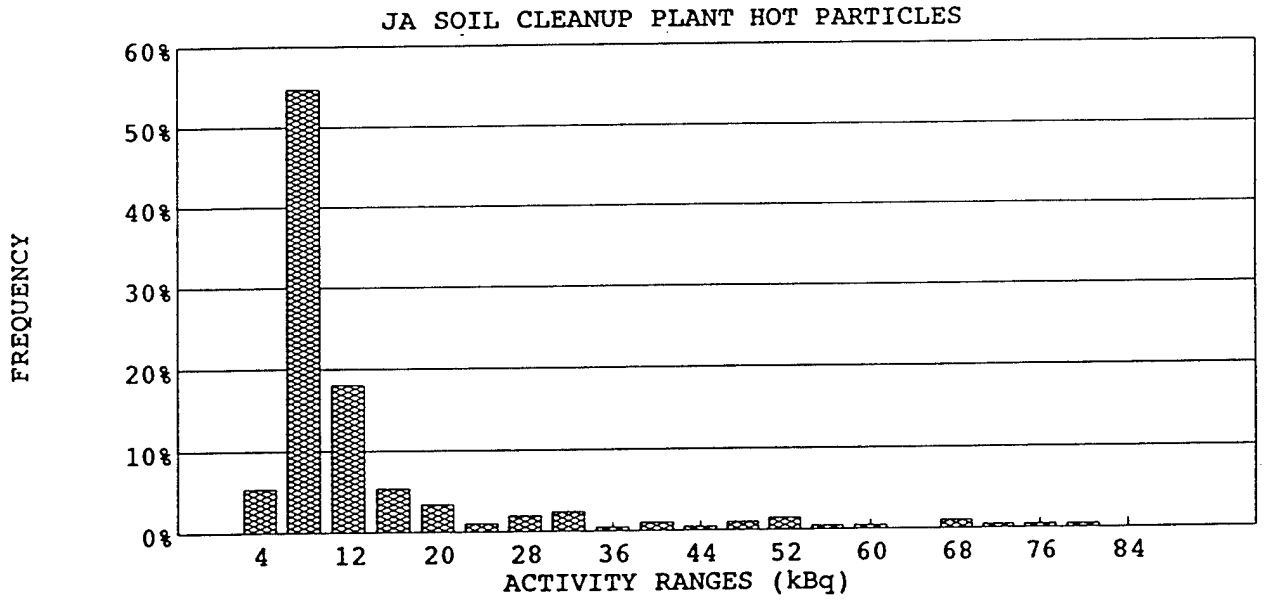
1-GATE SORTS DET	SORTS	FREQ%
1	2	1.9%
2	5	4.7%
3	2	1.9%
4	14	13.2%
5	15	14.2%
6	40	37.7%
7	24	22.6%
8	4	3.8%
TOTAL	106	

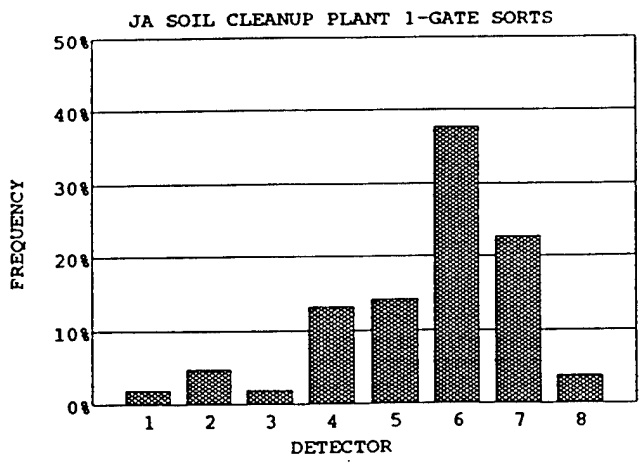
2-GATE SORTS DET	SORTS	FREQ%
9	3	3.0%
10	2	2.0%
11	6	6.1%
12	17	17.2%
13	26	26.3%
14	35	35.4%
15	10	10.1%
TOTAL	99	

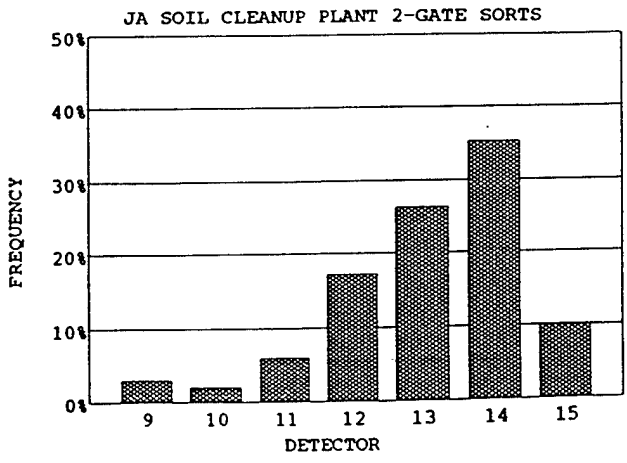
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	11	5.4%
-12000	0	-215	0.0%	8	112	54.6%
-10000	0	-179	0.0%	12	37	18.0%
-8000	2	-143	0.1%	16	11	5.4%
-6000	5	-107	0.3%	20	7	3.4%
-4000	26	-72	1.5%	24	2	1.0%
-2000	88	-36	5.0%	28	4	2.0%
0	208	0	11.8%	32	5	2.4%
2000	348	36	19.8%	36	1	0.5%
4000	416	72	23.6%	40	2	1.0%
6000	345	107	19.6%	44	1	0.5%
8000	191	143	10.9%	48	2	1.0%
10000	88	179	5.0%	52	3	1.5%
12000	35	215	2.0%	56	1	0.5%
14000	7	250	0.4%	60	1	0.5%
16000	1	286	0.1%	64	0	0.0%
18000	0	322	0.0%	68	2	1.0%
20000	0	358	0.0%	72	1	0.5%
22000	0	394	0.0%	76	1	0.5%
24000	0	429	0.0%	80	1	0.5%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	0	0.0%
TOTAL	1,760			TOTAL	205	

EVENT TYPES HPE 215 MPE 414 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 4

08-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.59 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	96.6 tons	97.3 tons
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.6 yd³	76.6 yd³	77.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	6,224 kBq	3,267 kBq	14,121 kBq
MAXIMUM/SORT	587 kBq	479 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-2 kBq
SPECIFIC ACTIVITY		4,695 Bq/kg	146 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,741		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1			
NONE (AD=0 & MD=0 & MND>0)		1,129		None	06:20
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		611			06:23
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			17,410		
2-SEC RECORDS WITH SORTS		289			
2-SEC RECORDS WITHOUT SORTS		17,121			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,030		
NONPROCESSING RECORDS (Test, calibration, etc)			1		

2-SEC SORT DETECTORS

1 DET	215	74.4%	5 DET	1	0.3%
2 DET	58	20.1%	6 DET	0	0.0%
3 DET	13	4.5%	7 DET	0	0.0%
4 DET	2	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 162.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

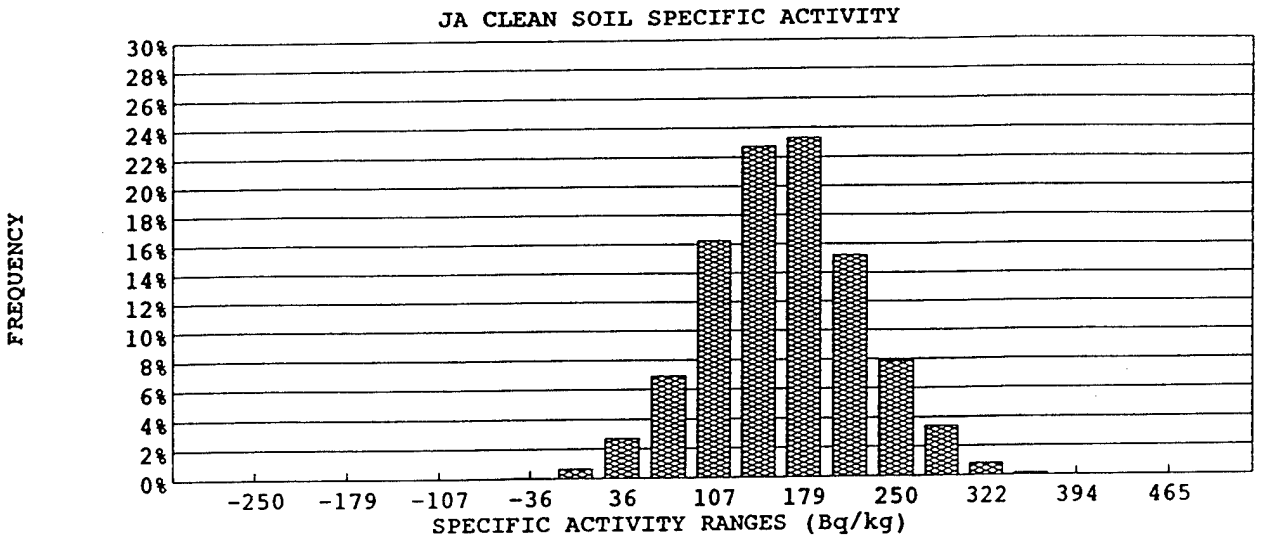
DET	SORTS	FREQ%
1	6	4.0%
2	34	22.7%
3	42	28.0%
4	39	26.0%
5	16	10.7%
6	7	4.7%
7	5	3.3%
8	1	0.7%
TOTAL	150	

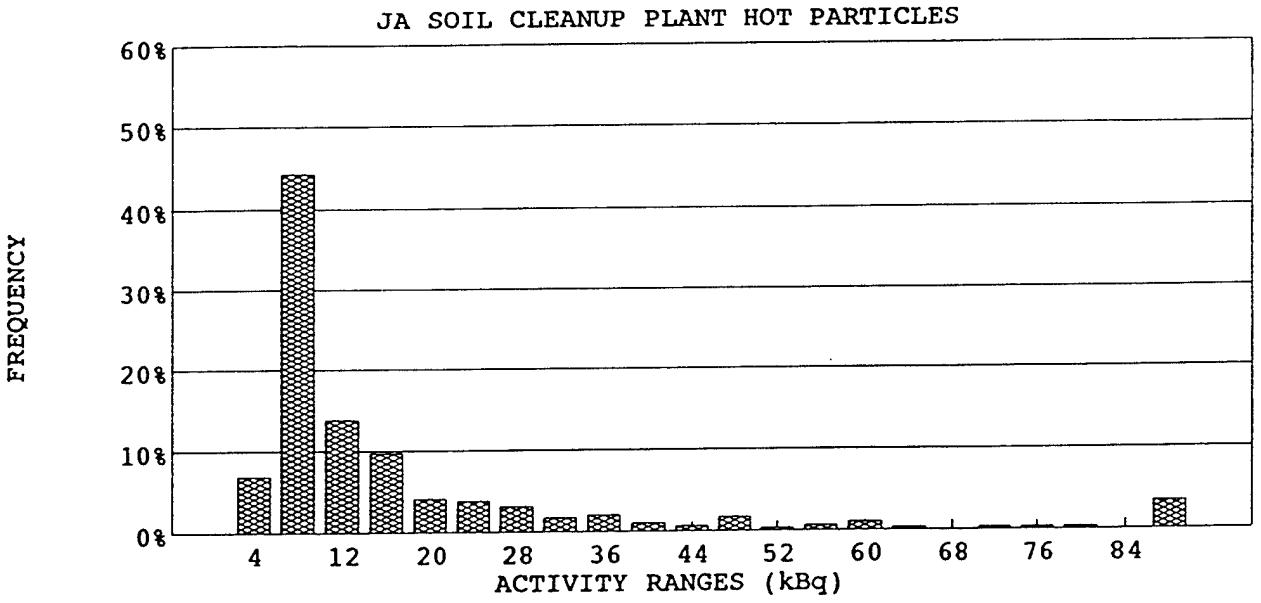
2-GATE SORTS

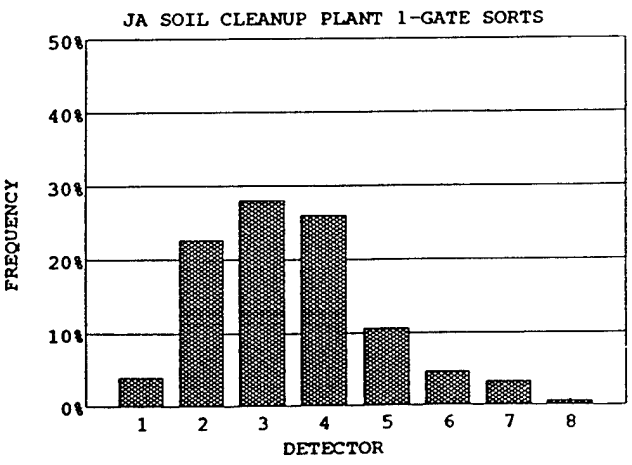
DET	SORTS	FREQ%
9	20	14.4%
10	33	23.7%
11	40	28.8%
12	26	18.7%
13	9	6.5%
14	7	5.0%
15	4	2.9%
TOTAL	139	

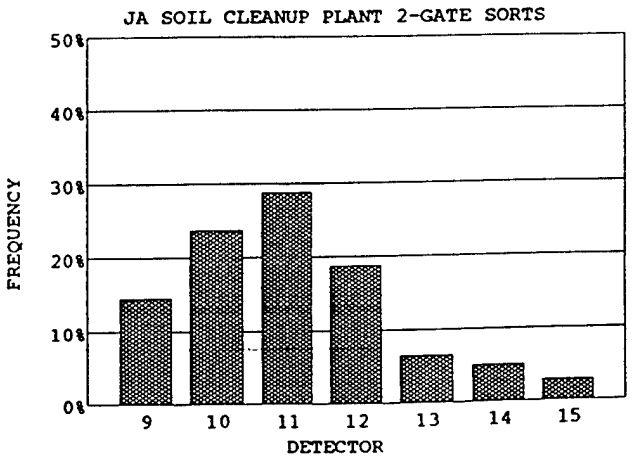
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	20	6.9%
-12000	0	-215	0.0%	8	128	44.3%
-10000	0	-179	0.0%	12	40	13.8%
-8000	0	-143	0.0%	16	28	9.7%
-6000	0	-107	0.0%	20	12	4.2%
-4000	0	-72	0.0%	24	11	3.8%
-2000	1	-36	0.1%	28	9	3.1%
0	11	0	0.6%	32	5	1.7%
2000	47	36	2.7%	36	6	2.1%
4000	121	72	6.9%	40	3	1.0%
6000	283	107	16.2%	44	2	0.7%
8000	396	143	22.7%	48	5	1.7%
10000	406	179	23.3%	52	1	0.3%
12000	265	215	15.2%	56	2	0.7%
14000	137	250	7.9%	60	3	1.0%
16000	59	286	3.4%	64	1	0.3%
18000	14	322	0.8%	68	0	0.0%
20000	2	358	0.1%	72	1	0.3%
22000	0	394	0.0%	76	1	0.3%
24000	0	429	0.0%	80	1	0.3%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	10	3.5%
TOTAL	1,742			TOTAL	289	

EVENT TYPES	HPE	289	MPE	621	DISE	83


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 09-Feb-94

WORK DAY START	05:40 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.8 hr	10.8 hr	10.8 hr	10.8 hr	43.3 hr
SORTER AVAILABLE HOURS	10.8 hr	10.8 hr	10.8 hr	10.8 hr	43.3 hr
SORTER START-UP	05:40	05:40	05:40	05:40	
START SOIL PROCESSING	06:10	06:09	06:11	06:11	
TIME REQUIRED TO START-UP	0.5 hr	0.5 hr	0.5 hr	0.5 hr	2.1 hr
SORTER SHUT-DOWN	16:30	16:30	16:30	16:30	
END SOIL PROCESSING	15:52	15:52	16:08	16:07	
TIME REQUIRED TO SHUT DOWN	0.6 hr	0.6 hr	0.4 hr	0.4 hr	2.0 hr
ACTUAL PROCESS HOURS	9.7 hr	9.7 hr	9.9 hr	9.9 hr	39.2 hr
DOWN-TIME	1.1 hr	1.1 hr	0.9 hr	1.0 hr	4.2 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.1 hr	0.1 hr	0.1 hr
SORTER NONAVAILABLE TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					90.4%
PRODUCTIVTY					90.4%

PRODUCTIVITY

Date	09-Feb-94	Excused Delays for day (sorter-hrs)	0 hr
Contract day (from 6 Sep)	123	Excused delays for contract (sorter-hrs)	1,601 hr
Current Contract week	21	Excused delay days (plant-days)	40 days
		Excused delay months (plant-month)	1.54 months
Soil production for Day	394 MT		
Cumlative Soil Production for Week	1,166 MT	Percent of contract completed	33.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,574 MT
Since 6 Sep 93	31,651 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	33,242 MT		
Total Soil production for project	59,529 MT		

MT = metric tons

SORTER 1

09-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	97.5 tons	97.6 tons
MAXIMUM/SORT	2.8 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.1 yd³	77.3 yd³	77.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	671 kBq	372 kBq	2,399 kBq
MAXIMUM/SORT	65 kBq	46 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		3,687 Bq/kg	25 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,746		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0			
NONE (AD=0 & MD=0 & MND>0)			1,639		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			107			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,460		
2-SEC RECORDS WITH SORTS			52			
2-SEC RECORDS WITHOUT SORTS			17,408			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,798		
NONPROCESSING RECORDS (Test, calibration, etc)				8		

2-SEC SORT DETECTORS

1 DET	39	75.0%	5 DET	0	0.0%
2 DET	10	19.2%	6 DET	0	0.0%
3 DET	2	3.8%	7 DET	0	0.0%
4 DET	1	1.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 895.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	0	0.0%
2	1	3.8%
3	2	7.7%
4	3	11.5%
5	7	26.9%
6	5	19.2%
7	6	23.1%
8	2	7.7%
TOTAL	26	

2-GATE SORTS

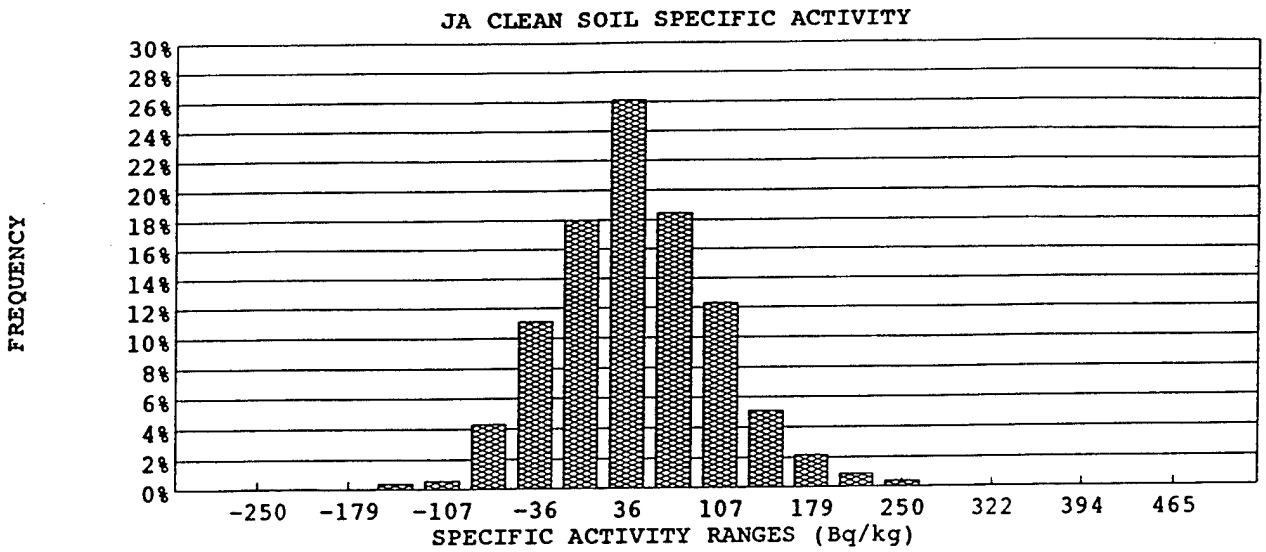
DET	SORTS	FREQ%
9	3	11.5%
10	1	3.8%
11	3	11.5%
12	4	15.4%
13	6	23.1%
14	3	11.5%
15	6	23.1%
TOTAL	26	

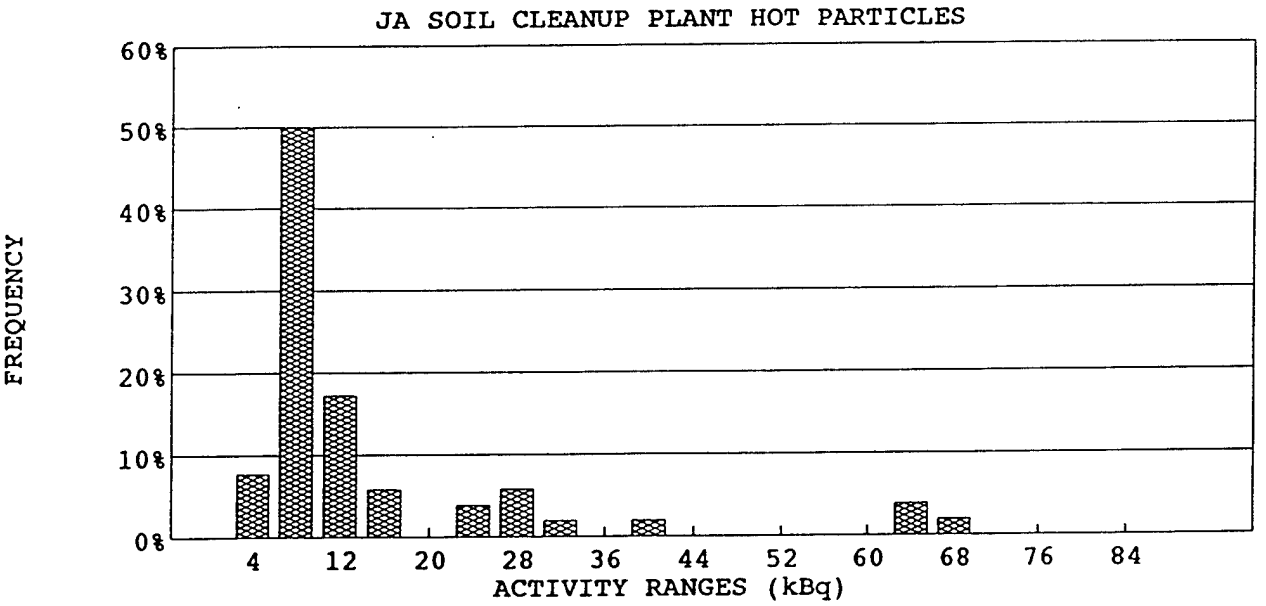
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	4	7.7%
-12000	1	-215	0.1%	8	26	50.0%
-10000	0	-179	0.0%	12	9	17.3%
-8000	7	-143	0.4%	16	3	5.8%
-6000	10	-107	0.6%	20	0	0.0%
-4000	75	-72	4.3%	24	2	3.8%
-2000	195	-36	11.1%	28	3	5.8%
0	315	0	18.0%	32	1	1.9%
2000	458	36	26.1%	36	0	0.0%
4000	324	72	18.5%	40	1	1.9%
6000	216	107	12.3%	44	0	0.0%
8000	90	143	5.1%	48	0	0.0%
10000	38	179	2.2%	52	0	0.0%
12000	15	215	0.9%	56	0	0.0%
14000	7	250	0.4%	60	0	0.0%
16000	1	286	0.1%	64	2	3.8%
18000	1	322	0.1%	68	1	1.9%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	0	0.0%
TOTAL	1,754			TOTAL	52	

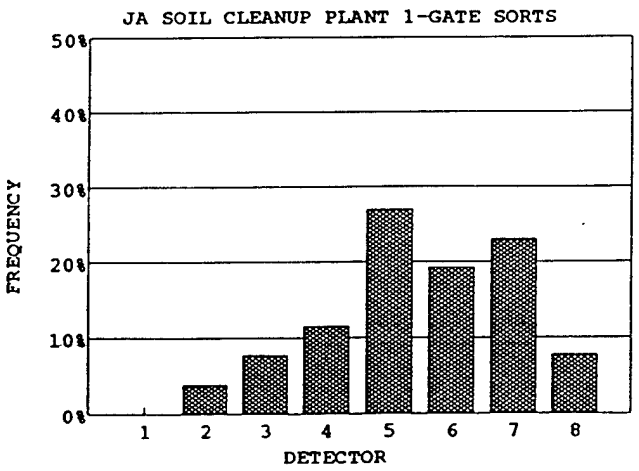
EVENT TYPES HPE 50 MPE 94 DISE 0

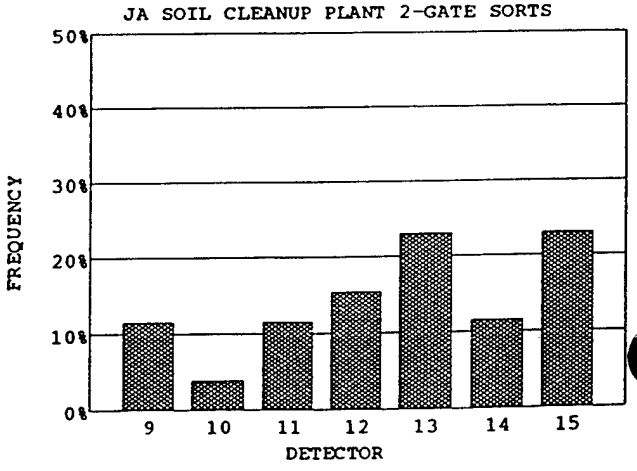
SORTER 1

09-Feb-









SORTER 2

09-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	97.3 tons	97.8 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.4 yd³	77.1 yd³	77.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,219 kBq	1,273 kBq	2,334 kBq
MAXIMUM/SORT	211 kBq	94 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		2,482 Bq/kg	24 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,749		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0			
NONE (AD=0 & MD=0 & MND>0)			1,218		11:12	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			531			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		1				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				17,490		
2-SEC RECORDS WITH SORTS			67			
2-SEC RECORDS WITHOUT SORTS			17,423			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,816		
NONPROCESSING RECORDS (Test, calibration, etc)				3		

2-SEC SORT DETECTORS

1 DET	55	82.1%	5 DET	0	0.0%
2 DET	11	16.4%	6 DET	0	0.0%
3 DET	1	1.5%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 636.0 sec

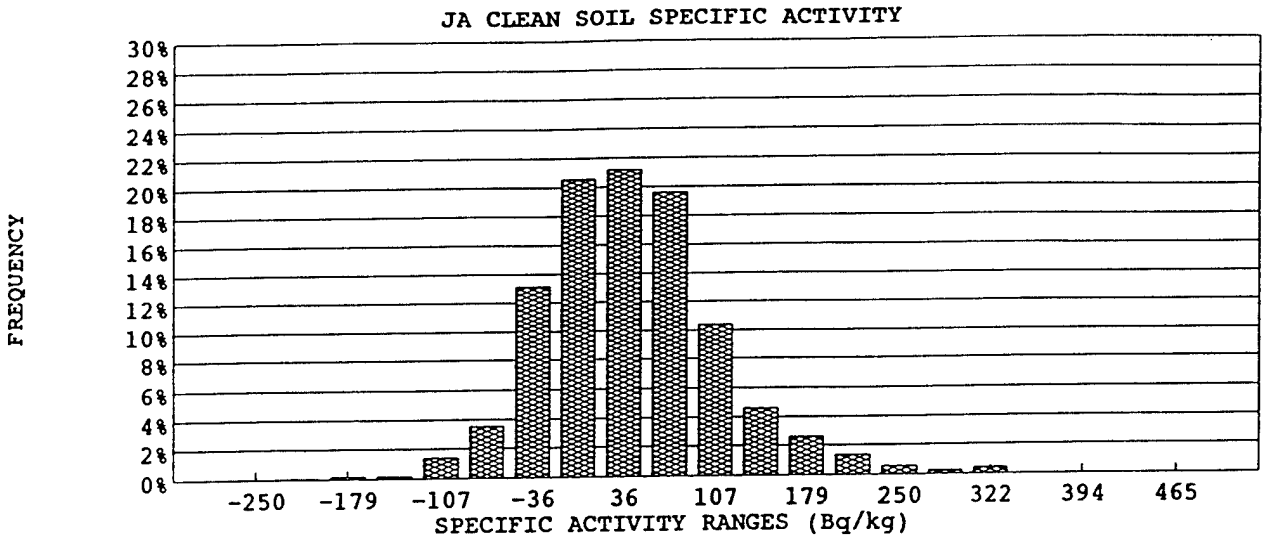
FREQUENCY DISTRIBUTIONS

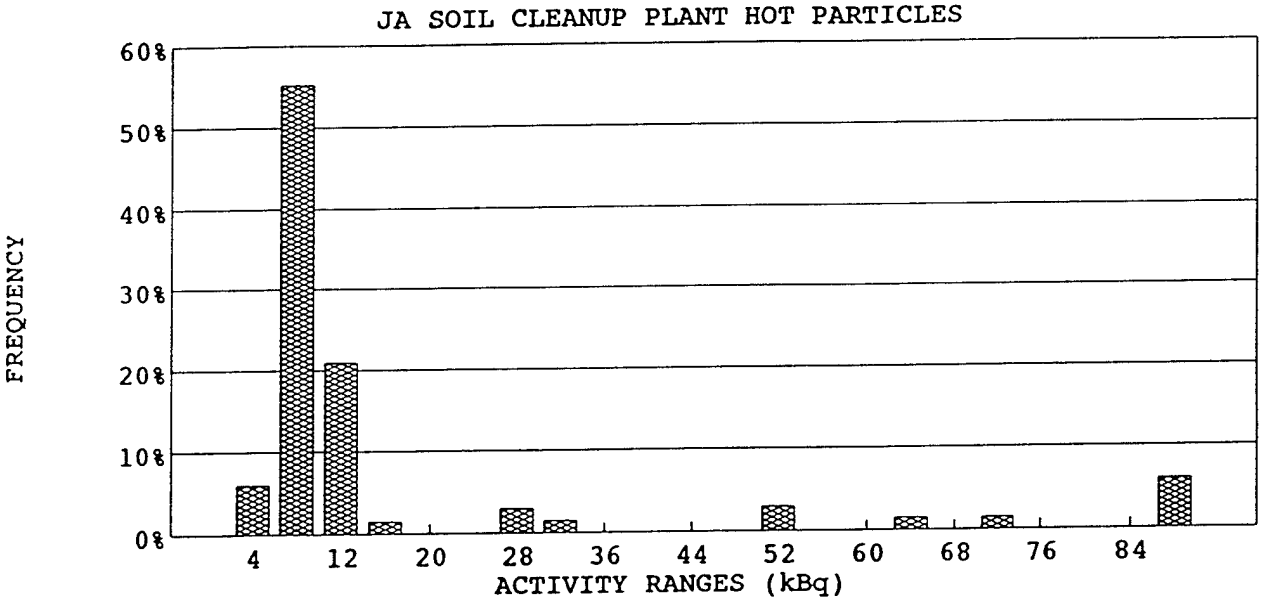
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	2	5.4%	-14000	0	-250	0.0%	4	4	6.0%
2	8	21.6%	-12000	1	-215	0.1%	8	37	55.2%
3	9	24.3%	-10000	3	-179	0.2%	12	14	20.9%
4	9	24.3%	-8000	3	-143	0.2%	16	1	1.5%
5	3	8.1%	-6000	25	-107	1.4%	20	0	0.0%
6	3	8.1%	-4000	61	-72	3.5%	24	0	0.0%
7	3	8.1%	-2000	230	-36	13.1%	28	2	3.0%
8	0	0.0%	0	360	0	20.5%	32	1	1.5%
TOTAL	37		2000	371	36	21.2%	36	0	0.0%
			4000	343	72	19.6%	40	0	0.0%
2-GATE DET	SORTS	FREQ%	6000	182	107	10.4%	44	0	0.0%
9	5	16.7%	8000	80	143	4.6%	48	0	0.0%
10	6	20.0%	10000	46	179	2.6%	52	2	3.0%
11	7	23.3%	12000	24	215	1.4%	56	0	0.0%
12	7	23.3%	14000	10	250	0.6%	60	0	0.0%
13	2	6.7%	16000	5	286	0.3%	64	1	1.5%
14	1	3.3%	18000	8	322	0.5%	68	0	0.0%
15	2	6.7%	20000	0	358	0.0%	72	1	1.5%
TOTAL	30		22000	0	394	0.0%	76	0	0.0%
			24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	4	6.0%
			TOTAL	1,752			TOTAL	67	

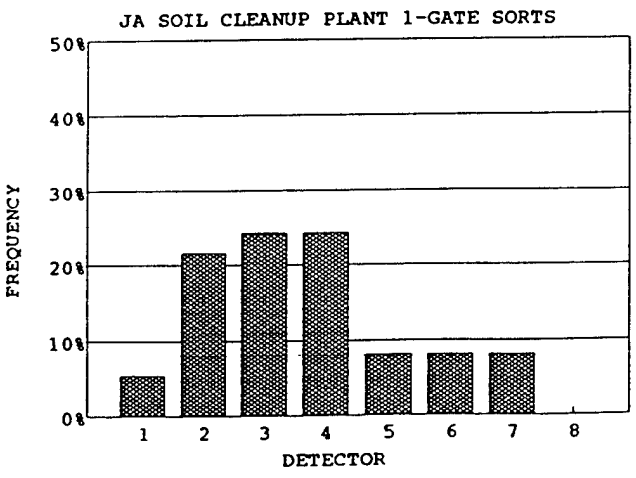
EVENT TYPES HPE 72 MPE 661 DISE 0

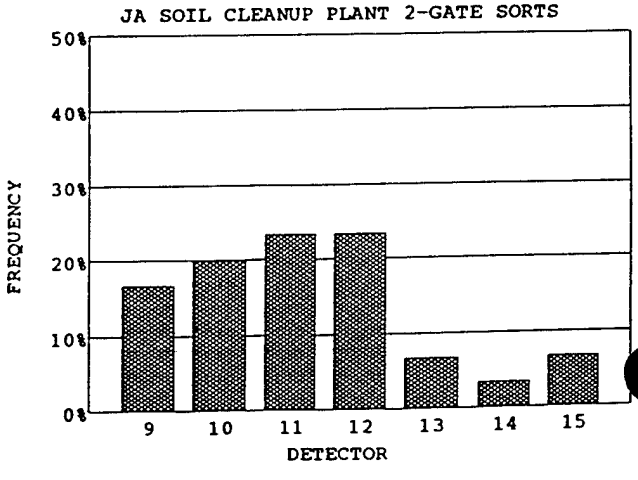
SORTER 2

09-Feb-04









SORTER 3

09-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	99.2 tons	99.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
VOLUME IN-GROUND	0.4 yd³	78.6 yd³	79.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,135 kBq	4,309 kBq	4,408 kBq
MAXIMUM/SORT	2,502 kBq	1,260 kBq	14 kBq
MINIMUM/SORT	4 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		9,327 Bq/kg	44 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,782		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1		None	08:52
NONE (AD=0 & MD=0 & MND>0)			1,381			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			400			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				17,820		
2-SEC RECORDS WITH SORTS			134			
2-SEC RECORDS WITHOUT SORTS			17,686			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,916		
NONPROCESSING RECORDS (Test, calibration, etc)				5		

2-SEC SORT DETECTORS

1 DET	89	66.4%	5 DET	2	1.5%
2 DET	31	23.1%	6 DET	0	0.0%
3 DET	8	6.0%	7 DET	0	0.0%
4 DET	4	3.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 400.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	0	0.0%
2	2	2.9%
3	6	8.7%
4	11	15.9%
5	16	23.2%
6	17	24.6%
7	15	21.7%
8	2	2.9%
TOTAL	69	

2-GATE SORTS

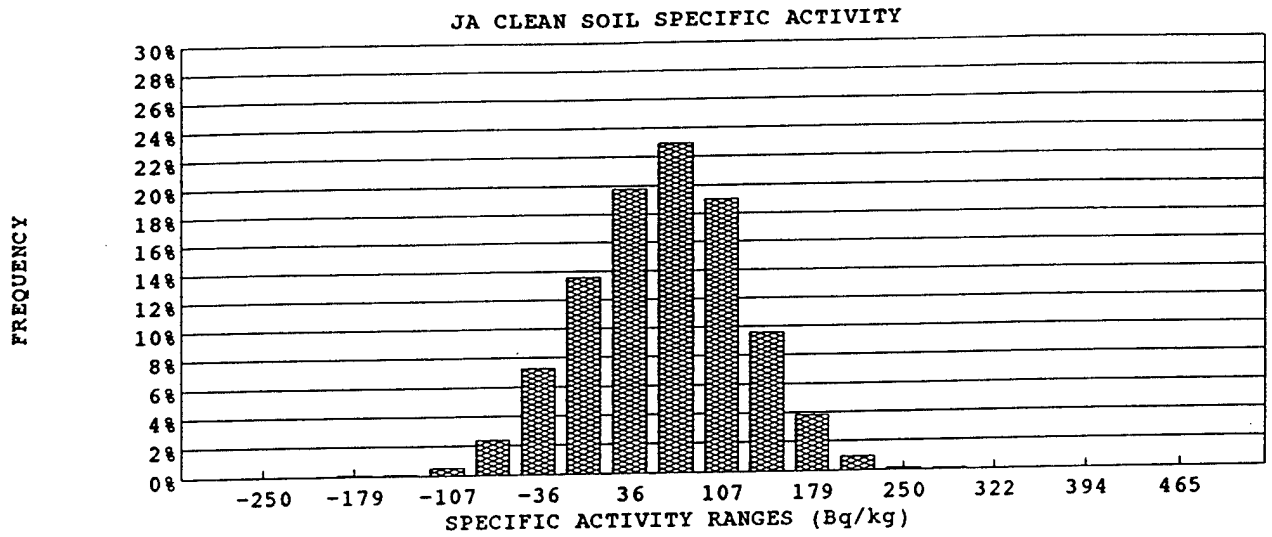
DET	SORTS	FREQ%
9	1	1.5%
10	4	6.2%
11	8	12.3%
12	13	20.0%
13	17	26.2%
14	17	26.2%
15	5	7.7%
TOTAL	65	

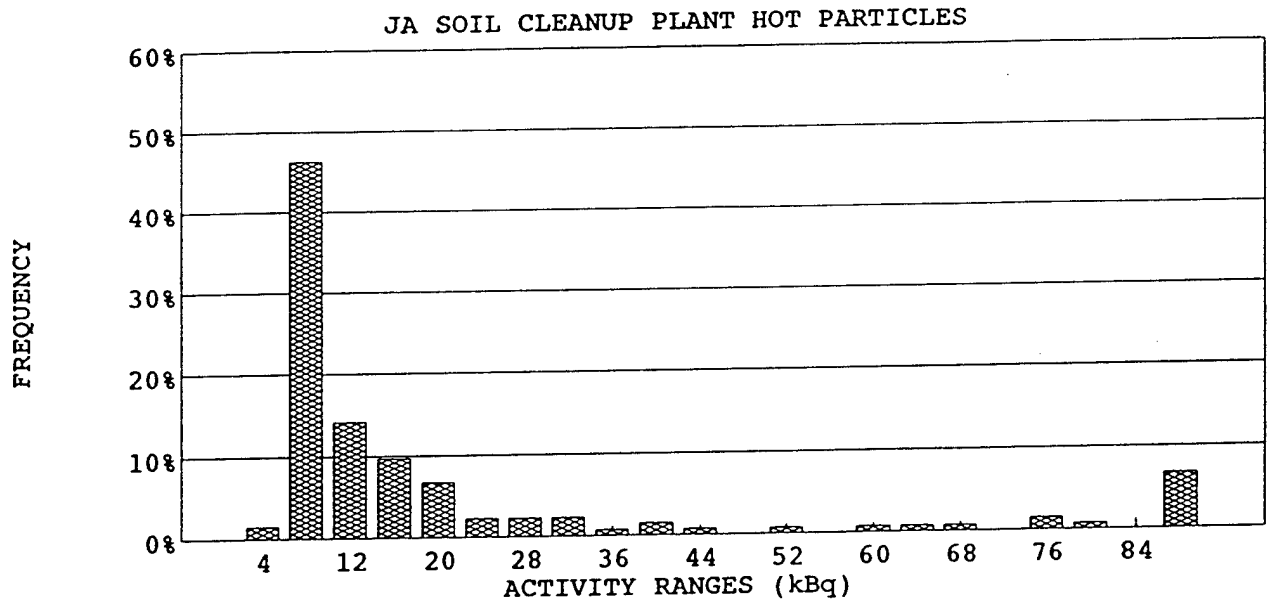
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	2	1.5%
-12000	0	-215	0.0%	8	62	46.3%
-10000	1	-179	0.1%	12	19	14.2%
-8000	1	-143	0.1%	16	13	9.7%
-6000	9	-107	0.5%	20	9	6.7%
-4000	42	-72	2.4%	24	3	2.2%
-2000	130	-36	7.3%	28	3	2.2%
0	242	0	13.5%	32	3	2.2%
2000	353	36	19.8%	36	1	0.7%
4000	410	72	22.9%	40	2	1.5%
6000	340	107	19.0%	44	1	0.7%
8000	171	143	9.6%	48	0	0.0%
10000	68	179	3.8%	52	1	0.7%
12000	17	215	1.0%	56	0	0.0%
14000	2	250	0.1%	60	1	0.7%
16000	1	286	0.1%	64	1	0.7%
18000	0	322	0.0%	68	1	0.7%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	2	1.5%
24000	0	429	0.0%	80	1	0.7%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	9	6.7%
TOTAL	1,787			TOTAL	134	

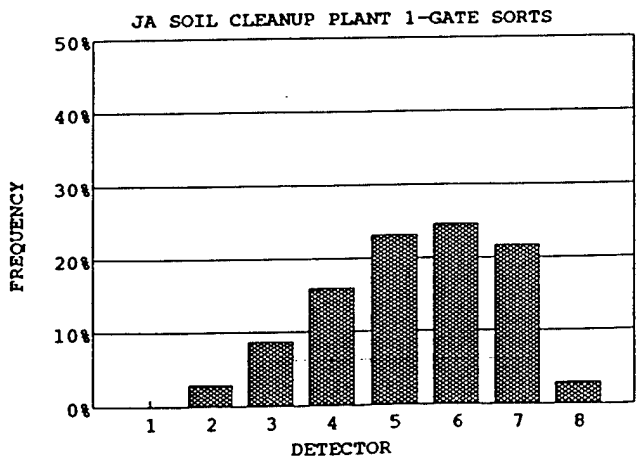
EVENT TYPES HPE 128 MPE 449 DISE 83

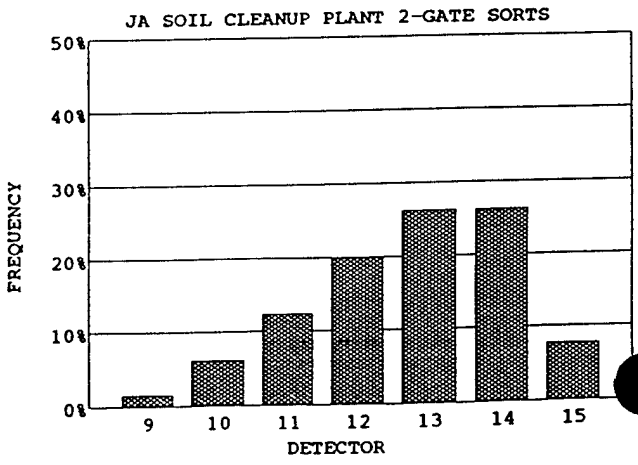
SORTER 3

09-Feb-94









SORTER 4

09-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.60 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	98.7 tons	99.2 tons
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
VOLUME IN-GROUND	0.4 yd³	78.2 yd³	78.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,371 kBq	1,917 kBq	13,809 kBq
MAXIMUM/SORT	797 kBq	565 kBq	18 kBq
MINIMUM/SORT	3 kBq	(2,071)Bq	-5 kBq
SPECIFIC ACTIVITY		3,481 Bq/kg	140 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,775		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			2			
NONE (AD=0 & MD=0 & MND>0)			1,300		06:18	06:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			473			06:15
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				17,750		
2-SEC RECORDS WITH SORTS			120			
2-SEC RECORDS WITHOUT SORTS			17,630			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,895		
NONPROCESSING RECORDS (Test, calibration, etc)				1		
2-SEC SORT DETECTORS						
1 DET	87	72.5%	5 DET	0	0.0%	
2 DET	25	20.8%	6 DET	0	0.0%	
3 DET	7	5.8%	7 DET	0	0.0%	
4 DET	1	0.8%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			408.0 sec			

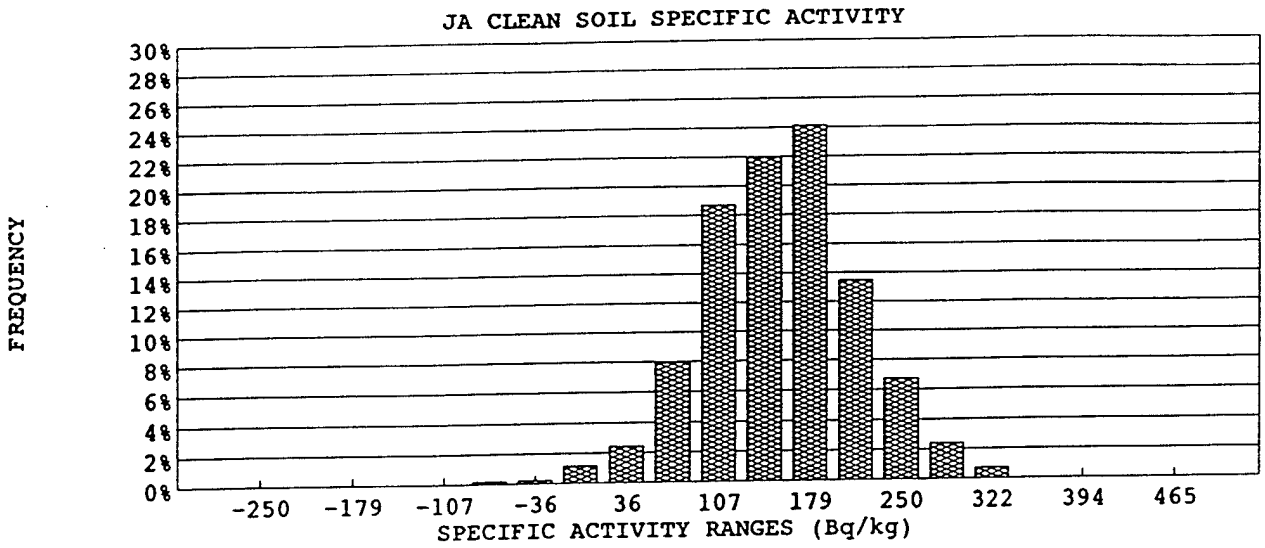
FREQUENCY DISTRIBUTIONS

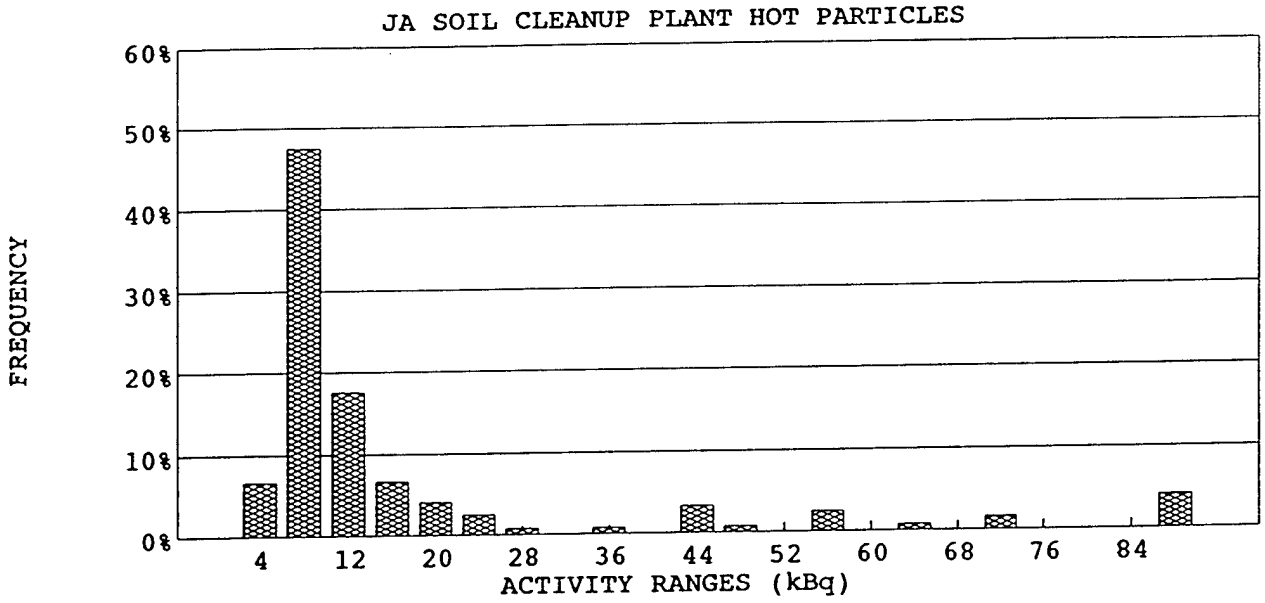
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	8	13.3%	-14000	0	-250	0.0%	4	8	6.7%
2	14	23.3%	-12000	0	-215	0.0%	8	57	47.5%
3	19	31.7%	-10000	0	-179	0.0%	12	21	17.5%
4	10	16.7%	-8000	0	-143	0.0%	16	8	6.7%
5	7	11.7%	-6000	0	-107	0.0%	20	5	4.2%
6	1	1.7%	-4000	3	-72	0.2%	24	3	2.5%
7	0	0.0%	-2000	4	-36	0.2%	28	1	0.8%
8	1	1.7%	0	21	0	1.2%	32	0	0.0%
TOTAL	60		2000	43	36	2.4%	36	1	0.8%
			4000	141	72	7.9%	40	0	0.0%
2-GATE SORTS			6000	332	107	18.7%	44	4	3.3%
DET	SORTS	FREQ%	8000	390	143	22.0%	48	1	0.8%
9	11	18.3%	10000	428	179	24.1%	52	0	0.0%
10	18	30.0%	12000	239	215	13.5%	56	3	2.5%
11	15	25.0%	14000	120	250	6.8%	60	0	0.0%
12	11	18.3%	16000	42	286	2.4%	64	1	0.8%
13	5	8.3%	18000	13	322	0.7%	68	0	0.0%
14	0	0.0%	20000	0	358	0.0%	72	2	1.7%
15	0	0.0%	22000	0	394	0.0%	76	0	0.0%
TOTAL	60		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	5	4.2%
			TOTAL	1,776			TOTAL	120	

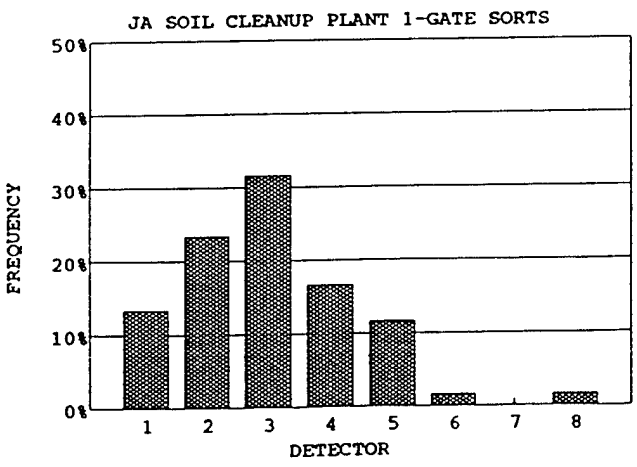
EVENT TYPES	HPE	125	MPE	494	DISE	166

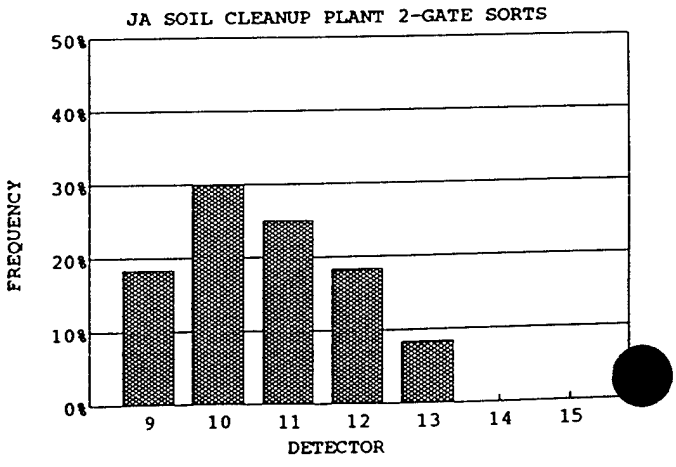
SORTER 4

09-Feb-94









WORK HISTORY – JA SOIL CLEANUP PLANT 10-Feb-94

WORK DAY START	05:45 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.8 hr	10.8 hr	10.8 hr	10.8 hr	43.0 hr
SORTER AVAILABLE HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER START-UP	05:45	05:45	05:45	05:45	
START SOIL PROCESSING	06:04	06:04	06:05	06:05	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.3 hr	0.3 hr	1.3 hr
SORTER SHUT-DOWN	16:15	16:15	16:15	16:15	
END SOIL PROCESSING	15:54	15:52	15:53	15:45	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.4 hr	0.4 hr	0.5 hr	1.6 hr
ACTUAL PROCESS HOURS	9.8 hr	9.8 hr	9.8 hr	9.7 hr	39.1 hr
DOWN-TIME	0.7 hr	0.7 hr	0.7 hr	0.8 hr	2.9 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.3 hr	0.3 hr	0.3 hr	0.3 hr	1.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					93.2%
PRODUCTIVTY					91.0%

PRODUCTIVITY

Date	10-Feb-94	Excused Delays for day (sorter-hrs)	0 hr
Contract day (from 6 Sep)	124	Excused delays for contract (sorter-hrs)	1,601 hr
Current Contract week	21	Excused delay days (plant-days)	40 days
		Excused delay months (plant-month)	1.54 months
Soil production for Day	394 MT		
Cumlative Soil Production for Week	1,560 MT	Percent of contract completed	33.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,651 MT
Since 6 Sep 93	32,045 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	33,636 MT		
Total Soil production for project	59,923 MT		

MT = metric tons

File Report1 Printed on 11-Feb-94 at 01:58:07 PM

SORTER 1

10-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.68 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	98.8 tons	99.0 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.2 yd³	78.3 yd³	78.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	2,176 kBq	961 kBq	5,085 kBq
MAXIMUM/SORT	106 kBq	74 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		4,200 Bq/kg	51 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,771		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		0		None	None
NONE (AD=0 & MD=0 & MND>0)		1,565			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		206			
UNEXPLAINED RECORDS		0			
0<AD<1kBq & MD>0		0			
AD=0 & MD>0		0			
AD<0 & MD >0		0			
2-SEC COUNT PERIODS			17,710		
2-SEC RECORDS WITH SORTS		164			
2-SEC RECORDS WITHOUT SORTS		17,546			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,935		
NONPROCESSING RECORDS (Test, calibration, etc)			3		

2-SEC SORT DETECTORS

1 DET	125	76.2%	5 DET	0	0.0%
2 DET	34	20.7%	6 DET	0	0.0%
3 DET	5	3.0%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 283.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	2	2.4%
2	8	9.8%
3	10	12.2%
4	16	19.5%
5	16	19.5%
6	10	12.2%
7	14	17.1%
8	6	7.3%
TOTAL	82	

2-GATE SORTS

DET	SORTS	FREQ%
9	9	11.0%
10	9	11.0%
11	11	13.4%
12	16	19.5%
13	18	22.0%
14	8	9.8%
15	11	13.4%
TOTAL	82	

ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	0
-8000	4
-6000	8
-4000	41
-2000	144
0	204
2000	382
4000	340
6000	295
8000	172
10000	104
12000	55
14000	15
16000	9
18000	1
20000	0
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,774

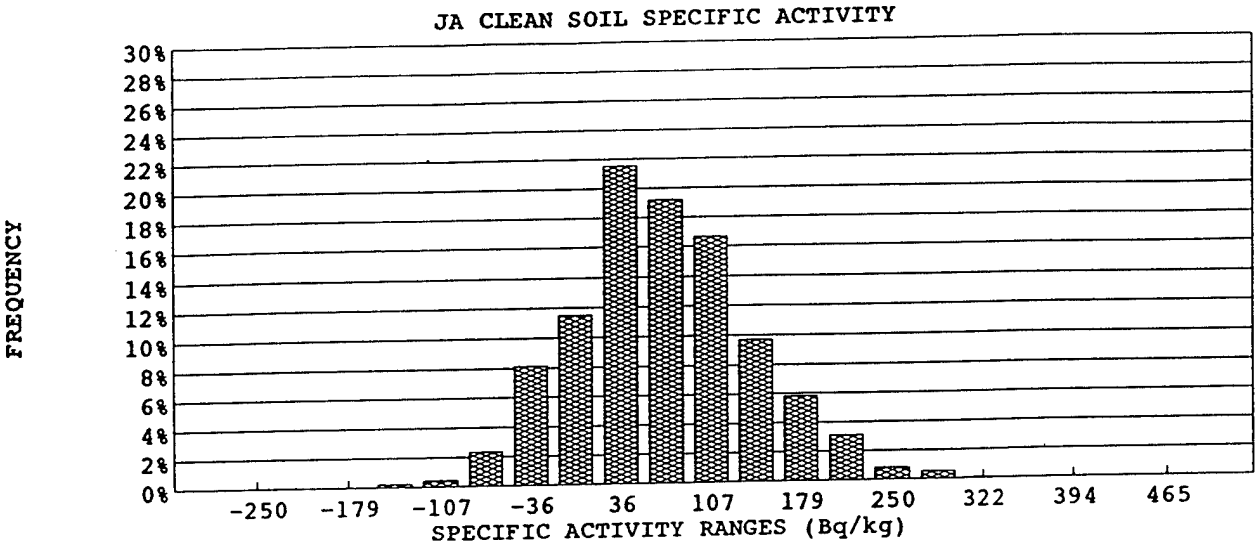
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.0%
-143	0.2%
-107	0.5%
-72	2.3%
-36	8.1%
0	11.5%
36	21.5%
72	19.2%
107	16.6%
143	9.7%
179	5.9%
215	3.1%
250	0.8%
286	0.5%
322	0.1%
358	0.0%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

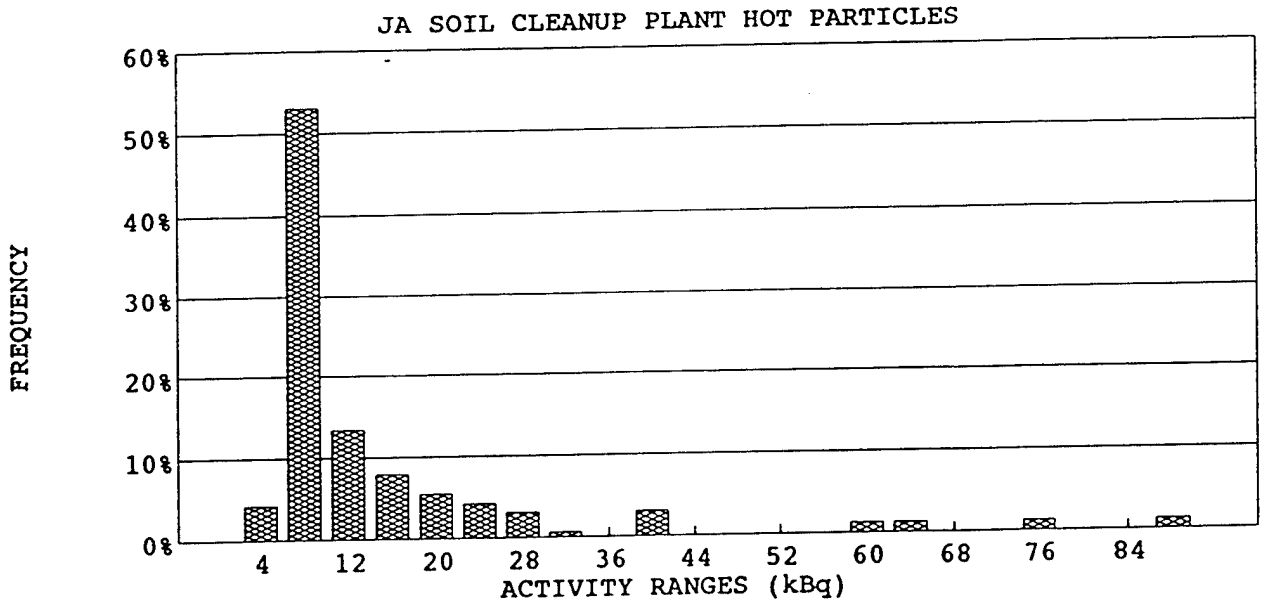
ACT_P (kBq)	NUM (#)	FREQ%
4	7	4.3%
8	87	53.0%
12	22	13.4%
16	13	7.9%
20	9	5.5%
24	7	4.3%
28	5	3.0%
32	1	0.6%
36	0	0.0%
40	5	3.0%
44	0	0.0%
48	0	0.0%
52	0	0.0%
56	0	0.0%
60	2	1.2%
64	2	1.2%
68	0	0.0%
72	0	0.0%
76	2	1.2%
80	0	0.0%
84	0	0.0%
>84	2	1.2%
TOTAL	164	

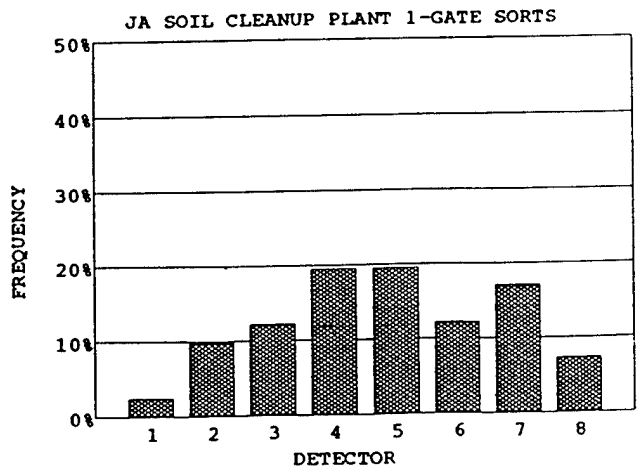
EVENT TYPES HPE 172 MPE 155 DISE 0

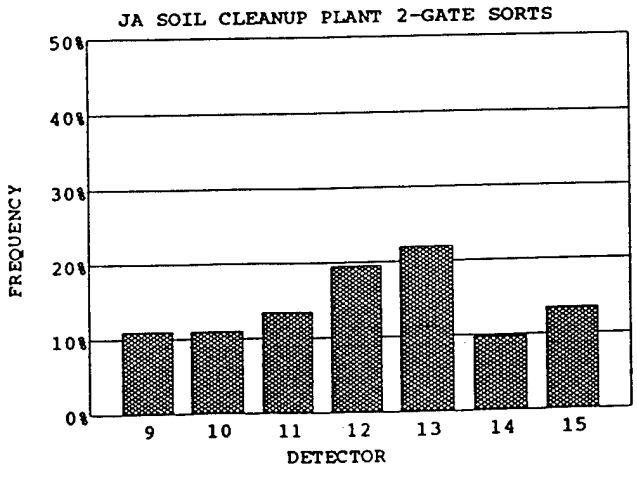
SORTER 1

10-Feb-94









SORTER 2

10-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.03 c/

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.0 tons	97.8 tons	98.7 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.8 yd³	77.5 yd³	78.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,501 kBq	1,885 kBq	4,952 kBq
MAXIMUM/SORT	96 kBq	48 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		1,972 Bq/kg	51 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,766		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			4			
NONE (AD=0 & MD=0 & MND>0)			1,061		10:36	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			701			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,660		
2-SEC RECORDS WITH SORTS			126			
2-SEC RECORDS WITHOUT SORTS			17,534			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,892		
NONPROCESSING RECORDS (Test, calibration, etc)				7		

2-SEC SORT DETECTORS

1 DET	96	76.2%	5 DET	0	0.0%
2 DET	27	21.4%	6 DET	0	0.0%
3 DET	3	2.4%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 367.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	1	1.5%
2	11	16.4%
3	9	13.4%
4	10	14.9%
5	15	22.4%
6	9	13.4%
7	11	16.4%
8	1	1.5%
TOTAL	67	

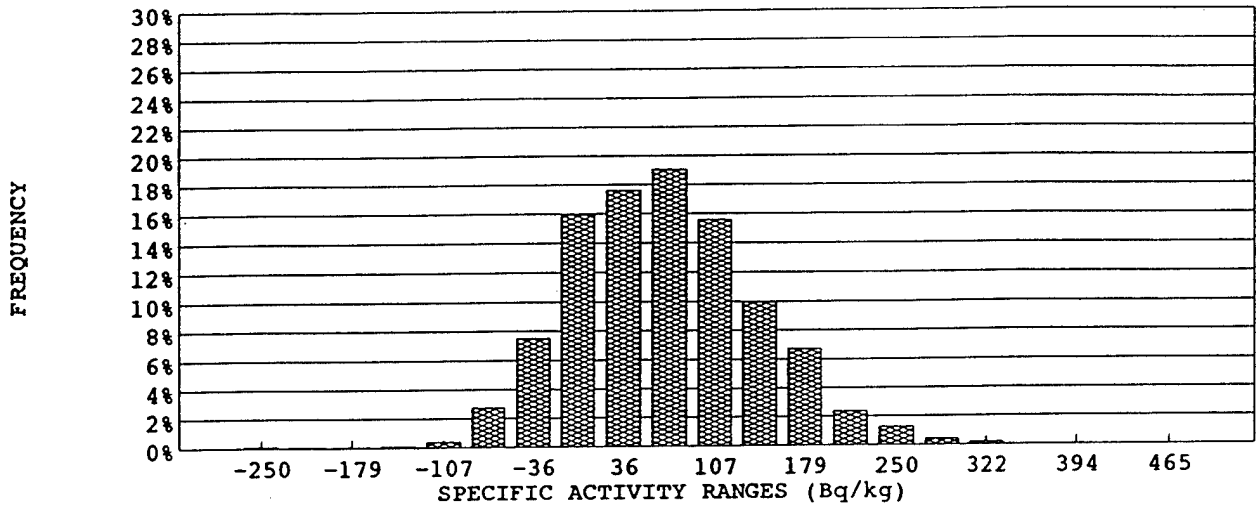
2-GATE SORTS

DET	SORTS	FREQ%
9	4	6.8%
10	8	13.6%
11	8	13.6%
12	12	20.3%
13	11	18.6%
14	11	18.6%
15	5	8.5%
TOTAL	59	

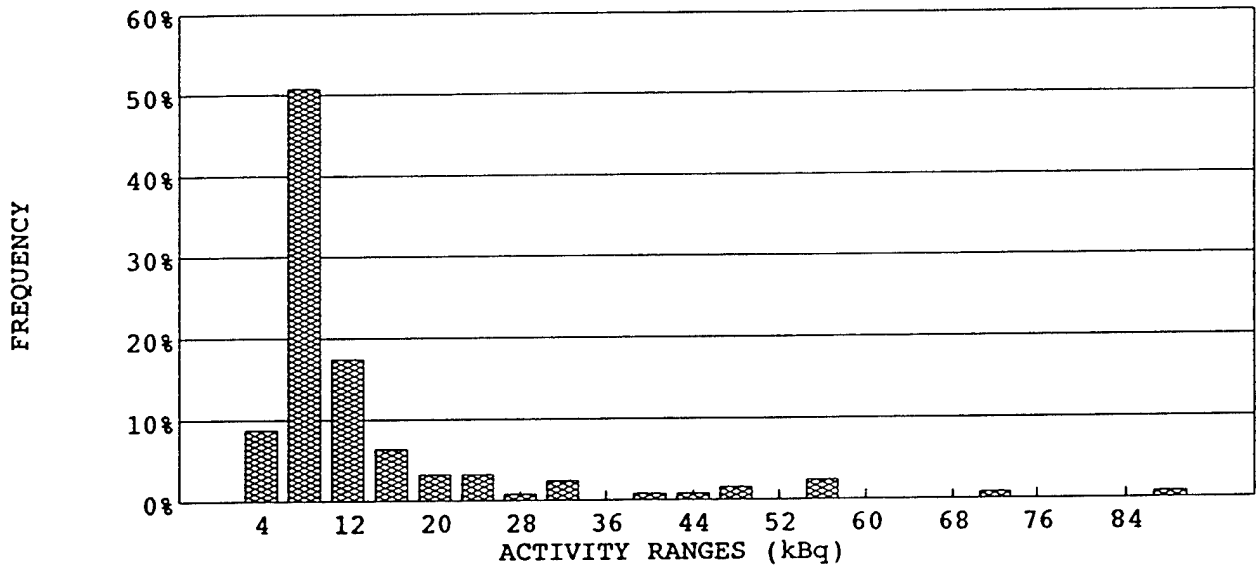
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-250	0.1%	4	11	8.7%
-12000	1	-215	0.1%	8	64	50.8%
-10000	1	-179	0.1%	12	22	17.5%
-8000	2	-143	0.1%	16	8	6.3%
-6000	7	-107	0.4%	20	4	3.2%
-4000	48	-72	2.7%	24	4	3.2%
-2000	133	-36	7.5%	28	1	0.8%
0	283	0	16.0%	32	3	2.4%
2000	312	36	17.6%	36	0	0.0%
4000	337	72	19.0%	40	1	0.8%
6000	276	107	15.6%	44	1	0.8%
8000	176	143	9.9%	48	2	1.6%
10000	119	179	6.7%	52	0	0.0%
12000	42	215	2.4%	56	3	2.4%
14000	23	250	1.3%	60	0	0.0%
16000	8	286	0.5%	64	0	0.0%
18000	3	322	0.2%	68	0	0.0%
20000	0	358	0.0%	72	1	0.8%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	1	0.8%
TOTAL	1,773			TOTAL	126	

EVENT TYPES HPE 133 MPE 923 DISE 310

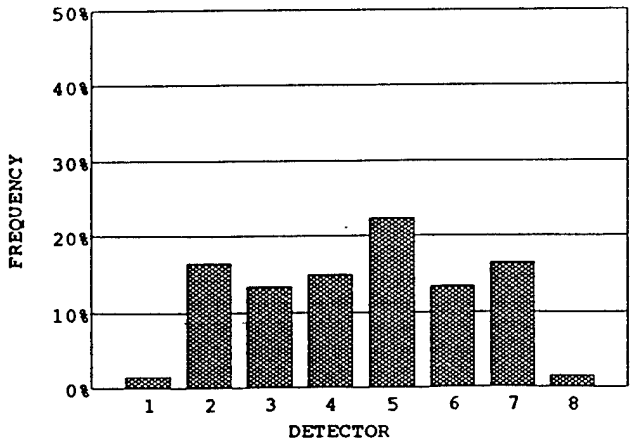
JA CLEAN SOIL SPECIFIC ACTIVITY



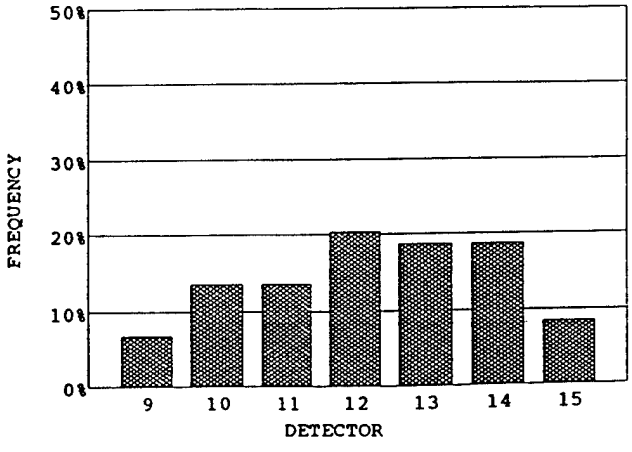
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 3

10-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	98.3 tons	98.6 tons
MAXIMUM/SORT	10.5 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	0.2 yd³	78.0 yd³	78.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	24,569 kBq	8,120 kBq	2,019 kBq
MAXIMUM/SORT	10,728 kBq	7,183 kBq	12 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		38,034 Bq/kg	21 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,763		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,535		14:48	10:30
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	228			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,630		
2-SEC RECORDS WITH SORTS	81			
2-SEC RECORDS WITHOUT SORTS	17,549			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,844		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

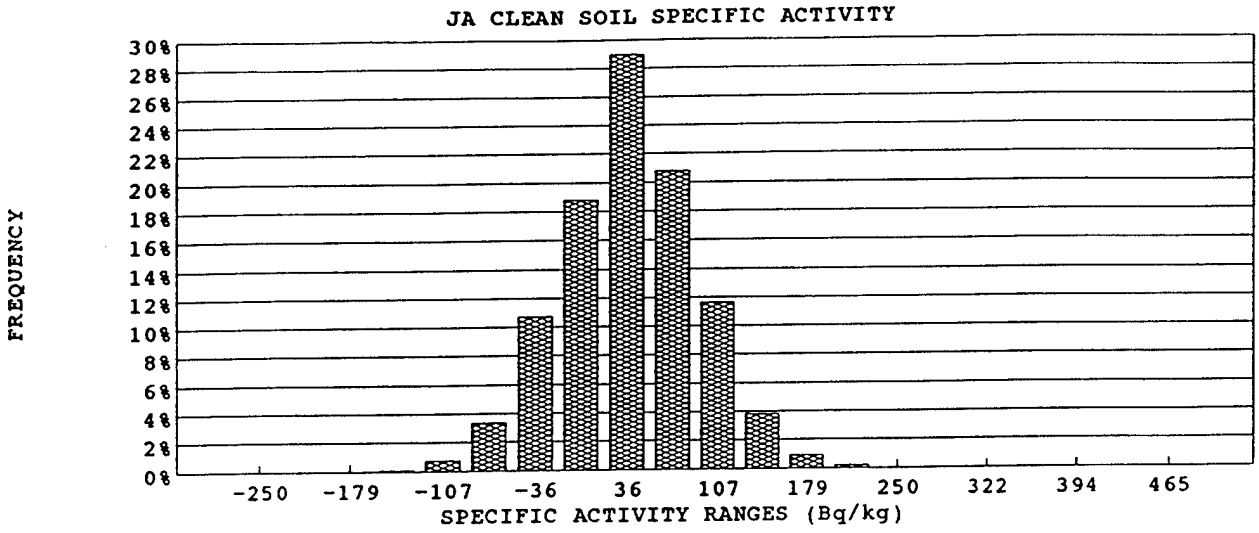
1 DET	55	67.9%	5 DET	1	1.2%
2 DET	19	23.5%	6 DET	0	0.0%
3 DET	4	4.9%	7 DET	0	0.0%
4 DET	2	2.5%	8 DET	0	0.0%

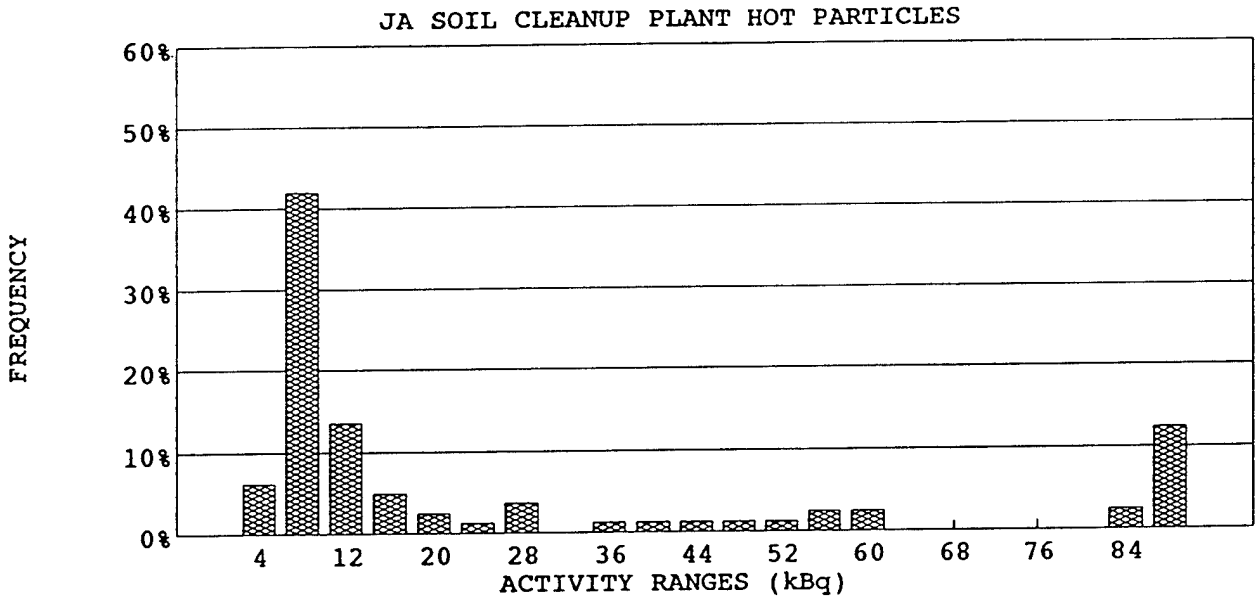
AVERAGE TIME BETWEEN 2-SEC SORTS 641.1 sec

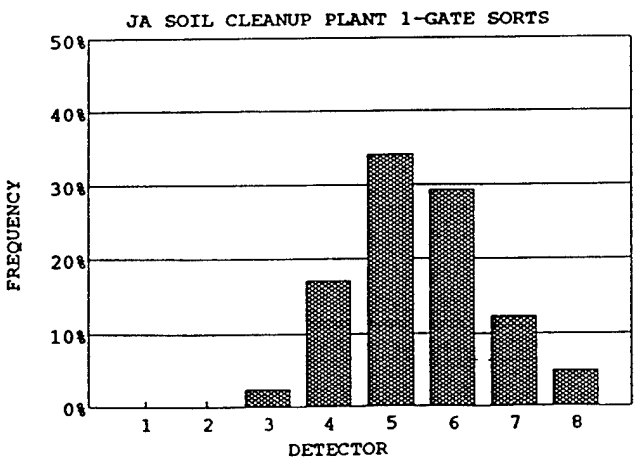
FREQUENCY DISTRIBUTIONS

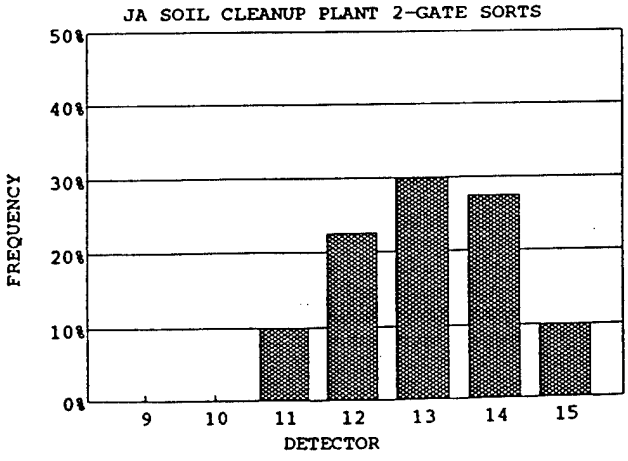
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	0	0.0%	-14000	0	-250	0.0%	4	5	6.2%
2	0	0.0%	-12000	0	-215	0.0%	8	34	42.0%
3	1	2.4%	-10000	0	-179	0.0%	12	11	13.6%
4	7	17.1%	-8000	1	-143	0.1%	16	4	4.9%
5	14	34.1%	-6000	13	-107	0.7%	20	2	2.5%
6	12	29.3%	-4000	59	-72	3.3%	24	1	1.2%
7	5	12.2%	-2000	189	-36	10.7%	28	3	3.7%
8	2	4.9%	0	332	0	18.8%	32	0	0.0%
TOTAL	41		2000	512	36	29.0%	36	1	1.2%
			4000	367	72	20.8%	40	1	1.2%
2-GATE SORTS			6000	206	107	11.7%	44	1	1.2%
DET	SORTS	FREQ%	8000	68	143	3.8%	48	1	1.2%
9	0	0.0%	10000	16	179	0.9%	52	1	1.2%
10	0	0.0%	12000	4	215	0.2%	56	2	2.5%
11	4	10.0%	14000	0	250	0.0%	60	2	2.5%
12	9	22.5%	16000	0	286	0.0%	64	0	0.0%
13	12	30.0%	18000	0	322	0.0%	68	0	0.0%
14	11	27.5%	20000	0	358	0.0%	72	0	0.0%
15	4	10.0%	22000	0	394	0.0%	76	0	0.0%
TOTAL	40		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	2	2.5%
			>28000	0	0	0.0%	>84	10	12.3%
			TOTAL	1,767			TOTAL	81	

EVENT TYPES HPE 78 MPE 227 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 4

10-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.60 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	97.1 tons	97.4 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.3 yd³	77.0 yd³	77.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	2,132 kBq	1,341 kBq	11,635 kBq
MAXIMUM/SORT	395 kBq	254 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-4 kBq
SPECIFIC ACTIVITY		3,809 Bq/kg	120 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,743		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			1,358			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			385			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,430		
2-SEC RECORDS WITH SORTS			112			
2-SEC RECORDS WITHOUT SORTS			17,318			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,855		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	80	71.4%	5 DET	1	0.9%	
2 DET	26	23.2%	6 DET	0	0.0%	
3 DET	4	3.6%	7 DET	0	0.0%	
4 DET	1	0.9%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			435.8 sec			

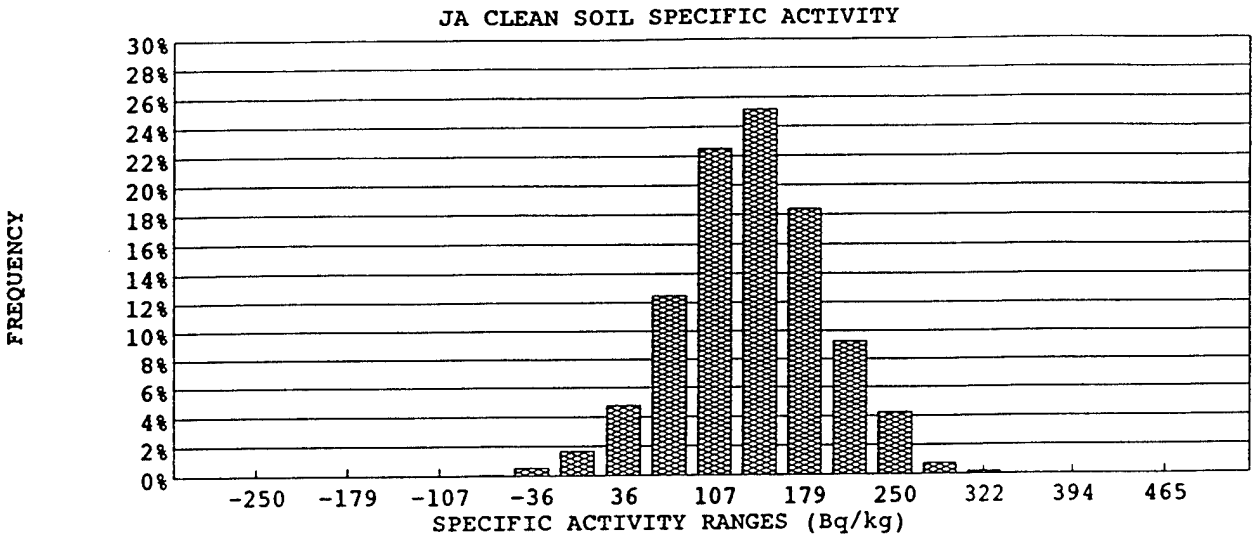
FREQUENCY DISTRIBUTIONS

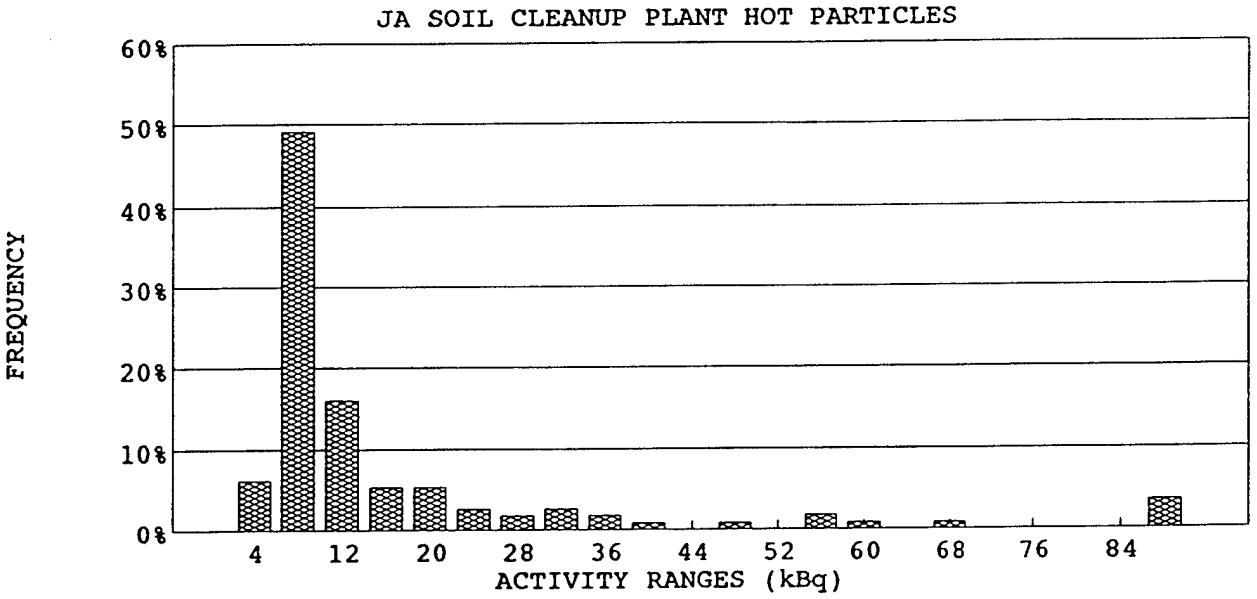
1-GATE SORTS DET	SORTS	FREQ%
1	0	0.0%
2	14	23.7%
3	17	28.8%
4	14	23.7%
5	7	11.9%
6	5	8.5%
7	1	1.7%
8	1	1.7%
TOTAL	59	

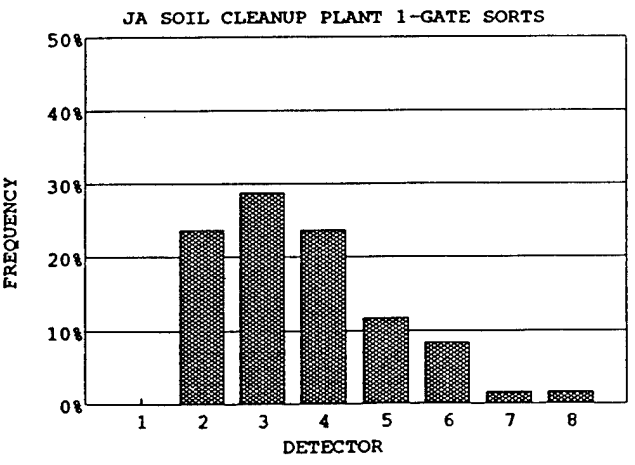
2-GATE SORTS DET	SORTS	FREQ%
9	8	15.1%
10	8	15.1%
11	17	32.1%
12	11	20.8%
13	4	7.5%
14	3	5.7%
15	2	3.8%
TOTAL	53	

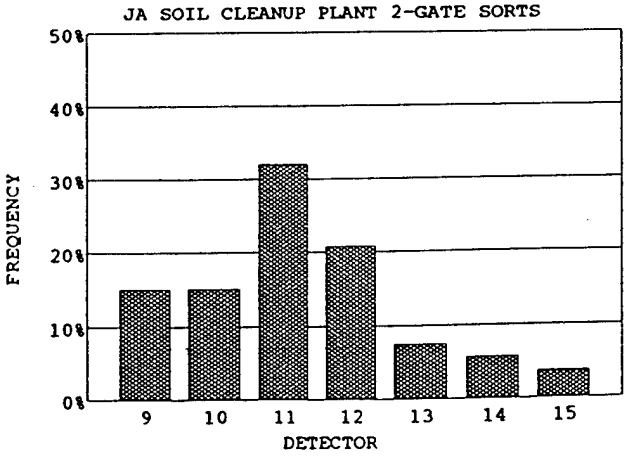
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	7	6.3%
-12000	0	-215	0.0%	8	55	49.1%
-10000	0	-179	0.0%	12	18	16.1%
-8000	0	-143	0.0%	16	6	5.4%
-6000	0	-107	0.0%	20	6	5.4%
-4000	1	-72	0.1%	24	3	2.7%
-2000	9	-36	0.5%	28	2	1.8%
0	29	0	1.7%	32	3	2.7%
2000	83	36	4.8%	36	2	1.8%
4000	218	72	12.5%	40	1	0.9%
6000	393	107	22.5%	44	0	0.0%
8000	439	143	25.2%	48	1	0.9%
10000	321	179	18.4%	52	0	0.0%
12000	162	215	9.3%	56	2	1.8%
14000	74	250	4.2%	60	1	0.9%
16000	13	286	0.7%	64	0	0.0%
18000	3	322	0.2%	68	1	0.9%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	4	3.6%
TOTAL	1,745			TOTAL	112	

EVENT TYPES HPE 107 MPE 396 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 11–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	11–Feb–94
Contract day (from 6 Sep)	125
Current Contract week	21
Soil production for Day	0 MT
Cumlative Soil Production for Week	1,560 MT
Total Soil production for contract	
Since 6 Sep 93	32,045 MT
Since 6 Aug 93	33,636 MT
Total Soil production for project	59,923 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	1,641 hr
Excused delay days (plant–days)	41 days
Excused delay months (plant–month)	1.58 months
Percent of contract completed	33.6%
Tons Ahead or Behind Schedule	1,651 MT
Days ahead or behind schedule	5 days

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 12–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	12–Feb–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	126	Excused delays for contract (sorter–hrs)	1,681 hr
Current Contract week	21	Excused delay days (plant–days)	42 days
		Excused delay months (plant–month)	1.62 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	1,560 MT	Percent of contract completed	33.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,651 MT
Since 6 Sep 93	32,045 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	33,636 MT		
Total Soil production for project	59,923 MT		

MT = metric tons

File Report1 Printed on 11-Feb-94 at 02:07:34 PM

WORK HISTORY – JA SOIL CLEANUP PLANT 14–Feb–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	7.5 hr	7.5 hr	7.5 hr	7.5 hr	30.0 hr
SORTER START–UP	09:00	09:00	09:00	09:00	
START SOIL PROCESSING	09:35	09:35	09:39	09:38	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.7 hr	0.6 hr	2.5 hr
SORTER SHUT–DOWN	16:30	16:30	16:30	16:30	
END SOIL PROCESSING	15:53	15:51	15:37	16:27	
TIME REQUIRED TO SHUT DOWN	0.6 hr	0.6 hr	0.9 hr	0.0 hr	2.2 hr
ACTUAL PROCESS HOURS	6.3 hr	6.3 hr	3.6 hr	6.7 hr	22.8 hr
DOWN–TIME	1.2 hr	1.2 hr	3.9 hr	0.8 hr	7.2 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	2.4 hr	0.1 hr	2.6 hr
SORTER NONAVAILABLE TIME	3.0 hr	3.0 hr	3.0 hr	3.0 hr	12.0 hr
AUTHORIZED DELAY TIME	3.0 hr	3.0 hr	3.0 hr	3.0 hr	12.0 hr
PLANT PERFORMANCE					76.1%
PRODUCTIVTY					54.4%

PRODUCTIVITY

Date	14–Feb–94	Excused Delays for day (sorter–hrs)	12 hr
Contract day (from 6 Sep)	127	Excused delays for contract (sorter–hrs)	1,693 hr
Current Contract week	22	Excused delay days (plant–days)	42 days
		Excused delay months (plant–month)	1.63 months
Soil production for Day	232 MT		
Cumlative Soil Production for Week	232 MT	Percent of contract completed	33.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,661 MT
Since 6 Sep 93	32,277 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	33,868 MT		
Total Soil production for project	60,155 MT		

MT = metric tons

File Report1 Printed on 18-Feb-94 at 11:43:10 AM

SORTER 1

14-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	63.3 tons	63.3 tons
MAXIMUM/SORT	2.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.8 kg	
VOLUME IN-GROUND	0.1 yd³	50.1 yd³	50.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	400 kBq	269 kBq	3,373 kBq
MAXIMUM/SORT	53 kBq	34 kBq	15 kBq
MINIMUM/SORT	4 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		3,202 Bq/kg	53 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,133		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,043		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	90			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,330		
2-SEC RECORDS WITH SORTS	39			
2-SEC RECORDS WITHOUT SORTS	11,291			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,172		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

1 DET	30	76.9%	5 DET	0	0.0%
2 DET	9	23.1%	6 DET	0	0.0%
3 DET	0	0.0%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 755.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE DET	SORTS	FREQ%
1	0	0.0%
2	2	10.0%
3	3	15.0%
4	3	15.0%
5	6	30.0%
6	2	10.0%
7	3	15.0%
8	1	5.0%
TOTAL	20	

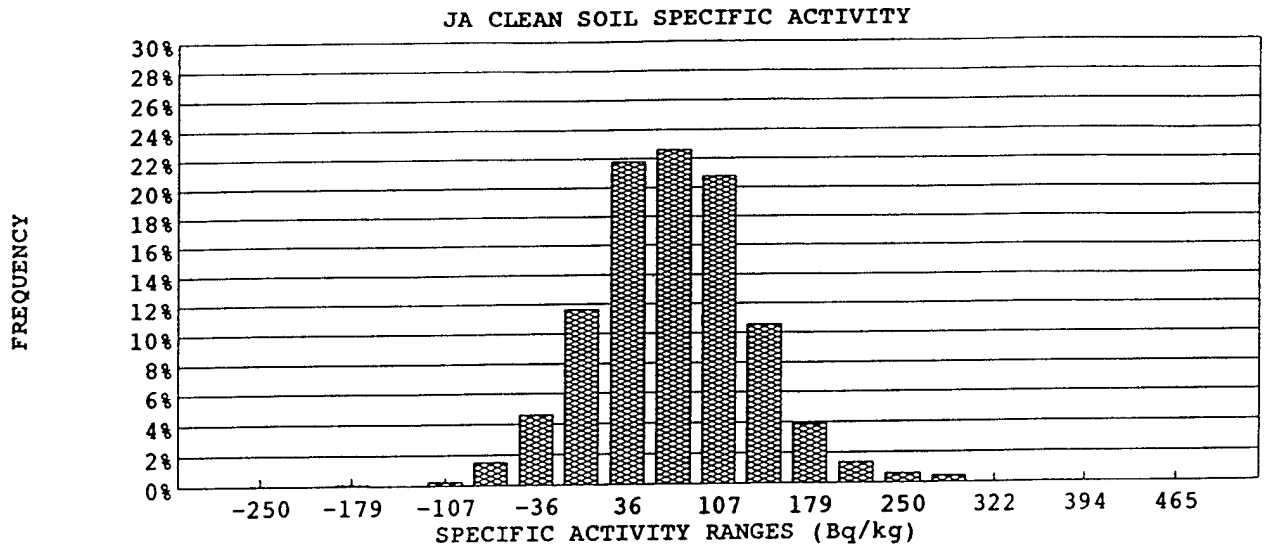
2-GATE DET	SORTS	FREQ%
9	0	0.0%
10	3	15.8%
11	3	15.8%
12	5	26.3%
13	4	21.1%
14	2	10.5%
15	2	10.5%
TOTAL	19	

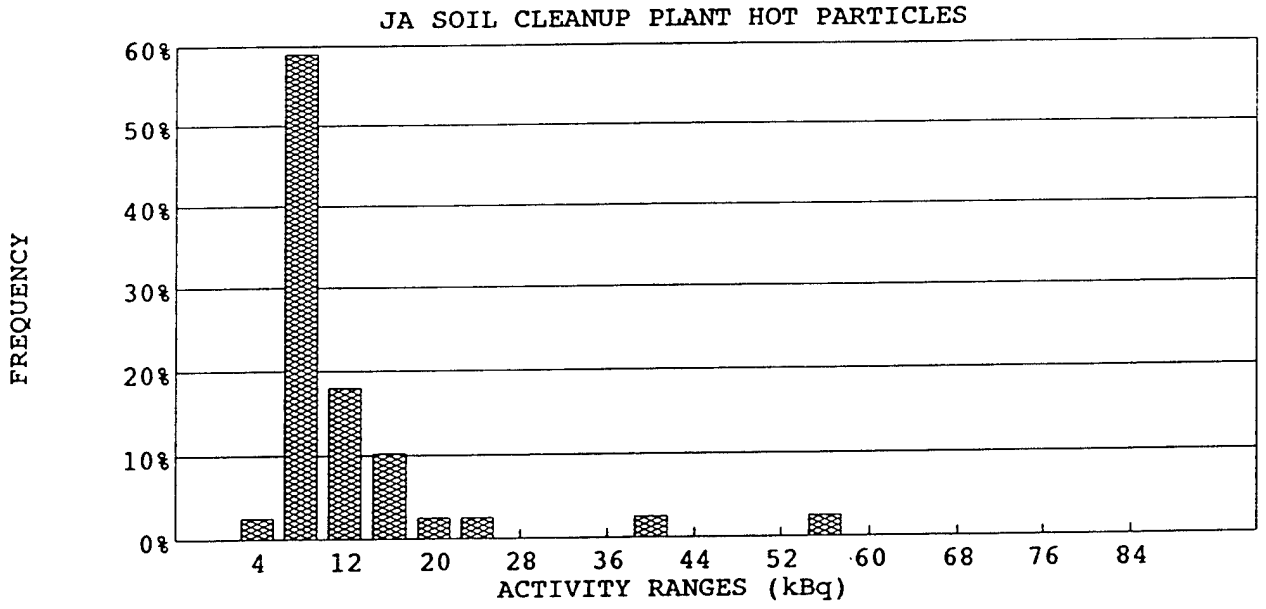
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	1	2.6%
-12000	0	-215	0.0%	8	23	59.0%
-10000	1	-179	0.1%	12	7	17.9%
-8000	0	-143	0.0%	16	4	10.3%
-6000	3	-107	0.3%	20	1	2.6%
-4000	17	-72	1.5%	24	1	2.6%
-2000	52	-36	4.6%	28	0	0.0%
0	132	0	11.6%	32	0	0.0%
2000	248	36	21.8%	36	0	0.0%
4000	257	72	22.6%	40	1	2.6%
6000	236	107	20.8%	44	0	0.0%
8000	120	143	10.6%	48	0	0.0%
10000	44	179	3.9%	52	0	0.0%
12000	15	215	1.3%	56	1	2.6%
14000	7	250	0.6%	60	0	0.0%
16000	5	286	0.4%	64	0	0.0%
18000	0	322	0.0%	68	0	0.0%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	0	0.0%
TOTAL	1,137			TOTAL	39	

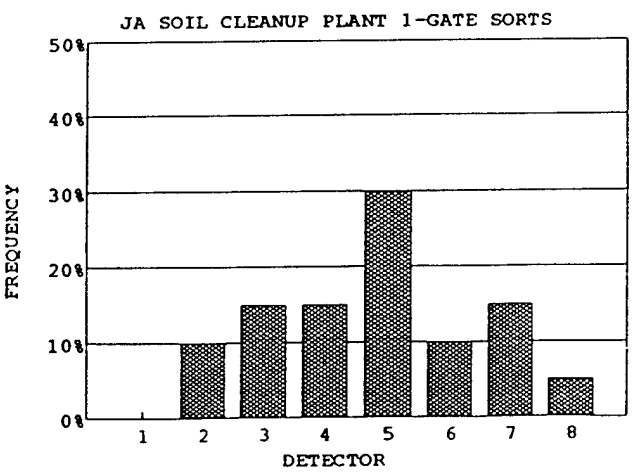
EVENT TYPES HPE 40 MPE 80 DISE 0

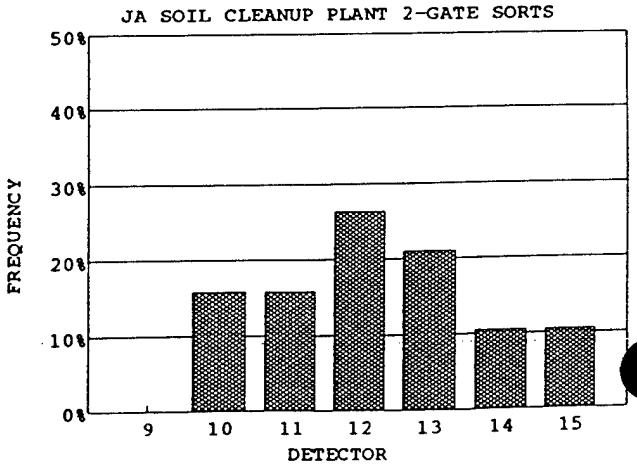
SORTER 1

14-Feb-94









SORTER 2

14-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	62.9 tons	63.1 tons
MAXIMUM/SORT	2.8 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.1 yd³	49.9 yd³	50.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	677 kBq	515 kBq	2,746 kBq
MAXIMUM/SORT	93 kBq	61 kBq	18 kBq
MINIMUM/SORT	4 kBq	0 Bq	−8 kBq
SPECIFIC ACTIVITY		3,129 Bq/kg	44 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,128		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	938		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	190			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,280		
2-SEC RECORDS WITH SORTS	42			
2-SEC RECORDS WITHOUT SORTS	11,238			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,170		
NONPROCESSING RECORDS (Test, calibration, etc)		9		

2-SEC SORT DETECTORS

1 DET	33	78.6%	5 DET	0	0.0%
2 DET	8	19.0%	6 DET	0	0.0%
3 DET	1	2.4%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 683.6 sec

FREQUENCY DISTRIBUTIONS

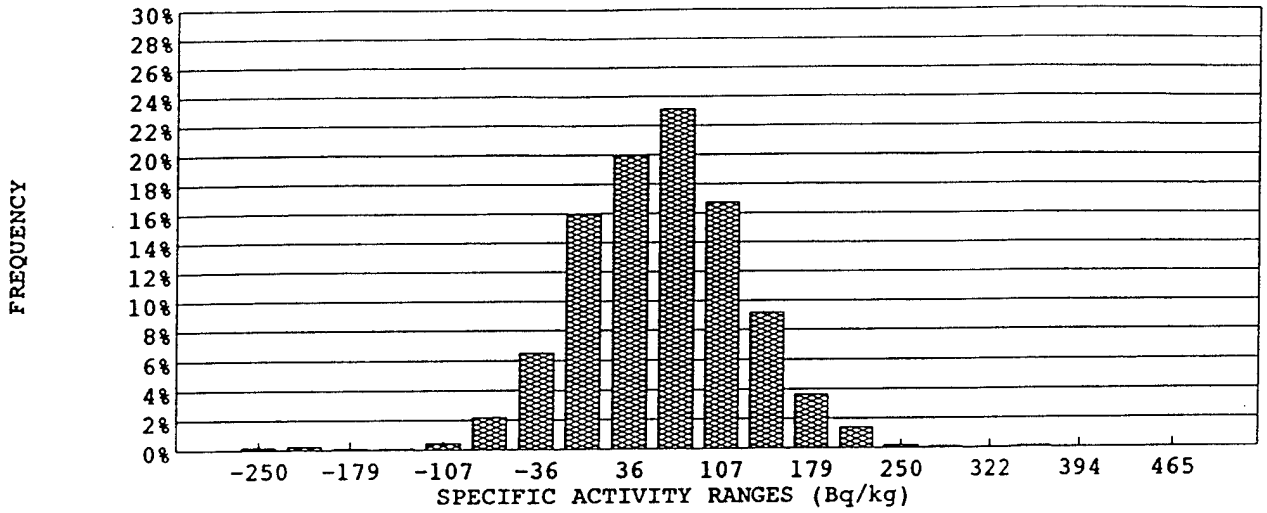
1-GATE DET	SORTS	FREQ%
1	2	9.5%
2	5	23.8%
3	5	23.8%
4	5	23.8%
5	3	14.3%
6	1	4.8%
7	0	0.0%
8	0	0.0%
TOTAL	21	

2-GATE DET	SORTS	FREQ%
9	1	4.8%
10	5	23.8%
11	6	28.6%
12	7	33.3%
13	2	9.5%
14	0	0.0%
15	0	0.0%
TOTAL	21	

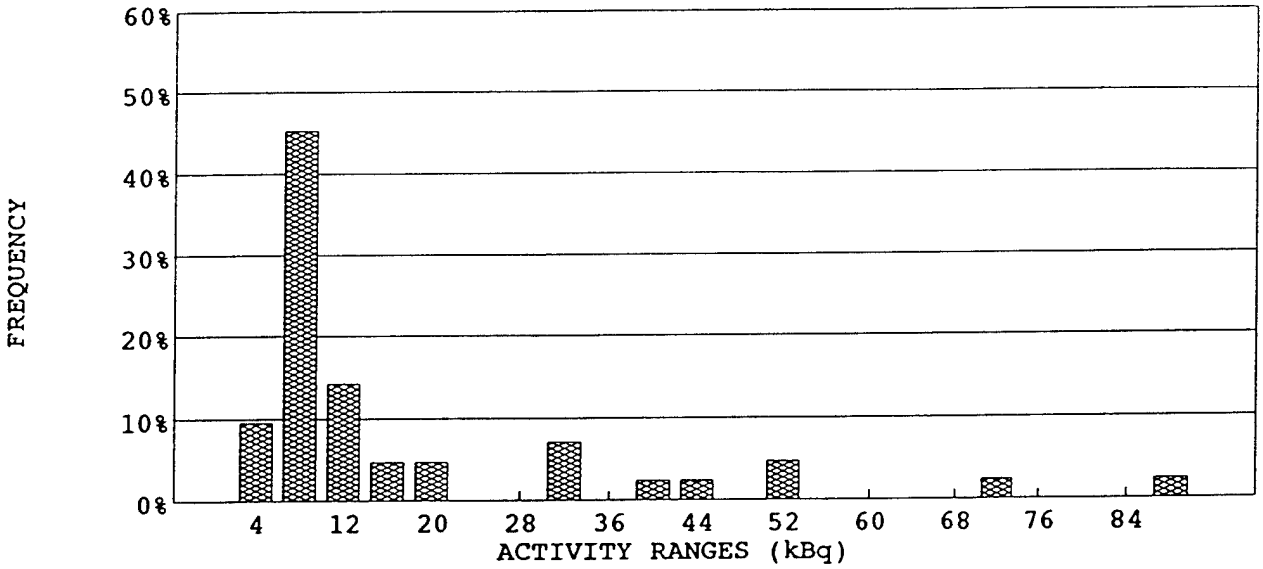
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
−14000	2	−250	0.2%	4	4	9.5%
−12000	3	−215	0.3%	8	19	45.2%
−10000	1	−179	0.1%	12	6	14.3%
−8000	1	−143	0.1%	16	2	4.8%
−6000	5	−107	0.4%	20	2	4.8%
−4000	25	−72	2.2%	24	0	0.0%
−2000	74	−36	6.5%	28	0	0.0%
0	181	0	15.9%	32	3	7.1%
2000	227	36	20.0%	36	0	0.0%
4000	263	72	23.1%	40	1	2.4%
6000	190	107	16.7%	44	1	2.4%
8000	104	143	9.1%	48	0	0.0%
10000	41	179	3.6%	52	2	4.8%
12000	16	215	1.4%	56	0	0.0%
14000	2	250	0.2%	60	0	0.0%
16000	1	286	0.1%	64	0	0.0%
18000	0	322	0.0%	68	0	0.0%
20000	1	358	0.1%	72	1	2.4%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	1	2.4%
TOTAL	1,137			TOTAL	42	

EVENT TYPES HPE 45 MPE 190 DISE 0

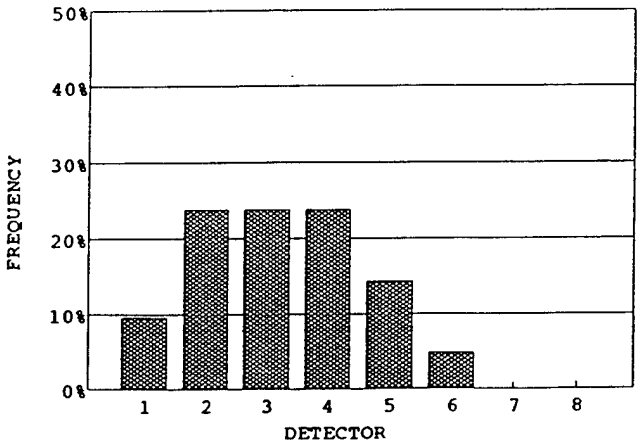
JA CLEAN SOIL SPECIFIC ACTIVITY



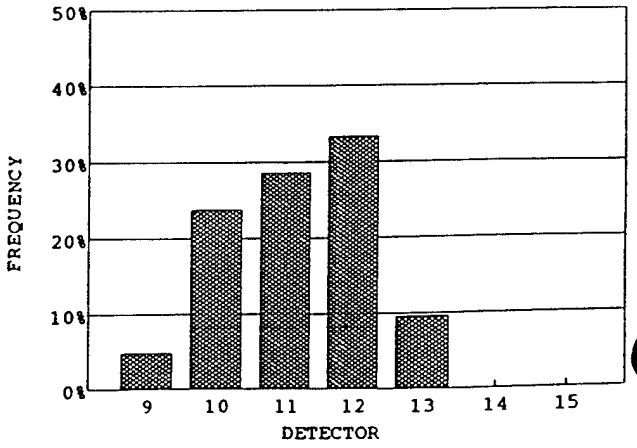
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 3

14-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.62 ± 0.06 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.0 tons	37.0 tons	38.0 tons
MAXIMUM/SORT	78.2 kg	65.2 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
VOLUME IN-GROUND	0.8 yd³	29.3 yd³	30.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,497 kBq	4,286 kBq	1,380 kBq
MAXIMUM/SORT	735 kBq	1,530 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		4,509 Bq/kg	37 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		644		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	9			
NONE (AD=0 & MD=0 & MND>0)	468		13:06	12:00
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	167		14:58	12:33
UNEXPLAINED RECORDS	0		15:10	12:47
0<AD<1kBq & MD>0	0			13:06
AD=0 & MD>0	3			14:27
AD<0 & MD >0	0			15:00
2-SEC COUNT PERIODS		6,440		15:02
2-SEC RECORDS WITH SORTS	53			15:11
2-SEC RECORDS WITHOUT SORTS	6,387			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		697		
NONPROCESSING RECORDS (Test, calibration, etc)		6		

2-SEC SORT DETECTORS

1 DET	46	86.8%	5 DET	0	0.0%
2 DET	6	11.3%	6 DET	0	0.0%
3 DET	1	1.9%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 280.0 sec

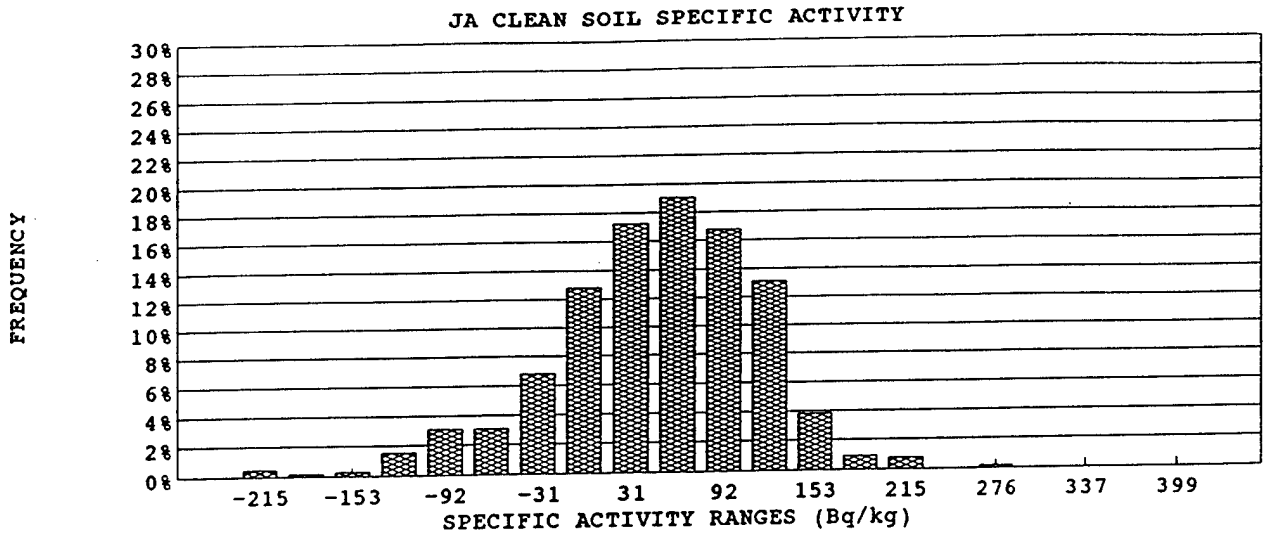
FREQUENCY DISTRIBUTIONS

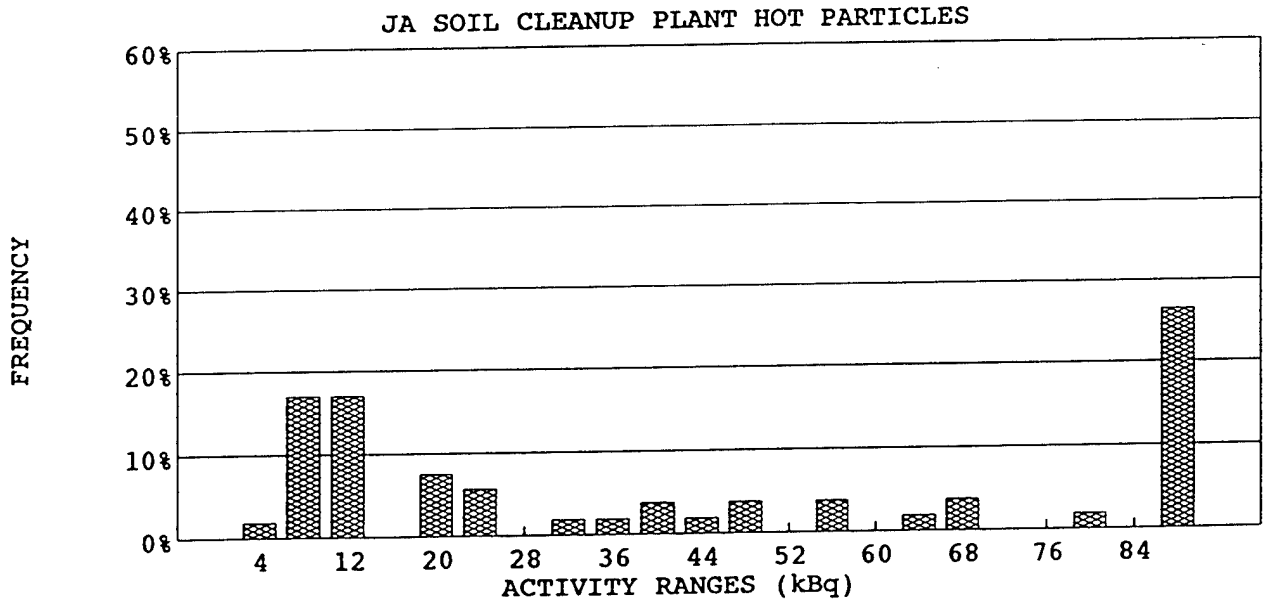
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	0	0.0%	-14000	3	-215	0.5%	4	1	1.9%
2	0	0.0%	-12000	1	-184	0.2%	8	9	17.0%
3	1	2.3%	-10000	2	-153	0.3%	12	9	17.0%
4	34	79.1%	-8000	10	-123	1.5%	16	0	0.0%
5	3	7.0%	-6000	20	-92	3.1%	20	4	7.5%
6	4	9.3%	-4000	20	-61	3.1%	24	3	5.7%
7	0	0.0%	-2000	44	-31	6.8%	28	0	0.0%
8	1	2.3%	0	83	0	12.8%	32	1	1.9%
TOTAL	43		2000	112	31	17.2%	36	1	1.9%
			4000	124	61	19.1%	40	2	3.8%
2-GATE SORTS			6000	109	92	16.8%	44	1	1.9%
DET	SORTS	FREQ%	8000	85	123	13.1%	48	2	3.8%
9	0	0.0%	10000	25	153	3.8%	52	0	0.0%
10	0	0.0%	12000	6	184	0.9%	56	2	3.8%
11	1	10.0%	14000	5	215	0.8%	60	0	0.0%
12	4	40.0%	16000	0	245	0.0%	64	1	1.9%
13	2	20.0%	18000	1	276	0.2%	68	2	3.8%
14	2	20.0%	20000	0	307	0.0%	72	0	0.0%
15	1	10.0%	22000	0	337	0.0%	76	0	0.0%
TOTAL	10		24000	0	368	0.0%	80	1	1.9%
			26000	0	399	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	14	26.4%
			TOTAL	650			TOTAL	53	

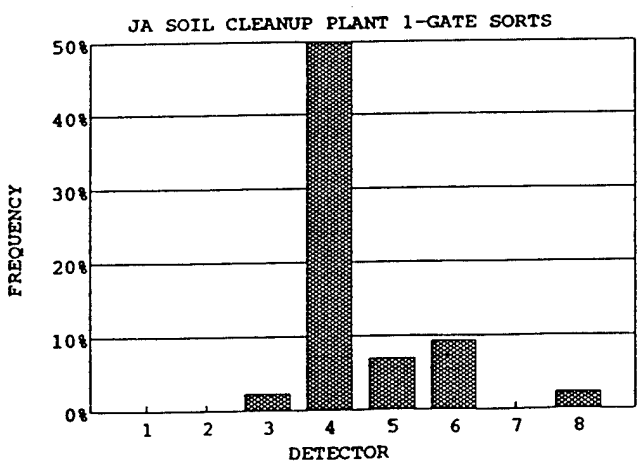
EVENT TYPES HPE 49 MPE 425 DISE 759

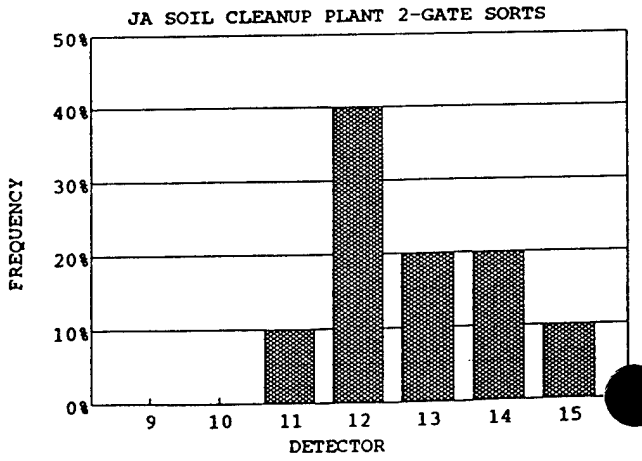
SORTER 3

14-Feb-94









SORTER 4

14-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.59 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	66.9 tons	67.3 tons
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.3 yd³	53.0 yd³	53.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	616 kBq	748 kBq	9,280 kBq
MAXIMUM/SORT	60 kBq	57 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		1,877 Bq/kg	139 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,204		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	3			
NONE (AD=0 & MD=0 & MND>0)	943		None	10:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	258			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,040		
2-SEC RECORDS WITH SORTS	49			
2-SEC RECORDS WITHOUT SORTS	11,991			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,253		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

1 DET	36	73.5%	5 DET	0	0.0%
2 DET	10	20.4%	6 DET	0	0.0%
3 DET	3	6.1%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 668.9 sec

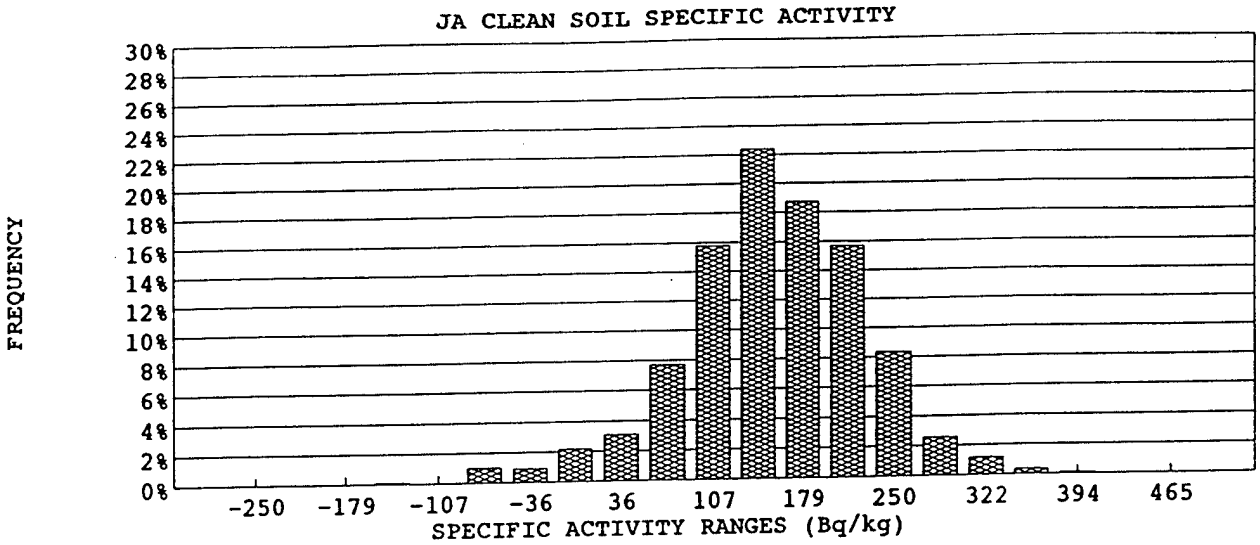
FREQUENCY DISTRIBUTIONS

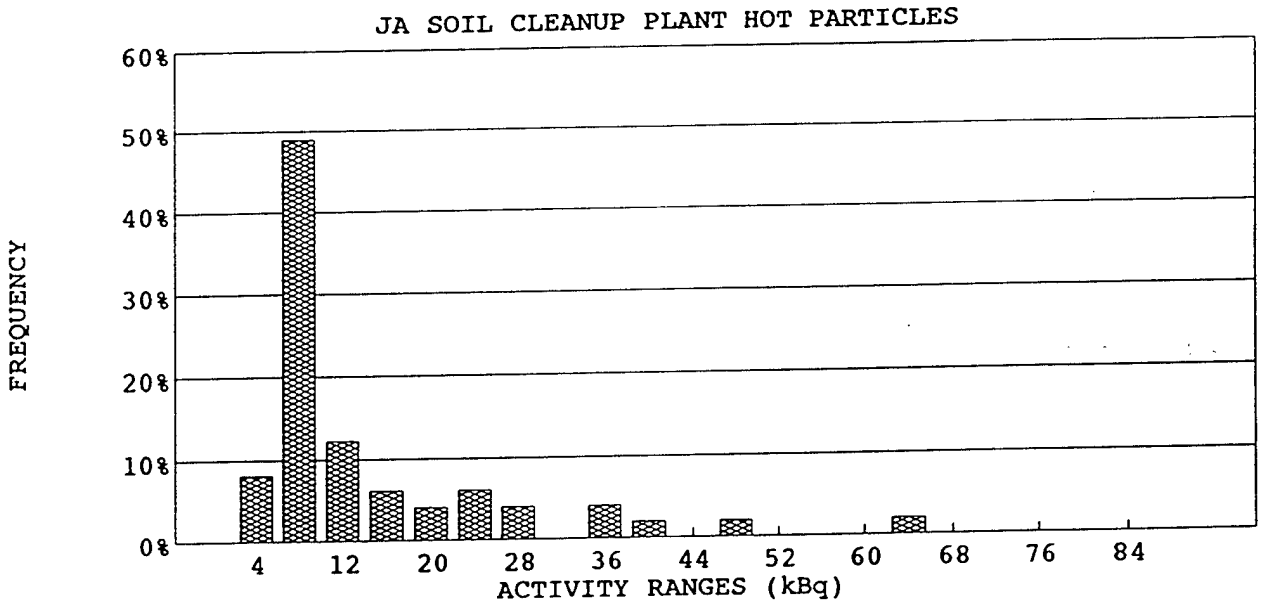
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	2	8.3%	-14000	0	-250	0.0%	4	4	8.2%
2	6	25.0%	-12000	0	-215	0.0%	8	24	49.0%
3	8	33.3%	-10000	0	-179	0.0%	12	6	12.2%
4	3	12.5%	-8000	1	-143	0.1%	16	3	6.1%
5	2	8.3%	-6000	0	-107	0.0%	20	2	4.1%
6	2	8.3%	-4000	12	-72	1.0%	24	3	6.1%
7	1	4.2%	-2000	11	-36	0.9%	28	2	4.1%
8	0	0.0%	0	26	0	2.2%	32	0	0.0%
TOTAL	24		2000	37	36	3.1%	36	2	4.1%
			4000	93	72	7.7%	40	1	2.0%
2-GATE SORTS			6000	190	107	15.8%	44	0	0.0%
DET	SORTS	FREQ%	8000	270	143	22.4%	48	1	2.0%
9	6	24.0%	10000	226	179	18.7%	52	0	0.0%
10	6	24.0%	12000	189	215	15.7%	56	0	0.0%
11	6	24.0%	14000	101	250	8.4%	60	0	0.0%
12	2	8.0%	16000	31	286	2.6%	64	1	2.0%
13	2	8.0%	18000	14	322	1.2%	68	0	0.0%
14	2	8.0%	20000	4	358	0.3%	72	0	0.0%
15	1	4.0%	22000	1	394	0.1%	76	0	0.0%
TOTAL	25		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	0	0.0%
			TOTAL	1,206			TOTAL	49	

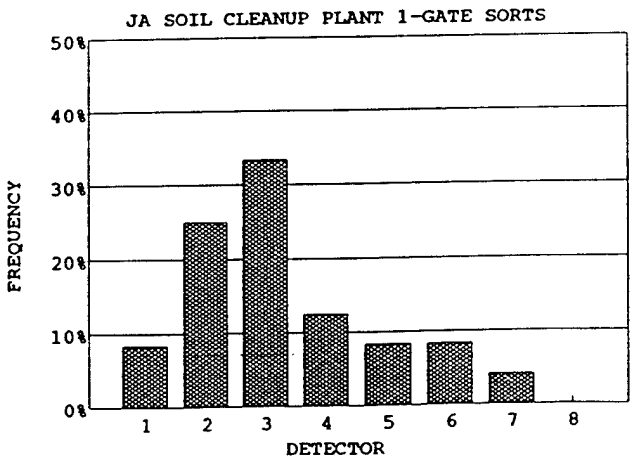
EVENT TYPES	HPE	MPE	DISE
	50	291	228

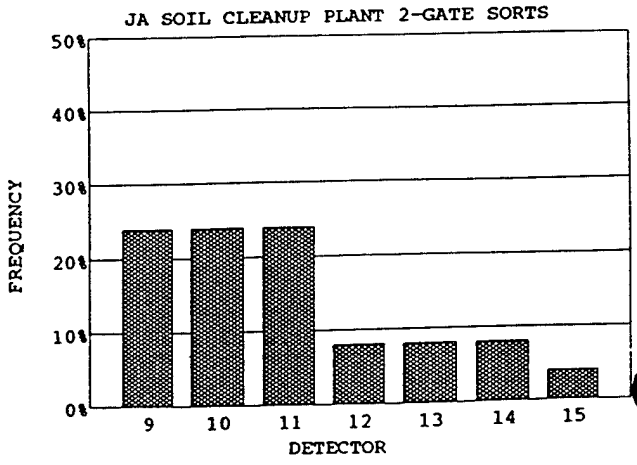
SORTER 4

14-Feb-94









WORK HISTORY – JA SOIL CLEANUP PLANT 15-Feb-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	10.3 hr	10.3 hr	41.0 hr
SORTER START-UP	06:00	06:00	06:00	06:00	
START SOIL PROCESSING	06:18	06:18	07:20	07:19	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	1.3 hr	1.3 hr	3.3 hr
SORTER SHUT-DOWN	16:15	16:15	16:15	16:15	
END SOIL PROCESSING	15:54	15:53	13:39	15:38	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	2.6 hr	0.6 hr	3.9 hr
ACTUAL PROCESS HOURS	9.6 hr	9.6 hr	4.7 hr	8.3 hr	32.2 hr
DOWN-TIME	0.7 hr	0.7 hr	5.6 hr	2.0 hr	8.9 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	1.6 hr	0.1 hr	1.7 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	0.2 hr	0.2 hr	1.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					78.4%
PRODUCTIVTY					76.5%

PRODUCTIVITY

Date	15-Feb-94	Excused Delays for day (sorter-hrs)	0 hr
Contract day (from 6 Sep)	128	Excused delays for contract (sorter-hrs)	1,693 hr
Current Contract week	22	Excused delay days (plant-days)	42 days
		Excused delay months (plant-month)	1.63 months
Soil production for Day	324 MT		
Cumlative Soil Production for Week	555 MT	Percent of contract completed	34.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,668 MT
Since 6 Sep 93	32,600 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	34,191 MT		
Total Soil production for project	60,478 MT		

MT = metric tons

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SORTER 1

15-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	96.4 tons	96.5 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.1 yd³	76.4 yd³	76.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,483 kBq	693 kBq	5,551 kBq
MAXIMUM/SORT	160 kBq	85 kBq	15 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		4,196 Bq/kg	58 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,727		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0		None	None
NONE (AD=0 & MD=0 & MND>0)	1,568			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	159			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,270		
2-SEC RECORDS WITH SORTS	101			
2-SEC RECORDS WITHOUT SORTS	17,169			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,828		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

1 DET	73	72.3%	5 DET	0	0.0%
2 DET	20	19.8%	6 DET	0	0.0%
3 DET	6	5.9%	7 DET	0	0.0%
4 DET	2	2.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 473.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

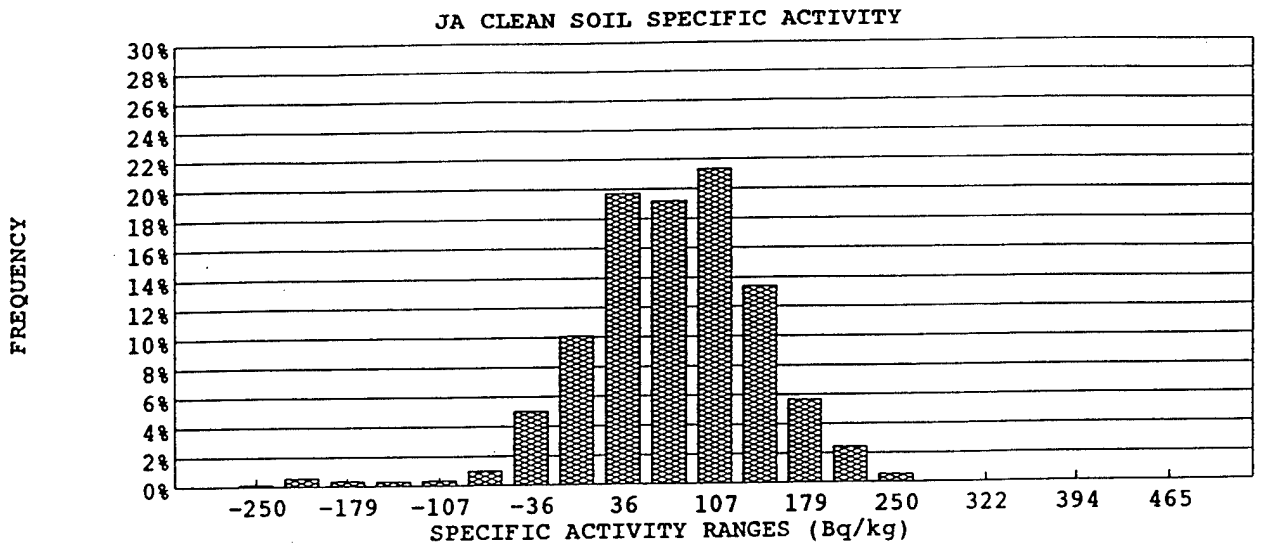
DET	SORTS	FREQ%
1	0	0.0%
2	6	12.8%
3	6	12.8%
4	8	17.0%
5	13	27.7%
6	8	17.0%
7	6	12.8%
8	0	0.0%
TOTAL	47	

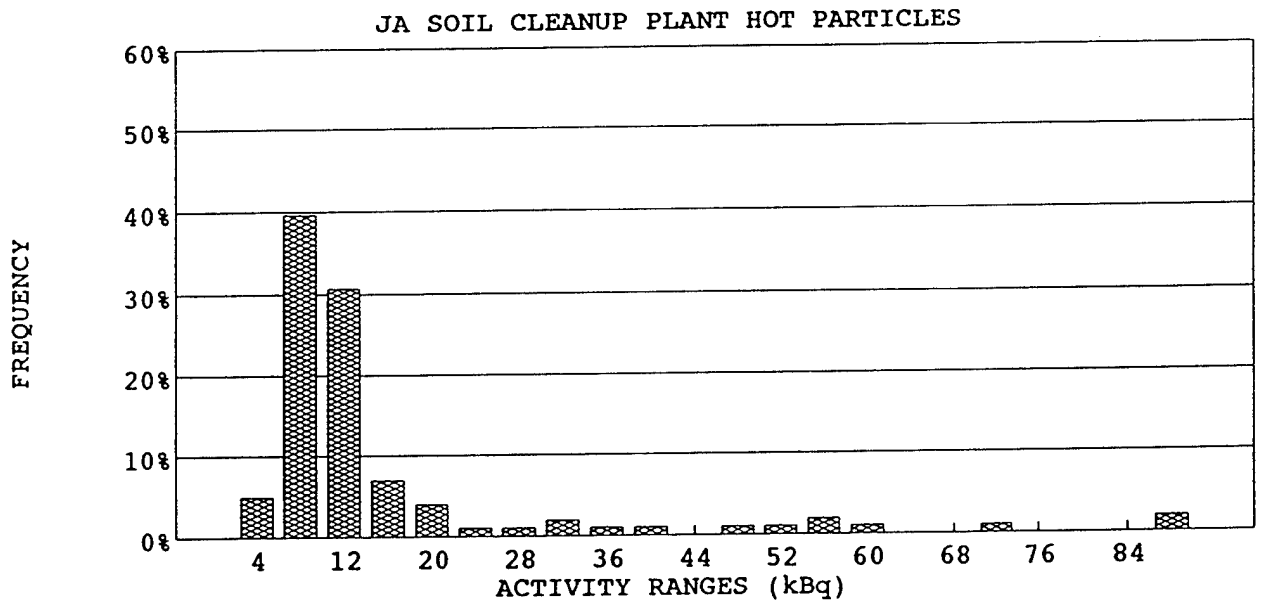
2-GATE SORTS

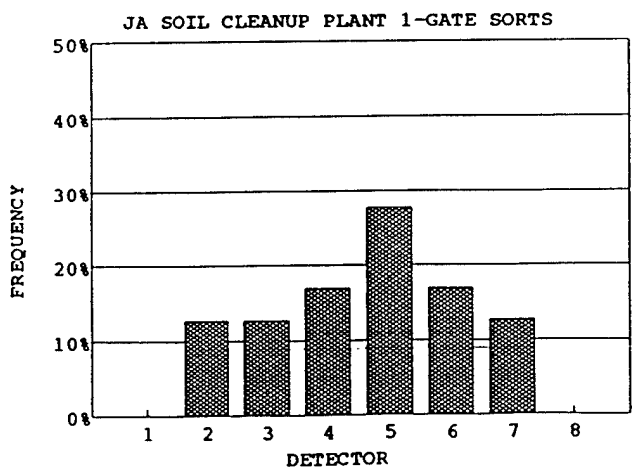
DET	SORTS	FREQ%
9	1	1.9%
10	8	14.8%
11	11	20.4%
12	9	16.7%
13	17	31.5%
14	8	14.8%
15	0	0.0%
TOTAL	54	

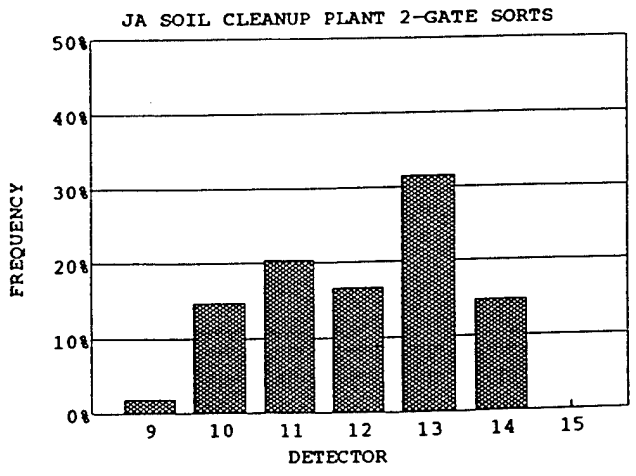
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-250	0.1%	4	5	5.0%
-12000	10	-215	0.6%	8	40	39.6%
-10000	6	-179	0.3%	12	31	30.7%
-8000	5	-143	0.3%	16	7	6.9%
-6000	6	-107	0.3%	20	4	4.0%
-4000	17	-72	1.0%	24	1	1.0%
-2000	87	-36	5.0%	28	1	1.0%
0	175	0	10.1%	32	2	2.0%
2000	341	36	19.7%	36	1	1.0%
4000	332	72	19.2%	40	1	1.0%
6000	369	107	21.3%	44	0	0.0%
8000	232	143	13.4%	48	1	1.0%
10000	98	179	5.7%	52	1	1.0%
12000	42	215	2.4%	56	2	2.0%
14000	9	250	0.5%	60	1	1.0%
16000	1	286	0.1%	64	0	0.0%
18000	0	322	0.0%	68	0	0.0%
20000	0	358	0.0%	72	1	1.0%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	2	2.0%
TOTAL	1,732			TOTAL	101	

EVENT TYPES HPE 108 MPE 128 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

15-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	96.2 tons	96.5 tons
MAXIMUM/SORT	3.5 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	52.4 kg	
VOLUME IN-GROUND	0.3 yd³	76.2 yd³	76.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,506 kBq	1,092 kBq	4,501 kBq
MAXIMUM/SORT	111 kBq	66 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-17 kBq
SPECIFIC ACTIVITY		2,977 Bq/kg	47 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,727		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,343		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	384			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,270		
2-SEC RECORDS WITH SORTS	116			
2-SEC RECORDS WITHOUT SORTS	17,154			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,843		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

1 DET	95	81.9%	5 DET	0	0.0%
2 DET	18	15.5%	6 DET	0	0.0%
3 DET	3	2.6%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 363.6 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

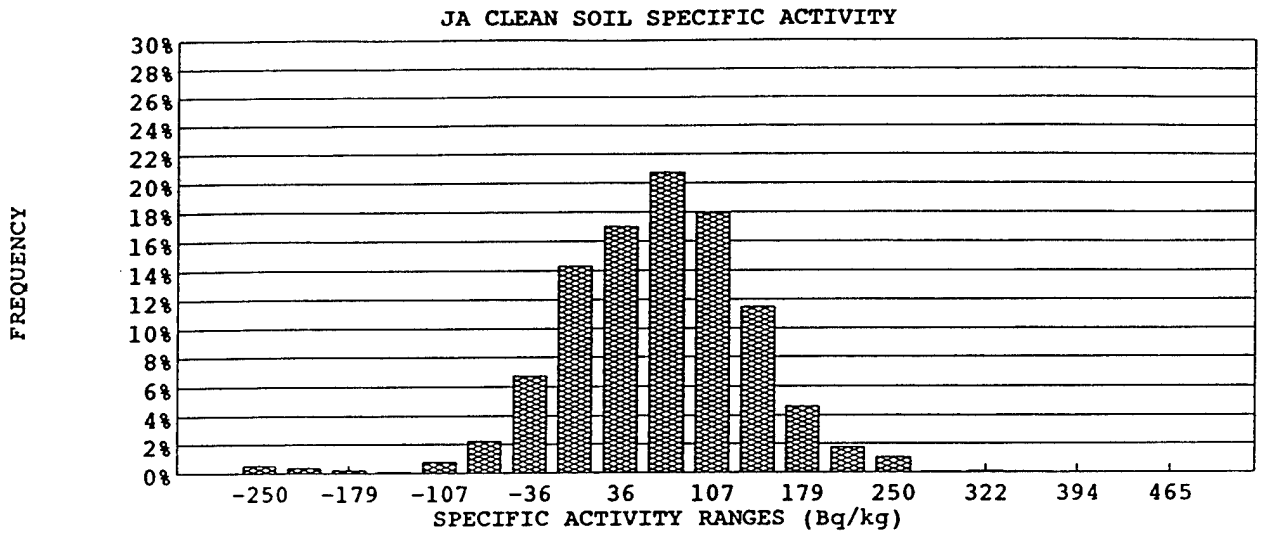
DET	SORTS	FREQ%
1	6	10.9%
2	9	16.4%
3	10	18.2%
4	12	21.8%
5	10	18.2%
6	4	7.3%
7	3	5.5%
8	1	1.8%
TOTAL	55	

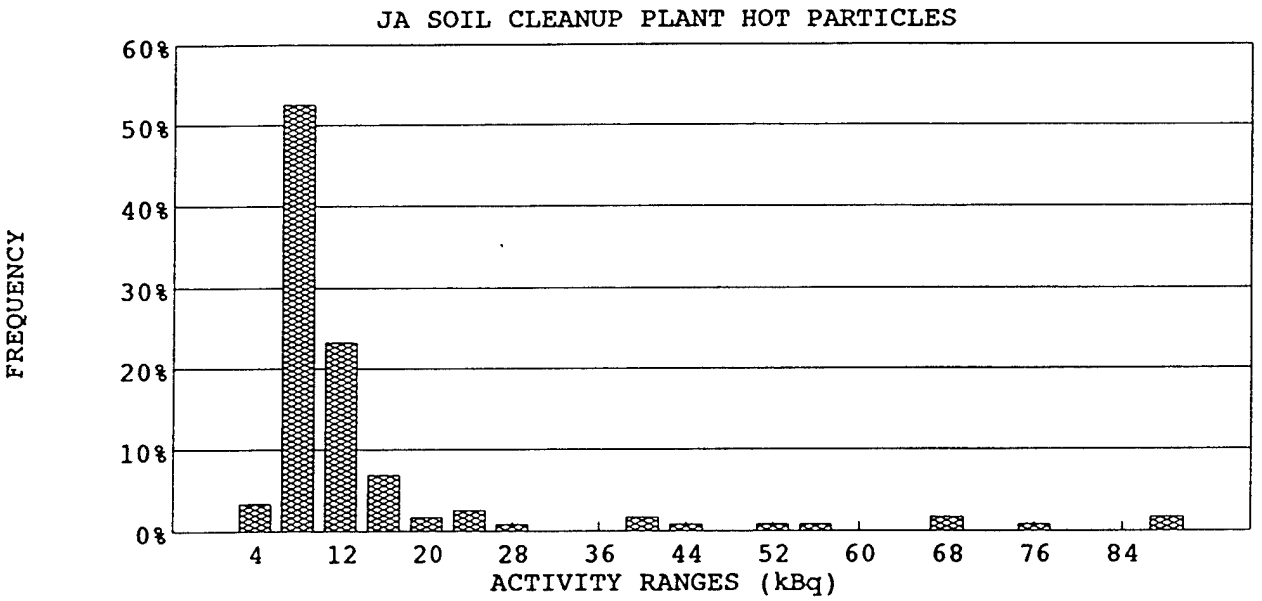
2-GATE SORTS

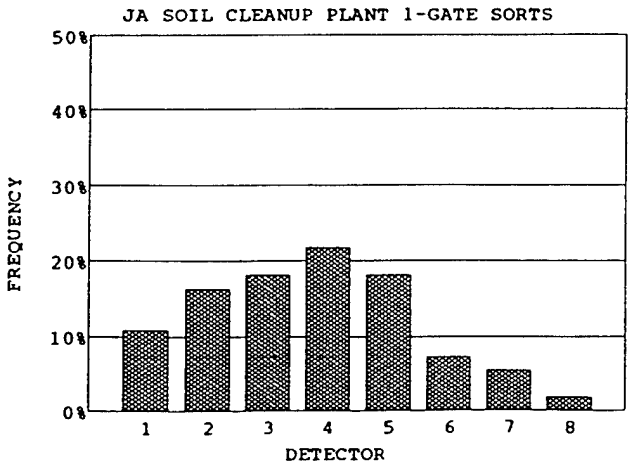
DET	SORTS	FREQ%
9	10	16.4%
10	11	18.0%
11	12	19.7%
12	13	21.3%
13	10	16.4%
14	3	4.9%
15	2	3.3%
TOTAL	61	

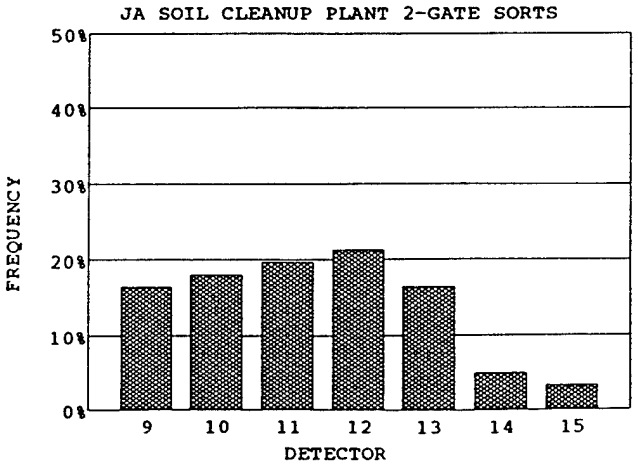
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	9	-250	0.5%	4	4	3.4%
-12000	7	-215	0.4%	8	61	52.6%
-10000	4	-179	0.2%	12	27	23.3%
-8000	2	-143	0.1%	16	8	6.9%
-6000	14	-107	0.8%	20	2	1.7%
-4000	39	-72	2.3%	24	3	2.6%
-2000	116	-36	6.7%	28	1	0.9%
0	247	0	14.3%	32	0	0.0%
2000	294	36	17.0%	36	0	0.0%
4000	359	72	20.8%	40	2	1.7%
6000	310	107	17.9%	44	1	0.9%
8000	198	143	11.4%	48	0	0.0%
10000	79	179	4.6%	52	1	0.9%
12000	30	215	1.7%	56	1	0.9%
14000	18	250	1.0%	60	0	0.0%
16000	1	286	0.1%	64	0	0.0%
18000	2	322	0.1%	68	2	1.7%
20000	1	358	0.1%	72	0	0.0%
22000	0	394	0.0%	76	1	0.9%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	2	1.7%
TOTAL	1,730			TOTAL	116	

EVENT TYPES HPE 127 MPE 397 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 3

15-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.62 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.9 tons	46.3 tons	47.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	0.7 yd³	36.7 yd³	37.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	789 kBq	2,166 kBq	4,092 kBq
MAXIMUM/SORT	86 kBq	45 kBq	18 kBq
MINIMUM/SORT	3 kBq	(1,867)Bq	-5 kBq
SPECIFIC ACTIVITY		2,340 Bq/kg	88 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		844		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2			
NONE (AD=0 & MD=0 & MND>0)	482		08:46	11:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	360		08:51	12:42
UNEXPLAINED RECORDS	0		08:51	
0<AD<1kBq & MD>0	9		08:53	
AD=0 & MD>0	1		08:54	
AD<0 & MD >0	1		08:55	
2-SEC COUNT PERIODS		8,440	08:56	
2-SEC RECORDS WITH SORTS	50		09:00	
2-SEC RECORDS WITHOUT SORTS	8,390		09:21	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		894	12:39	
NONPROCESSING RECORDS (Test, calibration, etc)		5	12:44	

2-SEC SORT DETECTORS

1 DET	35	70.0%	5 DET	0	0.0%
2 DET	9	18.0%	6 DET	0	0.0%
3 DET	4	8.0%	7 DET	0	0.0%
4 DET	2	4.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 482.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

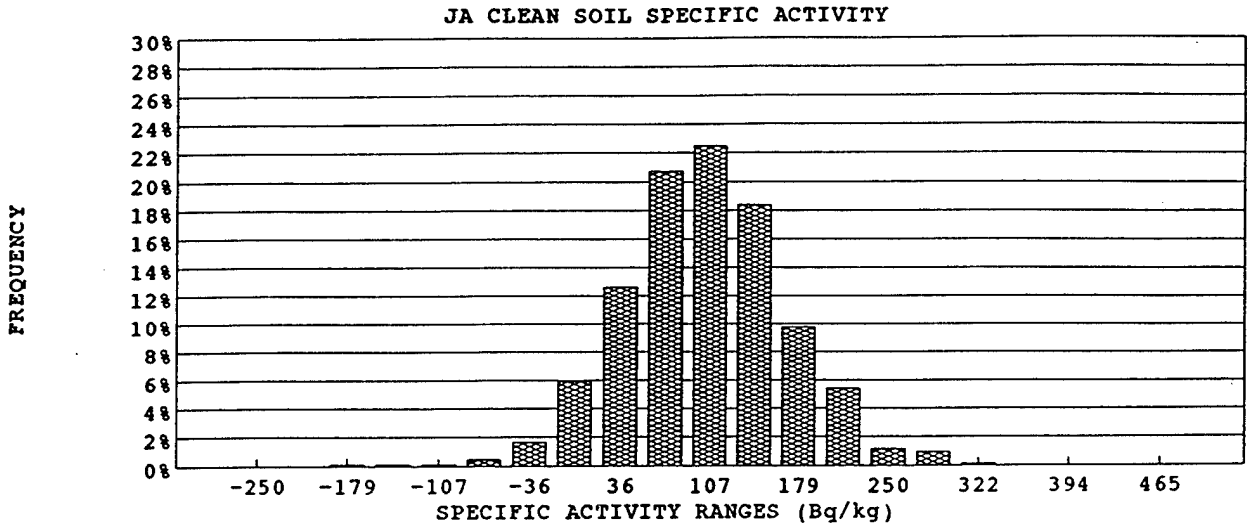
DET	SORTS	FREQ%
1	0	0.0%
2	2	12.5%
3	2	12.5%
4	2	12.5%
5	1	6.3%
6	4	25.0%
7	4	25.0%
8	1	6.3%
TOTAL	16	

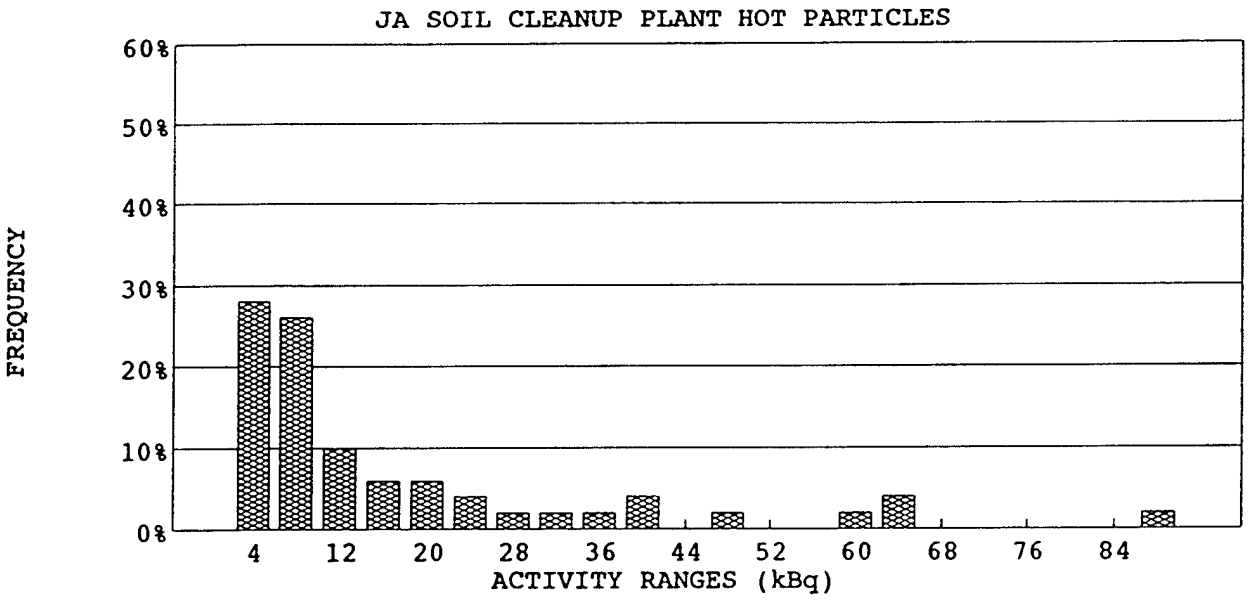
2-GATE SORTS

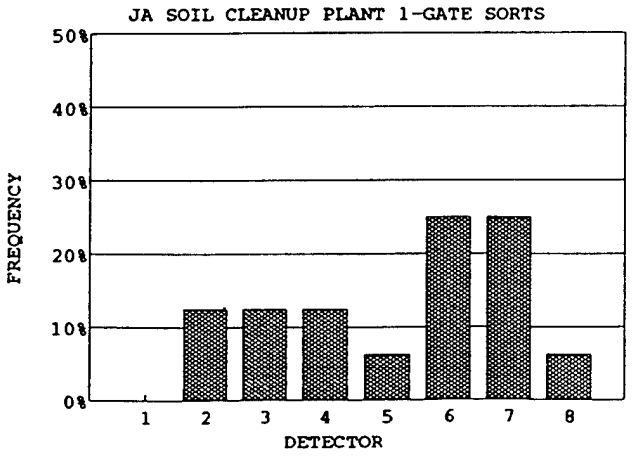
DET	SORTS	FREQ%
9	1	2.9%
10	2	5.9%
11	17	50.0%
12	2	5.9%
13	4	11.8%
14	5	14.7%
15	3	8.8%
TOTAL	34	

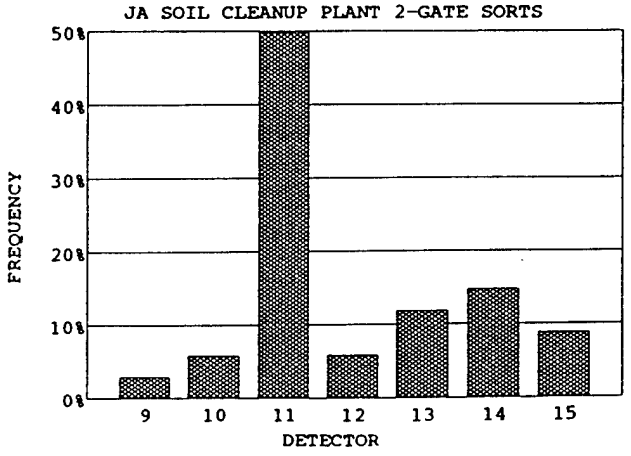
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	14	28.0%
-12000	0	-215	0.0%	8	13	26.0%
-10000	1	-179	0.1%	12	5	10.0%
-8000	1	-143	0.1%	16	3	6.0%
-6000	1	-107	0.1%	20	3	6.0%
-4000	4	-72	0.5%	24	2	4.0%
-2000	14	-36	1.6%	28	1	2.0%
0	50	0	5.9%	32	1	2.0%
2000	107	36	12.6%	36	1	2.0%
4000	176	72	20.7%	40	2	4.0%
6000	191	107	22.5%	44	0	0.0%
8000	156	143	18.4%	48	1	2.0%
10000	83	179	9.8%	52	0	0.0%
12000	46	215	5.4%	56	0	0.0%
14000	10	250	1.2%	60	1	2.0%
16000	8	286	0.9%	64	2	4.0%
18000	1	322	0.1%	68	0	0.0%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	1	2.0%
TOTAL	849			TOTAL	50	

EVENT TYPES HPE 66 MPE 1090 DISE 166


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 4

15-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.60 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	82.8 tons	83.2 tons
MAXIMUM/SORT	58.7 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.3 yd³	65.6 yd³	66.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	777 kBq	880 kBq	10,062 kBq
MAXIMUM/SORT	73 kBq	51 kBq	18 kBq
MINIMUM/SORT	4 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		2,094 Bq/kg	121 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,489		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2				
NONE (AD=0 & MD=0 & MND>0)	1,149			None	13:01
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	338				
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			14,890		
2-SEC RECORDS WITH SORTS	74				
2-SEC RECORDS WITHOUT SORTS	14,816				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,563		
NONPROCESSING RECORDS (Test, calibration, etc)			0		

2-SEC SORT DETECTORS

1 DET	58	78.4%	5 DET	0	0.0%
2 DET	14	18.9%	6 DET	0	0.0%
3 DET	2	2.7%	7 DET	0	0.0%
4 DET	0	0.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 513.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

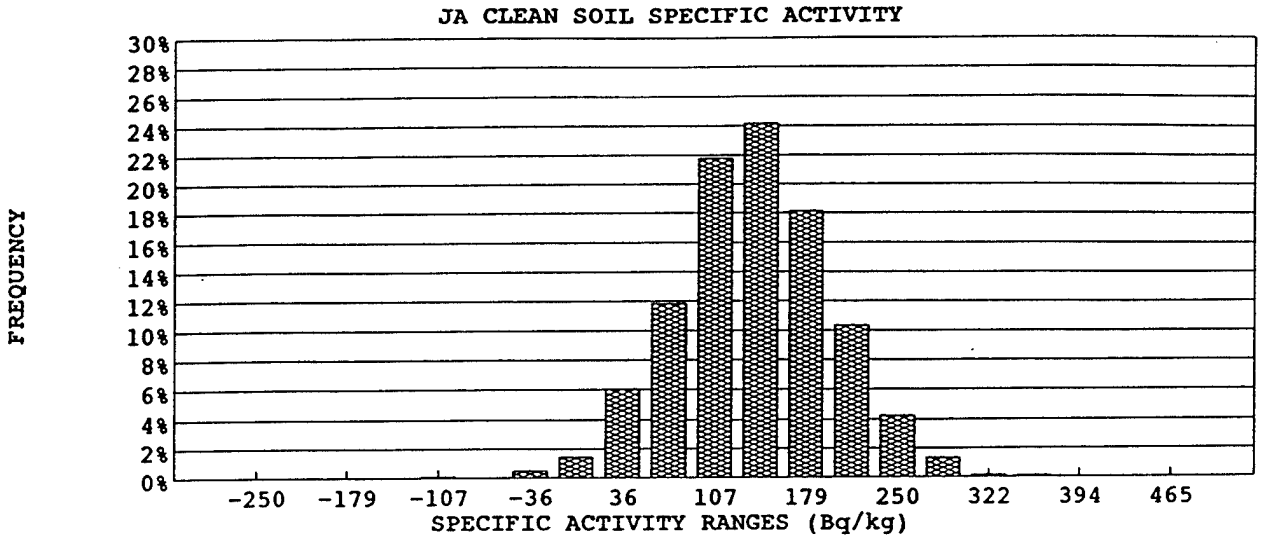
DET	SORTS	FREQ%
1	1	2.6%
2	3	7.7%
3	10	25.6%
4	11	28.2%
5	6	15.4%
6	4	10.3%
7	2	5.1%
8	2	5.1%
TOTAL	39	

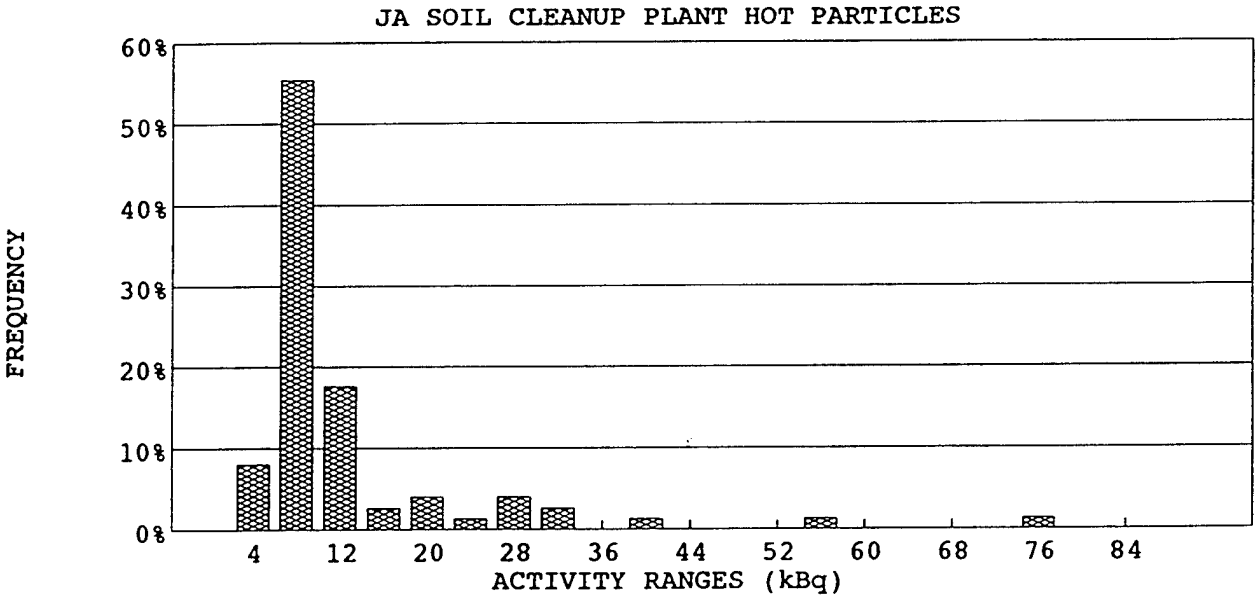
2-GATE SORTS

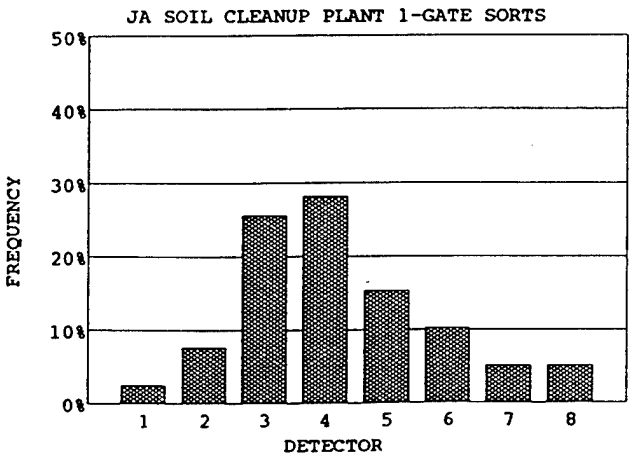
DET	SORTS	FREQ%
9	4	11.4%
10	6	17.1%
11	9	25.7%
12	6	17.1%
13	4	11.4%
14	6	17.1%
15	0	0.0%
TOTAL	35	

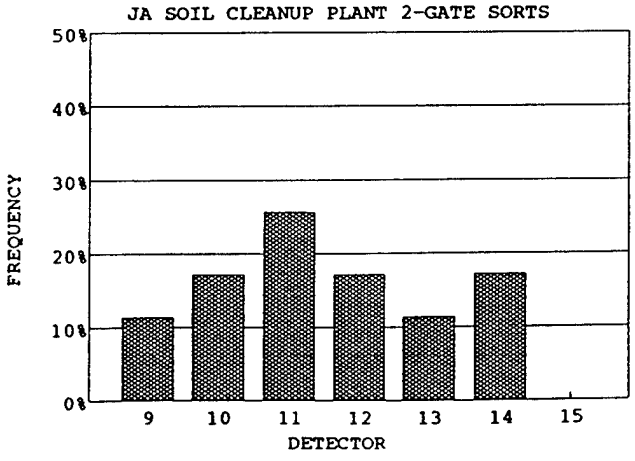
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	6	8.1%
-12000	0	-215	0.0%	8	41	55.4%
-10000	0	-179	0.0%	12	13	17.6%
-8000	0	-143	0.0%	16	2	2.7%
-6000	1	-107	0.1%	20	3	4.1%
-4000	0	-72	0.0%	24	1	1.4%
-2000	7	-36	0.5%	28	3	4.1%
0	21	0	1.4%	32	2	2.7%
2000	90	36	6.0%	36	0	0.0%
4000	176	72	11.8%	40	1	1.4%
6000	324	107	21.8%	44	0	0.0%
8000	360	143	24.2%	48	0	0.0%
10000	270	179	18.1%	52	0	0.0%
12000	154	215	10.3%	56	1	1.4%
14000	63	250	4.2%	60	0	0.0%
16000	20	286	1.3%	64	0	0.0%
18000	2	322	0.1%	68	0	0.0%
20000	1	358	0.1%	72	0	0.0%
22000	0	394	0.0%	76	1	1.4%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	0	0.0%
TOTAL	1,489			TOTAL	74	

EVENT TYPES HPE 78 MPE 360 DISE 162


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 16–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	16–Feb–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	129	Excused delays for contract (sorter–hrs)	1,733 hr
Current Contract week	22	Excused delay days (plant–days)	43 days
		Excused delay months (plant–month)	1.67 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	555 MT	Percent of contract completed	34.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,668 MT
Since 6 Sep 93	32,600 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	34,191 MT		
Total Soil production for project	60,478 MT		

MT = metric tons

WORK HISTORY – JA SOIL CLEANUP PLANT 17–Feb–94

WORK DAY START	05:55 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.6 hr	10.6 hr	10.6 hr	10.6 hr	42.3 hr
SORTER AVAILABLE HOURS	10.5 hr	10.5 hr	3.3 hr	3.3 hr	27.7 hr
SORTER START–UP	05:55	05:55	05:55	05:55	
START SOIL PROCESSING	06:14	06:15	06:19	06:17	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.4 hr	0.4 hr	1.5 hr
SORTER SHUT–DOWN	16:25	16:25	09:15	09:15	
END SOIL PROCESSING	16:06	16:05	08:51	08:51	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.4 hr	0.4 hr	1.4 hr
ACTUAL PROCESS HOURS	9.9 hr	9.8 hr	2.5 hr	2.6 hr	24.8 hr
DOWN–TIME	0.6 hr	0.7 hr	0.8 hr	0.8 hr	2.9 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.1 hr	0.1 hr	7.3 hr	7.3 hr	14.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	6.8 hr	6.8 hr	13.5 hr
PLANT PERFORMANCE					89.6%
PRODUCTIVTY					58.6%

PRODUCTIVITY

Date	17–Feb–94
Contract day (from 6 Sep)	130
Current Contract week	22
Soil production for Day	250 MT
Cumlative Soil Production for Week	805 MT
Total Soil production for contract	
Since 6 Sep 93	32,850 MT
Since 6 Aug 93	34,441 MT
Total Soil production for project	60,728 MT

Excused Delays for day (sorter–hrs)	13.5 hr
Excused delays for contract (sorter–hrs)	1,746 hr
Excused delay days (plant–days)	44 days
Excused delay months (plant–month)	1.68 months
Percent of contract completed	34.4%
Tons Ahead or Behind Schedule	1,707 MT
Days ahead or behind schedule	5 days

MT = metric tons

File Report1 Printed on 19-Feb-94 at 09:04:04 AM

SORTER 1

17-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	98.9 tons	99.2 tons
MAXIMUM/SORT	4.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.2 yd³	78.4 yd³	78.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,280 kBq	1,432 kBq	7,414 kBq
MAXIMUM/SORT	174 kBq	62 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		4,555 Bq/kg	75 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,775		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		0			
NONE (AD=0 & MD=0 & MND>0)		1,501		08:38	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		274		08:58	
UNEXPLAINED RECORDS		0		12:01	
0<AD<1kBq & MD>0		4		14:08	
AD=0 & MD>0		0			
AD<0 & MD >0		0			
2-SEC COUNT PERIODS			17,750		
2-SEC RECORDS WITH SORTS		208			
2-SEC RECORDS WITHOUT SORTS		17,542			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,983		
NONPROCESSING RECORDS (Test, calibration, etc)			4		

2-SEC SORT DETECTORS

1 DET	151	72.6%	5 DET	1	0.5%
2 DET	42	20.2%	6 DET	0	0.0%
3 DET	10	4.8%	7 DET	0	0.0%
4 DET	4	1.9%	8 DET	0	0.0%

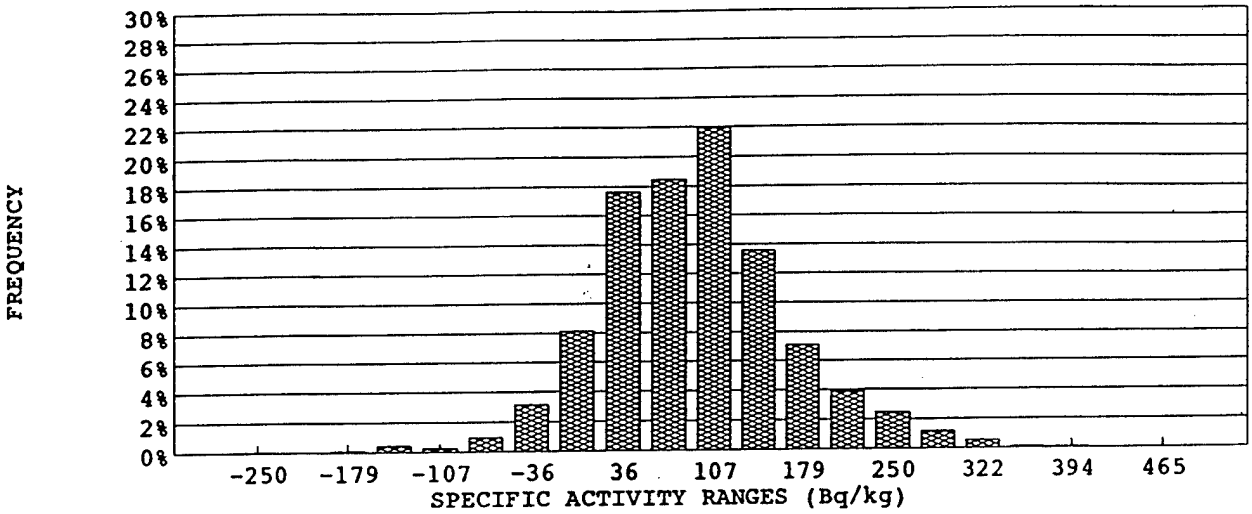
AVERAGE TIME BETWEEN 2-SEC SORTS 235.1 sec

FREQUENCY DISTRIBUTIONS

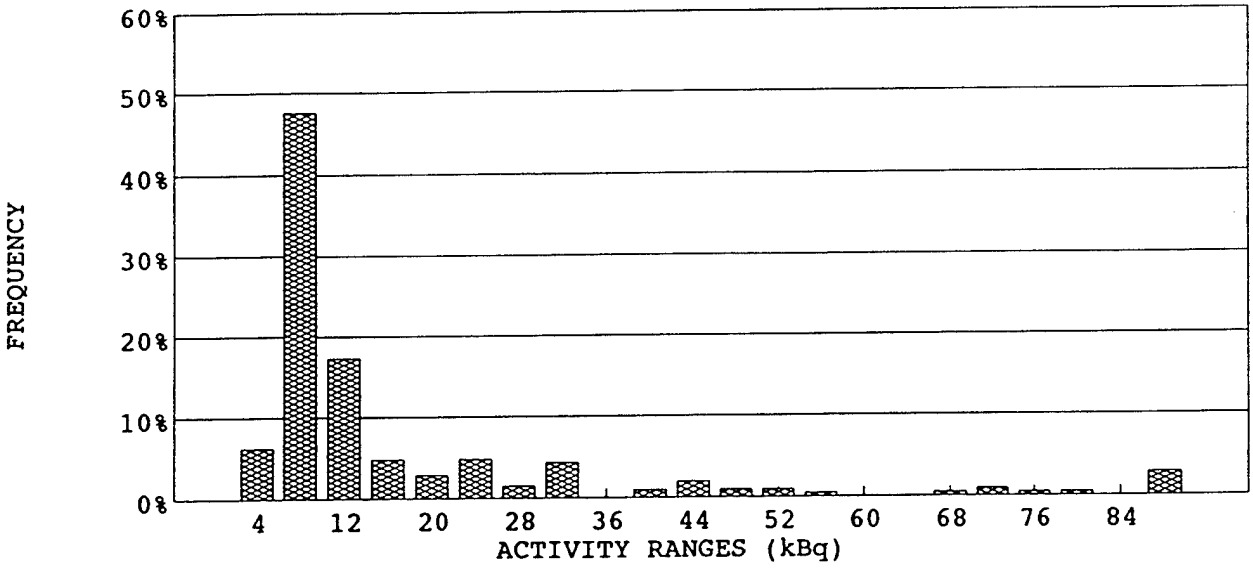
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	1	1.0%	-14000	1	-250	0.1%	4	13	6.3%
2	16	15.5%	-12000	0	-215	0.0%	8	99	47.6%
3	19	18.4%	-10000	2	-179	0.1%	12	36	17.3%
4	16	15.5%	-8000	8	-143	0.4%	16	10	4.8%
5	16	15.5%	-6000	5	-107	0.3%	20	6	2.9%
6	19	18.4%	-4000	17	-72	1.0%	24	10	4.8%
7	12	11.7%	-2000	56	-36	3.1%	28	3	1.4%
8	4	3.9%	0	144	0	8.1%	32	9	4.3%
TOTAL	103		2000	314	36	17.7%	36	0	0.0%
			4000	328	72	18.4%	40	2	1.0%
2-GATE DET	SORTS	FREQ%	6000	391	107	22.0%	44	4	1.9%
			8000	241	143	13.5%	48	2	1.0%
9	6	5.7%	10000	126	179	7.1%	52	2	1.0%
10	13	12.4%	12000	69	215	3.9%	56	1	0.5%
11	17	16.2%	14000	44	250	2.5%	60	0	0.0%
12	22	21.0%	16000	21	286	1.2%	64	0	0.0%
13	21	20.0%	18000	9	322	0.5%	68	1	0.5%
14	15	14.3%	20000	2	358	0.1%	72	2	1.0%
15	11	10.5%	22000	1	394	0.1%	76	1	0.5%
TOTAL	105		24000	0	429	0.0%	80	1	0.5%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	6	2.9%
			TOTAL	1,779			TOTAL	208	

EVENT TYPES	HPE	MPE	DISE
	221	228	0

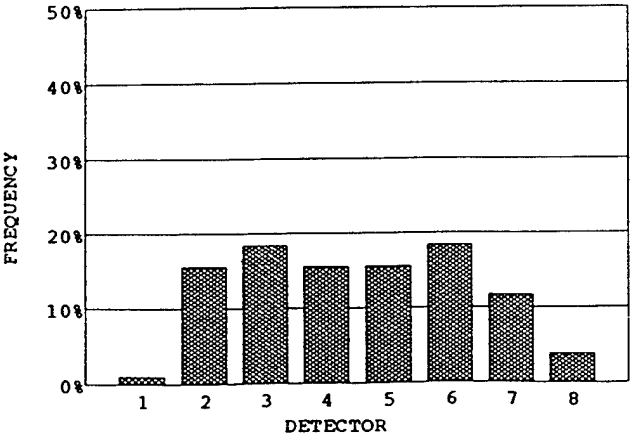
JA CLEAN SOIL SPECIFIC ACTIVITY



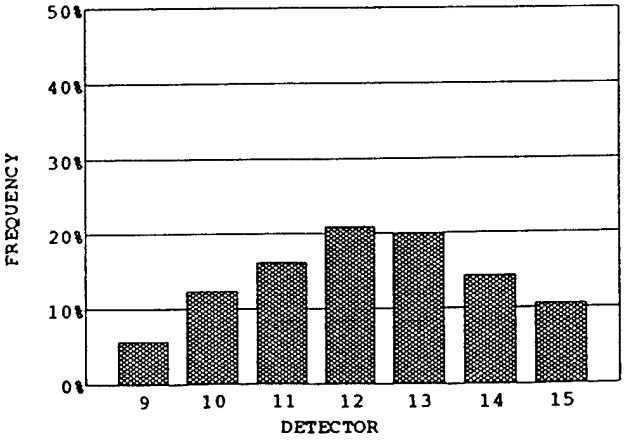
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

17-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	98.5 tons	99.0 tons
MAXIMUM/SORT	3.5 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	52.4 kg	
VOLUME IN-GROUND	0.4 yd³	78.1 yd³	78.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,922 kBq	2,191 kBq	5,972 kBq
MAXIMUM/SORT	820 kBq	530 kBq	19 kBq
MINIMUM/SORT	4 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		4,556 Bq/kg	61 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,771		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0				
NONE (AD=0 & MD=0 & MND>0)	1,317			12:12	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	454				
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	1				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			17,710		
2-SEC RECORDS WITH SORTS	175				
2-SEC RECORDS WITHOUT SORTS	17,535				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,946		
NONPROCESSING RECORDS (Test, calibration, etc)			8		

2-SEC SORT DETECTORS

1 DET	134	76.6%	5 DET	0	0.0%
2 DET	35	20.0%	6 DET	0	0.0%
3 DET	5	2.9%	7 DET	0	0.0%
4 DET	1	0.6%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 264.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

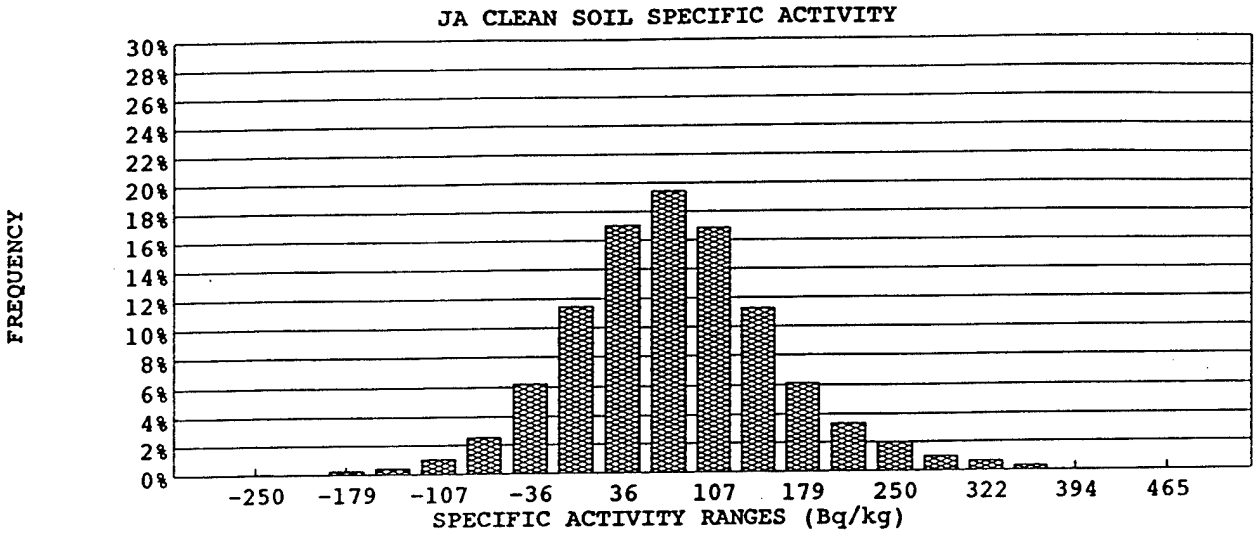
DET	SORTS	FREQ%
1	11	11.6%
2	21	22.1%
3	18	18.9%
4	18	18.9%
5	9	9.5%
6	7	7.4%
7	10	10.5%
8	1	1.1%
TOTAL	95	

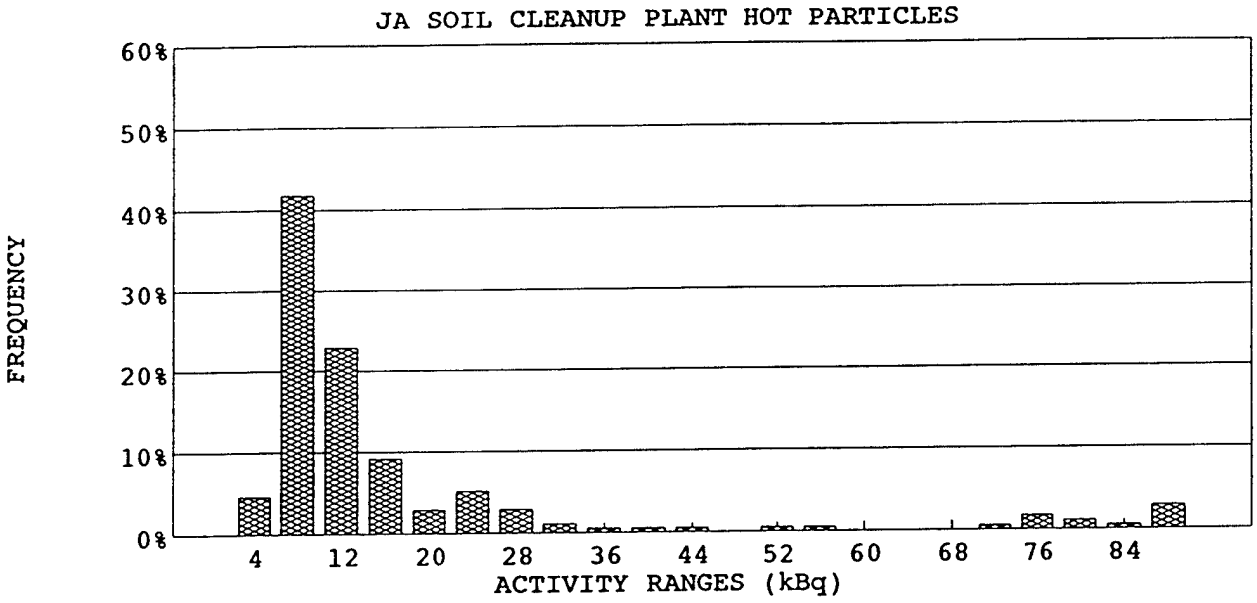
2-GATE SORTS

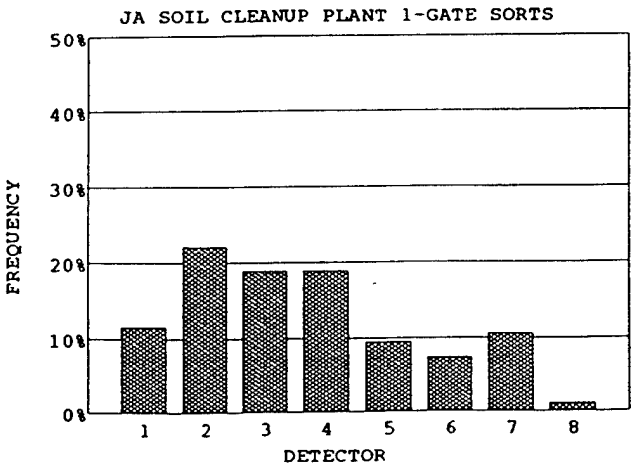
DET	SORTS	FREQ%
9	20	25.0%
10	14	17.5%
11	14	17.5%
12	10	12.5%
13	11	13.8%
14	4	5.0%
15	7	8.8%
TOTAL	80	

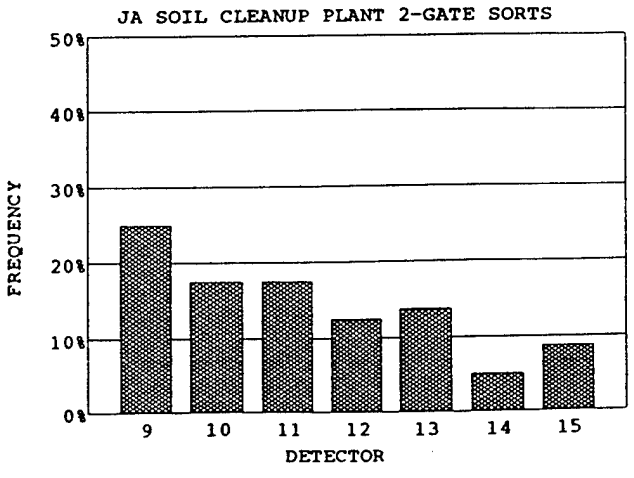
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	8	4.6%
-12000	0	-215	0.0%	8	73	41.7%
-10000	5	-179	0.3%	12	40	22.9%
-8000	8	-143	0.4%	16	16	9.1%
-6000	19	-107	1.1%	20	5	2.9%
-4000	45	-72	2.5%	24	9	5.1%
-2000	110	-36	6.2%	28	5	2.9%
0	203	0	11.4%	32	2	1.1%
2000	303	36	17.0%	36	1	0.6%
4000	346	72	19.4%	40	1	0.6%
6000	300	107	16.9%	44	1	0.6%
8000	200	143	11.2%	48	0	0.0%
10000	109	179	6.1%	52	1	0.6%
12000	59	215	3.3%	56	1	0.6%
14000	35	250	2.0%	60	0	0.0%
16000	18	286	1.0%	64	0	0.0%
18000	12	322	0.7%	68	0	0.0%
20000	6	358	0.3%	72	1	0.6%
22000	0	394	0.0%	76	3	1.7%
24000	0	429	0.0%	80	2	1.1%
26000	0	465	0.0%	84	1	0.6%
>28000	0	0	0.0%	>84	5	2.9%
TOTAL	1,779			TOTAL	175	

EVENT TYPES HPE 182 MPE 505 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 3

17-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.60 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.0 tons	25.4 tons	25.5 tons
MAXIMUM/SORT	2.8 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.0 yd³	20.2 yd³	20.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	269 kBq	156 kBq	(525)kBq
MAXIMUM/SORT	68 kBq	46 kBq	8 kBq
MINIMUM/SORT	4 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		3,647 Bq/kg	(21)Bq/kg

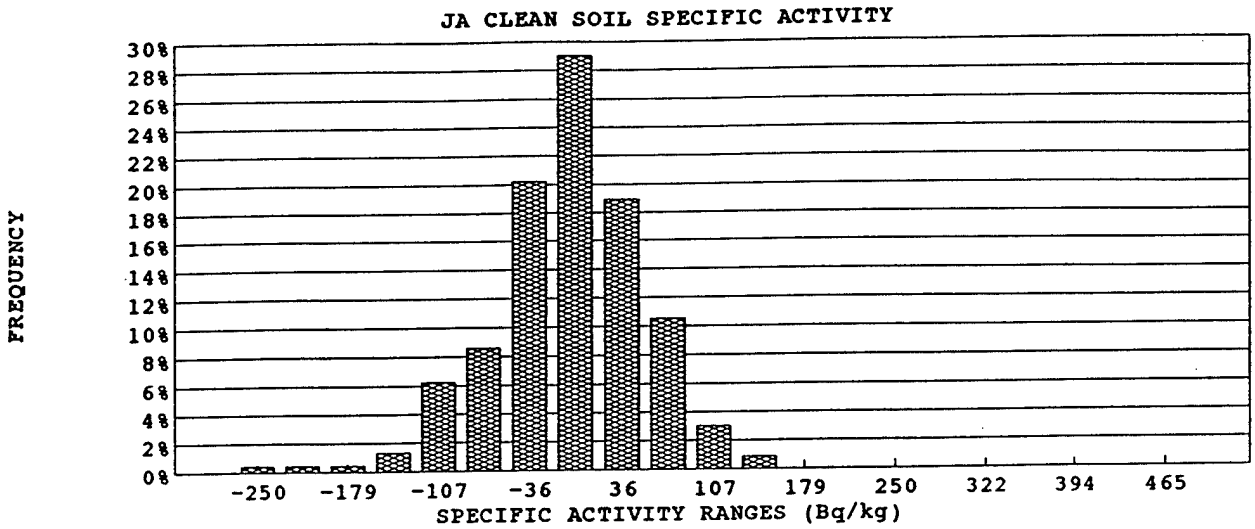
SORTS

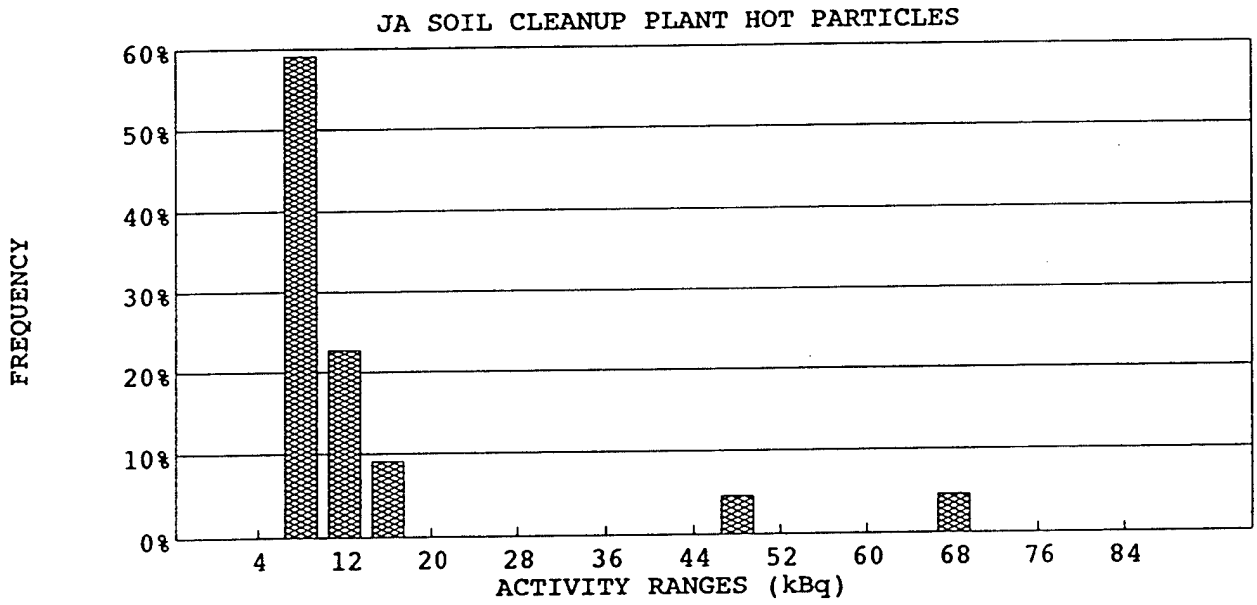
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				456		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			409			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			47			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				4,560		
2-SEC RECORDS WITH SORTS			22			
2-SEC RECORDS WITHOUT SORTS			4,538			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				478		
NONPROCESSING RECORDS (Test, calibration, etc)				9		
2-SEC SORT DETECTORS						
1 DET	18	81.8%	5 DET	0	0.0%	
2 DET	3	13.6%	6 DET	0	0.0%	
3 DET	1	4.5%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			506.7 sec			

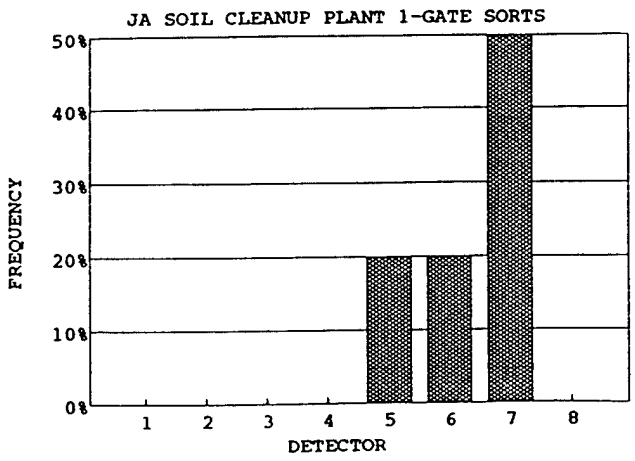
FREQUENCY DISTRIBUTIONS

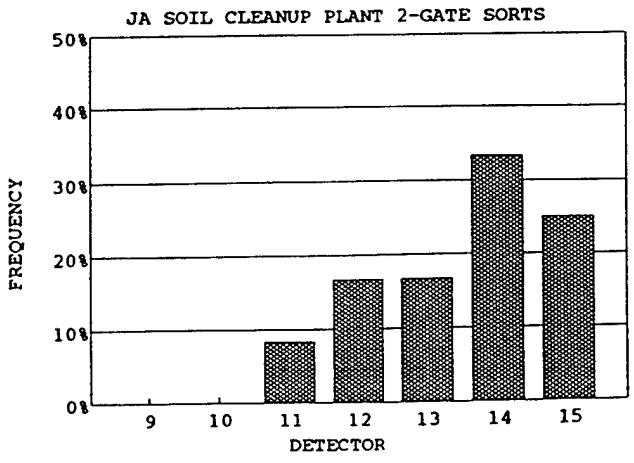
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	0	0.0%	-14000	2	-250	0.4%	4	0	0.0%
2	0	0.0%	-12000	2	-215	0.4%	8	13	59.1%
3	0	0.0%	-10000	2	-179	0.4%	12	5	22.7%
4	0	0.0%	-8000	6	-143	1.3%	16	2	9.1%
5	2	20.0%	-6000	29	-107	6.2%	20	0	0.0%
6	2	20.0%	-4000	40	-72	8.6%	24	0	0.0%
7	6	60.0%	-2000	94	-36	20.2%	28	0	0.0%
8	0	0.0%	0	135	0	29.0%	32	0	0.0%
TOTAL	10		2000	88	36	18.9%	36	0	0.0%
			4000	49	72	10.5%	40	0	0.0%
2-GATE SORTS			6000	14	107	3.0%	44	0	0.0%
DET	SORTS	FREQ%	8000	4	143	0.9%	48	1	4.5%
9	0	0.0%	10000	0	179	0.0%	52	0	0.0%
10	0	0.0%	12000	0	215	0.0%	56	0	0.0%
11	1	8.3%	14000	0	250	0.0%	60	0	0.0%
12	2	16.7%	16000	0	286	0.0%	64	0	0.0%
13	2	16.7%	18000	0	322	0.0%	68	1	4.5%
14	4	33.3%	20000	0	358	0.0%	72	0	0.0%
15	3	25.0%	22000	0	394	0.0%	76	0	0.0%
TOTAL	12		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	0	0.0%
			TOTAL	465			TOTAL	22	

EVENT TYPES HPE 25 MPE 36 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 4

17-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.60 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	25.7 tons	25.8 tons
MAXIMUM/SORT	2.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.8 kg	
VOLUME IN-GROUND	0.1 yd³	20.4 yd³	20.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	214 kBq	215 kBq	2,332 kBq
MAXIMUM/SORT	62 kBq	41 kBq	17 kBq
MINIMUM/SORT	4 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		2,818 Bq/kg	91 Bq/kg

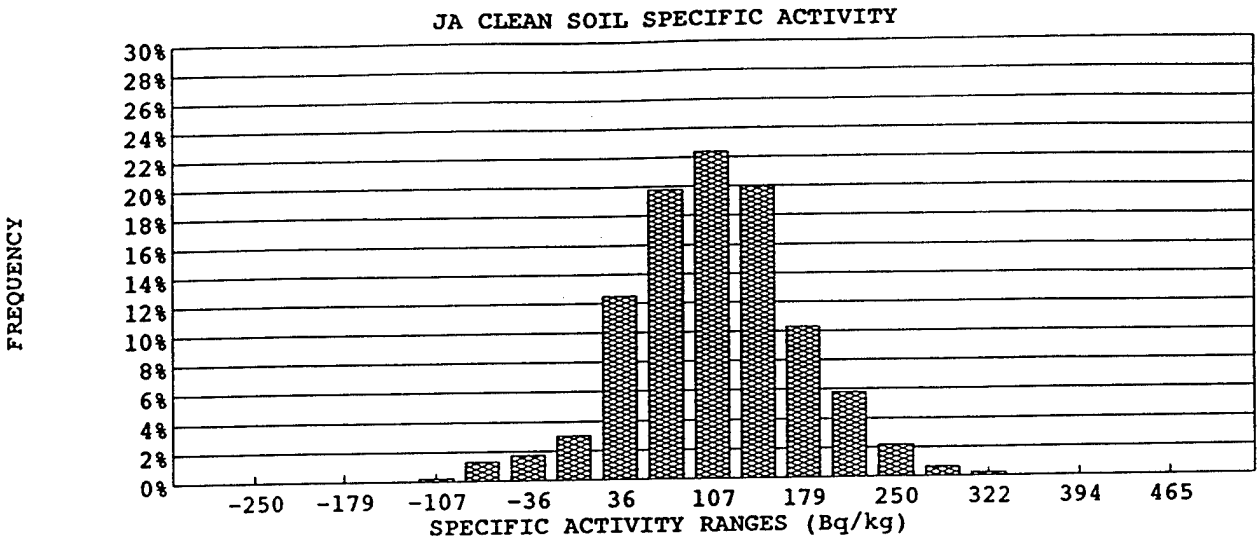
SORTS

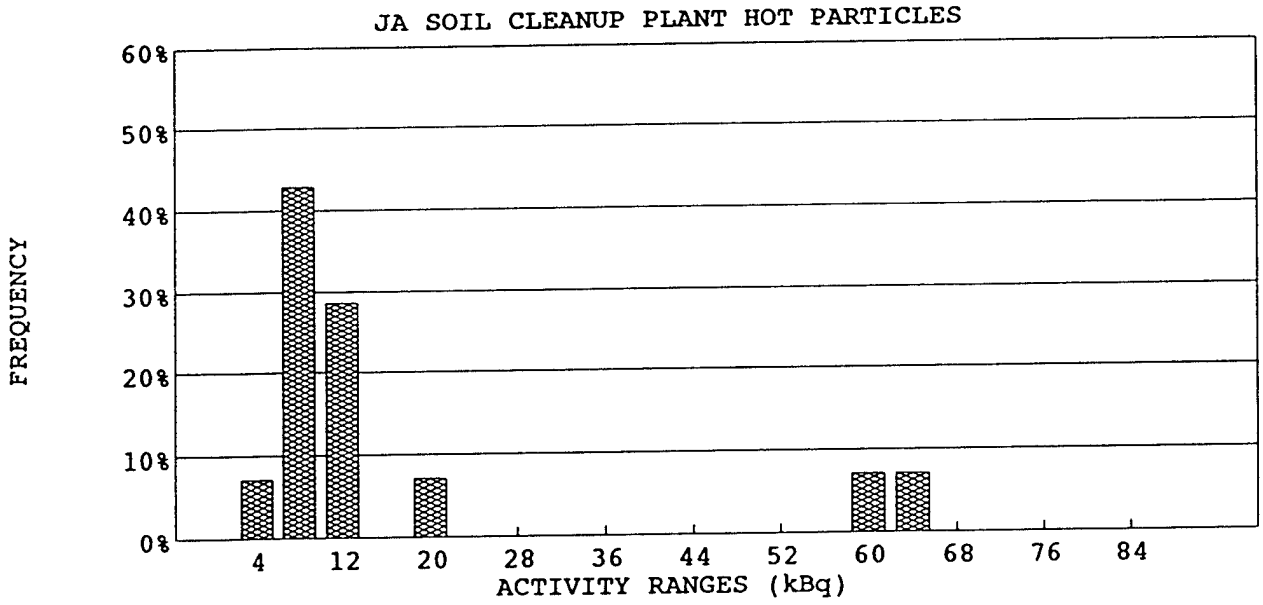
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				462		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			373			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			89			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				4,620		
2-SEC RECORDS WITH SORTS			14			
2-SEC RECORDS WITHOUT SORTS			4,606			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				476		
NONPROCESSING RECORDS (Test, calibration, etc)				3		
2-SEC SORT DETECTORS						
1 DET	11	78.6%	5 DET	0	0.0%	
2 DET	3	21.4%	6 DET	0	0.0%	
3 DET	0	0.0%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			840.0 sec			

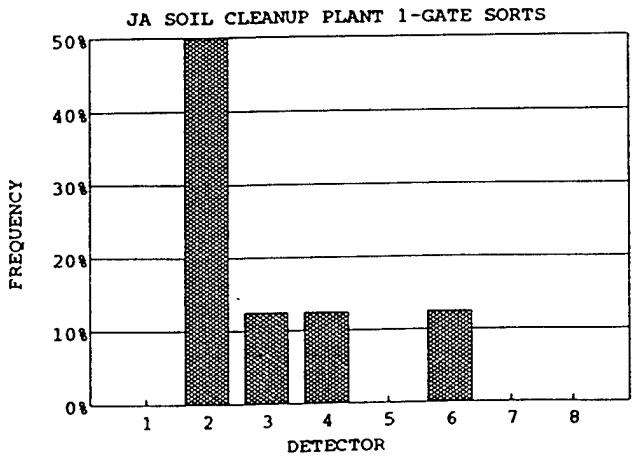
FREQUENCY DISTRIBUTIONS

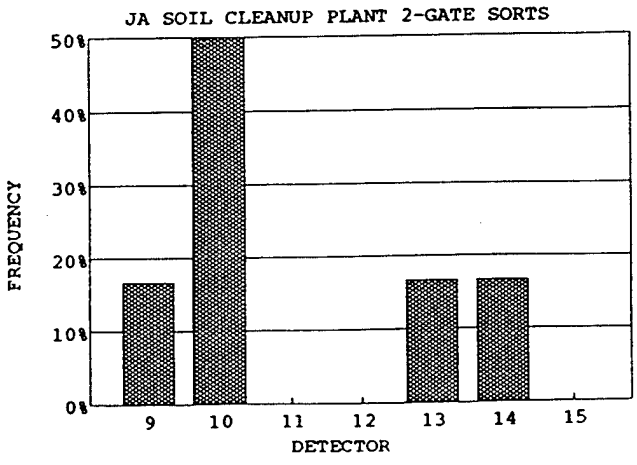
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	0	0.0%	-14000	0	-250	0.0%	4	1	7.1%
2	5	62.5%	-12000	0	-215	0.0%	8	6	42.9%
3	1	12.5%	-10000	0	-179	0.0%	12	4	28.6%
4	1	12.5%	-8000	0	-143	0.0%	16	0	0.0%
5	0	0.0%	-6000	1	-107	0.2%	20	1	7.1%
6	1	12.5%	-4000	6	-72	1.3%	24	0	0.0%
7	0	0.0%	-2000	8	-36	1.7%	28	0	0.0%
8	0	0.0%	0	14	0	3.0%	32	0	0.0%
TOTAL	8		2000	58	36	12.5%	36	0	0.0%
			4000	92	72	19.8%	40	0	0.0%
2-GATE SORTS			6000	104	107	22.4%	44	0	0.0%
DET	SORTS	FREQ%	8000	93	143	20.0%	48	0	0.0%
9	1	16.7%	10000	48	179	10.3%	52	0	0.0%
10	3	50.0%	12000	27	215	5.8%	56	0	0.0%
11	0	0.0%	14000	10	250	2.2%	60	1	7.1%
12	0	0.0%	16000	3	286	0.6%	64	1	7.1%
13	1	16.7%	18000	1	322	0.2%	68	0	0.0%
14	1	16.7%	20000	0	358	0.0%	72	0	0.0%
15	0	0.0%	22000	0	394	0.0%	76	0	0.0%
TOTAL	6		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	0	0.0%
			TOTAL	465			TOTAL	14	

EVENT TYPES	HPE	13	MPE	96	DISE	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 18-Feb-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.7 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:19	06:18	NA	NA	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT-DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:06	16:03	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	9.7 hr	9.7 hr	0.0 hr	0.0 hr	19.4 hr
DOWN-TIME	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					94.1%
PRODUCTIVTY					46.3%

PRODUCTIVITY

Date	18-Feb-94
Contract day (from 6 Sep)	131
Current Contract week	22
Soil production for Day	196 MT
Cumlative Soil Production for Week	1,000 MT
Total Soil production for contract	
Since 6 Sep 93	33,046 MT
Since 6 Aug 93	34,637 MT
Total Soil production for project	60,923 MT

Excused Delays for day (sorter-hrs)	20 hr
Excused delays for contract (sorter-hrs)	1,766 hr
Excused delay days (plant-days)	44 days
Excused delay months (plant-month)	1.70 months
Percent of contract completed	34.6%
Tons Ahead or Behind Schedule	1,745 MT
Days ahead or behind schedule	6 days

MT = metric tons

File Report1 Printed on 21-Feb-94 at 11:02:12 AM

SORTER 1

18-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	97.7 tons	98.0 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.3 yd³	77.5 yd³	77.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,935 kBq	1,678 kBq	6,430 kBq
MAXIMUM/SORT	281 kBq	172 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		5,102 Bq/kg	66 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,754		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,474		12:49	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	280			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,540		
2-SEC RECORDS WITH SORTS	236			
2-SEC RECORDS WITHOUT SORTS	17,304			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,990		
NONPROCESSING RECORDS (Test, calibration, etc)		14		

2-SEC SORT DETECTORS

1 DET	180	76.3%	5 DET	0	0.0%
2 DET	49	20.8%	6 DET	0	0.0%
3 DET	6	2.5%	7 DET	0	0.0%
4 DET	1	0.4%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 194.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	3	2.4%
2	15	12.1%
3	16	12.9%
4	20	16.1%
5	29	23.4%
6	21	16.9%
7	15	12.1%
8	5	4.0%
TOTAL	124	

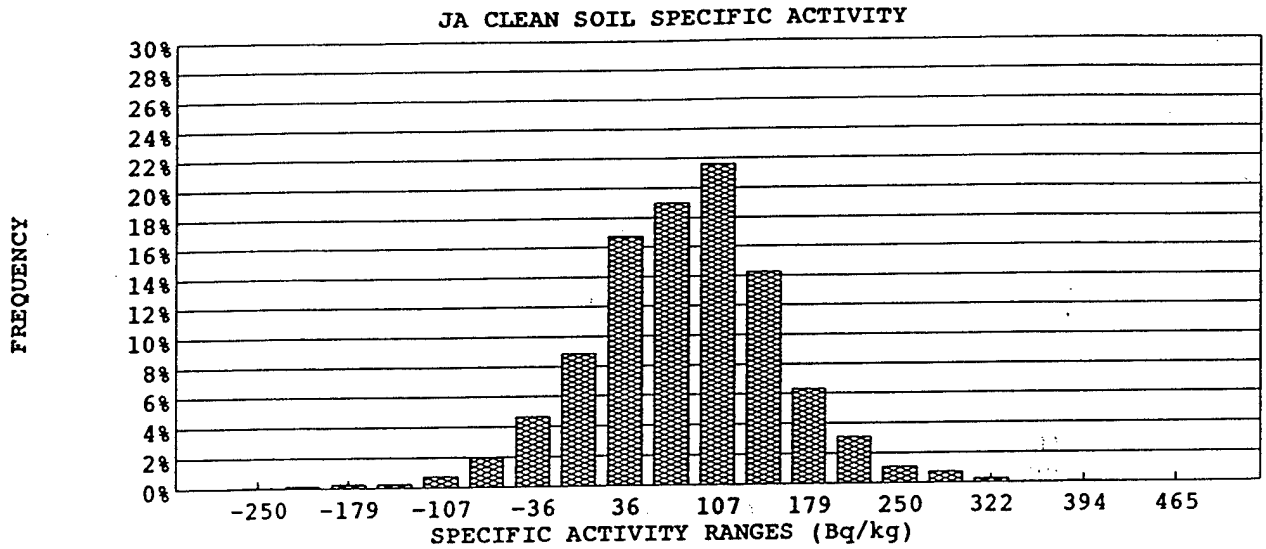
2-GATE SORTS DET	SORTS	FREQ%
9	6	5.4%
10	16	14.3%
11	22	19.6%
12	26	23.2%
13	21	18.8%
14	10	8.9%
15	11	9.8%
TOTAL	112	

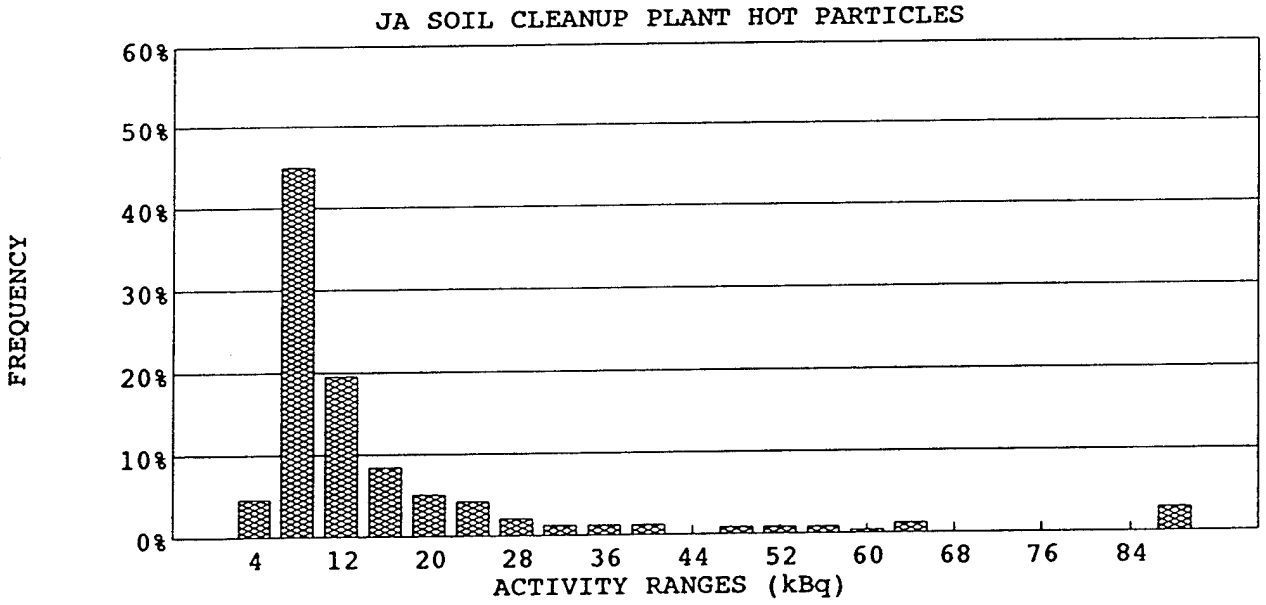
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	11	4.7%
-12000	2	-215	0.1%	8	106	44.9%
-10000	5	-179	0.3%	12	46	19.5%
-8000	5	-143	0.3%	16	20	8.5%
-6000	13	-107	0.7%	20	12	5.1%
-4000	34	-72	1.9%	24	10	4.2%
-2000	82	-36	4.6%	28	5	2.1%
0	156	0	8.8%	32	3	1.3%
2000	296	36	16.7%	36	3	1.3%
4000	335	72	18.9%	40	3	1.3%
6000	382	107	21.6%	44	0	0.0%
8000	252	143	14.3%	48	2	0.8%
10000	112	179	6.3%	52	2	0.8%
12000	55	215	3.1%	56	2	0.8%
14000	19	250	1.1%	60	1	0.4%
16000	13	286	0.7%	64	3	1.3%
18000	5	322	0.3%	68	0	0.0%
20000	0	358	0.0%	72	0	0.0%
22000	1	394	0.1%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	7	3.0%
TOTAL	1,768			TOTAL	236	

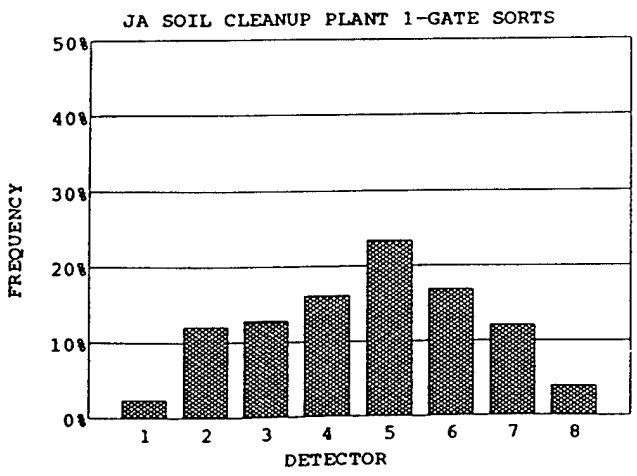
EVENT TYPES HPE 236 MPE 234 DISE 0

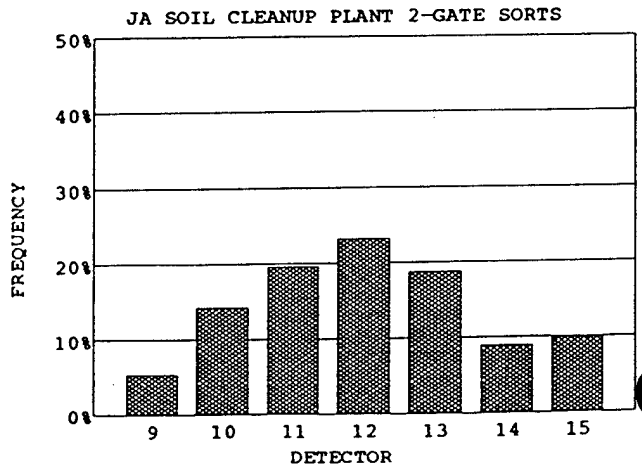
SORTER 1

18-Feb-94









SORTER 2

18-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.80 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	97.1 tons	97.6 tons
MAXIMUM/SORT	5.6 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.4 yd³	76.9 yd³	77.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,501 kBq	2,363 kBq	5,059 kBq
MAXIMUM/SORT	507 kBq	370 kBq	15 kBq
MINIMUM/SORT	2 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		4,350 Bq/kg	52 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,746		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,240		10:26	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	506			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,460		
2-SEC RECORDS WITH SORTS	222			
2-SEC RECORDS WITHOUT SORTS	17,238			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,968		
NONPROCESSING RECORDS (Test, calibration, etc)		14		

2-SEC SORT DETECTORS

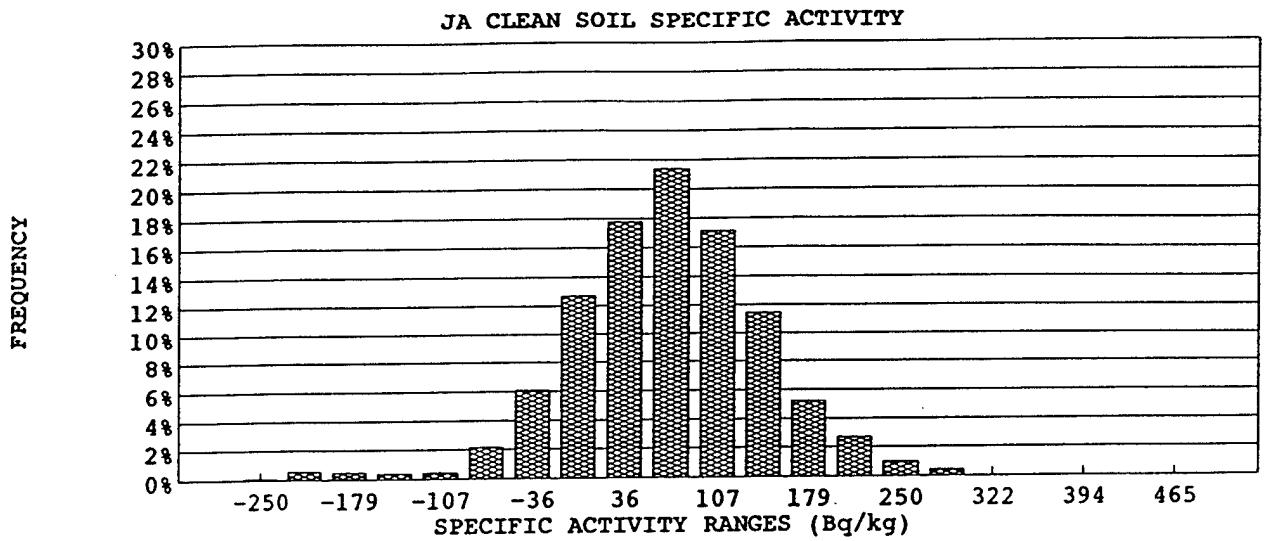
1 DET	169	76.1%	5 DET	0	0.0%
2 DET	44	19.8%	6 DET	0	0.0%
3 DET	7	3.2%	7 DET	0	0.0%
4 DET	2	0.9%	8 DET	0	0.0%

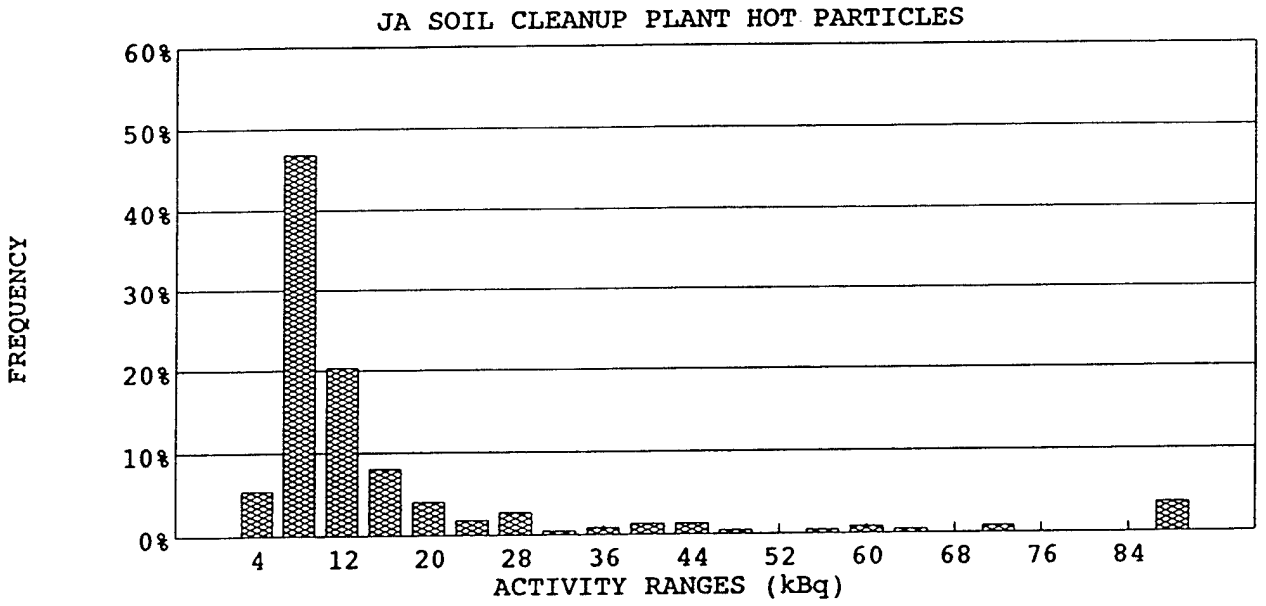
AVERAGE TIME BETWEEN 2-SEC SORTS 206.6 sec

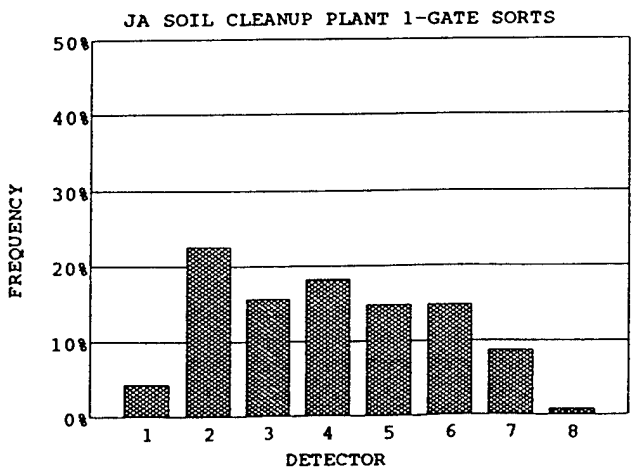
FREQUENCY DISTRIBUTIONS

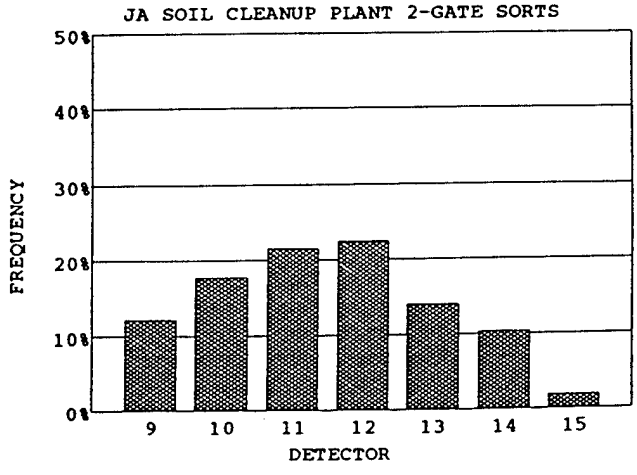
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	5	4.3%	-14000	2	-250	0.1%	4	12	5.4%
2	26	22.6%	-12000	10	-215	0.6%	8	104	46.8%
3	18	15.7%	-10000	9	-179	0.5%	12	45	20.3%
4	21	18.3%	-8000	7	-143	0.4%	16	18	8.1%
5	17	14.8%	-6000	8	-107	0.5%	20	9	4.1%
6	17	14.8%	-4000	38	-72	2.2%	24	4	1.8%
7	10	8.7%	-2000	107	-36	6.1%	28	6	2.7%
8	1	0.9%	0	223	0	12.7%	32	1	0.5%
TOTAL	115		2000	313	36	17.8%	36	2	0.9%
			4000	376	72	21.4%	40	3	1.4%
2-GATE SORTS			6000	301	107	17.1%	44	3	1.4%
DET	SORTS	FREQ%	8000	201	143	11.4%	48	1	0.5%
9	13	12.1%	10000	91	179	5.2%	52	0	0.0%
10	19	17.8%	12000	48	215	2.7%	56	1	0.5%
11	23	21.5%	14000	18	250	1.0%	60	2	0.9%
12	24	22.4%	16000	8	286	0.5%	64	1	0.5%
13	15	14.0%	18000	0	322	0.0%	68	0	0.0%
14	11	10.3%	20000	0	358	0.0%	72	2	0.9%
15	2	1.9%	22000	0	394	0.0%	76	0	0.0%
TOTAL	107		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	8	3.6%
			TOTAL	1,760			TOTAL	222	

EVENT TYPES HPE 230 MPE 546 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 19–Feb–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	6.8 hr	6.8 hr	0.0 hr	0.0 hr	13.5 hr
SORTER START–UP	06:30	06:30	NA	NA	
START SOIL PROCESSING	06:53	06:53	NA	NA	
TIME REQUIRED TO START–UP	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
SORTER SHUT–DOWN	13:15	13:15	NA	NA	
END SOIL PROCESSING	12:55	12:56	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	6.0 hr	6.1 hr	0.0 hr	0.0 hr	12.1 hr
DOWN–TIME	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	3.7 hr	3.7 hr	10.0 hr	10.0 hr	27.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					89.6%
PRODUCTIVTY					28.8%

PRODUCTIVITY

Date	19–Feb–94
Contract day (from 6 Sep)	132
Current Contract week	22
Soil production for Day	122 MT
Cumlative Soil Production for Week	1,122 MT
Total Soil production for contract	
Since 6 Sep 93	33,168 MT
Since 6 Aug 93	34,759 MT
Total Soil production for project	61,045 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	1,786 hr
Excused delay days (plant–days)	45 days
Excused delay months (plant–month)	1.72 months
Percent of contract completed	34.8%
Tons Ahead or Behind Schedule	1,708 MT
Days ahead or behind schedule	5 days

MT = metric tons

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SORTER 1

19-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	60.8 tons	60.8 tons
MAXIMUM/SORT	2.8 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.0 yd³	48.2 yd³	48.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	400 kBq	234 kBq	3,351 kBq
MAXIMUM/SORT	72 kBq	46 kBq	13 kBq
MINIMUM/SORT	4 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		3,719 Bq/kg	55 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,088		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		0			
NONE (AD=0 & MD=0 & MND>0)		1,015		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		73			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			10,880		
2-SEC RECORDS WITH SORTS		25			
2-SEC RECORDS WITHOUT SORTS		10,855			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,113		
NONPROCESSING RECORDS (Test, calibration, etc)			6		

2-SEC SORT DETECTORS

1 DET	17	68.0%	5 DET	0	0.0%
2 DET	6	24.0%	6 DET	0	0.0%
3 DET	1	4.0%	7 DET	0	0.0%
4 DET	1	4.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 1280.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

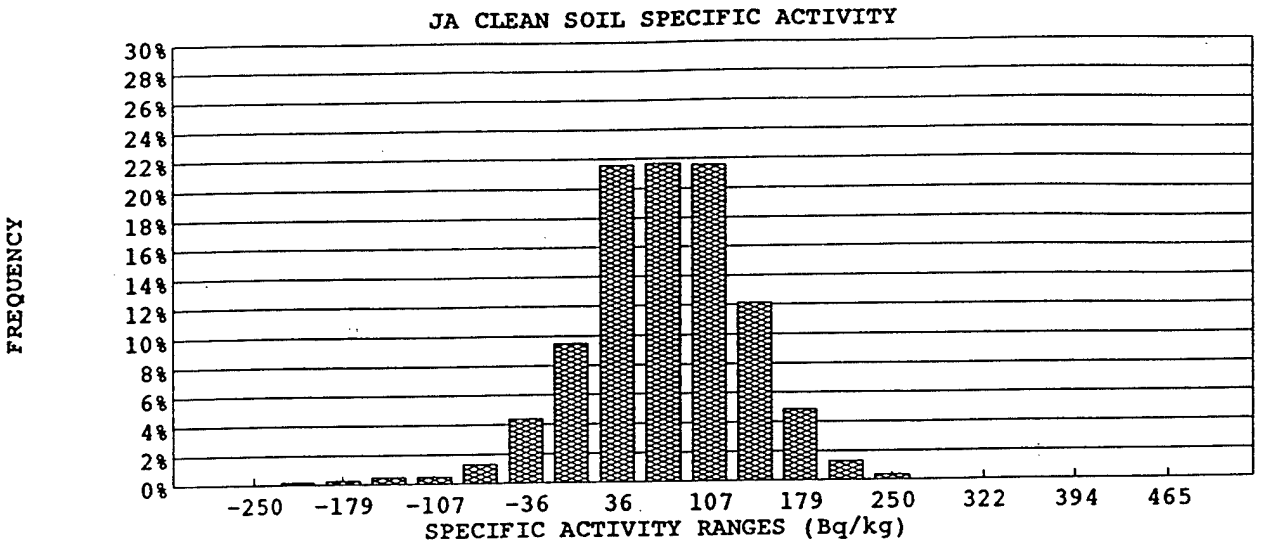
DET	SORTS	FREQ%
1	1	8.3%
2	0	0.0%
3	2	16.7%
4	2	16.7%
5	2	16.7%
6	4	33.3%
7	1	8.3%
8	0	0.0%
TOTAL	12	

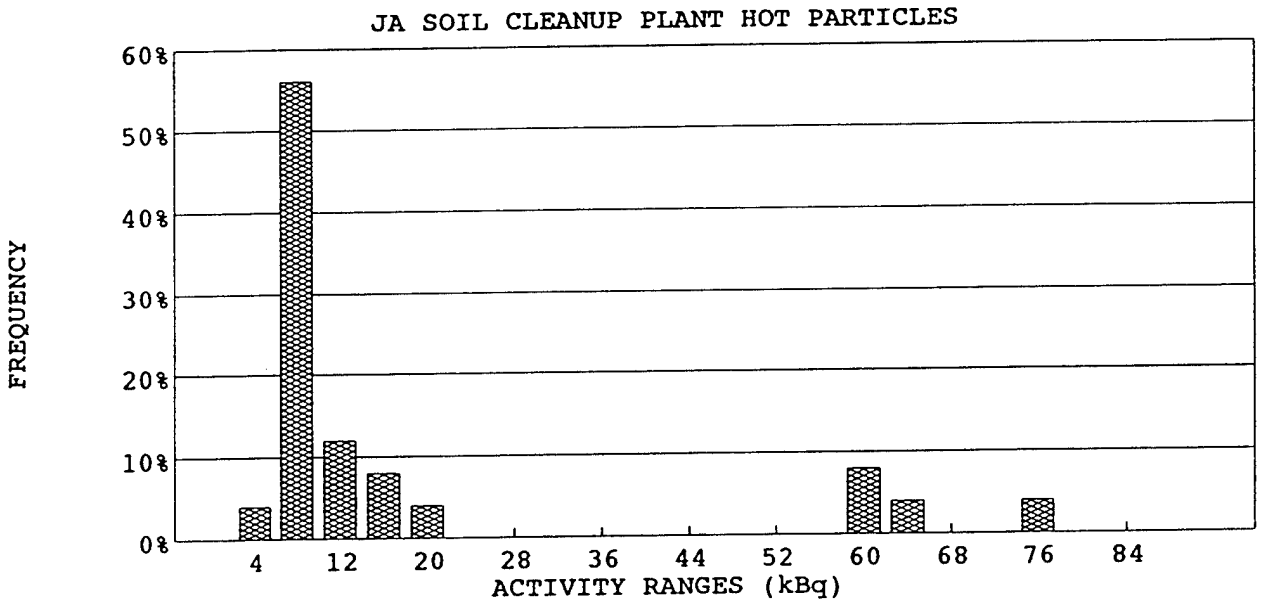
2-GATE SORTS

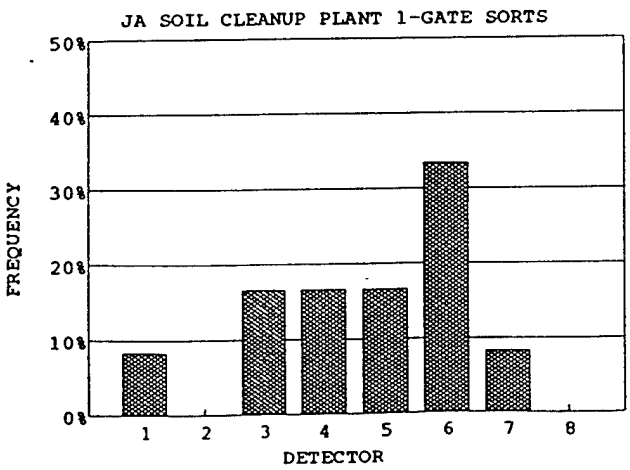
DET	SORTS	FREQ%
9	1	7.7%
10	1	7.7%
11	3	23.1%
12	2	15.4%
13	5	38.5%
14	1	7.7%
15	0	0.0%
TOTAL	13	

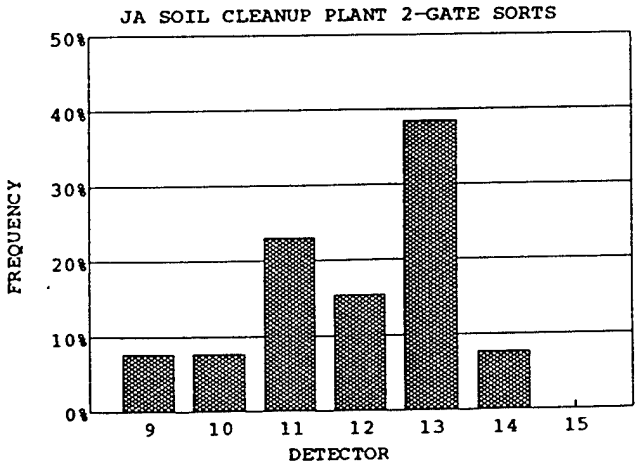
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	1	4.0%
-12000	2	-215	0.2%	8	14	56.0%
-10000	3	-179	0.3%	12	3	12.0%
-8000	5	-143	0.5%	16	2	8.0%
-6000	5	-107	0.5%	20	1	4.0%
-4000	14	-72	1.3%	24	0	0.0%
-2000	48	-36	4.4%	28	0	0.0%
0	104	0	9.5%	32	0	0.0%
2000	236	36	21.6%	36	0	0.0%
4000	237	72	21.7%	40	0	0.0%
6000	236	107	21.6%	44	0	0.0%
8000	133	143	12.2%	48	0	0.0%
10000	53	179	4.8%	52	0	0.0%
12000	14	215	1.3%	56	0	0.0%
14000	4	250	0.4%	60	2	8.0%
16000	0	286	0.0%	64	1	4.0%
18000	0	322	0.0%	68	0	0.0%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	1	4.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	0	0.0%
TOTAL	1,094			TOTAL	25	

EVENT TYPES HPE 25 MPE 65 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

19-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	60.7 tons	60.9 tons
MAXIMUM/SORT	2.8 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	53.1 kg	
VOLUME IN-GROUND	0.1 yd³	48.1 yd³	48.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	333 kBq	393 kBq	2,588 kBq
MAXIMUM/SORT	68 kBq	42 kBq	16 kBq
MINIMUM/SORT	2 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		2,586 Bq/kg	43 Bq/kg

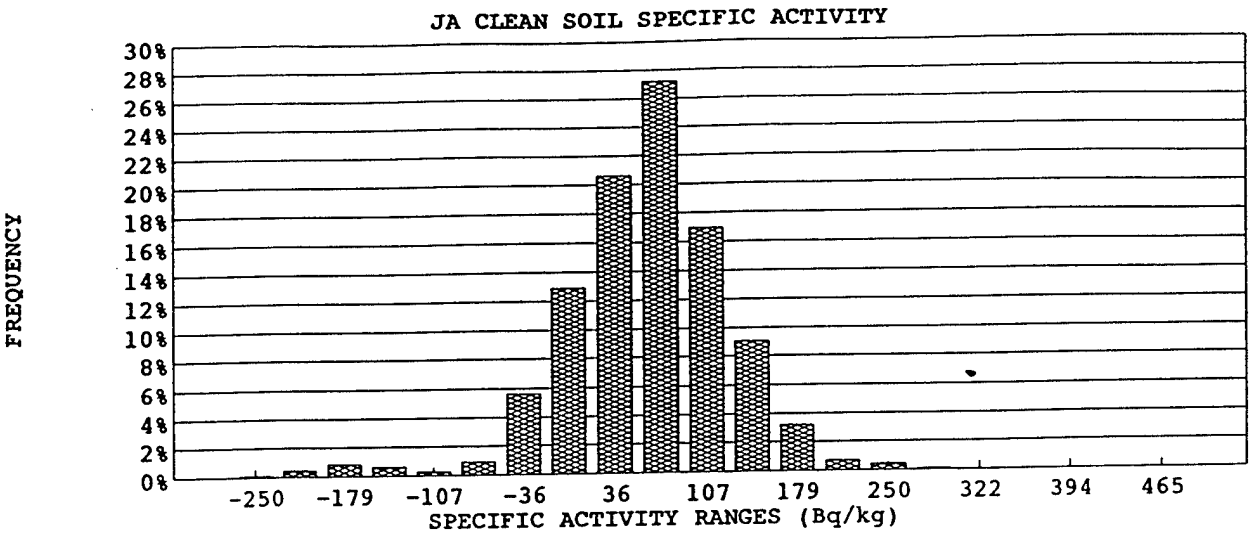
SORTS

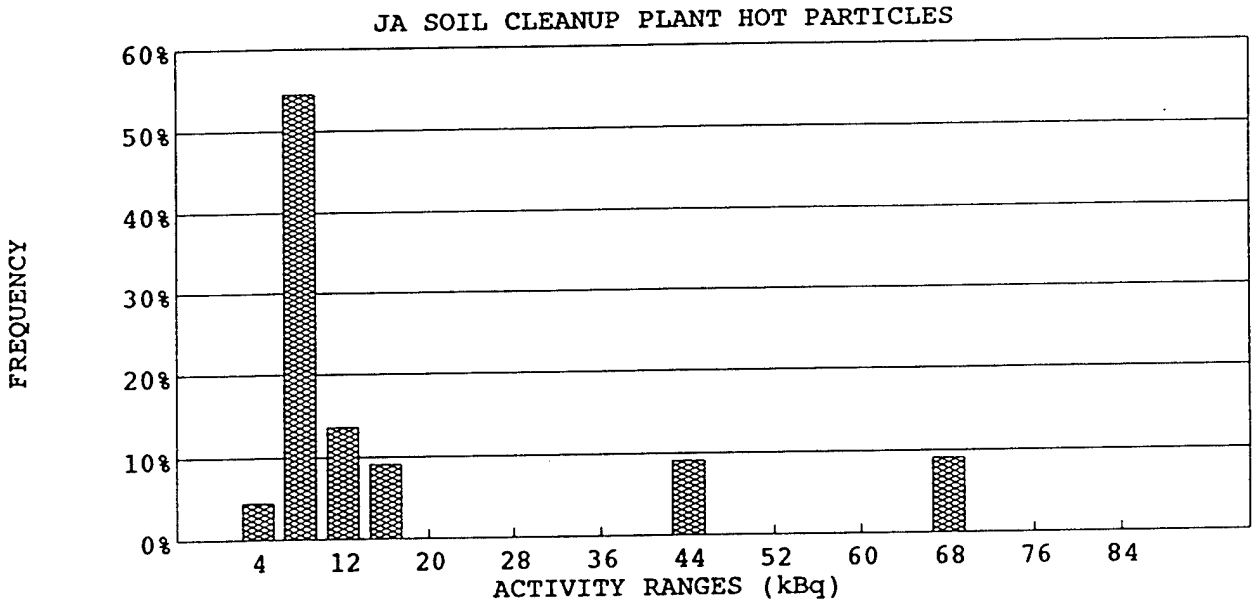
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,089		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			901			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			188			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				10,890		
2-SEC RECORDS WITH SORTS			22			
2-SEC RECORDS WITHOUT SORTS			10,868			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,111		
NONPROCESSING RECORDS (Test, calibration, etc)				3		
2-SEC SORT DETECTORS						
1 DET	16	72.7%	5 DET	0	0.0%	
2 DET	5	22.7%	6 DET	0	0.0%	
3 DET	1	4.5%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			1361.3 sec			

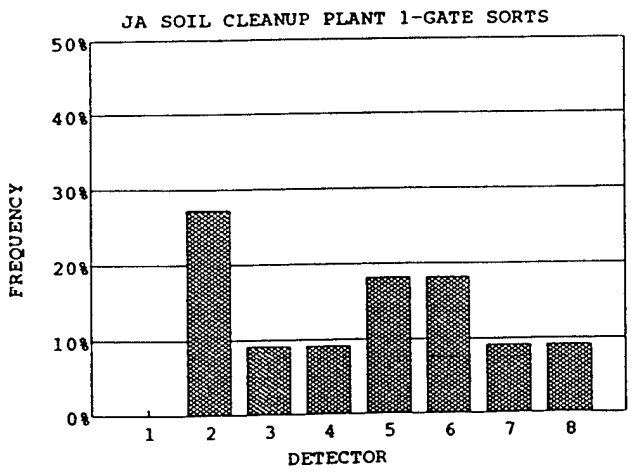
FREQUENCY DISTRIBUTIONS

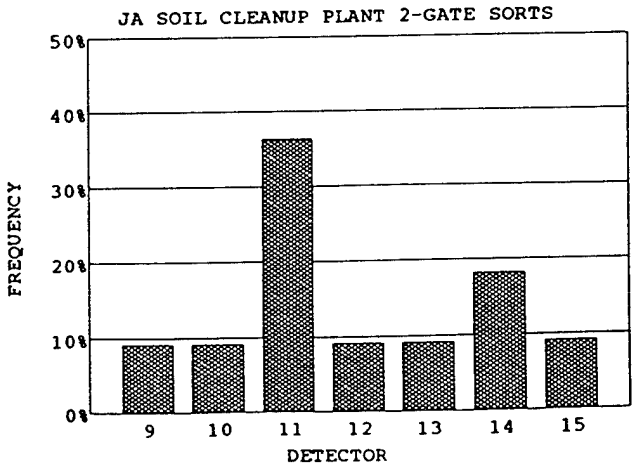
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	0	0.0%	-14000	1	-250	0.1%	4	1	4.5%
2	3	27.3%	-12000	5	-215	0.5%	8	12	54.5%
3	1	9.1%	-10000	9	-179	0.8%	12	3	13.6%
4	1	9.1%	-8000	7	-143	0.6%	16	2	9.1%
5	2	18.2%	-6000	3	-107	0.3%	20	0	0.0%
6	2	18.2%	-4000	10	-72	0.9%	24	0	0.0%
7	1	9.1%	-2000	61	-36	5.6%	28	0	0.0%
8	1	9.1%	0	141	0	12.9%	32	0	0.0%
TOTAL	11		2000	225	36	20.6%	36	0	0.0%
			4000	297	72	27.2%	40	0	0.0%
2-GATE SORTS			6000	185	107	16.9%	44	2	9.1%
DET	SORTS	FREQ%	8000	99	143	9.1%	48	0	0.0%
9	1	9.1%	10000	35	179	3.2%	52	0	0.0%
10	1	9.1%	12000	8	215	0.7%	56	0	0.0%
11	4	36.4%	14000	5	250	0.5%	60	0	0.0%
12	1	9.1%	16000	1	286	0.1%	64	0	0.0%
13	1	9.1%	18000	0	322	0.0%	68	2	9.1%
14	2	18.2%	20000	0	358	0.0%	72	0	0.0%
15	1	9.1%	22000	0	394	0.0%	76	0	0.0%
TOTAL	11		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	0	0.0%
			TOTAL	1,092			TOTAL	22	

EVENT TYPES	HPE	24	MPE	193	DISE	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 21–Feb–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	21–Feb–94
Contract day (from 6 Sep)	133
Current Contract week	23
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	33,168 MT
Since 6 Aug 93	34,759 MT
Total Soil production for project	61,045 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	1,826 hr
Excused delay days (plant–days)	46 days
Excused delay months (plant–month)	1.76 months
Percent of contract completed	34.8%
Tons Ahead or Behind Schedule	1,708 MT
Days ahead or behind schedule	5 days

MT = metric tons

WORK HISTORY – JA SOIL CLEANUP PLANT 22–Feb–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM	
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	22–Feb–94
Contract day (from 6 Sep)	134
Current Contract week	23
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	33,168 MT
Since 6 Aug 93	34,759 MT
Total Soil production for project	61,045 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	1,866 hr
Excused delay days (plant–days)	47 days
Excused delay months (plant–month)	1.79 months
Percent of contract completed	34.8%
Tons Ahead or Behind Schedule	1,708 MT
Days ahead or behind schedule	5 days

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 23–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	23–Feb–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	135	Excused delays for contract (sorter–hrs)	1,906 hr
Current Contract week	23	Excused delay days (plant–days)	48 days
		Excused delay months (plant–month)	1.83 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	34.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,708 MT
Since 6 Sep 93	33,168 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	34,759 MT		
Total Soil production for project	61,045 MT		

MT = metric tons

WORK HISTORY – JA SOIL CLEANUP PLANT 24–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	24–Feb–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	136	Excused delays for contract (sorter–hrs)	1,946 hr
Current Contract week	23	Excused delay days (plant–days)	49 days
		Excused delay months (plant–month)	1.87 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	34.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,708 MT
Since 6 Sep 93	33,168 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	34,759 MT		
Total Soil production for project	61,045 MT		

MT = metric tons

File Report1 Printed on 26-Feb-94 at 08:24:18 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 25–Feb–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM	
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	25–Feb–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	137	Excused delays for contract (sorter–hrs)	1,986 hr
Current Contract week	23	Excused delay days (plant–days)	50 days
		Excused delay months (plant–month)	1.91 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	34.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,708 MT
Since 6 Sep 93	33,168 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	34,759 MT		
Total Soil production for project	61,045 MT		

MT = metric tons

File Report1 Printed on 26-Feb-94 at 08:25:52 AM

ADJUSTED COPY

WORK HISTORY – JA SOIL CLEANUP PLANT 26-Feb-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.0 hr	10.0 hr	0.0 hr	0.0 hr	20.0 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:27	06:26	NA	NA	
TIME REQUIRED TO START-UP	0.5 hr	0.4 hr	0.0 hr	0.0 hr	0.9 hr
SORTER SHUT-DOWN	16:00	16:00	NA	NA	
END SOIL PROCESSING	15:25	15:27	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.6 hr	0.5 hr	0.0 hr	0.0 hr	1.1 hr
ACTUAL PROCESS HOURS	8.3 hr	8.4 hr	0.0 hr	0.0 hr	16.6 hr
DOWN-TIME	1.8 hr	1.6 hr	0.0 hr	0.0 hr	3.4 hr
SYSTEM PAUSE	0.8 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SORTER NONAVAILABLE TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					83.2%
PRODUCTIVTY					39.6%

PRODUCTIVITY

Date	26-Feb-94
Contract day (from 6 Sep)	138
Current Contract week	23
Soil production for Day	166 MT
Cumlative Soil Production for Week	166 MT
Total Soil production for contract	
Since 6 Sep 93	33,334 MT
Since 6 Aug 93	34,925 MT
Total Soil production for project	61,211 MT

Excused Delays for day (sorter-hrs)	20 hr
Excused delays for contract (sorter-hrs)	2,006 hr
Excused delay days (plant-days)	50 days
Excused delay months (plant-month)	1.93 months
Percent of contract completed	34.9%
Tons Ahead or Behind Schedule	1,716 MT
Days ahead or behind schedule	5 days

MT = metric tons

File Report1 Printed on 28-Feb-94 at 10:22:26 AM

SORTER 1

26-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.4 tons	73.6 tons	83.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	7.5 yd³	58.3 yd³	65.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.7%		

ACTIVITY

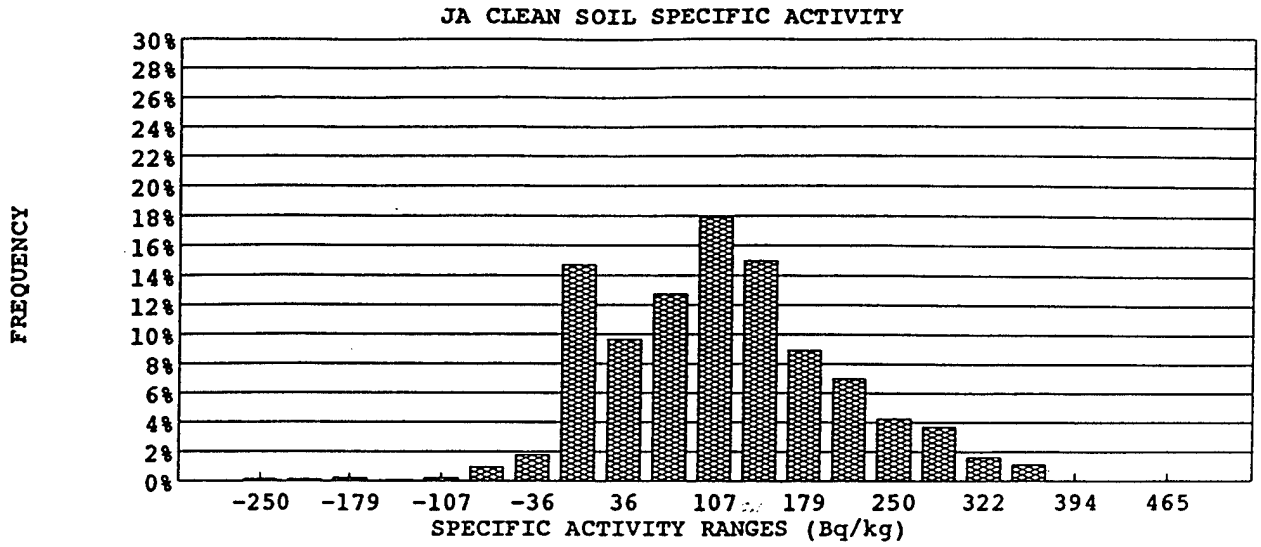
	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	28,916 kBq	15,502 kBq	8,010 kBq
MAXIMUM/SORT	3,730 kBq	2,094 kBq	20 kBq
MINIMUM/SORT	3 kBq	(1,605)Bq	-17 kBq
SPECIFIC ACTIVITY		1,646 Bq/kg	109 Bq/kg

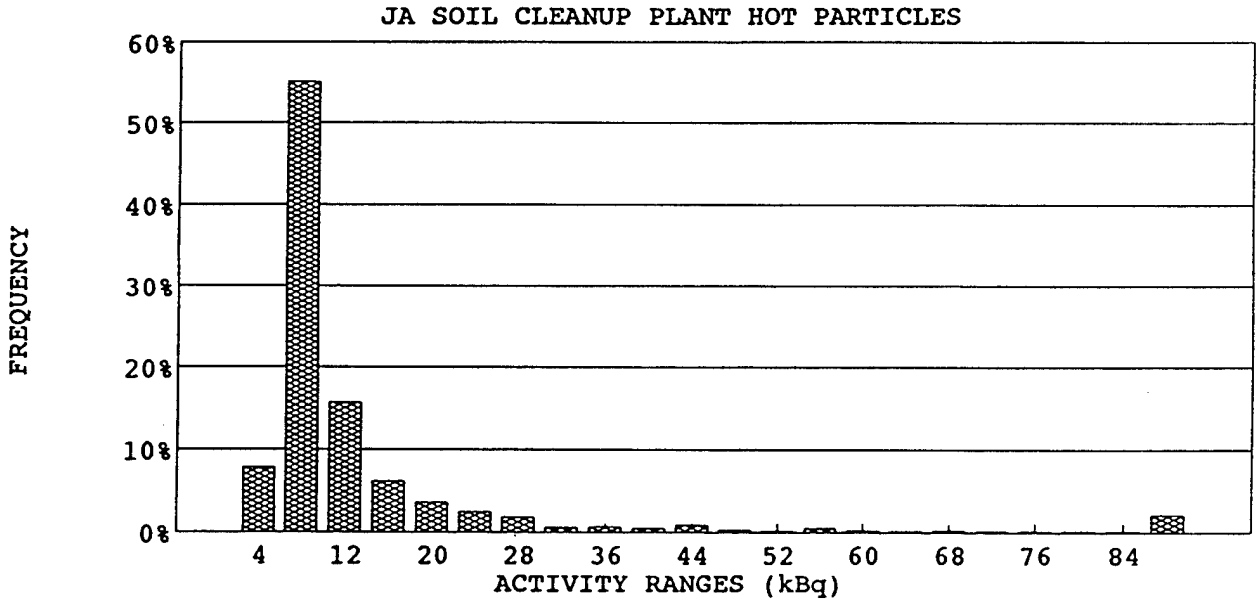
SORTS

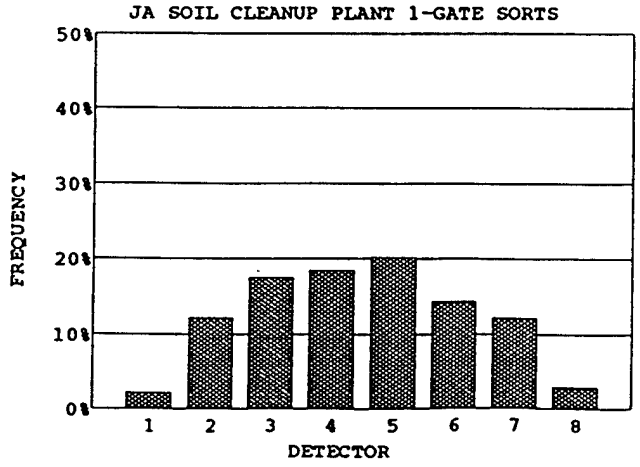
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,485		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			154		08:40	08:17
NONE (AD=0 & MD=0 & MND>0)			917		11:05	13:08
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			414			14:58
UNEXPLAINED RECORDS			0			15:02
0<AD<1kBq & MD>0			1			15:04
AD=0 & MD>0			0			15:14
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				14,850		
2-SEC RECORDS WITH SORTS			1,603			
2-SEC RECORDS WITHOUT SORTS			13,247			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,088		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2-SEC SORT DETECTORS						
1 DET	1,218	76.0%	5 DET	6	0.4%	
2 DET	310	19.3%	6 DET	0	0.0%	
3 DET	60	3.7%	7 DET	1	0.1%	
4 DET	9	0.6%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			24.4 sec			

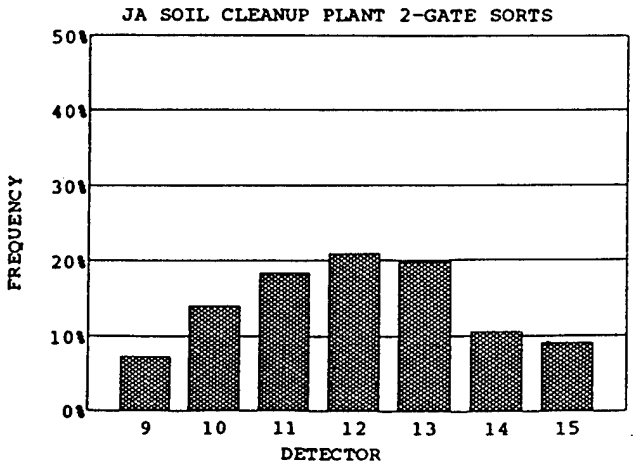
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	18	2.2%	-14000	2	-250	0.1%	4	126	7.9%
2	100	12.2%	-12000	2	-215	0.1%	8	883	55.1%
3	143	17.5%	-10000	3	-179	0.2%	12	252	15.7%
4	151	18.4%	-8000	1	-143	0.1%	16	99	6.2%
5	165	20.1%	-6000	3	-107	0.2%	20	58	3.6%
6	118	14.4%	-4000	14	-72	0.9%	24	39	2.4%
7	100	12.2%	-2000	26	-36	1.7%	28	30	1.9%
8	24	2.9%	0	219	0	14.7%	32	10	0.6%
TOTAL	819		2000	144	36	9.7%	36	11	0.7%
			4000	190	72	12.8%	40	9	0.6%
2-GATE SORTS			6000	266	107	17.9%	44	15	0.9%
DET	SORTS	FREQ%	8000	223	143	15.0%	48	5	0.3%
9	57	7.3%	10000	133	179	8.9%	52	2	0.1%
10	110	14.0%	12000	104	215	7.0%	56	9	0.6%
11	144	18.4%	14000	63	250	4.2%	60	4	0.2%
12	164	20.9%	16000	55	286	3.7%	64	3	0.2%
13	155	19.8%	18000	24	322	1.6%	68	4	0.2%
14	83	10.6%	20000	17	358	1.1%	72	3	0.2%
15	71	9.1%	22000	0	394	0.0%	76	2	0.1%
TOTAL	784		24000	0	429	0.0%	80	2	0.1%
			26000	0	465	0.0%	84	2	0.1%
			>28000	0	0	0.0%	>84	35	2.2%
			TOTAL	1,489			TOTAL	1,603	
EVENT TYPES		HPE	1,637	MPE	29	DISE	11812		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

26-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.0 tons	9.3E+09 tons	9E+09 tons
MAXIMUM/SORT	58.1 kg	9.3E+12 kg	
MINIMUM/SORT	0.7 kg	4.1E+01 kg	
VOLUME IN-GROUND	6.4 yd³	7.3E+09 yd³	7E+09 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	100.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	25,934 kBq	13,532 kBq	2,331 kBq
MAXIMUM/SORT	1,434 kBq	851 kBq	20 kBq
MINIMUM/SORT	2 kBq	(4,983)Bq	-23 kBq
SPECIFIC ACTIVITY		1,684 Bq/kg	0 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,509		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			128		06:59	08:17
NONE (AD=0 & MD=0 & MND>0)			937		08:38	14:58
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			563		08:39	15:02
UNEXPLAINED RECORDS			(119)		09:52	15:04
0<AD<1kBq & MD>0			5		10:44	15:14
AD=0 & MD>0			1		11:57	
AD<0 & MD >0			4		12:56	
2-SEC COUNT PERIODS				15,090	13:22	
2-SEC RECORDS WITH SORTS			1,634		15:14	
2-SEC RECORDS WITHOUT SORTS			13,456		15:27	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,143		
NONPROCESSING RECORDS (Test, calibration, etc)				4		

2-SEC SORT DETECTORS

1 DET	1,216	74.4%	5 DET	3	0.2%
2 DET	334	20.4%	6 DET	0	0.0%
3 DET	70	4.3%	7 DET	0	0.0%
4 DET	11	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 24.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	36	4.5%	-14000	10	-0	0.7%	4	228	14.0%
2	137	17.3%	-12000	6	-0	0.4%	8	863	52.8%
3	148	18.6%	-10000	7	-0	0.5%	12	219	13.4%
4	165	20.8%	-8000	12	-0	0.8%	16	75	4.6%
5	154	19.4%	-6000	33	-0	2.2%	20	60	3.7%
6	100	12.6%	-4000	98	-0	6.5%	24	26	1.6%
7	38	4.8%	-2000	186	-0	12.3%	28	26	1.6%
8	16	2.0%	0	329	0	21.7%	32	22	1.3%
TOTAL	794		2000	251	0	16.6%	36	19	1.2%
			4000	168	0	11.1%	40	14	0.9%
2-GATE DET	SORTS	FREQ%	6000	148	0	9.8%	44	7	0.4%
			8000	101	0	6.7%	48	7	0.4%
9	102	12.1%	10000	57	0	3.8%	52	8	0.5%
10	182	21.7%	12000	39	0	2.6%	56	4	0.2%
11	176	21.0%	14000	24	0	1.6%	60	8	0.5%
12	158	18.8%	16000	19	0	1.3%	64	4	0.2%
13	133	15.8%	18000	15	0	1.0%	68	4	0.2%
14	59	7.0%	20000	10	0	0.7%	72	2	0.1%
15	30	3.6%	22000	0	0	0.0%	76	4	0.2%
TOTAL	840		24000	0	0	0.0%	80	1	0.1%
			26000	0	0	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	32	2.0%
			TOTAL	1,513			TOTAL	1,634	

EVENT TYPES		HPE	1,733	MPE	29	DISE	10063

SORTER 2

26-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.0 tons	75.0 tons	83.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	40.5 kg	
VOLUME IN-GROUND	6.4 yd³	59.5 yd³	65.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	90.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	25,934 kBq	13,532 kBq	2,331 kBq
MAXIMUM/SORT	1,434 kBq	851 kBq	20 kBq
MINIMUM/SORT	2 kBq	(4,983)Bq	-23 kBq
SPECIFIC ACTIVITY		1,684 Bq/kg	31 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,509		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	128		06:59	08:17
NONE (AD=0 & MD=0 & MND>0)	937		08:38	14:58
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	563		08:39	15:02
UNEXPLAINED RECORDS	(119)		09:52	15:04
0<AD<1kBq & MD>0	5		10:44	15:14
AD=0 & MD>0	1		11:57	
AD<0 & MD >0	4		12:56	
2-SEC COUNT PERIODS		15,090	13:22	
2-SEC RECORDS WITH SORTS	1,634		15:14	
2-SEC RECORDS WITHOUT SORTS	13,456		15:27	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,143		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

1 DET	1,216	74.4%	5 DET	3	0.2%
2 DET	334	20.4%	6 DET	0	0.0%
3 DET	70	4.3%	7 DET	0	0.0%
4 DET	11	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 24.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	36	4.5%
2	137	17.3%
3	148	18.6%
4	165	20.8%
5	154	19.4%
6	100	12.6%
7	38	4.8%
8	16	2.0%
TOTAL	794	

2-GATE SORTS

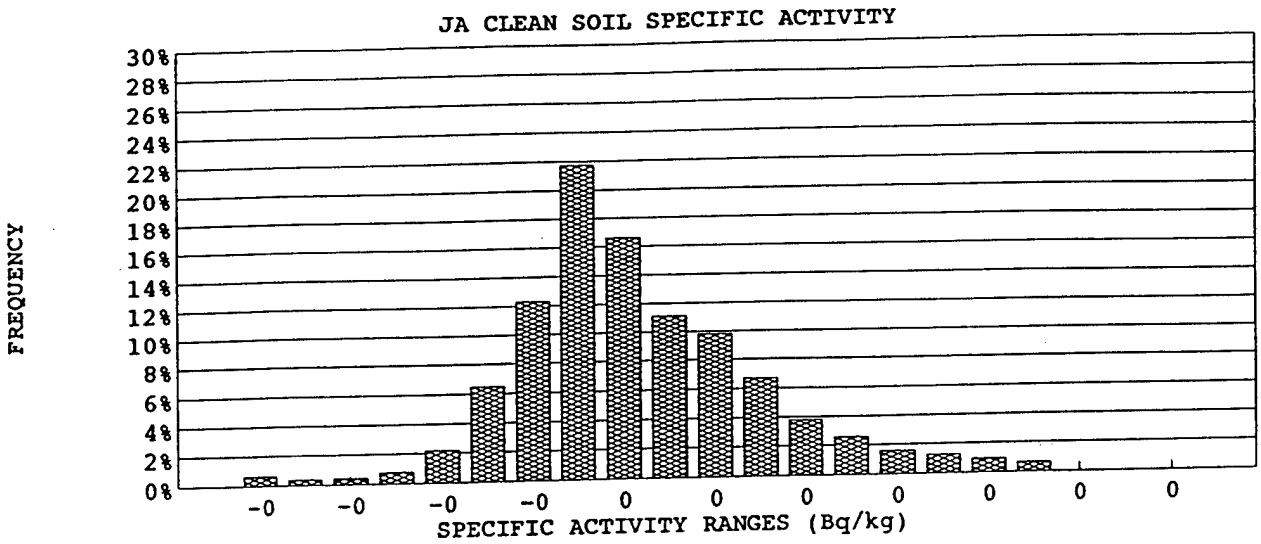
DET	SORTS	FREQ%
9	102	12.1%
10	182	21.7%
11	176	21.0%
12	158	18.8%
13	133	15.8%
14	59	7.0%
15	30	3.6%
TOTAL	840	

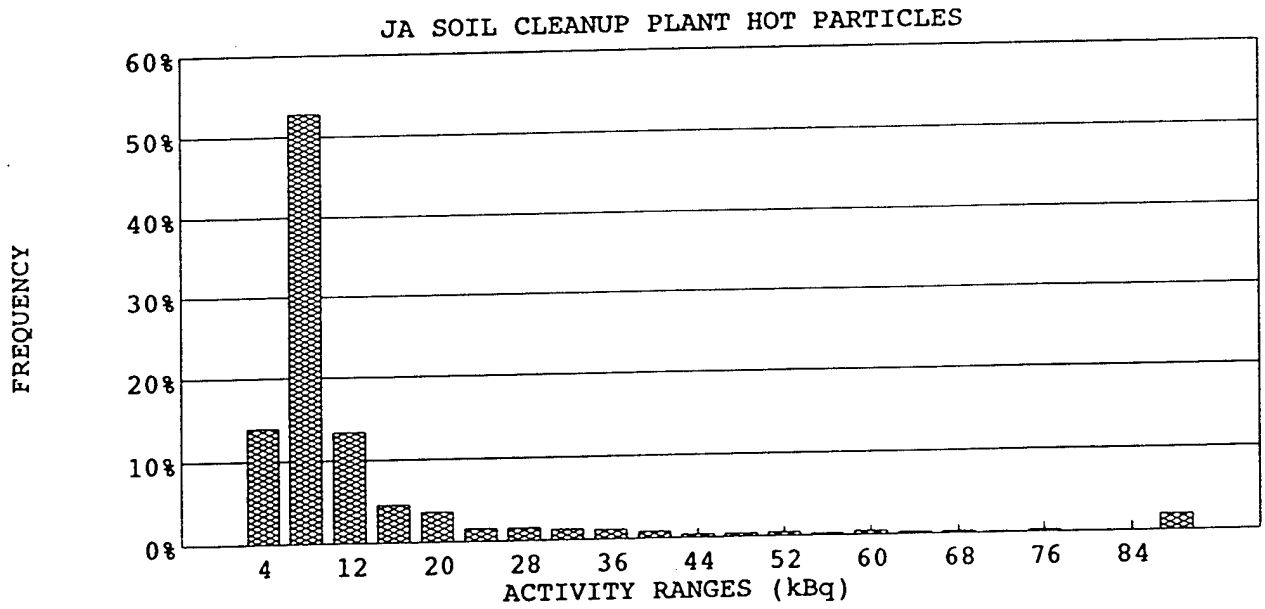
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	10	-250	0.7%	4	228	14.0%
-12000	6	-215	0.4%	8	863	52.8%
-10000	7	-179	0.5%	12	219	13.4%
-8000	12	-143	0.8%	16	75	4.6%
-6000	33	-107	2.2%	20	60	3.7%
-4000	98	-72	6.5%	24	26	1.6%
-2000	186	-36	12.3%	28	26	1.6%
0	329	0	21.7%	32	22	1.3%
2000	251	36	16.6%	36	19	1.2%
4000	168	72	11.1%	40	14	0.9%
6000	148	107	9.8%	44	7	0.4%
8000	101	143	6.7%	48	7	0.4%
10000	57	179	3.8%	52	8	0.5%
12000	39	215	2.6%	56	4	0.2%
14000	24	250	1.6%	60	8	0.5%
16000	19	286	1.3%	64	4	0.2%
18000	15	322	1.0%	68	4	0.2%
20000	10	358	0.7%	72	2	0.1%
22000	0	394	0.0%	76	4	0.2%
24000	0	429	0.0%	80	1	0.1%
26000	0	465	0.0%	84	1	0.1%
>28000	0	0	0.0%	>84	32	2.0%
TOTAL	1,513			TOTAL	1,634	

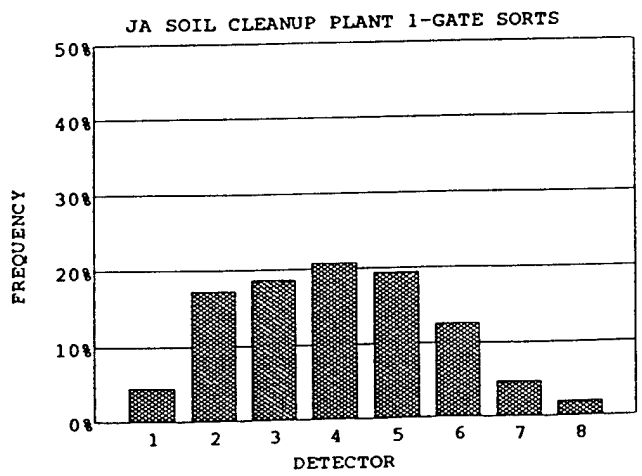
EVENT TYPES HPE 1,733 MPE 29 DISE 10063

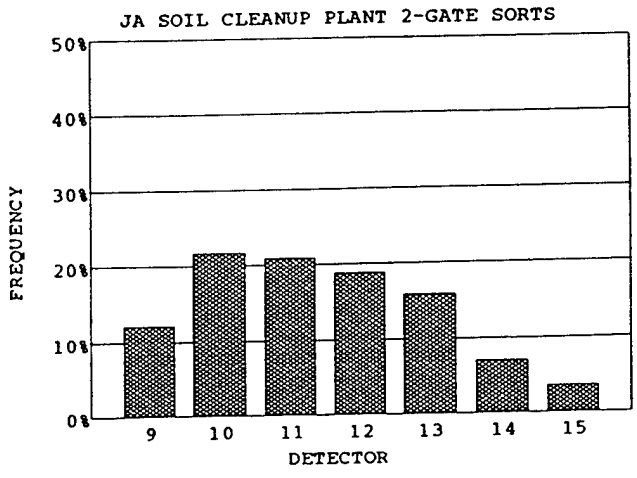
SORTER 2

26-Feb-94









WORK HISTORY – JA SOIL CLEANUP PLANT 28-Feb-94

WORK DAY START	05:50 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.7 hr	10.7 hr	10.7 hr	10.7 hr	42.7 hr
SORTER AVAILABLE HOURS	10.5 hr	10.5 hr	0.0 hr	0.0 hr	21.0 hr
SORTER START-UP	05:50	05:50	NA	NA	
START SOIL PROCESSING	06:24	06:25	NA	NA	
TIME REQUIRED TO START-UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SORTER SHUT-DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:00	16:00	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	9.6 hr	9.6 hr	0.0 hr	0.0 hr	19.1 hr
DOWN-TIME	0.9 hr	0.9 hr	0.0 hr	0.0 hr	1.9 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					91.1%
PRODUCTIVTY					44.9%

PRODUCTIVITY

Date	28-Feb-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	139	Excused delays for contract (sorter-hrs)	2,026 hr
Current Contract week	24	Excused delay days (plant-days)	51 days
		Excused delay months (plant-month)	1.95 months
Soil production for Day	193 MT		
Cumlative Soil Production for Week	193 MT	Percent of contract completed	35.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,750 MT
Since 6 Sep 93	33,526 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	35,117 MT		
Total Soil production for project	61,404 MT		

MT = metric tons

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SORTER 1

28-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.68 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	95.7 tons	96.2 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.4 yd³	75.9 yd³	76.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,511 kBq	3,425 kBq	6,551 kBq
MAXIMUM/SORT	335 kBq	181 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		7,090 Bq/kg	68 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,721		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,408		12:40	12:53
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	313		13:33	
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,210		
2-SEC RECORDS WITH SORTS	669			
2-SEC RECORDS WITHOUT SORTS	16,541			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,390		
NONPROCESSING RECORDS (Test, calibration, etc)		8		

2-SEC SORT DETECTORS

1 DET	488	72.9%	5 DET	1	0.1%
2 DET	145	21.7%	6 DET	0	0.0%
3 DET	29	4.3%	7 DET	0	0.0%
4 DET	6	0.9%	8 DET	0	0.0%

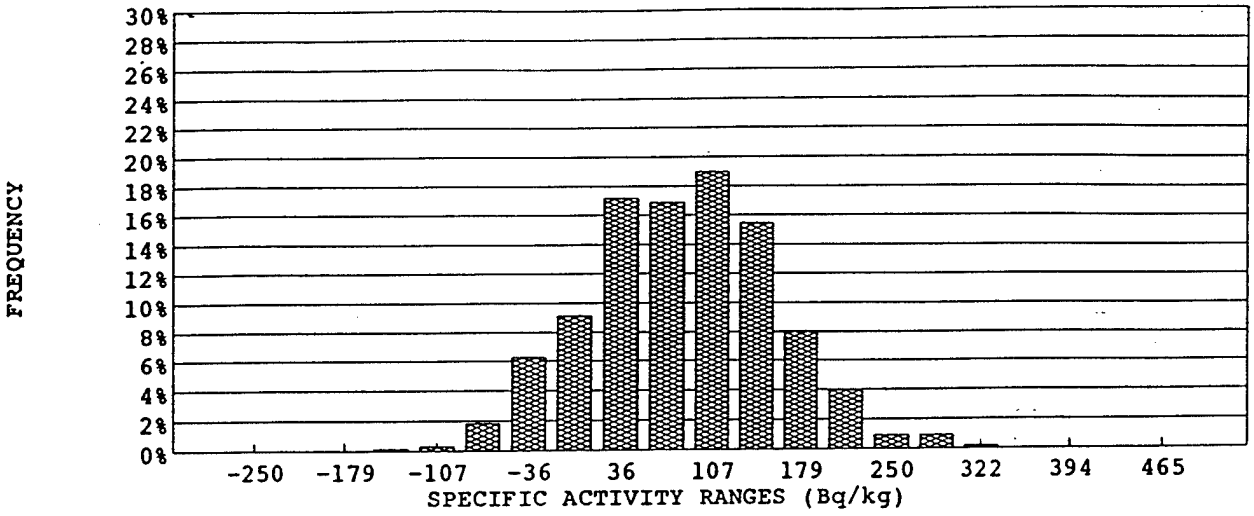
AVERAGE TIME BETWEEN 2-SEC SORTS 70.5 sec

FREQUENCY DISTRIBUTIONS

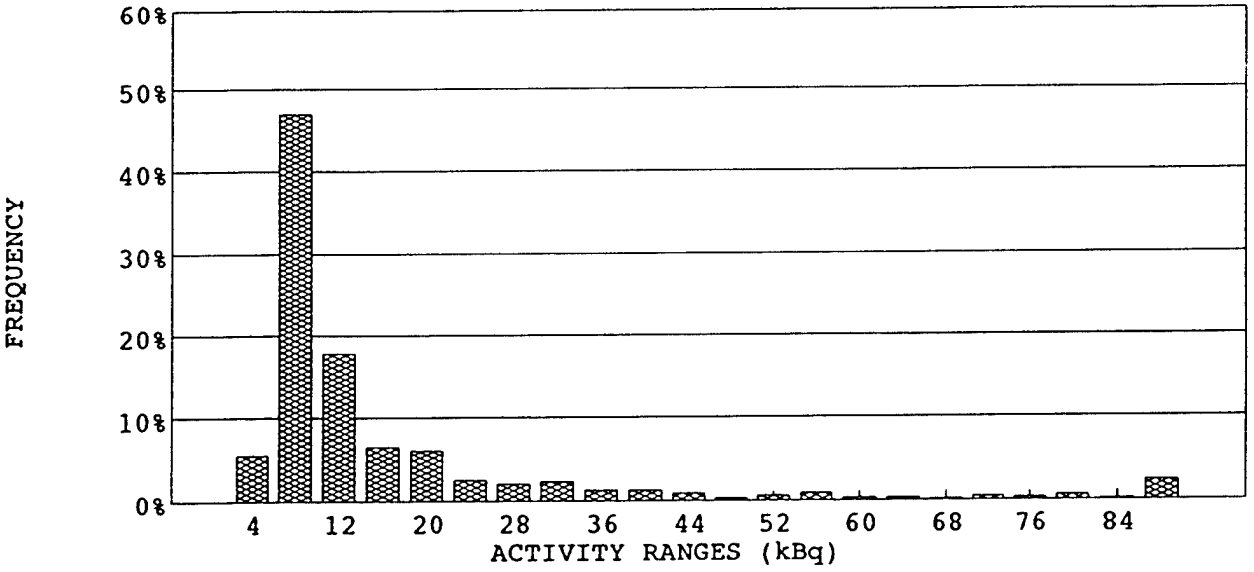
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	9	2.7%	-14000	0	-250	0.0%	4	37	5.5%
2	35	10.3%	-12000	0	-215	0.0%	8	314	46.9%
3	52	15.3%	-10000	0	-179	0.0%	12	119	17.8%
4	72	21.2%	-8000	2	-143	0.1%	16	44	6.6%
5	65	19.2%	-6000	5	-107	0.3%	20	41	6.1%
6	44	13.0%	-4000	31	-72	1.8%	24	17	2.5%
7	48	14.2%	-2000	108	-36	6.2%	28	14	2.1%
8	14	4.1%	0	157	0	9.1%	32	16	2.4%
TOTAL	339		2000	297	36	17.2%	36	9	1.3%
			4000	292	72	16.9%	40	9	1.3%
2-GATE DET	SORTS	FREQ%	6000	328	107	19.0%	44	6	0.9%
			8000	267	143	15.4%	48	2	0.3%
9	25	7.6%	10000	139	179	8.0%	52	4	0.6%
10	44	13.3%	12000	68	215	3.9%	56	6	0.9%
11	48	14.5%	14000	16	250	0.9%	60	2	0.3%
12	67	20.3%	16000	16	286	0.9%	64	2	0.3%
13	69	20.9%	18000	3	322	0.2%	68	1	0.1%
14	49	14.8%	20000	0	358	0.0%	72	3	0.4%
15	28	8.5%	22000	0	394	0.0%	76	2	0.3%
TOTAL	330		24000	0	429	0.0%	80	4	0.6%
			26000	0	465	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	16	2.4%
			TOTAL	1,729			TOTAL	669	

EVENT TYPES HPE 678 MPE 12 DISE 0

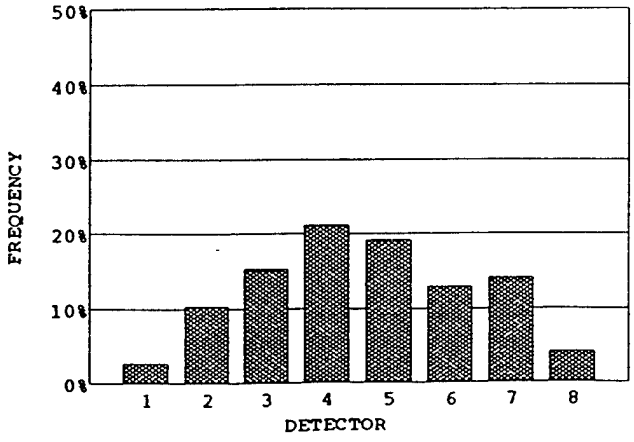
JA CLEAN SOIL SPECIFIC ACTIVITY



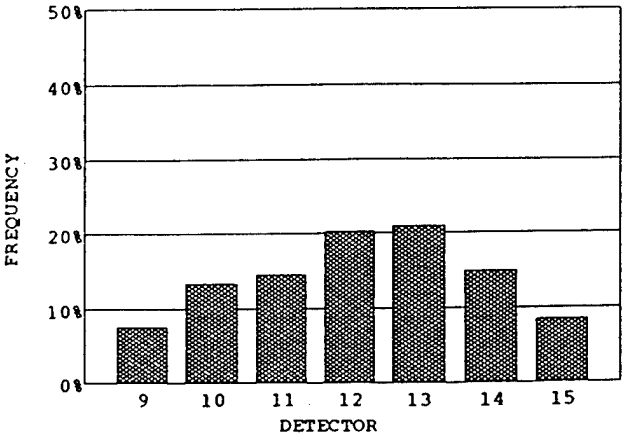
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

28-Feb-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	95.9 tons	96.4 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.4 yd³	76.0 yd³	76.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	13,534 kBq	4,109 kBq	6,246 kBq
MAXIMUM/SORT	2,452 kBq	1,271 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		8,131 Bq/kg	65 Bq/kg

SORTS

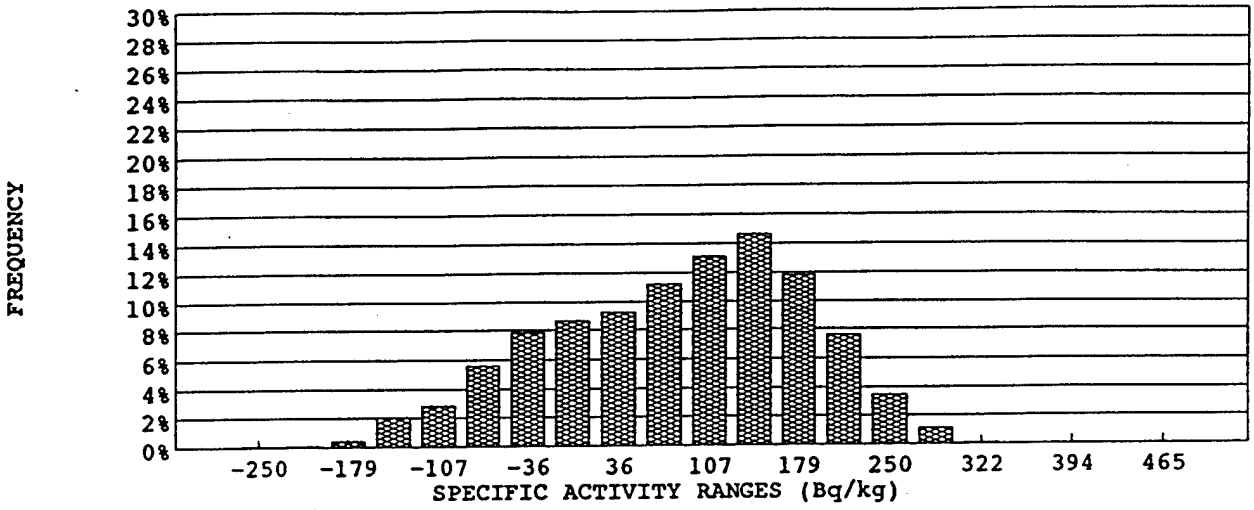
						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,724		
ALL 80 ELEMENTS SORT (MD>0&MND=0)				1		None	None
NONE (AD=0 & MD=0 & MND>0)				1,438			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)				285			
UNEXPLAINED RECORDS				0			
0<AD<1kBq & MD>0				0			
AD=0 & MD>0				0			
AD<0 & MD >0				0			
2-SEC COUNT PERIODS					17,240		
2-SEC RECORDS WITH SORTS				622			
2-SEC RECORDS WITHOUT SORTS				16,618			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					2,346		
NONPROCESSING RECORDS (Test, calibration, etc)					6		
2-SEC SORT DETECTORS							
1 DET	461	74.1%	5 DET		1	0.2%	
2 DET	132	21.2%	6 DET		0	0.0%	
3 DET	25	4.0%	7 DET		0	0.0%	
4 DET	3	0.5%	8 DET		0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			74.8 sec				

FREQUENCY DISTRIBUTIONS

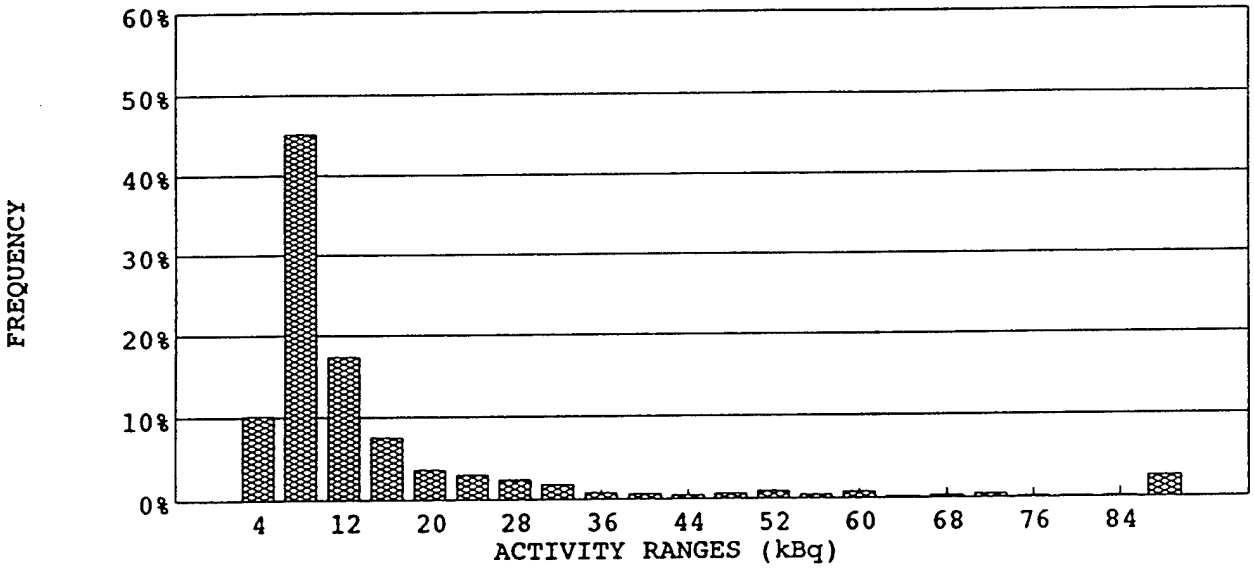
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	15	4.9%	-14000	1	-250	0.1%	4	63	10.1%
2	56	18.2%	-12000	2	-215	0.1%	8	281	45.2%
3	62	20.2%	-10000	8	-179	0.5%	12	108	17.4%
4	53	17.3%	-8000	36	-143	2.1%	16	47	7.6%
5	57	18.6%	-6000	49	-107	2.8%	20	23	3.7%
6	38	12.4%	-4000	97	-72	5.6%	24	19	3.1%
7	23	7.5%	-2000	136	-36	7.9%	28	15	2.4%
8	3	1.0%	0	150	0	8.7%	32	11	1.8%
TOTAL	307		2000	160	36	9.2%	36	5	0.8%
			4000	194	72	11.2%	40	4	0.6%
2-GATE SORTS			6000	227	107	13.1%	44	3	0.5%
DET	SORTS	FREQ%	8000	253	143	14.6%	48	4	0.6%
9	45	14.3%	10000	204	179	11.8%	52	6	1.0%
10	59	18.7%	12000	131	215	7.6%	56	3	0.5%
11	59	18.7%	14000	60	250	3.5%	60	5	0.8%
12	57	18.1%	16000	20	286	1.2%	64	1	0.2%
13	45	14.3%	18000	2	322	0.1%	68	2	0.3%
14	34	10.8%	20000	0	358	0.0%	72	3	0.5%
15	16	5.1%	22000	0	394	0.0%	76	1	0.2%
TOTAL	315		24000	0	429	0.0%	80	1	0.2%
			26000	0	465	0.0%	84	1	0.2%
			>28000	0	0	0.0%	>84	16	2.6%
			TOTAL	1,730			TOTAL	622	

EVENT TYPES	HPE	632	MPE	11	DISE	79

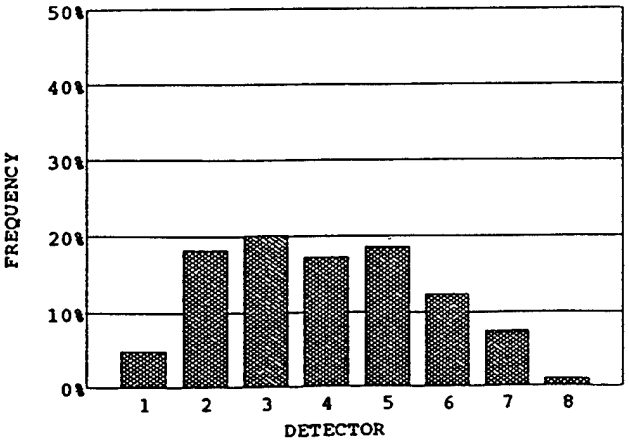
JA CLEAN SOIL SPECIFIC ACTIVITY



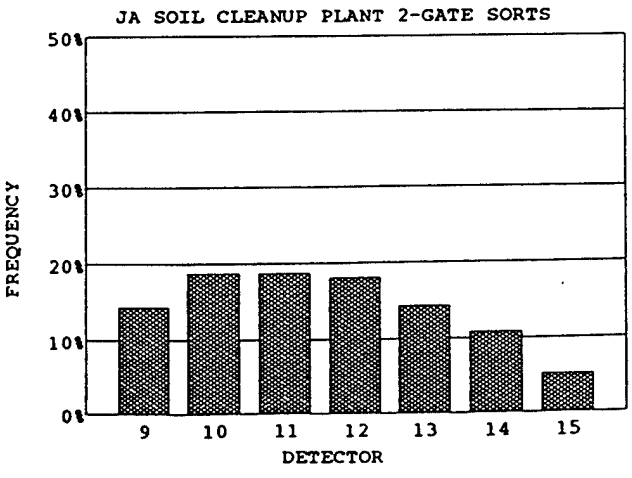
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



WORK HISTORY – JA SOIL CLEANUP PLANT 01-Mar-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:17	06:17	NA	NA	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:53	15:52	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	9.5 hr	9.6 hr	0.0 hr	0.0 hr	19.1 hr
DOWN-TIME	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SYSTEM PAUSE	0.1 hr	0.0 hr	0.0 hr	0.0 hr	0.1 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					93.3%
PRODUCTIVTY					45.5%

PRODUCTIVITY

Date	01-Mar-94
Contract day (from 6 Sep)	140
Current Contract week	24
Soil production for Day	192 MT
Cumlative Soil Production for Week	385 MT
Total Soil production for contract	
Since 6 Sep 93	33,719 MT
Since 6 Aug 93	35,310 MT
Total Soil production for project	61,596 MT

Excused Delays for day (sorter-hrs)	20 hr
Excused delays for contract (sorter-hrs)	2,046 hr
Excused delay days (plant-days)	51 days
Excused delay months (plant-month)	1.97 months
Percent of contract completed	35.3%
Tons Ahead or Behind Schedule	1,784 MT
Days ahead or behind schedule	6 days

MT = metric tons

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SORTER 1

01-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.0 tons	95.0 tons	96.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.8 yd³	75.3 yd³	76.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	19,127 kBq	6,166 kBq	10,507 kBq
MAXIMUM/SORT	1,223 kBq	730 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		6,044 Bq/kg	111 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,717		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			7		07:21	06:40
NONE (AD=0 & MD=0 & MND>0)			1,324		08:12	15:26
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			386		09:08	15:43
UNEXPLAINED RECORDS			0		09:46	
0<AD<1kBq & MD>0			6		14:28	
AD=0 & MD>0			1		15:21	
AD<0 & MD >0			0		15:27	
2-SEC COUNT PERIODS				17,170		
2-SEC RECORDS WITH SORTS			855			
2-SEC RECORDS WITHOUT SORTS			16,315			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,572		
NONPROCESSING RECORDS (Test, calibration, etc)				6		
2-SEC SORT DETECTORS						
1 DET	618	72.3%	5 DET	0	0.0%	
2 DET	202	23.6%	6 DET	0	0.0%	
3 DET	32	3.7%	7 DET	0	0.0%	
4 DET	3	0.4%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			55.6 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	13	3.1%
2	55	12.9%
3	57	13.4%
4	71	16.7%
5	91	21.4%
6	69	16.2%
7	59	13.9%
8	10	2.4%
TOTAL	425	

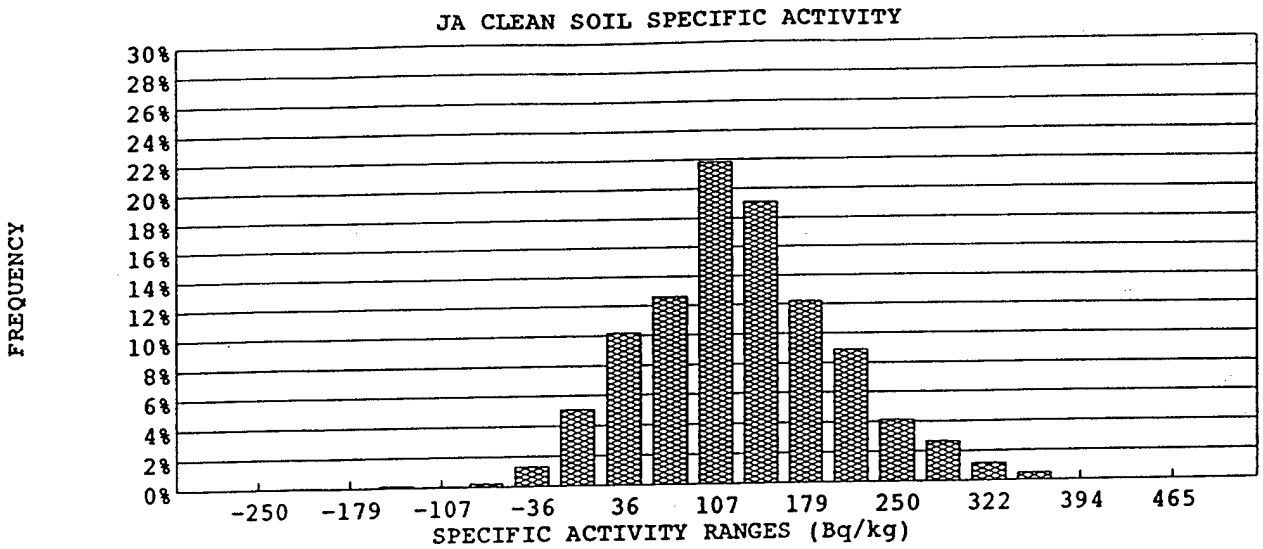
2-GATE SORTS DET	SORTS	FREQ%
9	46	10.7%
10	60	14.0%
11	65	15.1%
12	80	18.6%
13	84	19.5%
14	54	12.6%
15	41	9.5%
TOTAL	430	

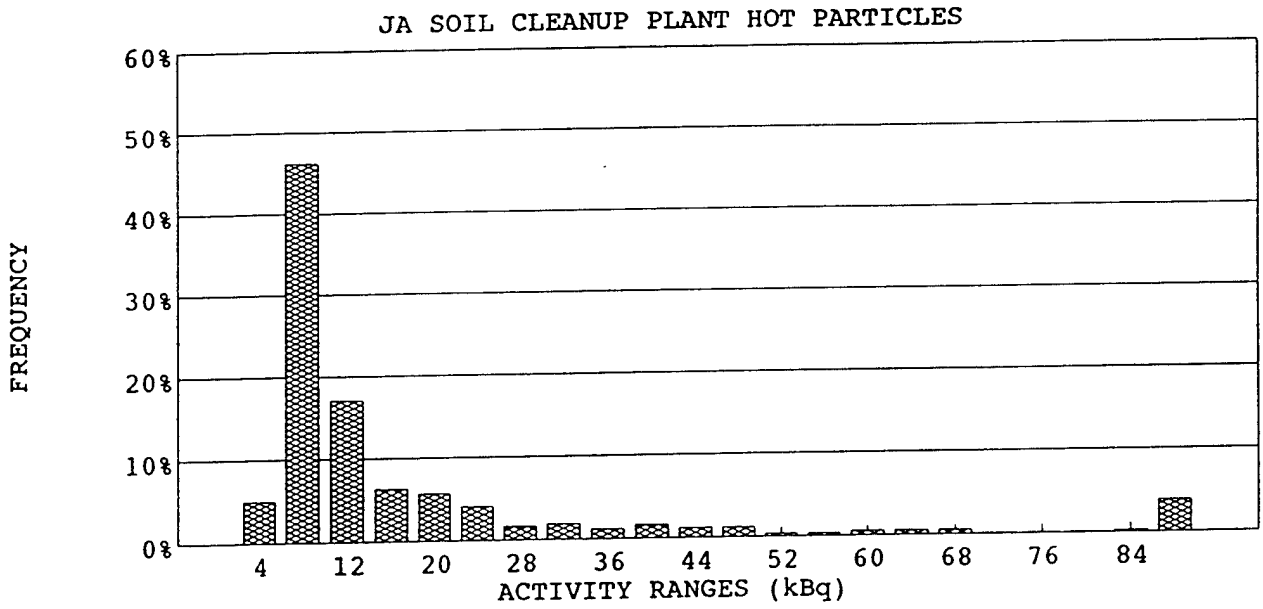
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	43	5.0%
-12000	1	-215	0.1%	8	395	46.2%
-10000	0	-179	0.0%	12	146	17.1%
-8000	2	-143	0.1%	16	54	6.3%
-6000	1	-107	0.1%	20	49	5.7%
-4000	4	-72	0.2%	24	35	4.1%
-2000	22	-36	1.3%	28	14	1.6%
0	87	0	5.0%	32	16	1.9%
2000	175	36	10.2%	36	10	1.2%
4000	217	72	12.6%	40	14	1.6%
6000	376	107	21.8%	44	10	1.2%
8000	329	143	19.1%	48	10	1.2%
10000	211	179	12.2%	52	3	0.4%
12000	153	215	8.9%	56	3	0.4%
14000	71	250	4.1%	60	5	0.6%
16000	46	286	2.7%	64	5	0.6%
18000	20	322	1.2%	68	5	0.6%
20000	8	358	0.5%	72	1	0.1%
22000	0	394	0.0%	76	1	0.1%
24000	0	429	0.0%	80	1	0.1%
26000	0	465	0.0%	84	2	0.2%
>28000	0	0	0.0%	>84	33	3.9%
TOTAL	1,723			TOTAL	855	

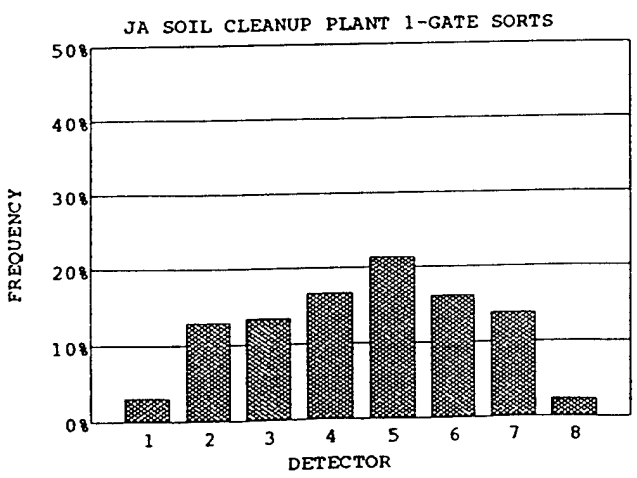
EVENT TYPES HPE 874 MPE 24 DISE 560

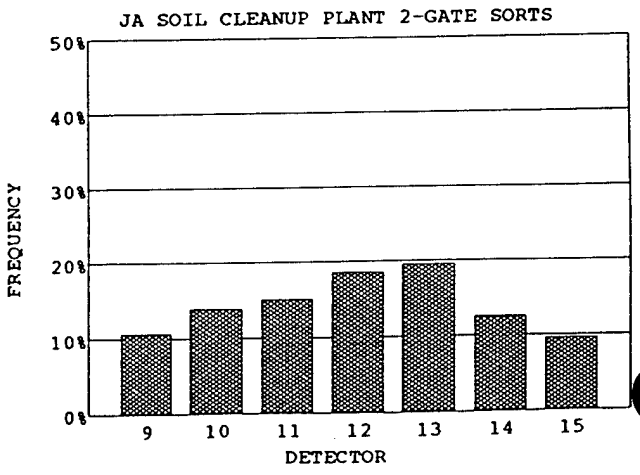
SORTER 1

01-Mar-94









SORTER 2

01-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.1 tons	95.4 tons	96.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	0.8 yd³	75.6 yd³	76.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	22,550 kBq	7,555 kBq	13,106 kBq
MAXIMUM/SORT	2,964 kBq	1,846 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		7,150 Bq/kg	137 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,726		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			5		15:40	None
NONE (AD=0 & MD=0 & MND>0)			1,269		15:52	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			452			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			2			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				17,260		
2-SEC RECORDS WITH SORTS			1,016			
2-SEC RECORDS WITHOUT SORTS			16,244			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,742		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	767	75.5%	5 DET	0	0.0%	
2 DET	197	19.4%	6 DET	0	0.0%	
3 DET	42	4.1%	7 DET	0	0.0%	
4 DET	10	1.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			45.0 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	32	6.5%
2	82	16.7%
3	91	18.5%
4	79	16.1%
5	86	17.5%
6	81	16.5%
7	34	6.9%
8	7	1.4%
TOTAL	492	

2-GATE SORTS

DET	SORTS	FREQ%
9	71	13.5%
10	93	17.7%
11	90	17.2%
12	109	20.8%
13	77	14.7%
14	61	11.6%
15	23	4.4%
TOTAL	524	

ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	1
-8000	1
-6000	1
-4000	9
-2000	16
0	43
2000	96
4000	168
6000	282
8000	348
10000	263
12000	230
14000	132
16000	85
18000	40
20000	12
22000	1
24000	0
26000	0
>28000	0
TOTAL	1,728

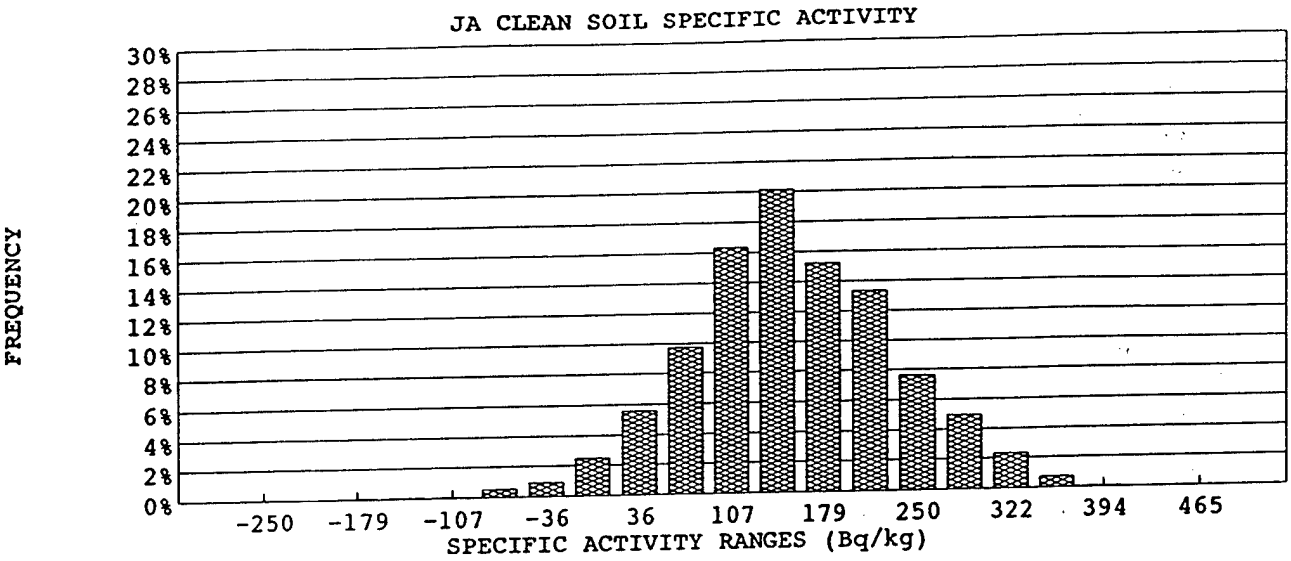
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.1%
-143	0.1%
-107	0.1%
-72	0.5%
-36	0.9%
0	2.5%
36	5.6%
72	9.7%
107	16.3%
143	20.1%
179	15.2%
215	13.3%
250	7.6%
286	4.9%
322	2.3%
358	0.7%
394	0.1%
429	0.0%
465	0.0%
0	0.0%

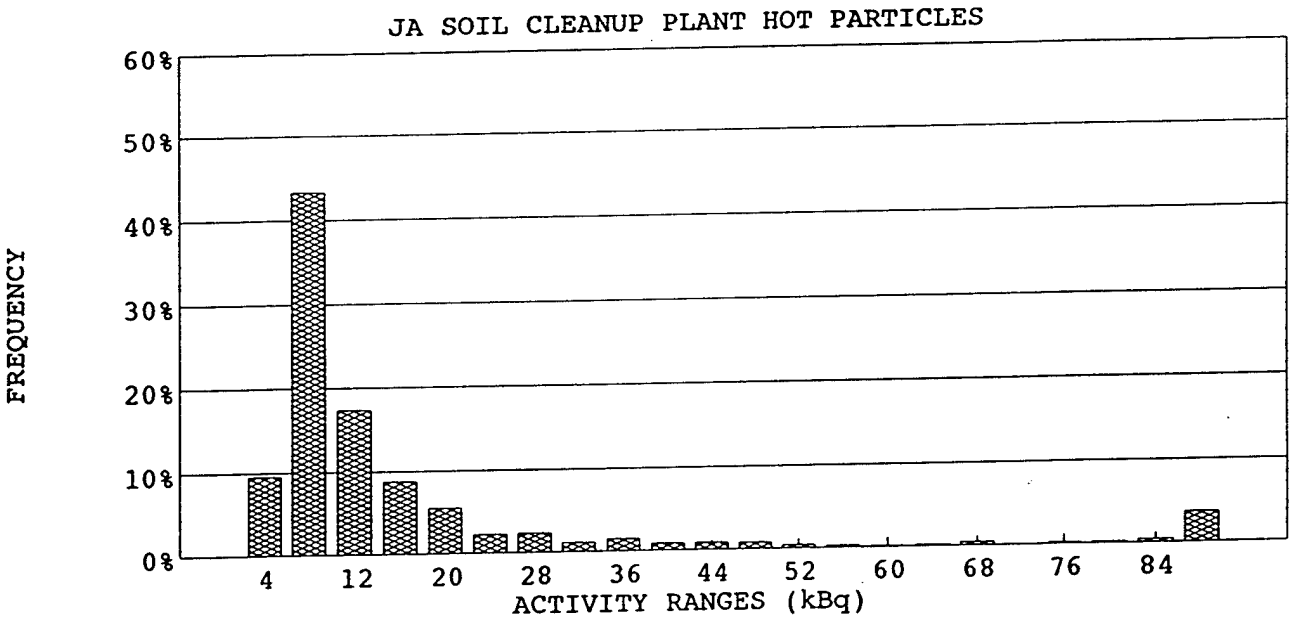
ACT_P (kBq)	NUM (#)	FREQ%
4	97	9.5%
8	440	43.3%
12	176	17.3%
16	89	8.8%
20	56	5.5%
24	23	2.3%
28	24	2.4%
32	11	1.1%
36	15	1.5%
40	9	0.9%
44	9	0.9%
48	8	0.8%
52	4	0.4%
56	3	0.3%
60	1	0.1%
64	2	0.2%
68	4	0.4%
72	0	0.0%
76	2	0.2%
80	2	0.2%
84	4	0.4%
>84	37	3.6%
TOTAL	1,016	

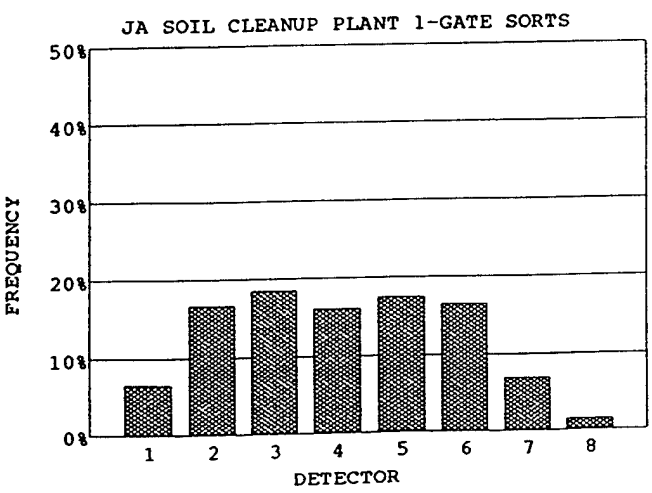
EVENT TYPES						
	HPE	1,066	MPE	20	DISE	424

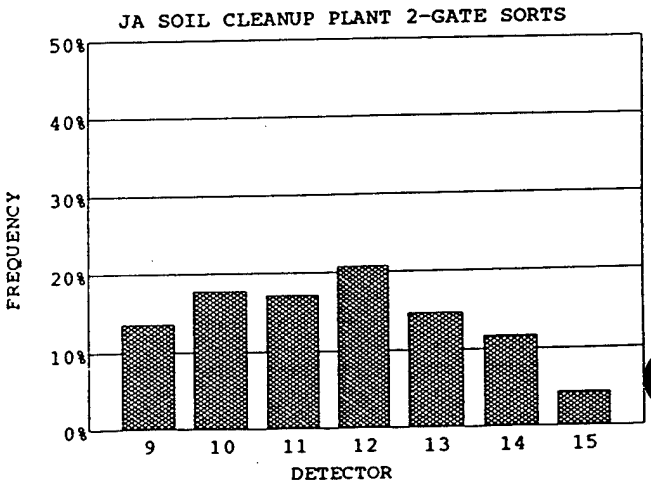
SORTER 2

01-Mar-94









WORK HISTORY – JA SOIL CLEANUP PLANT 02–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	9.8 hr	10.3 hr	0.0 hr	0.0 hr	20.2 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:13	06:13	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	15:55	15:57	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	9.7 hr	9.7 hr	0.0 hr	0.0 hr	19.4 hr
DOWN–TIME	0.2 hr	0.6 hr	0.0 hr	0.0 hr	0.8 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.7 hr	0.2 hr	10.0 hr	10.0 hr	20.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					96.3%
PRODUCTIVTY					46.2%

PRODUCTIVITY

Date	02–Mar–94
Contract day (from 6 Sep)	141
Current Contract week	24
Soil production for Day	195 MT
Cumlative Soil Production for Week	580 MT
Total Soil production for contract	
Since 6 Sep 93	33,914 MT
Since 6 Aug 93	35,505 MT
Total Soil production for project	61,792 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,066 hr
Excused delay days (plant–days)	52 days
Excused delay months (plant–month)	1.99 months
Percent of contract completed	35.5%
Tons Ahead or Behind Schedule	1,821 MT
Days ahead or behind schedule	6 days

MT = metric tons

SORTER 1

02-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	96.6 tons	97.3 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.6 yd³	76.6 yd³	77.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	16,487 kBq	5,291 kBq	8,578 kBq
MAXIMUM/SORT	360 kBq	205 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		7,186 Bq/kg	89 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,741		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2		09:11	13:51
NONE (AD=0 & MD=0 & MND>0)	1,348		12:01	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	391		13:37	
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,410		
2-SEC RECORDS WITH SORTS	832			
2-SEC RECORDS WITHOUT SORTS	16,578			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,573		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	598	71.9%	5 DET	2	0.2%
2 DET	193	23.2%	6 DET	0	0.0%
3 DET	33	4.0%	7 DET	0	0.0%
4 DET	6	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 58.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	4	1.0%
2	19	4.6%
3	44	10.7%
4	73	17.8%
5	95	23.1%
6	69	16.8%
7	80	19.5%
8	27	6.6%
TOTAL	411	

2-GATE SORTS

DET	SORTS	FREQ%
9	14	3.3%
10	39	9.3%
11	65	15.4%
12	81	19.2%
13	90	21.4%
14	70	16.6%
15	62	14.7%
TOTAL	421	

ACT_ND (Bq)	NUM (#)
-14000	0
-12000	1
-10000	0
-8000	1
-6000	1
-4000	9
-2000	39
0	103
2000	223
4000	339
6000	385
8000	297
10000	181
12000	110
14000	30
16000	13
18000	7
20000	3
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,742

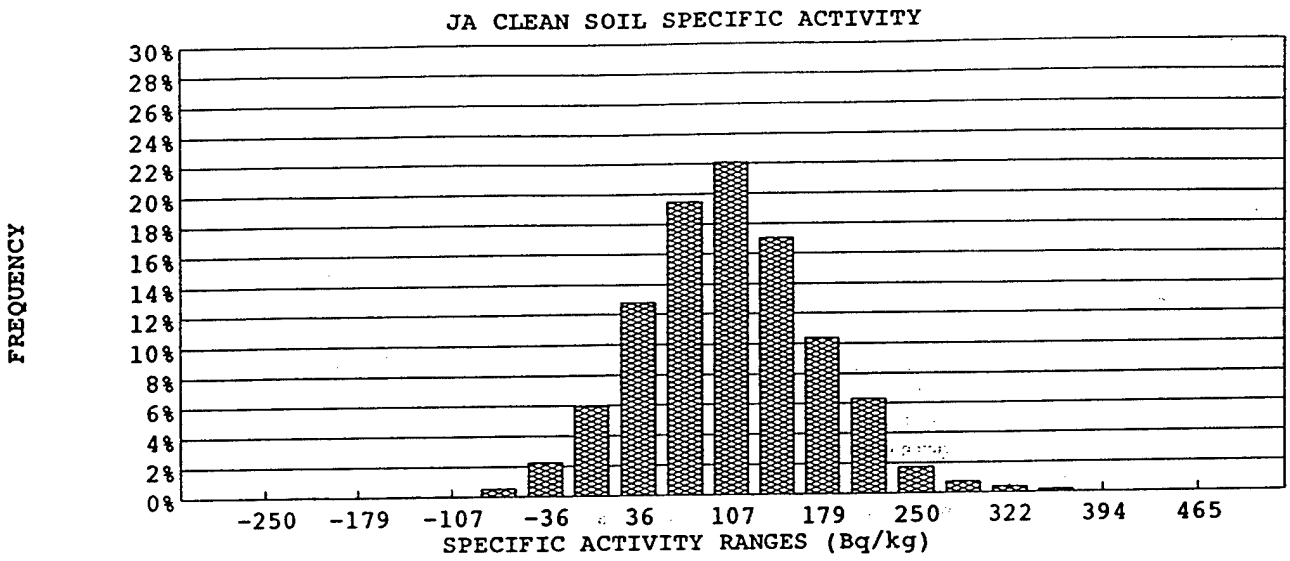
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.1%
-179	0.0%
-143	0.1%
-107	0.1%
-72	0.5%
-36	2.2%
0	5.9%
36	12.8%
72	19.5%
107	22.1%
143	17.0%
179	10.4%
215	6.3%
250	1.7%
286	0.7%
322	0.4%
358	0.2%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

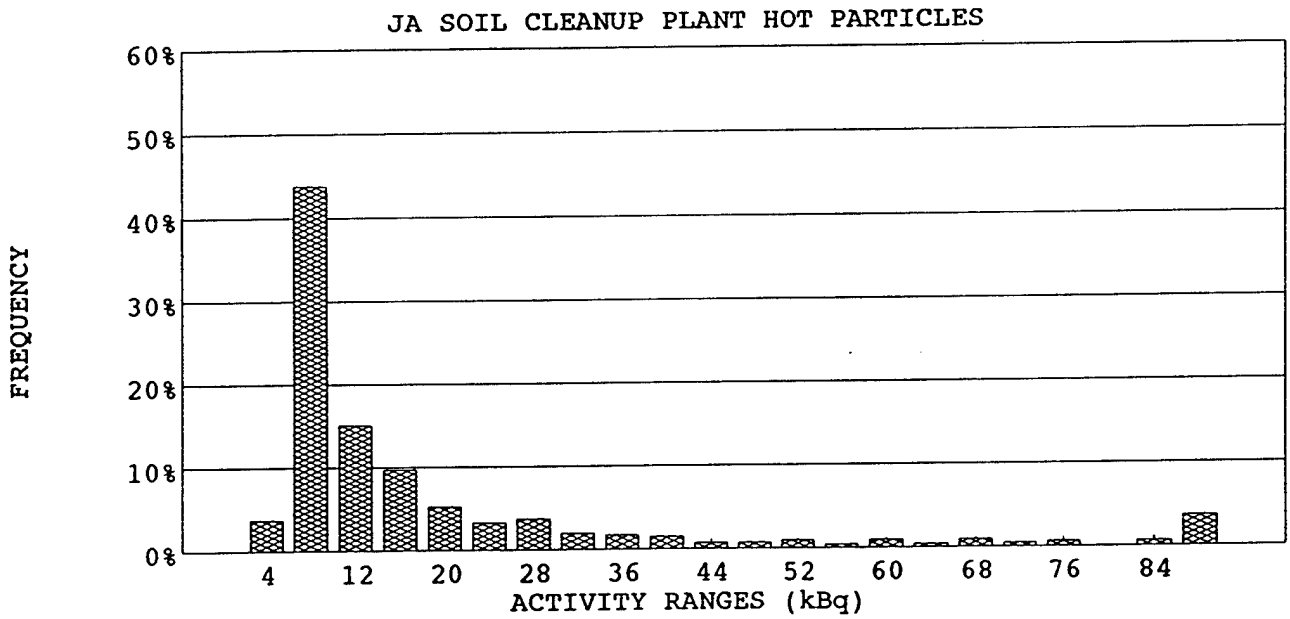
ACT_P (kBq)	NUM (#)	FREQ%
4	31	3.7%
8	364	43.8%
12	126	15.1%
16	81	9.7%
20	44	5.3%
24	27	3.2%
28	31	3.7%
32	16	1.9%
36	14	1.7%
40	12	1.4%
44	6	0.7%
48	6	0.7%
52	8	1.0%
56	3	0.4%
60	8	1.0%
64	3	0.4%
68	8	1.0%
72	4	0.5%
76	5	0.6%
80	0	0.0%
84	5	0.6%
>84	30	3.6%
TOTAL	832	

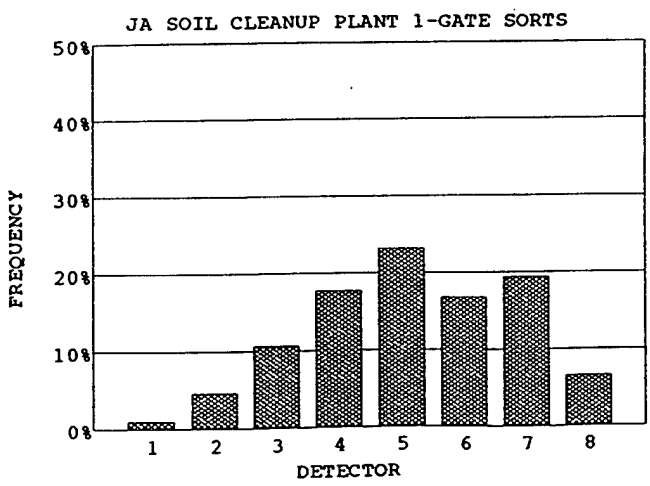
EVENT TYPES HPE 861 MPE 28 DISE 163

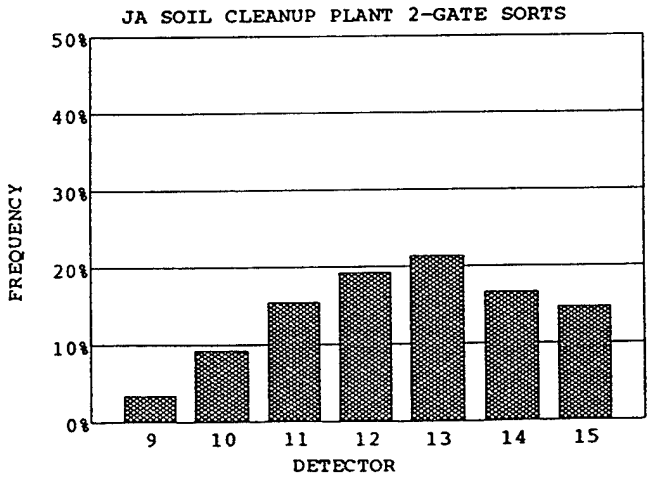
SORTER 1

02–Mar–94









SORTER 2

02-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.9 tons	97.1 tons	98.0 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	0.7 yd³	77.0 yd³	77.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	24,344 kBq	7,794 kBq	13,914 kBq
MAXIMUM/SORT	2,893 kBq	1,581 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-2 kBq
SPECIFIC ACTIVITY		8,587 Bq/kg	143 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,753		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2		11:22	None
NONE (AD=0 & MD=0 & MND>0)	1,263			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	488			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,530		
2-SEC RECORDS WITH SORTS	1,087			
2-SEC RECORDS WITHOUT SORTS	16,443			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,840		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

1 DET	817	75.2%	5 DET	0	0.0%
2 DET	212	19.5%	6 DET	0	0.0%
3 DET	51	4.7%	7 DET	0	0.0%
4 DET	7	0.6%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 42.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	26	4.6%
2	95	16.8%
3	102	18.1%
4	106	18.8%
5	104	18.4%
6	78	13.8%
7	41	7.3%
8	12	2.1%
TOTAL	564	

2-GATE SORTS

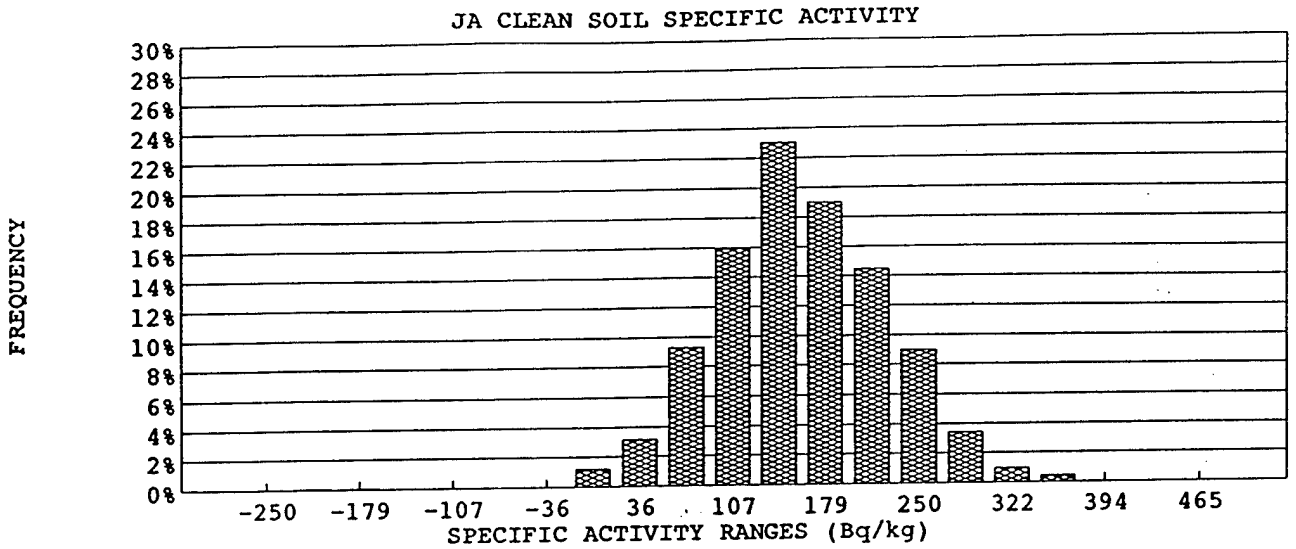
DET	SORTS	FREQ%
9	59	11.3%
10	104	19.9%
11	97	18.5%
12	98	18.7%
13	95	18.2%
14	49	9.4%
15	21	4.0%
TOTAL	523	

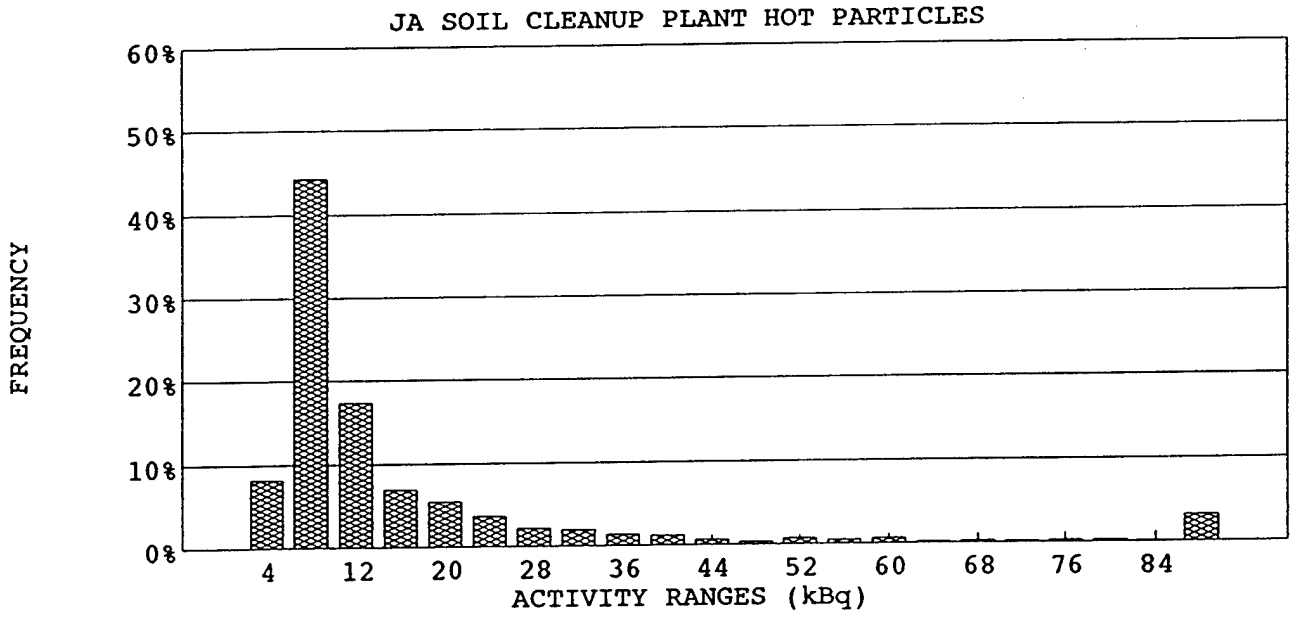
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	1
-10000	1
-8000	0
-6000	0
-4000	0
-2000	0
0	21
2000	55
4000	163
6000	280
8000	404
10000	333
12000	254
14000	158
16000	60
18000	17
20000	8
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,755

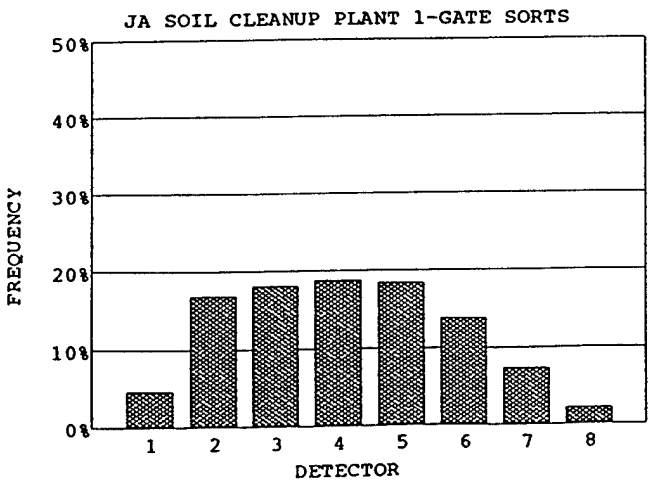
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.1%
-179	0.1%
-143	0.0%
-107	0.0%
-72	0.0%
-36	0.0%
0	1.2%
36	3.1%
72	9.3%
107	16.0%
143	23.0%
179	19.0%
215	14.5%
250	9.0%
286	3.4%
322	1.0%
358	0.5%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

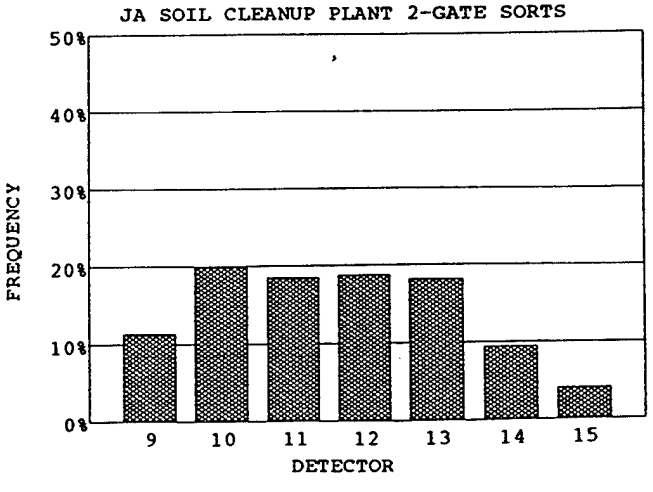
ACT_P (kBq)	NUM (#)	FREQ%
4	89	8.2%
8	482	44.3%
12	189	17.4%
16	75	6.9%
20	59	5.4%
24	40	3.7%
28	24	2.2%
32	21	1.9%
36	15	1.4%
40	13	1.2%
44	7	0.6%
48	4	0.4%
52	8	0.7%
56	5	0.5%
60	7	0.6%
64	2	0.2%
68	3	0.3%
72	2	0.2%
76	3	0.3%
80	3	0.3%
84	1	0.1%
>84	35	3.2%
TOTAL	1,087	

EVENT TYPES HPE 1,103 MPE 20 DISE 174


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 03–Mar–94

WORK DAY START	05:50 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.7 hr	10.7 hr	10.7 hr	10.7 hr	42.7 hr
SORTER AVAILABLE HOURS	10.4 hr	10.4 hr	0.0 hr	0.0 hr	20.8 hr
SORTER START–UP	05:50	05:50	NA	NA	
START SOIL PROCESSING	06:28	06:28	NA	NA	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.3 hr
SORTER SHUT–DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:50	15:50	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	9.4 hr	9.4 hr	0.0 hr	0.0 hr	18.8 hr
DOWN–TIME	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.1 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					90.1%
PRODUCTIVTY					44.0%

PRODUCTIVITY

Date	03–Mar–94
Contract day (from 6 Sep)	142
Current Contract week	24
Soil production for Day	189 MT
Cumlative Soil Production for Week	769 MT
Total Soil production for contract	
Since 6 Sep 93	34,103 MT
Since 6 Aug 93	35,694 MT
Total Soil production for project	61,980 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,086 hr
Excused delay days (plant–days)	52 days
Excused delay months (plant–month)	2.01 months
Percent of contract completed	35.7%
Tons Ahead or Behind Schedule	1,852 MT
Days ahead or behind schedule	6 days

MT = metric tons

File Report1 Printed on 09-Mar-94 at 06:07:10 AM

SORTER 1

03-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	93.6 tons	94.4 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.6 yd³	74.2 yd³	74.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	41,280 kBq	13,307 kBq	9,628 kBq
MAXIMUM/SORT	10,305 kBq	8,155 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		16,664 Bq/kg	103 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,689		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		2		08:07	None
NONE (AD=0 & MD=0 & MND>0)		1,251		09:44	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		436		12:58	
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	3				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			16,890		
2-SEC RECORDS WITH SORTS		951			
2-SEC RECORDS WITHOUT SORTS		15,939			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,640		
NONPROCESSING RECORDS (Test, calibration, etc)			4		

2-SEC SORT DETECTORS

1 DET	692	72.8%	5 DET	2	0.2%
2 DET	218	22.9%	6 DET	0	0.0%
3 DET	34	3.6%	7 DET	0	0.0%
4 DET	5	0.5%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 48.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	8	1.6%
2	22	4.4%
3	46	9.3%
4	74	14.9%
5	115	23.1%
6	96	19.3%
7	106	21.3%
8	30	6.0%
TOTAL	497	

2-GATE SORTS

DET	SORTS	FREQ%
9	18	4.0%
10	27	5.9%
11	56	12.3%
12	104	22.9%
13	104	22.9%
14	79	17.4%
15	66	14.5%
TOTAL	454	

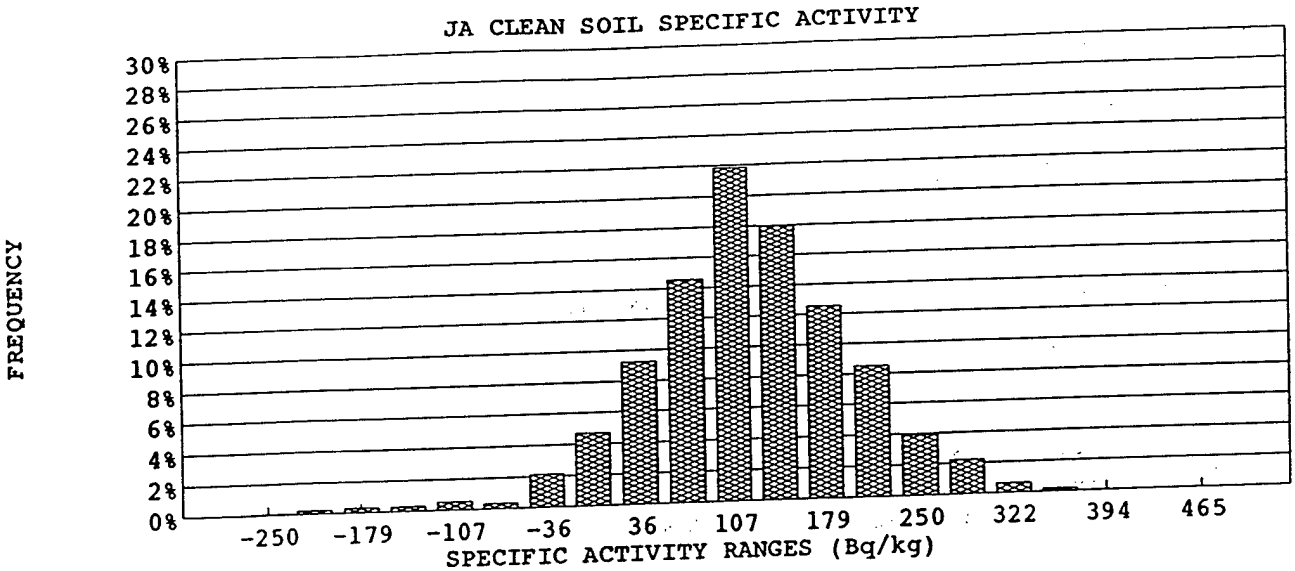
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	4
-10000	5
-8000	5
-6000	9
-4000	6
-2000	36
0	79
2000	156
4000	246
6000	370
8000	304
10000	212
12000	144
14000	66
16000	37
18000	10
20000	3
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,693

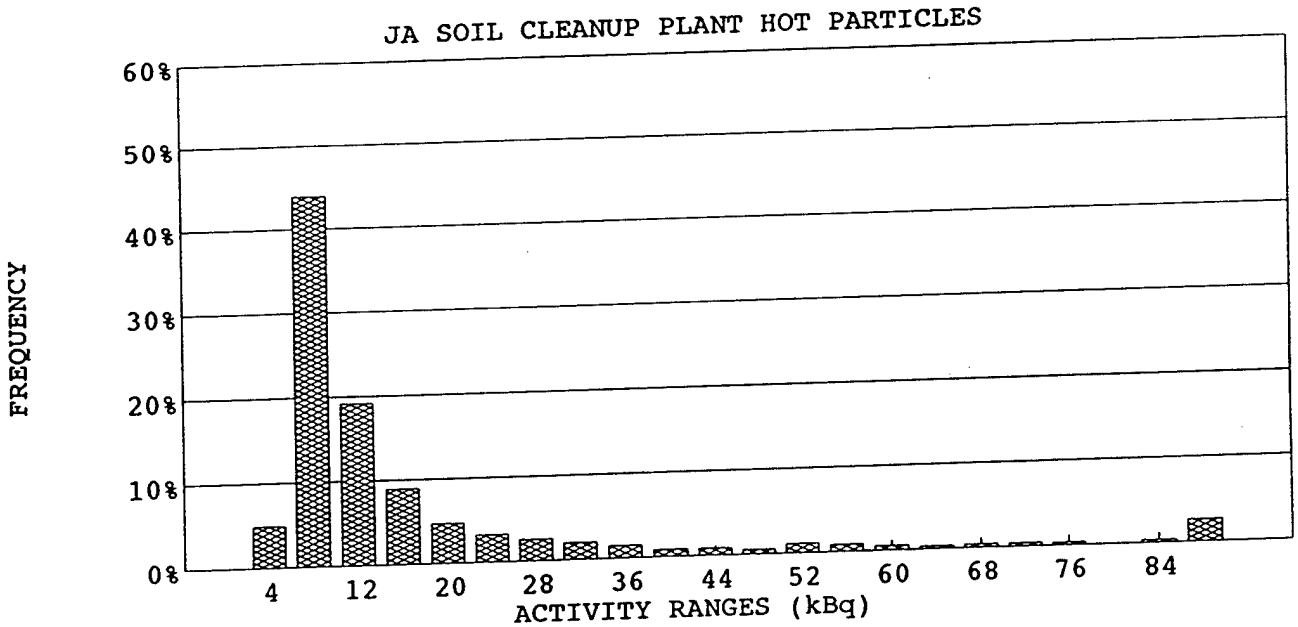
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.2%
-179	0.3%
-143	0.3%
-107	0.5%
-72	0.4%
-36	2.1%
0	4.7%
36	9.2%
72	14.5%
107	21.9%
143	18.0%
179	12.5%
215	8.5%
250	3.9%
286	2.2%
322	0.6%
358	0.2%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

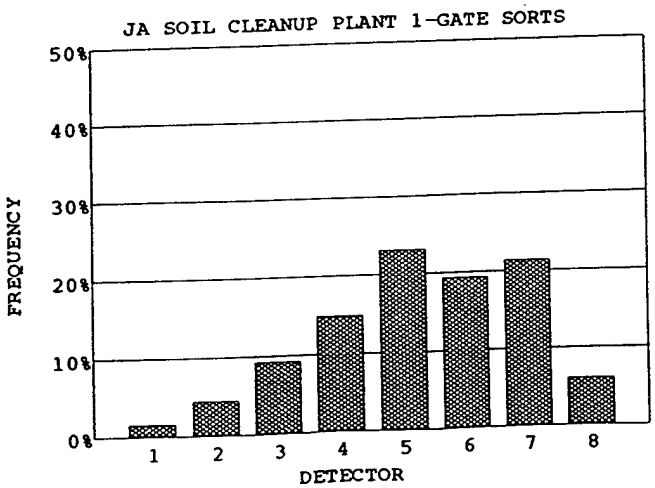
ACT_P (kBq)	NUM (#)	FREQ%
4	47	4.9%
8	418	44.0%
12	182	19.1%
16	85	8.9%
20	45	4.7%
24	31	3.3%
28	24	2.5%
32	19	2.0%
36	14	1.5%
40	8	0.8%
44	8	0.8%
48	5	0.5%
52	10	1.1%
56	8	0.8%
60	5	0.5%
64	3	0.3%
68	4	0.4%
72	4	0.4%
76	3	0.3%
80	0	0.0%
84	3	0.3%
>84	25	2.6%
TOTAL	951	

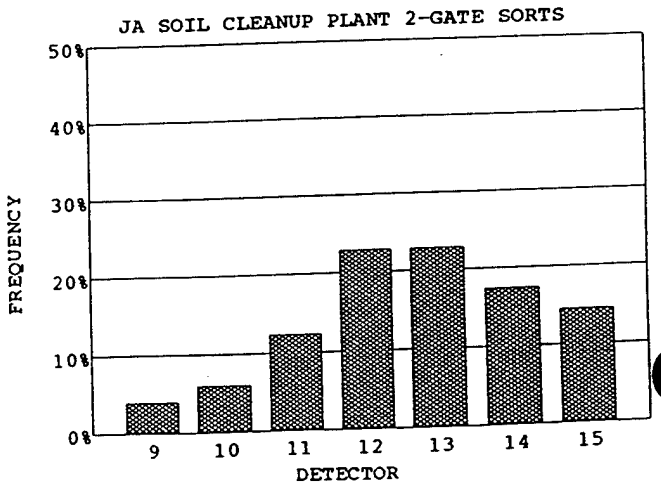
EVENT TYPES HPE 953 MPE 20 DISE 168

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

03-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.4 tons	93.0 tons	94.4 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	1.1 yd³	73.7 yd³	74.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	17,240 kBq	5,920 kBq	14,346 kBq
MAXIMUM/SORT	239 kBq	184 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		4,351 Bq/kg	154 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,688		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	9		13:16	None
NONE (AD=0 & MD=0 & MND>0)	1,175		13:28	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	504		14:53	
UNEXPLAINED RECORDS	0		15:46	
0<AD<1kBq & MD>0	4			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,880		
2-SEC RECORDS WITH SORTS	1,151			
2-SEC RECORDS WITHOUT SORTS	15,729			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,839		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

1 DET	864	75.1%	5 DET	1	0.1%
2 DET	243	21.1%	6 DET	0	0.0%
3 DET	37	3.2%	7 DET	0	0.0%
4 DET	6	0.5%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 39.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	27	4.9%
2	80	14.4%
3	95	17.1%
4	114	20.5%
5	103	18.5%
6	81	14.6%
7	46	8.3%
8	10	1.8%
TOTAL	556	

2-GATE SORTS

DET	SORTS	FREQ%
9	66	11.1%
10	93	15.6%
11	113	19.0%
12	116	19.5%
13	101	17.0%
14	74	12.4%
15	32	5.4%
TOTAL	595	

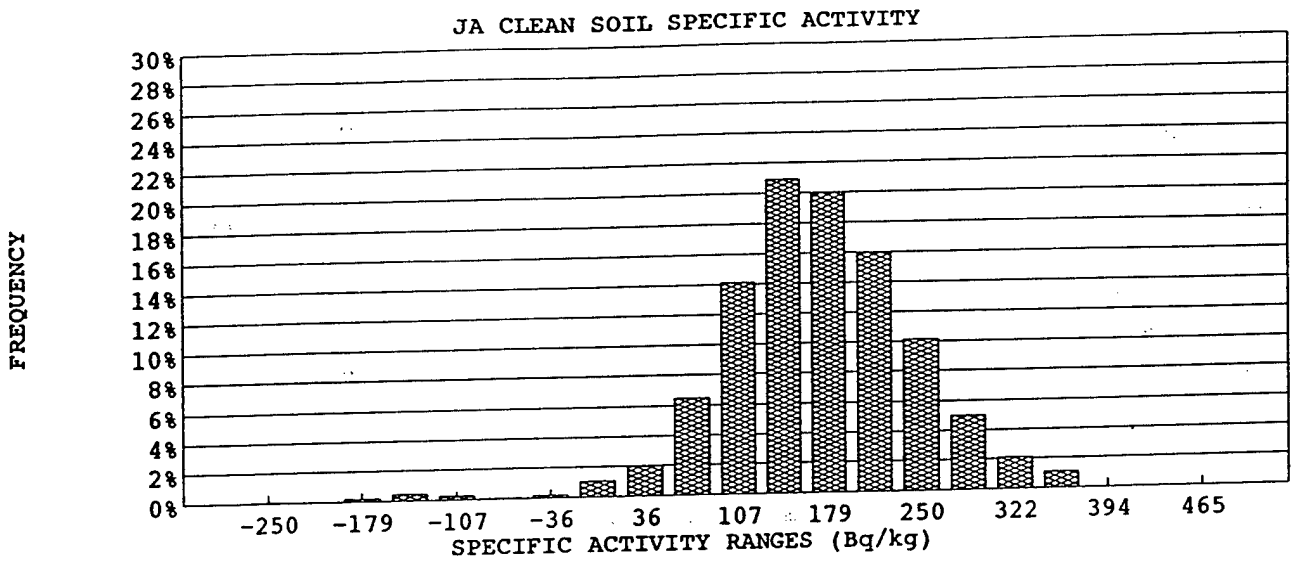
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	0
-10000	3
-8000	8
-6000	5
-4000	1
-2000	3
0	18
2000	33
4000	109
6000	239
8000	354
10000	338
12000	270
14000	171
16000	84
18000	36
20000	19
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,692

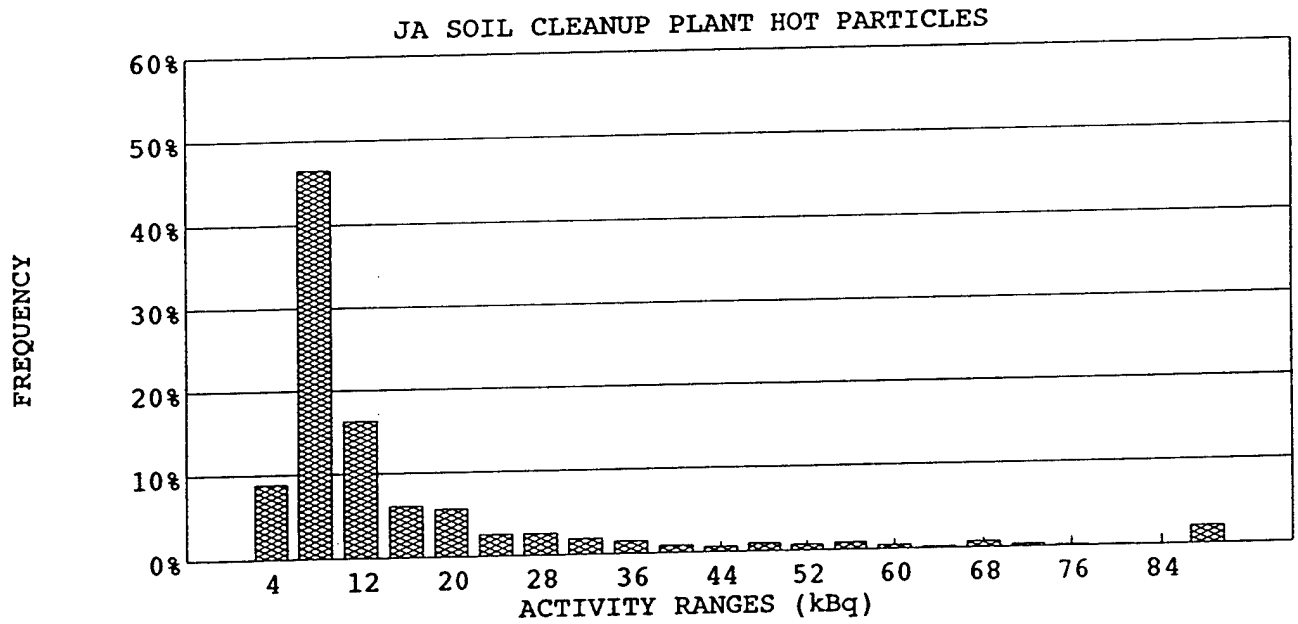
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.0%
-179	0.2%
-143	0.5%
-107	0.3%
-72	0.1%
-36	0.2%
0	1.1%
36	2.0%
72	6.4%
107	14.1%
143	20.9%
179	20.0%
215	16.0%
250	10.1%
286	5.0%
322	2.1%
358	1.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

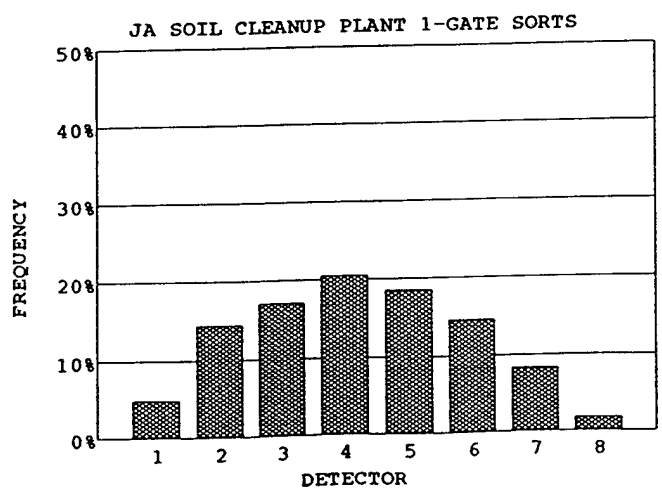
ACT_P (kBq)	NUM (#)	FREQ%
4	102	8.9%
8	535	46.5%
12	187	16.2%
16	70	6.1%
20	65	5.6%
24	30	2.6%
28	30	2.6%
32	22	1.9%
36	17	1.5%
40	10	0.9%
44	7	0.6%
48	11	1.0%
52	8	0.7%
56	10	0.9%
60	6	0.5%
64	2	0.2%
68	8	0.7%
72	4	0.3%
76	2	0.2%
80	1	0.1%
84	0	0.0%
>84	24	2.1%
TOTAL	1,151	

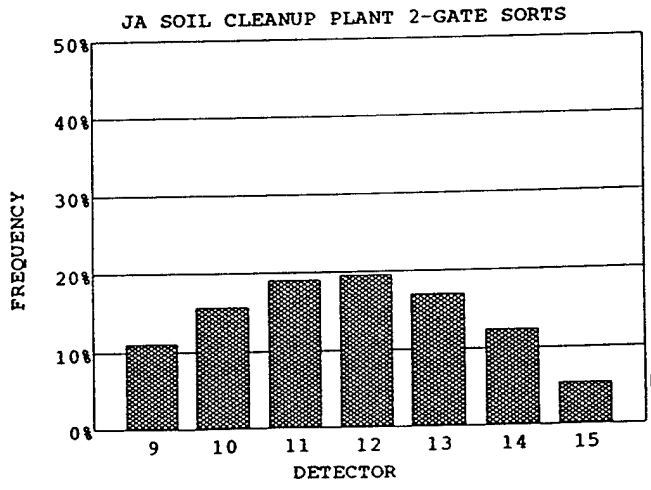
EVENT TYPES		HPE	1,191	MPE	19	DISE	735

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 04–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	07:04	06:33	NA	NA	
TIME REQUIRED TO START–UP	1.1 hr	0.6 hr	0.0 hr	0.0 hr	1.6 hr
SORTER SHUT–DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:51	15:50	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	8.7 hr	9.3 hr	0.0 hr	0.0 hr	18.0 hr
DOWN–TIME	1.5 hr	1.0 hr	0.0 hr	0.0 hr	2.5 hr
SYSTEM PAUSE	0.1 hr	0.0 hr	0.0 hr	0.0 hr	0.1 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					87.9%
PRODUCTIVTY					42.9%

PRODUCTIVITY

Date	04–Mar–94
Contract day (from 6 Sep)	143
Current Contract week	24
Soil production for Day	181 MT
Cumlative Soil Production for Week	950 MT
Total Soil production for contract	
Since 6 Sep 93	34,284 MT
Since 6 Aug 93	35,875 MT
Total Soil production for project	62,162 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,106 hr
Excused delay days (plant–days)	53 days
Excused delay months (plant–month)	2.03 months
Percent of contract completed	35.9%
Tons Ahead or Behind Schedule	1,875 MT
Days ahead or behind schedule	6 days

File Report1 Printed on 09-Mar-94 at 12:17:52 PM

SORTER 1

04-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	87.0 tons	87.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.6 yd³	68.9 yd³	69.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	16,777 kBq	5,441 kBq	9,557 kBq
MAXIMUM/SORT	487 kBq	288 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		6,860 Bq/kg	110 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,570		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		2		07:12	07:05
NONE (AD=0 & MD=0 & MND>0)		1,149		07:28	07:26
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		419		08:43	
UNEXPLAINED RECORDS	0			10:02	
0<AD<1kBq & MD>0	4			15:18	
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			15,700		
2-SEC RECORDS WITH SORTS		935			
2-SEC RECORDS WITHOUT SORTS		14,765			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,505		
NONPROCESSING RECORDS (Test, calibration, etc)			2		

2-SEC SORT DETECTORS

1 DET	680	72.7%	5 DET	1	0.1%
2 DET	212	22.7%	6 DET	0	0.0%
3 DET	37	4.0%	7 DET	0	0.0%
4 DET	5	0.5%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 46.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	12	2.5%
2	34	7.2%
3	57	12.0%
4	83	17.5%
5	104	21.9%
6	88	18.6%
7	75	15.8%
8	21	4.4%
TOTAL	474	

2-GATE SORTS

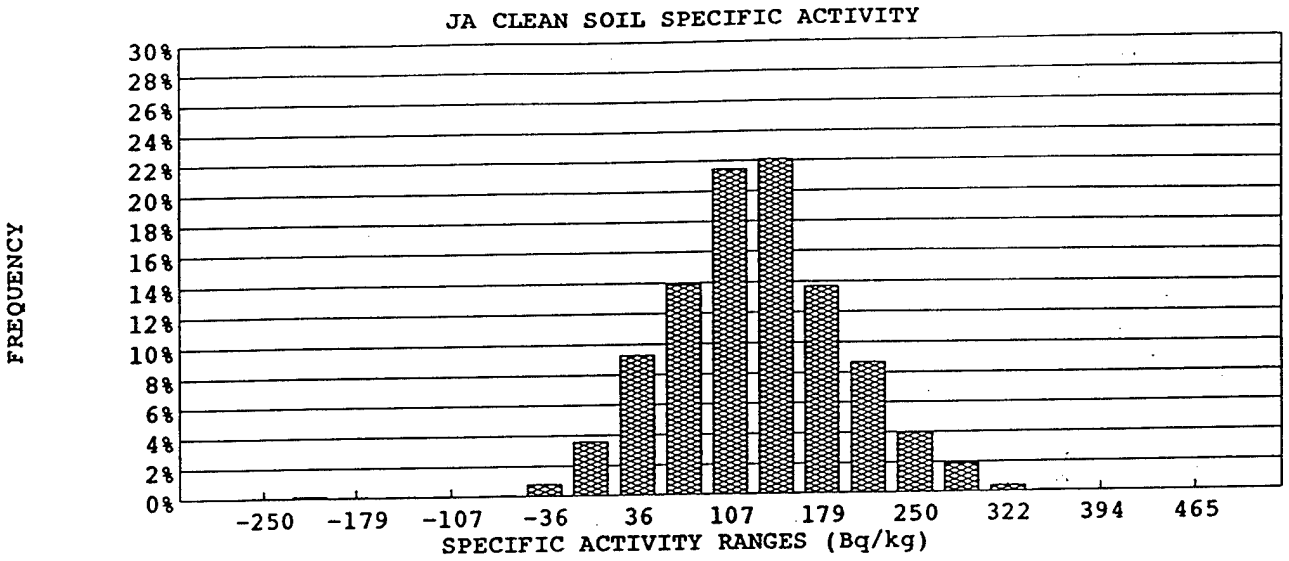
DET	SORTS	FREQ%
9	20	4.3%
10	42	9.1%
11	74	16.1%
12	94	20.4%
13	101	21.9%
14	77	16.7%
15	53	11.5%
TOTAL	461	

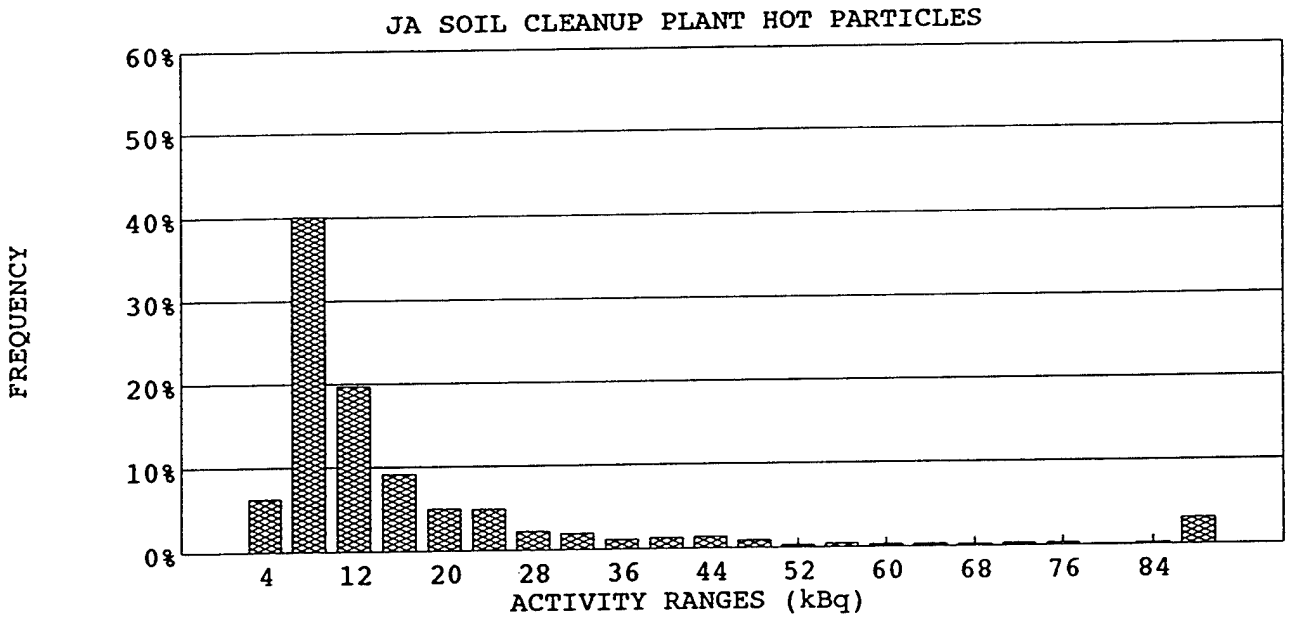
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	2
-10000	1
-8000	1
-6000	1
-4000	1
-2000	12
0	56
2000	146
4000	218
6000	337
8000	347
10000	215
12000	136
14000	62
16000	29
18000	6
20000	1
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,572

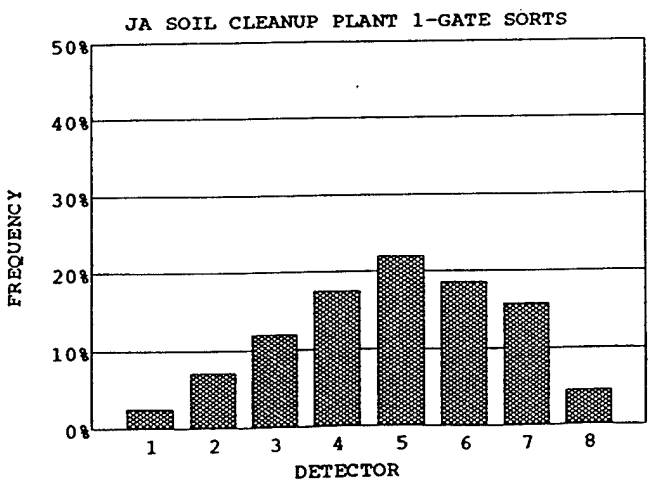
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.1%
-143	0.1%
-107	0.1%
-72	0.1%
-36	0.8%
0	3.6%
36	9.3%
72	13.9%
107	21.4%
143	22.1%
179	13.7%
215	8.7%
250	3.9%
286	1.8%
322	0.4%
358	0.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

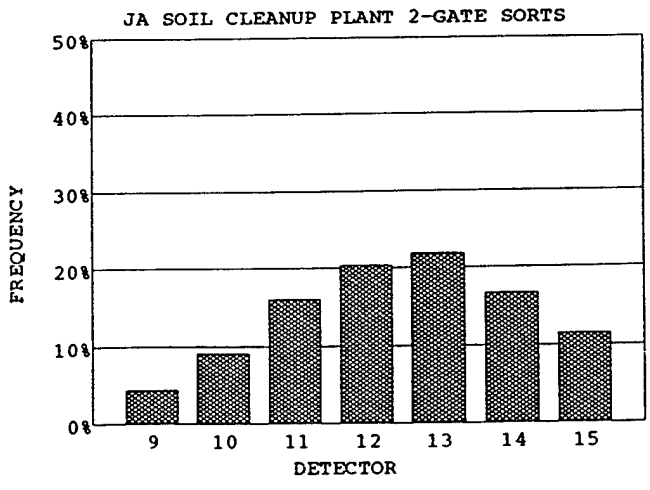
ACT_P (kBq)	NUM (#)	FREQ%
4	59	6.3%
8	375	40.1%
12	184	19.7%
16	86	9.2%
20	47	5.0%
24	46	4.9%
28	21	2.2%
32	18	1.9%
36	11	1.2%
40	12	1.3%
44	13	1.4%
48	9	1.0%
52	3	0.3%
56	4	0.4%
60	3	0.3%
64	3	0.3%
68	2	0.2%
72	3	0.3%
76	3	0.3%
80	1	0.1%
84	2	0.2%
>84	30	3.2%
TOTAL	935	

EVENT TYPES HPE 943 MPE 24 DISE 166


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

04-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.9 tons	91.6 tons	93.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	1.5 yd³	72.6 yd³	74.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	22,931 kBq	7,941 kBq	15,335 kBq
MAXIMUM/SORT	558 kBq	368 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		4,186 Bq/kg	167 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,673		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		16		08:02	None
NONE (AD=0 & MD=0 & MND>0)		1,089		11:02	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		568		12:05	
UNEXPLAINED RECORDS		0			
0<AD<1kBq & MD>0		3			
AD=0 & MD>0		0			
AD<0 & MD >0		0			
2-SEC COUNT PERIODS			16,730		
2-SEC RECORDS WITH SORTS		1,370			
2-SEC RECORDS WITHOUT SORTS		15,360			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,043		
NONPROCESSING RECORDS (Test, calibration, etc)			4		
2-SEC SORT DETECTORS					
1 DET	1,014	74.0%	5 DET	2	0.1%
2 DET	294	21.5%	6 DET	0	0.0%
3 DET	52	3.8%	7 DET	0	0.0%
4 DET	8	0.6%	8 DET	0	0.0%
AVERAGE TIME BETWEEN 2-SEC SORTS			33.0 sec		

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	32	4.8%
2	112	16.7%
3	124	18.5%
4	127	19.0%
5	119	17.8%
6	90	13.5%
7	51	7.6%
8	14	2.1%
TOTAL	669	

2-GATE SORTS

DET	SORTS	FREQ%
9	87	12.4%
10	126	18.0%
11	142	20.3%
12	139	19.8%
13	110	15.7%
14	65	9.3%
15	32	4.6%
TOTAL	701	

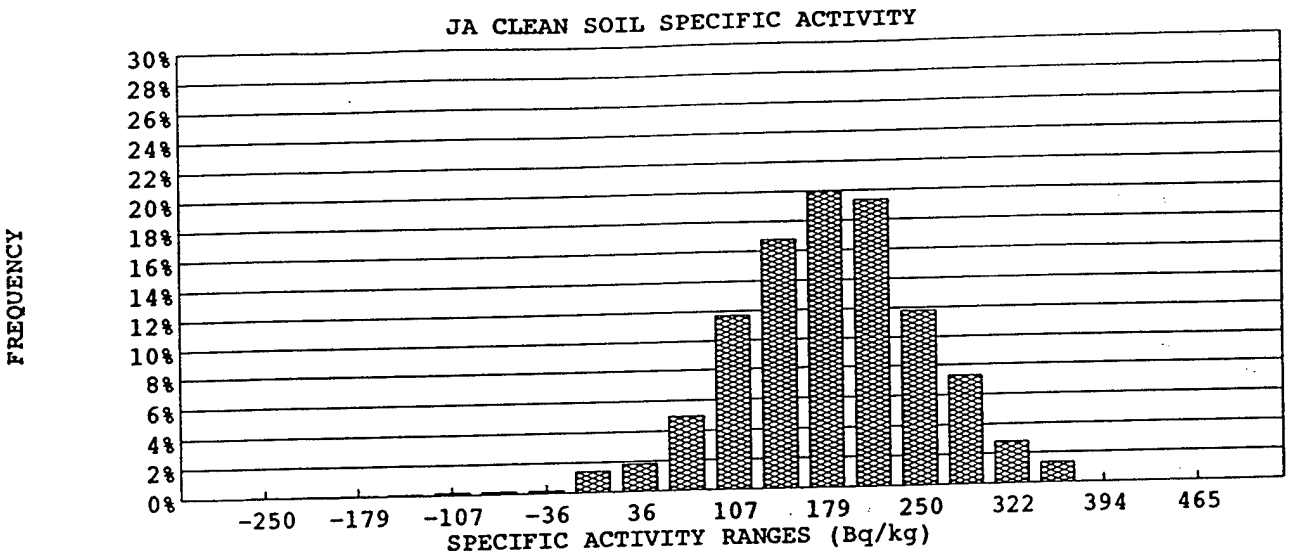
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	1
-10000	1
-8000	2
-6000	3
-4000	3
-2000	3
0	24
2000	31
4000	83
6000	196
8000	281
10000	335
12000	324
14000	197
16000	122
18000	47
20000	23
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,677

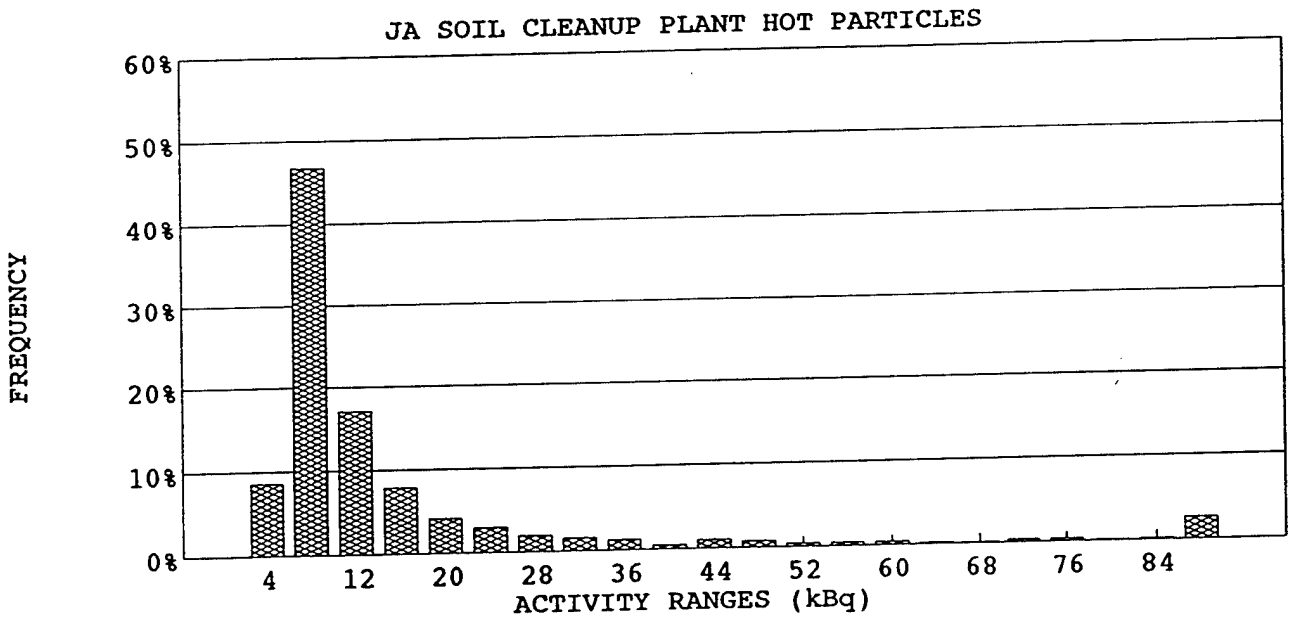
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.1%
-143	0.1%
-107	0.2%
-72	0.2%
-36	0.2%
0	1.4%
36	1.8%
72	4.9%
107	11.7%
143	16.8%
179	20.0%
215	19.3%
250	11.7%
286	7.3%
322	2.8%
358	1.4%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

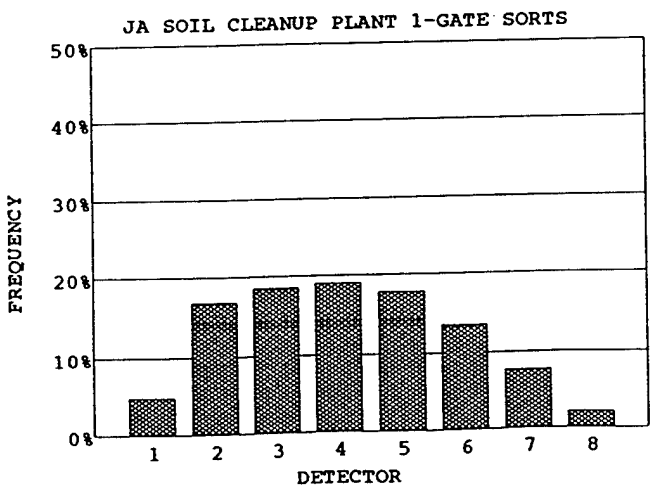
ACT_P (kBq)	NUM (#)	FREQ%
4	118	8.6%
8	641	46.8%
12	234	17.1%
16	108	7.9%
20	58	4.2%
24	42	3.1%
28	27	2.0%
32	21	1.5%
36	17	1.2%
40	7	0.5%
44	14	1.0%
48	11	0.8%
52	6	0.4%
56	6	0.4%
60	6	0.4%
64	3	0.2%
68	1	0.1%
72	5	0.4%
76	5	0.4%
80	1	0.1%
84	3	0.2%
>84	36	2.6%
TOTAL	1,370	

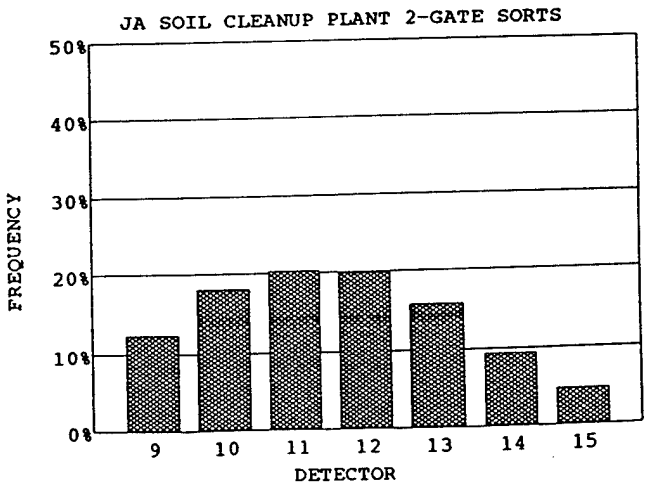
EVENT TYPES						
	HPE	1,420	MPE	32	DISE	1260

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 05–Mar–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	3.5 hr	3.5 hr	0.0 hr	0.0 hr	7.0 hr
SORTER START–UP	05:45	05:45	NA	NA	
START SOIL PROCESSING	06:14	06:15	NA	NA	
TIME REQUIRED TO START–UP	0.5 hr	0.5 hr	0.0 hr	0.0 hr	1.0 hr
SORTER SHUT–DOWN	09:15	09:15	NA	NA	
END SOIL PROCESSING	08:50	08:51	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	2.6 hr	2.6 hr	0.0 hr	0.0 hr	5.2 hr
DOWN–TIME	0.9 hr	0.9 hr	0.0 hr	0.0 hr	1.8 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	6.5 hr	6.5 hr	10.0 hr	10.0 hr	33.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					74.4%
PRODUCTIVTY					13.0%

PRODUCTIVITY

Date	05–Mar–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	144	Excused delays for contract (sorter–hrs)	2,126 hr
Current Contract week	24	Excused delay days (plant–days)	53 days
		Excused delay months (plant–month)	2.04 months
Soil production for Day	52 MT		
Cumlative Soil Production for Week	1,003 MT	Percent of contract completed	35.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,769 MT
Since 6 Sep 93	34,336 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	35,927 MT		
Total Soil production for project	62,214 MT		

MT = metric tons

SORTER 1

05–Mar–94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.64 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.1 tons	26.1 tons	26.2 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN–GROUND	0.1 yd³	20.7 yd³	20.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	6,077 kBq	1,841 kBq	2,505 kBq
MAXIMUM/SORT	1,341 kBq	768 kBq	17 kBq
MINIMUM/SORT	3 kBq	0 Bq	–7 kBq
SPECIFIC ACTIVITY		12,641 Bq/kg	96 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS				469		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		None	None
NONE (AD=0 & MD=0 & MND>0)			374			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			95			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2–SEC COUNT PERIODS				4,690		
2–SEC RECORDS WITH SORTS			206			
2–SEC RECORDS WITHOUT SORTS			4,484			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)				675		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2–SEC SORT DETECTORS						
1 DET	152	73.8%	5 DET	1	0.5%	
2 DET	45	21.8%	6 DET	0	0.0%	
3 DET	7	3.4%	7 DET	0	0.0%	
4 DET	1	0.5%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2–SEC SORTS			61.7 sec			

FREQUENCY DISTRIBUTIONS

1–GATE SORTS DET	SORTS	FREQ%
1	1	0.9%
2	7	6.5%
3	14	13.0%
4	16	14.8%
5	23	21.3%
6	20	18.5%
7	20	18.5%
8	7	6.5%
TOTAL	108	

2–GATE SORTS DET	SORTS	FREQ%
9	2	2.0%
10	11	11.2%
11	14	14.3%
12	20	20.4%
13	23	23.5%
14	15	15.3%
15	13	13.3%
TOTAL	98	

ACT_ND (Bq)	NUM (#)
–14000	0
–12000	1
–10000	1
–8000	0
–6000	1
–4000	2
–2000	3
0	13
2000	70
4000	80
6000	120
8000	75
10000	65
12000	24
14000	9
16000	8
18000	1
20000	0
22000	0
24000	0
26000	0
>28000	0
TOTAL	473

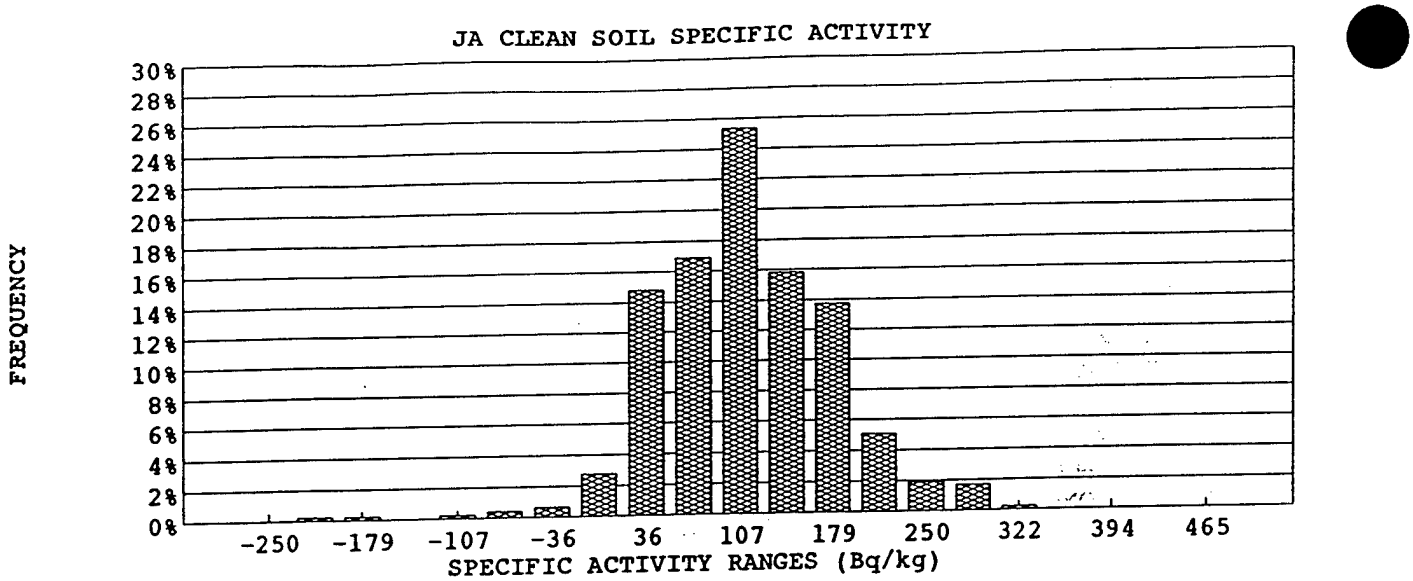
SPEC_A (Bq/kg)	FREQ%
–250	0.0%
–215	0.2%
–179	0.2%
–143	0.0%
–107	0.2%
–72	0.4%
–36	0.6%
0	2.7%
36	14.8%
72	16.9%
107	25.4%
143	15.9%
179	13.7%
215	5.1%
250	1.9%
286	1.7%
322	0.2%
358	0.0%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

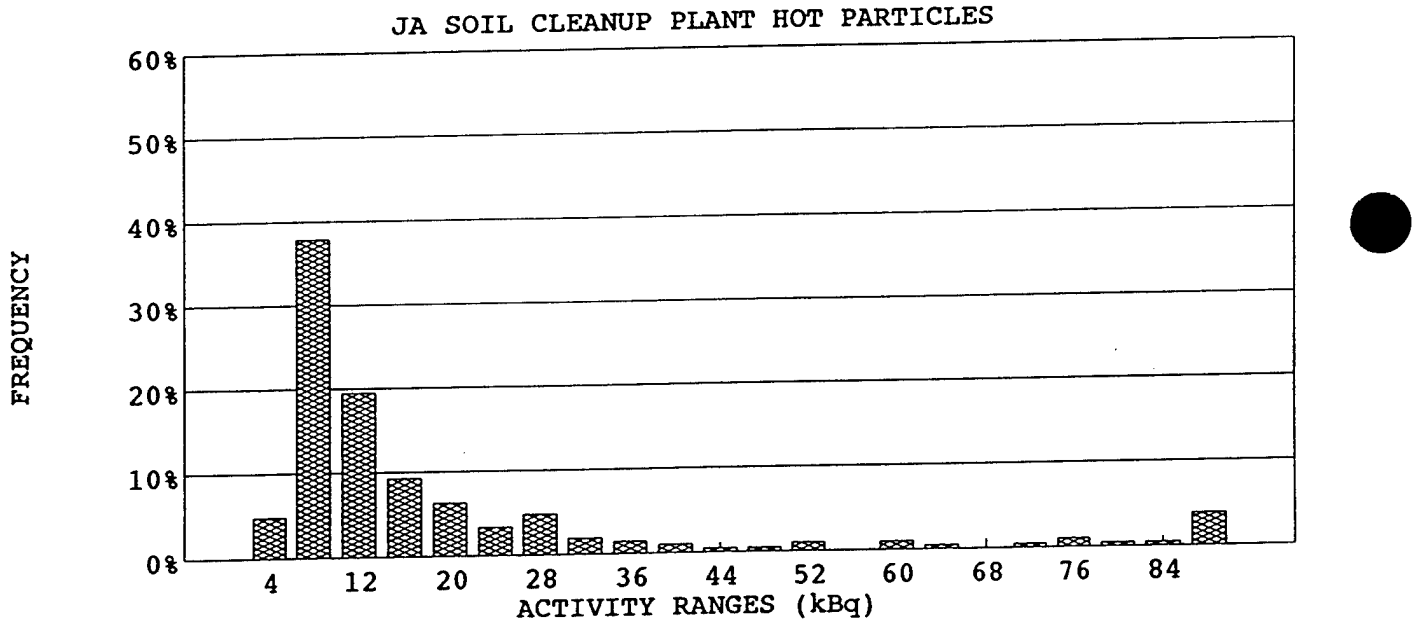
ACT_P (kBq)	NUM (#)	FREQ%
4	10	4.9%
8	78	37.9%
12	40	19.4%
16	19	9.2%
20	13	6.3%
24	7	3.4%
28	10	4.9%
32	4	1.9%
36	3	1.5%
40	2	1.0%
44	1	0.5%
48	1	0.5%
52	2	1.0%
56	0	0.0%
60	2	1.0%
64	1	0.5%
68	0	0.0%
72	1	0.5%
76	2	1.0%
80	1	0.5%
84	1	0.5%
>84	8	3.9%
TOTAL	206	

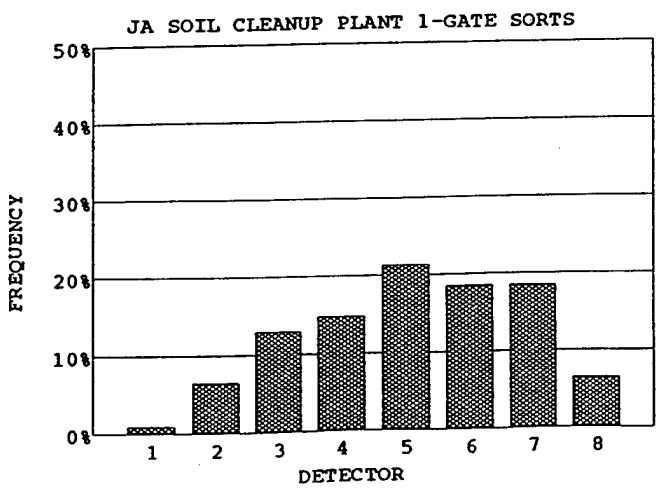
EVENT TYPES					
	HPE	205	MPE	3	DISE	0

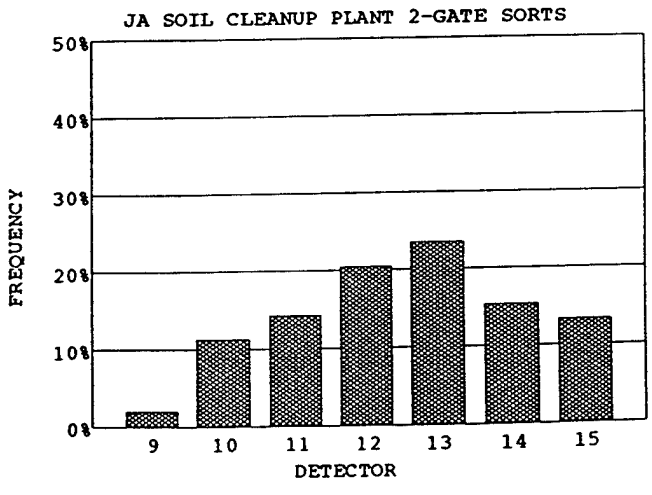
SORTER 1

05-Mar-94









SORTER 2

05-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	26.0 tons	26.2 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.2 yd³	20.6 yd³	20.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,969 kBq	1,272 kBq	3,616 kBq
MAXIMUM/SORT	164 kBq	99 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		6,116 Bq/kg	139 Bq/kg

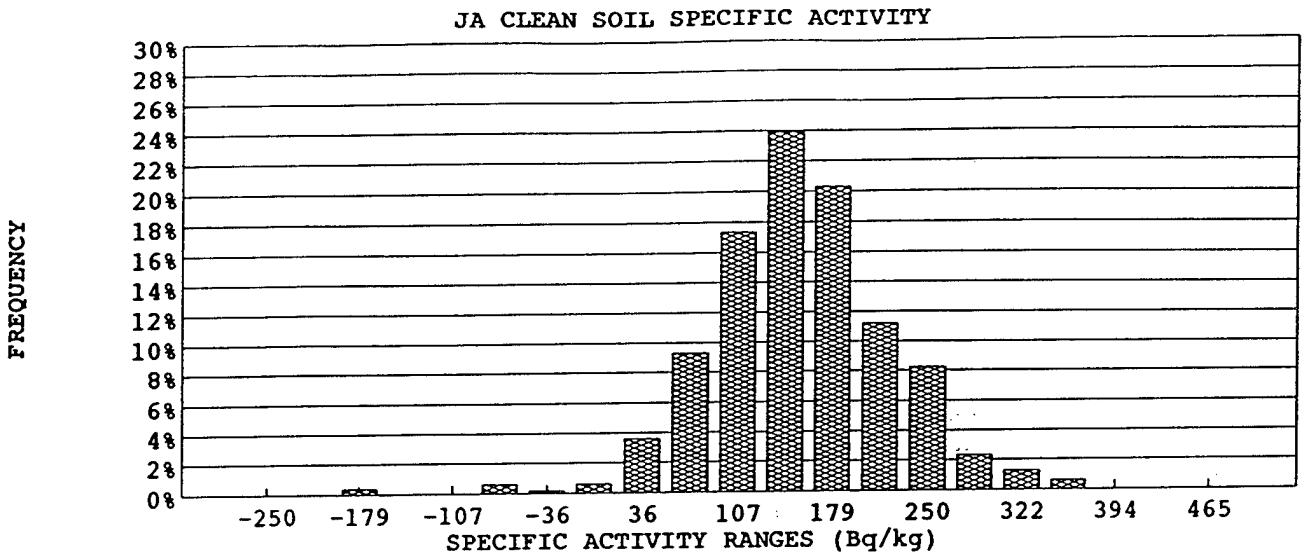
SORTS

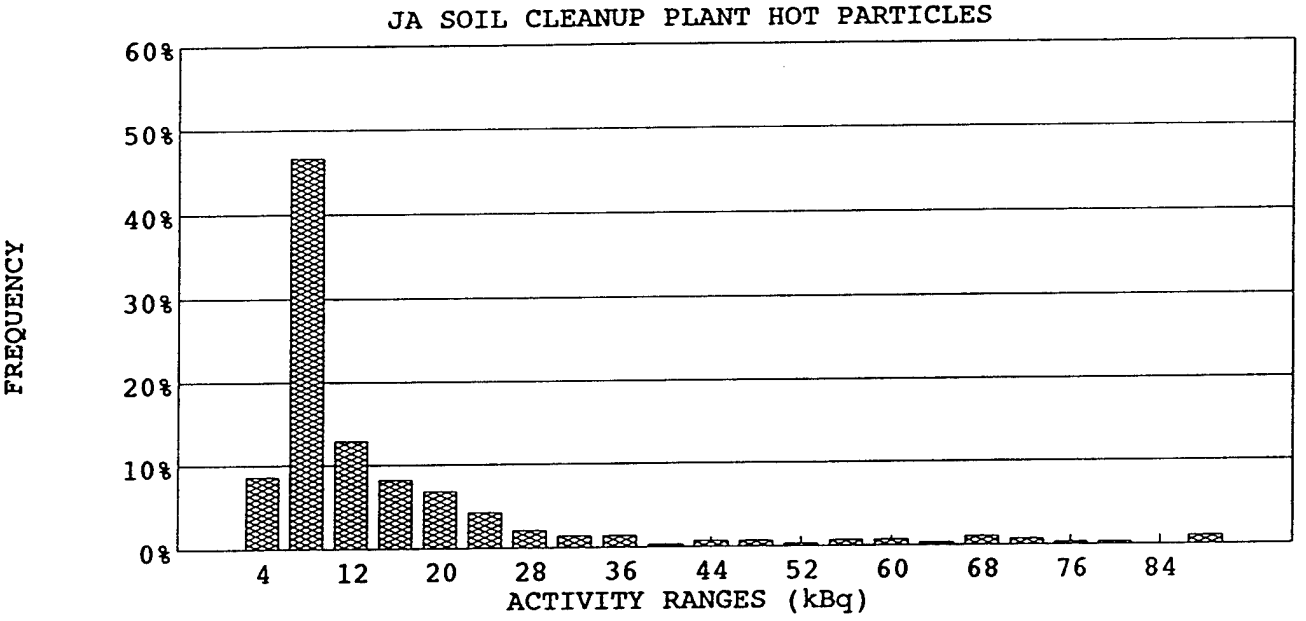
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				468		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		07:03	None
NONE (AD=0 & MD=0 & MND>0)			336			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			132			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		1				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				4,680		
2-SEC RECORDS WITH SORTS			279			
2-SEC RECORDS WITHOUT SORTS			4,401			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				747		
NONPROCESSING RECORDS (Test, calibration, etc)				5		
2-SEC SORT DETECTORS						
1 DET	204	73.1%	5 DET	0	0.0%	
2 DET	63	22.6%	6 DET	0	0.0%	
3 DET	10	3.6%	7 DET	0	0.0%	
4 DET	2	0.7%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			45.9 sec			

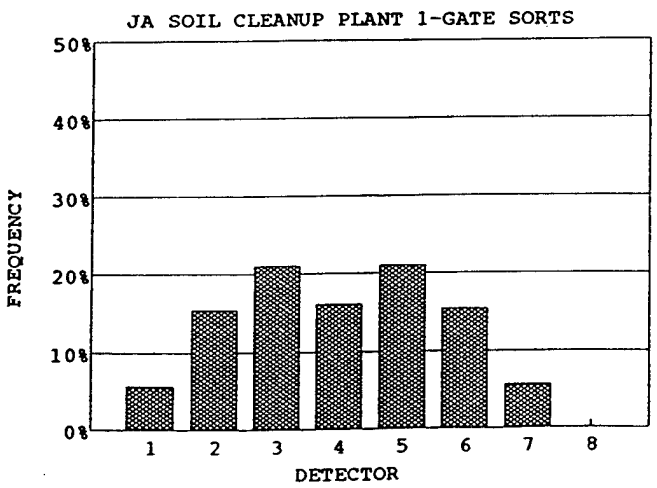
FREQUENCY DISTRIBUTIONS

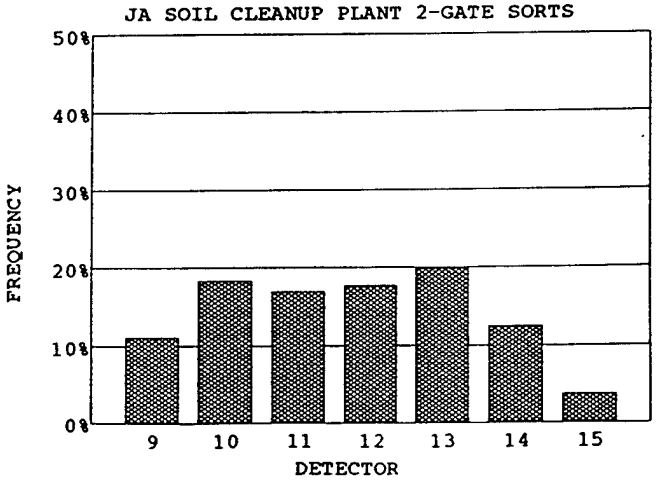
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	8	5.6%	-14000	0	-250	0.0%	4	24	8.6%
2	22	15.4%	-12000	0	-215	0.0%	8	130	46.6%
3	30	21.0%	-10000	2	-179	0.4%	12	36	12.9%
4	23	16.1%	-8000	0	-143	0.0%	16	23	8.2%
5	30	21.0%	-6000	0	-107	0.0%	20	19	6.8%
6	22	15.4%	-4000	3	-72	0.6%	24	12	4.3%
7	8	5.6%	-2000	1	-36	0.2%	28	6	2.2%
8	0	0.0%	0	3	0	0.6%	32	4	1.4%
TOTAL	143		2000	17	36	3.6%	36	4	1.4%
			4000	44	72	9.3%	40	1	0.4%
2-GATE SORTS			6000	82	107	17.3%	44	2	0.7%
DET	SORTS	FREQ%	8000	113	143	23.9%	48	2	0.7%
9	15	11.0%	10000	96	179	20.3%	52	1	0.4%
10	25	18.4%	12000	53	215	11.2%	56	2	0.7%
11	23	16.9%	14000	39	250	8.2%	60	2	0.7%
12	24	17.6%	16000	11	286	2.3%	64	1	0.4%
13	27	19.9%	18000	6	322	1.3%	68	3	1.1%
14	17	12.5%	20000	3	358	0.6%	72	2	0.7%
15	5	3.7%	22000	0	394	0.0%	76	1	0.4%
TOTAL	136		24000	0	429	0.0%	80	1	0.4%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	3	1.1%
			TOTAL	473			TOTAL	279	

EVENT TYPES HPE 287 MPE 5 DISE 5


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 07–Mar–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	07–Mar–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	145	Excused delays for contract (sorter–hrs)	2,166 hr
Current Contract week	25	Excused delay days (plant–days)	54 days
		Excused delay months (plant–month)	2.08 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	35.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,769 MT
Since 6 Sep 93	34,336 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	35,927 MT		
Total Soil production for project	62,214 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 08–Mar–94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM	
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	08–Mar–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	146	Excused delays for contract (sorter–hrs)	2,206 hr
Current Contract week	25	Excused delay days (plant–days)	55 days
		Excused delay months (plant–month)	2.12 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	35.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,769 MT
Since 6 Sep 93	34,336 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	35,927 MT		
Total Soil production for project	62,214 MT		

MT = metric tons

File Report1 Printed on 16-Mar-94 at 02:56:55 PM

WORK HISTORY – JA SOIL CLEANUP PLANT 09-Mar-94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM	
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START-UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START-UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT-DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN-TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	09-Mar-94
Contract day (from 6 Sep)	147
Current Contract week	25
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	34,336 MT
Since 6 Aug 93	35,927 MT
Total Soil production for project	62,214 MT

Excused Delays for day (sorter-hrs)	40 hr
Excused delays for contract (sorter-hrs)	2,246 hr
Excused delay days (plant-days)	56 days
Excused delay months (plant-month)	2.16 months
Percent of contract completed	35.9%
Tons Ahead or Behind Schedule	1,769 MT
Days ahead or behind schedule	6 days

MT = metric tons

File Report1 Printed on 16-Mar-94 at 03:44:43 PM

WORK HISTORY – JA SOIL CLEANUP PLANT 10–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM		
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR		

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	10–Mar–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	148	Excused delays for contract (sorter–hrs)	2,286 hr
Current Contract week	25	Excused delay days (plant–days)	57 days
		Excused delay months (plant–month)	2.20 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	35.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,769 MT
Since 6 Sep 93	34,336 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	35,927 MT		
Total Soil production for project	62,214 MT		

MT = metric tons

WORK HISTORY – JA SOIL CLEANUP PLANT 11–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	7.5 hr	7.5 hr	0.0 hr	0.0 hr	15.0 hr
SORTER START–UP	08:30	08:30	NA	NA	
START SOIL PROCESSING	09:10	09:10	NA	NA	
TIME REQUIRED TO START–UP	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.3 hr
SORTER SHUT–DOWN	16:00	16:00	NA	NA	
END SOIL PROCESSING	15:43	15:42	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	6.6 hr	6.5 hr	0.0 hr	0.0 hr	13.0 hr
DOWN–TIME	0.9 hr	1.0 hr	0.0 hr	0.0 hr	2.0 hr
SYSTEM PAUSE	0.0 hr	0.1 hr	0.0 hr	0.0 hr	0.1 hr
SORTER NONAVAILABLE TIME	3.0 hr	3.0 hr	10.0 hr	10.0 hr	26.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					86.9%
PRODUCTIVTY					31.0%

PRODUCTIVITY

Date	11–Mar–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	149	Excused delays for contract (sorter–hrs)	2,296 hr
Current Contract week	25	Excused delay days (plant–days)	57 days
		Excused delay months (plant–month)	2.21 months
Soil production for Day	131 MT		
Cumlative Soil Production for Week	131 MT	Percent of contract completed	36.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,663 MT
Since 6 Sep 93	34,468 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	36,059 MT		
Total Soil production for project	62,345 MT		

MT = metric tons

SORTER 1

11-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	7.8 tons	58.2 tons	66.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	6.2 yd³	46.2 yd³	52.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	99,666 kBq	37,549 kBq	10,465 kBq
MAXIMUM/SORT	11,480 kBq	13,938 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		4,826 Bq/kg	180 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,181		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		122		11:06	None
NONE (AD=0 & MD=0 & MND>0)		672		11:26	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		387			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	2				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			11,810		
2-SEC RECORDS WITH SORTS		1,244			
2-SEC RECORDS WITHOUT SORTS		10,566			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,425		
NONPROCESSING RECORDS (Test, calibration, etc)			2		

2-SEC SORT DETECTORS

1 DET	886	71.2%	5 DET	4	0.3%
2 DET	275	22.1%	6 DET	0	0.0%
3 DET	68	5.5%	7 DET	0	0.0%
4 DET	11	0.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 26.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	11	1.8%
2	23	3.7%
3	80	12.7%
4	126	20.1%
5	144	22.9%
6	115	18.3%
7	101	16.1%
8	28	4.5%
TOTAL	628	

2-GATE SORTS

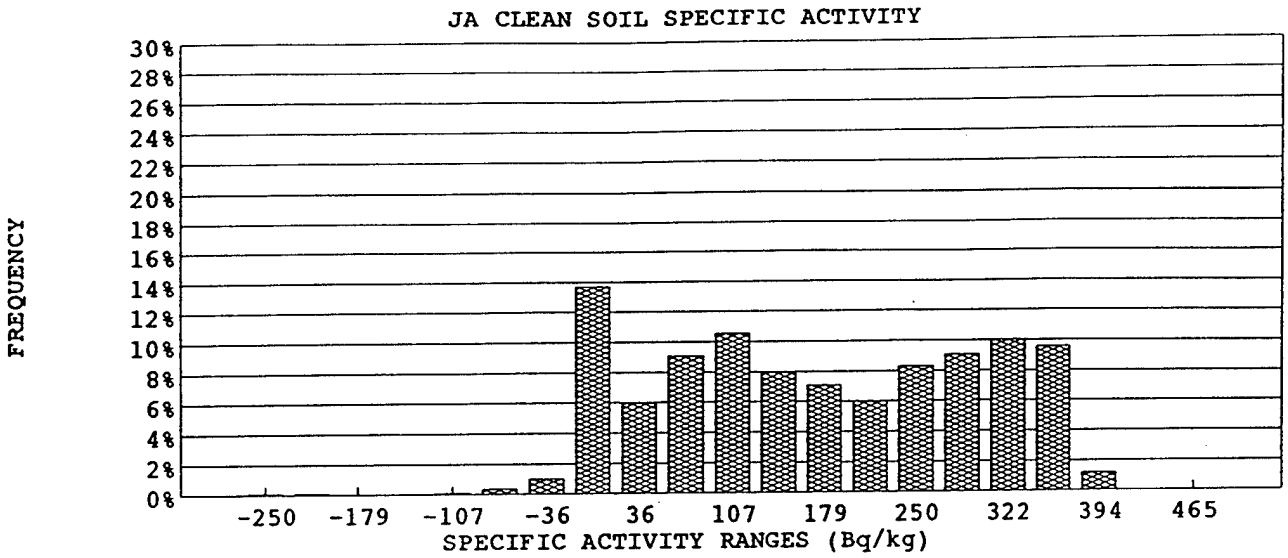
DET	SORTS	FREQ%
9	13	2.1%
10	45	7.3%
11	103	16.7%
12	146	23.7%
13	142	23.1%
14	104	16.9%
15	63	10.2%
TOTAL	616	

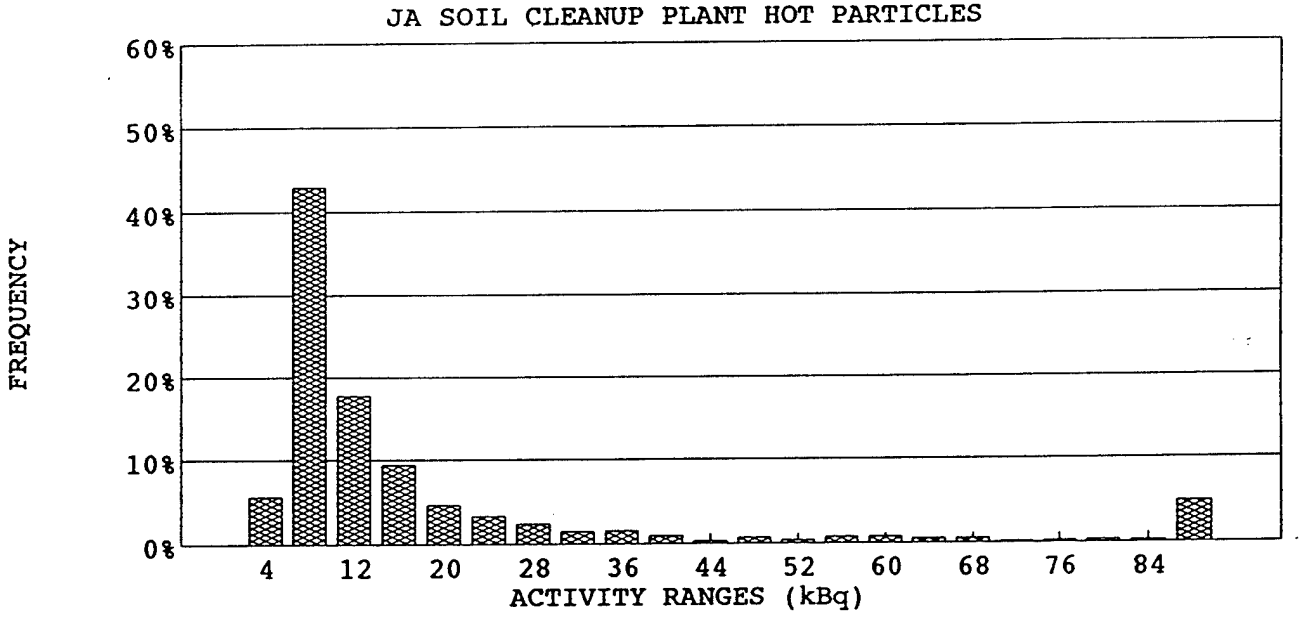
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	1
-10000	0
-8000	0
-6000	1
-4000	4
-2000	12
0	162
2000	70
4000	107
6000	125
8000	94
10000	84
12000	71
14000	98
16000	107
18000	119
20000	113
22000	14
24000	0
26000	0
>28000	0
TOTAL	1,183

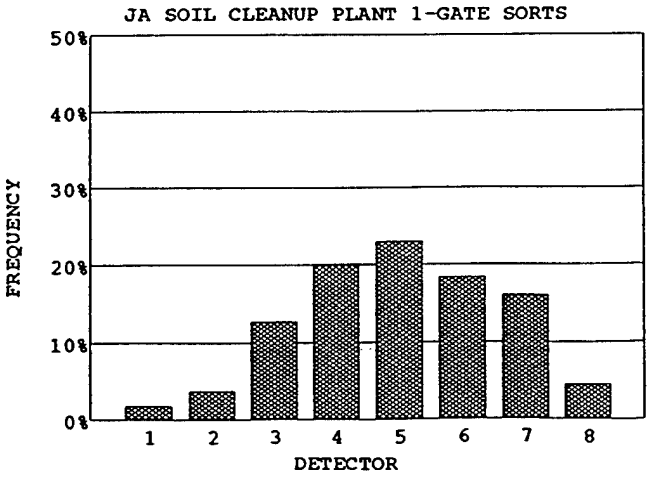
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.0%
-143	0.0%
-107	0.1%
-72	0.3%
-36	1.0%
0	13.7%
36	5.9%
72	9.0%
107	10.6%
143	7.9%
179	7.1%
215	6.0%
250	8.3%
286	9.0%
322	10.1%
358	9.6%
394	1.2%
429	0.0%
465	0.0%
0	0.0%

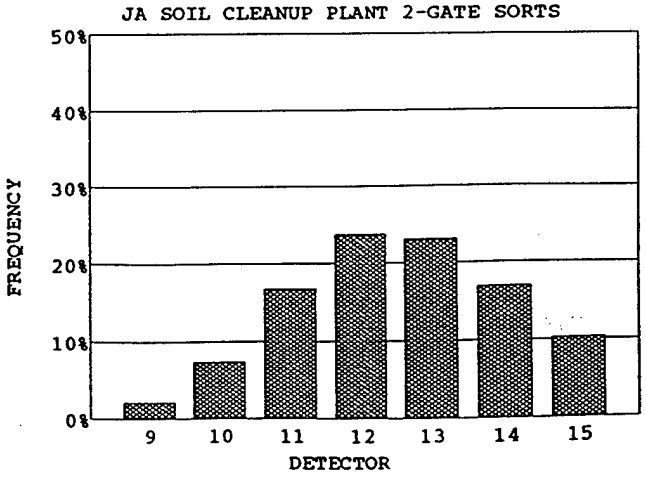
ACT_P (kBq)	NUM (#)	FREQ%
4	70	5.6%
8	534	42.9%
12	221	17.8%
16	117	9.4%
20	58	4.7%
24	41	3.3%
28	30	2.4%
32	18	1.4%
36	19	1.5%
40	12	1.0%
44	4	0.3%
48	9	0.7%
52	5	0.4%
56	10	0.8%
60	10	0.8%
64	7	0.6%
68	7	0.6%
72	2	0.2%
76	3	0.2%
80	4	0.3%
84	3	0.2%
>84	60	4.8%
TOTAL	1,244	

EVENT TYPES HPE 1,214 MPE 47 DISE 9872


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

11-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	20.5 tons	44.7 tons	65.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	16.3 yd³	35.4 yd³	51.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	68.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	25,177 kBq	18,155 kBq	8,512 kBq
MAXIMUM/SORT	864 kBq	636 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		885 Bq/kg	191 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,166		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		353		09:56	13:25
NONE (AD=0 & MD=0 & MND>0)		510		13:49	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		303			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	2				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			11,660		
2-SEC RECORDS WITH SORTS		1,438			
2-SEC RECORDS WITHOUT SORTS		10,222			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,604		
NONPROCESSING RECORDS (Test, calibration, etc)			2		

2-SEC SORT DETECTORS

1 DET	1,049	72.9%	5 DET	2	0.1%
2 DET	317	22.0%	6 DET	0	0.0%
3 DET	60	4.2%	7 DET	0	0.0%
4 DET	10	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 22.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	28	4.0%
2	115	16.4%
3	147	20.9%
4	123	17.5%
5	126	17.9%
6	89	12.7%
7	62	8.8%
8	13	1.8%
TOTAL	703	

2-GATE SORTS

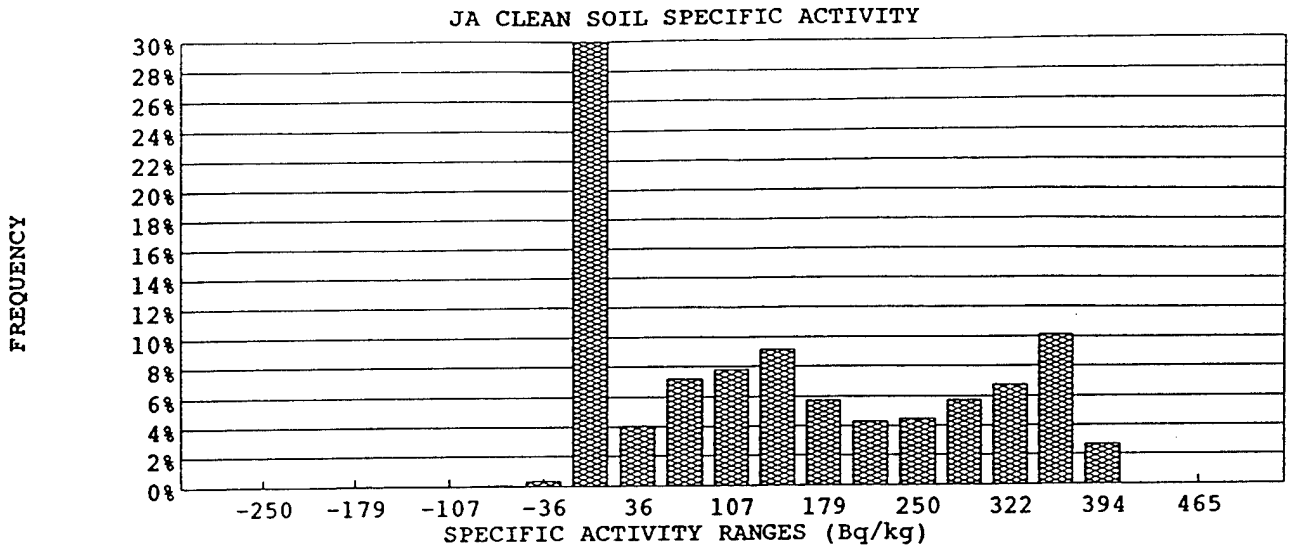
DET	SORTS	FREQ%
9	64	8.7%
10	151	20.5%
11	159	21.6%
12	141	19.2%
13	104	14.1%
14	82	11.2%
15	34	4.6%
TOTAL	735	

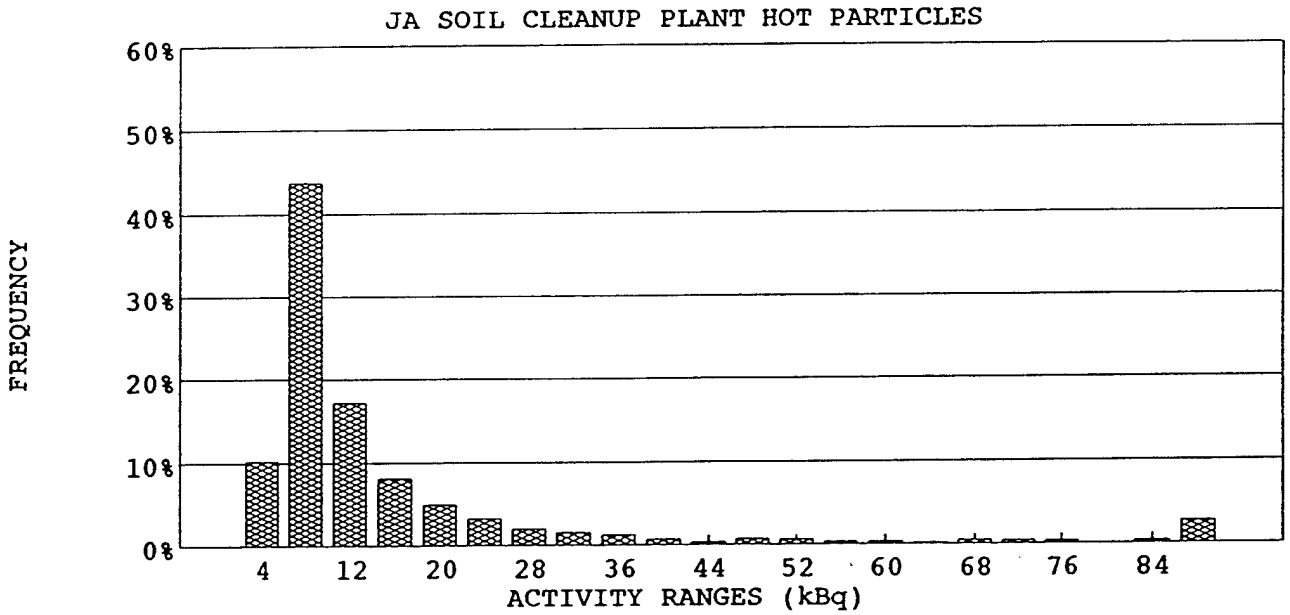
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	1
-8000	1
-6000	0
-4000	1
-2000	4
0	368
2000	47
4000	84
6000	91
8000	107
10000	67
12000	50
14000	52
16000	67
18000	79
20000	118
22000	31
24000	0
26000	0
>28000	0
TOTAL	1,168

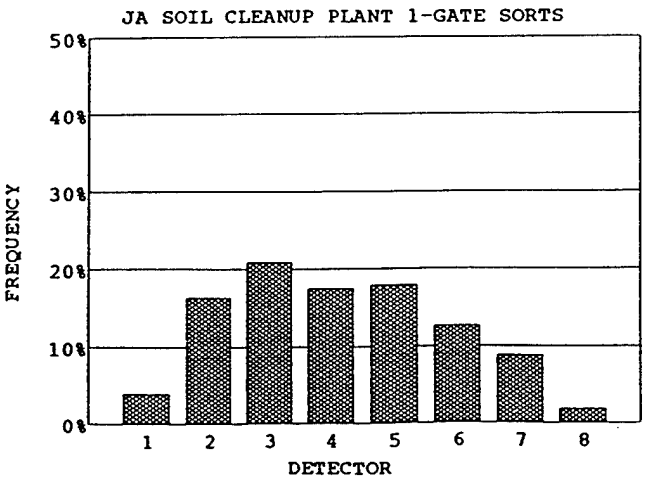
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.1%
-143	0.1%
-107	0.0%
-72	0.1%
-36	0.3%
0	31.5%
36	4.0%
72	7.2%
107	7.8%
143	9.2%
179	5.7%
215	4.3%
250	4.5%
286	5.7%
322	6.8%
358	10.1%
394	2.7%
429	0.0%
465	0.0%
0	0.0%

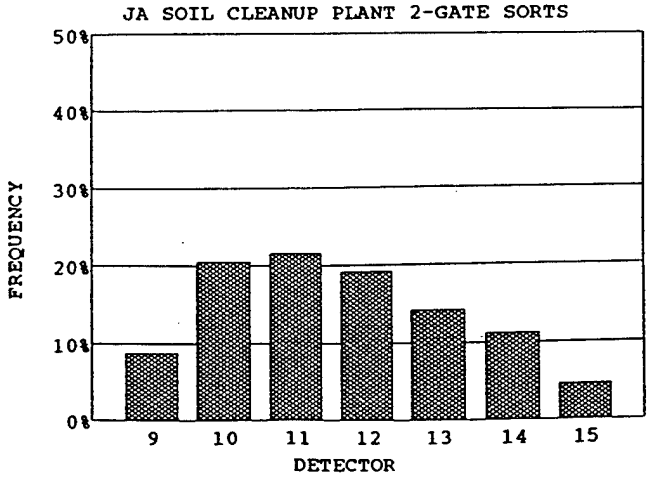
ACT_P (kBq)	NUM (#)	FREQ%
4	147	10.2%
8	628	43.7%
12	248	17.2%
16	117	8.1%
20	72	5.0%
24	47	3.3%
28	29	2.0%
32	22	1.5%
36	18	1.3%
40	11	0.8%
44	5	0.3%
48	11	0.8%
52	9	0.6%
56	5	0.3%
60	5	0.3%
64	2	0.1%
68	7	0.5%
72	6	0.4%
76	5	0.3%
80	0	0.0%
84	5	0.3%
>84	39	2.7%
TOTAL	1,438	

EVENT TYPES HPE 1,432 MPE 40 DISE 27885


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 12–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM		
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR		

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	14–Mar–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	151	Excused delays for contract (sorter–hrs)	2,386 hr
Current Contract week	26	Excused delay days (plant–days)	60 days
		Excused delay months (plant–month)	2.29 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	36.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,742 MT
Since 6 Sep 93	34,468 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	36,059 MT		
Total Soil production for project	62,345 MT		

MT = metric tons

WORK HISTORY – JA SOIL CLEANUP PLANT 14–Mar–94

WORK DAY START	6:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START–UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT–DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN–TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	14–Mar–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	151	Excused delays for contract (sorter–hrs)	2,386 hr
Current Contract week	26	Excused delay days (plant–days)	60 days
		Excused delay months (plant–month)	2.29 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	36.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,742 MT
Since 6 Sep 93	34,468 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	36,059 MT		
Total Soil production for project	62,345 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 15-Mar-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:51	06:51	NA	NA	
TIME REQUIRED TO START-UP	0.9 hr	0.9 hr	0.0 hr	0.0 hr	1.7 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:41	15:41	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
ACTUAL PROCESS HOURS	7.1 hr	6.9 hr	0.0 hr	0.0 hr	14.1 hr
DOWN-TIME	3.1 hr	3.3 hr	0.0 hr	0.0 hr	6.4 hr
SYSTEM PAUSE	1.7 hr	1.9 hr	0.0 hr	0.0 hr	3.7 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					68.7%
PRODUCTIVTY					33.5%

PRODUCTIVITY

Date	15-Mar-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	152	Excused delays for contract (sorter-hrs)	2,406 hr
Current Contract week	26	Excused delay days (plant-days)	60 days
		Excused delay months (plant-month)	2.31 months
Soil production for Day	142 MT		
Cumlative Soil Production for Week	142 MT	Percent of contract completed	36.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,725 MT
Since 6 Sep 93	34,609 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	36,200 MT		
Total Soil production for project	62,487 MT		

MT = metric tons

SORTER 1

15-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.1 tons	63.8 tons	71.9 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	6.4 yd³	50.6 yd³	57.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	38,323 kBq	15,304 kBq	15,747 kBq
MAXIMUM/SORT	2,499 kBq	1,353 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		1,893 Bq/kg	247 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,286		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		124		07:29	06:52
NONE (AD=0 & MD=0 & MND>0)		646		07:29	07:30
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		516		08:05	07:40
UNEXPLAINED RECORDS	0				07:44
0<AD<1kBq & MD>0	0				08:08
AD=0 & MD>0	2				08:27
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			12,860		
2-SEC RECORDS WITH SORTS		1,343			
2-SEC RECORDS WITHOUT SORTS		11,517			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,629		
NONPROCESSING RECORDS (Test, calibration, etc)			7		

2-SEC SORT DETECTORS

1 DET	994	74.0%	5 DET	1	0.1%
2 DET	270	20.1%	6 DET	0	0.0%
3 DET	63	4.7%	7 DET	0	0.0%
4 DET	15	1.1%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 25.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	7	1.0%
2	24	3.5%
3	94	13.7%
4	123	17.9%
5	151	22.0%
6	142	20.7%
7	107	15.6%
8	39	5.7%
TOTAL	687	

2-GATE SORTS

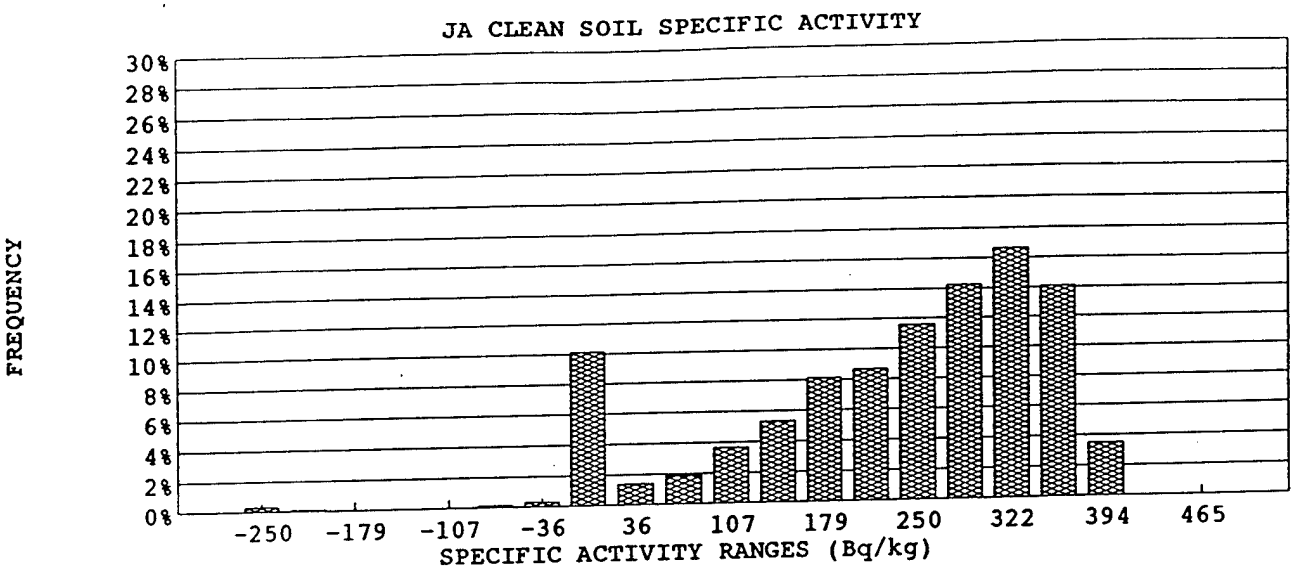
DET	SORTS	FREQ%
9	18	2.7%
10	52	7.9%
11	107	16.3%
12	138	21.0%
13	159	24.2%
14	110	16.8%
15	72	11.0%
TOTAL	656	

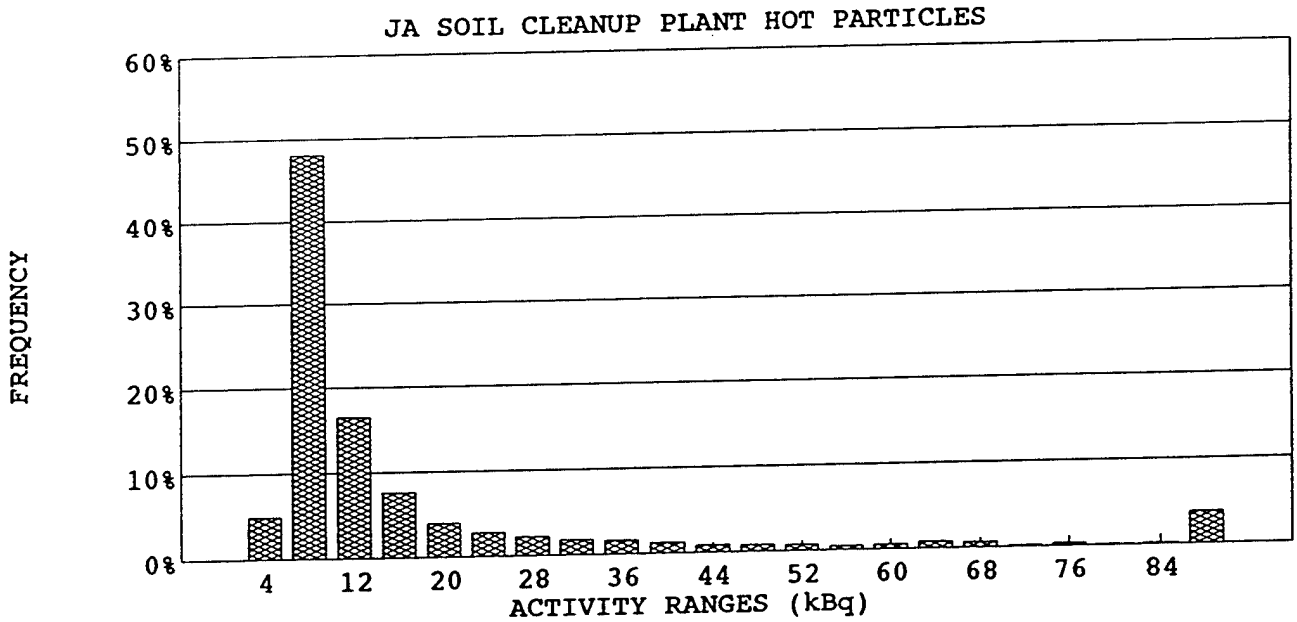
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	4	-250	0.3%	4	66	4.9%
-12000	1	-215	0.1%	8	646	48.1%
-10000	0	-179	0.0%	12	222	16.5%
-8000	0	-143	0.0%	16	103	7.7%
-6000	0	-107	0.0%	20	53	3.9%
-4000	2	-72	0.2%	24	37	2.8%
-2000	4	-36	0.3%	28	30	2.2%
0	131	0	10.1%	32	24	1.8%
2000	18	36	1.4%	36	22	1.6%
4000	24	72	1.9%	40	17	1.3%
6000	47	107	3.6%	44	12	0.9%
8000	69	143	5.3%	48	10	0.7%
10000	105	179	8.1%	52	9	0.7%
12000	112	215	8.7%	56	6	0.4%
14000	150	250	11.6%	60	7	0.5%
16000	184	286	14.2%	64	11	0.8%
18000	215	322	16.6%	68	8	0.6%
20000	182	358	14.1%	72	2	0.1%
22000	45	394	3.5%	76	4	0.3%
24000	0	429	0.0%	80	1	0.1%
26000	0	465	0.0%	84	2	0.1%
>28000	0	0	0.0%	>84	51	3.8%
TOTAL	1,293			TOTAL	1,343	

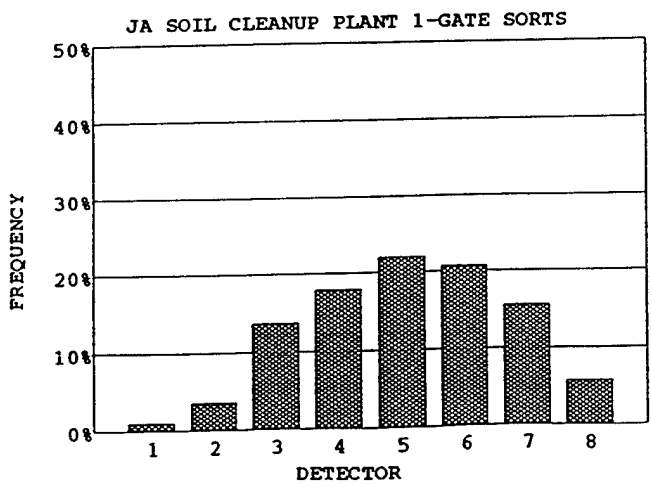
EVENT TYPES	HPE	MPE	DISE
	1,347	55	10162

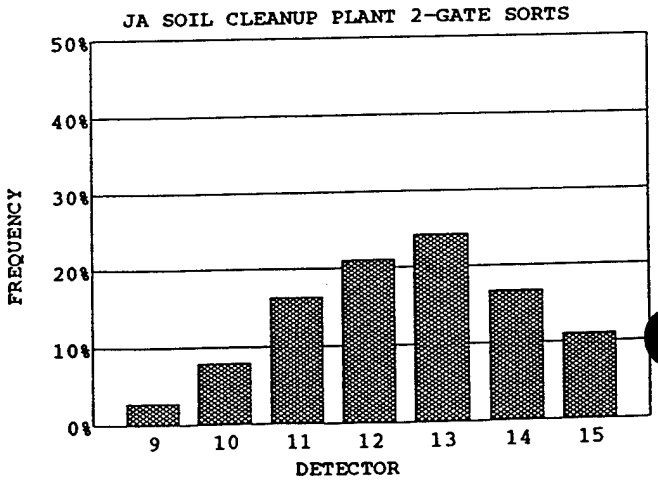
SORTER 1

15-Mar-94









SORTER 2

15-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.85 ± 1.27 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	16.0 tons	53.8 tons	69.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	39.1 kg	
VOLUME IN-GROUND	12.7 yd³	42.7 yd³	55.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	77.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	39,852 kBq	32,315 kBq	14,471 kBq
MAXIMUM/SORT	2,830 kBq	2,574 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	-3 kBq
SPECIFIC ACTIVITY		2,024 Bq/kg	269 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,248	07:29	06:52
ALL 80 ELEMENTS SORT (MD>0&MND=0)		260		07:30	07:29
NONE (AD=0 & MD=0 & MND>0)		425		08:05	07:30
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		563		08:22	07:37
UNEXPLAINED RECORDS	0			08:24	07:43
0<AD<1kBq & MD>0	0				07:45
AD=0 & MD>0	5				08:05
AD<0 & MD >0	0				08:22
2-SEC COUNT PERIODS			12,480		08:24
2-SEC RECORDS WITH SORTS		1,868			
2-SEC RECORDS WITHOUT SORTS		10,612			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,116		
NONPROCESSING RECORDS (Test, calibration, etc)			8		

2-SEC SORT DETECTORS

1 DET	1,395	74.7%	5 DET	5	0.3%
2 DET	398	21.3%	6 DET	0	0.0%
3 DET	58	3.1%	7 DET	0	0.0%
4 DET	12	0.6%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 17.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	45	4.7%
2	142	14.9%
3	172	18.1%
4	170	17.9%
5	172	18.1%
6	159	16.7%
7	76	8.0%
8	14	1.5%
TOTAL	950	

2-GATE SORTS

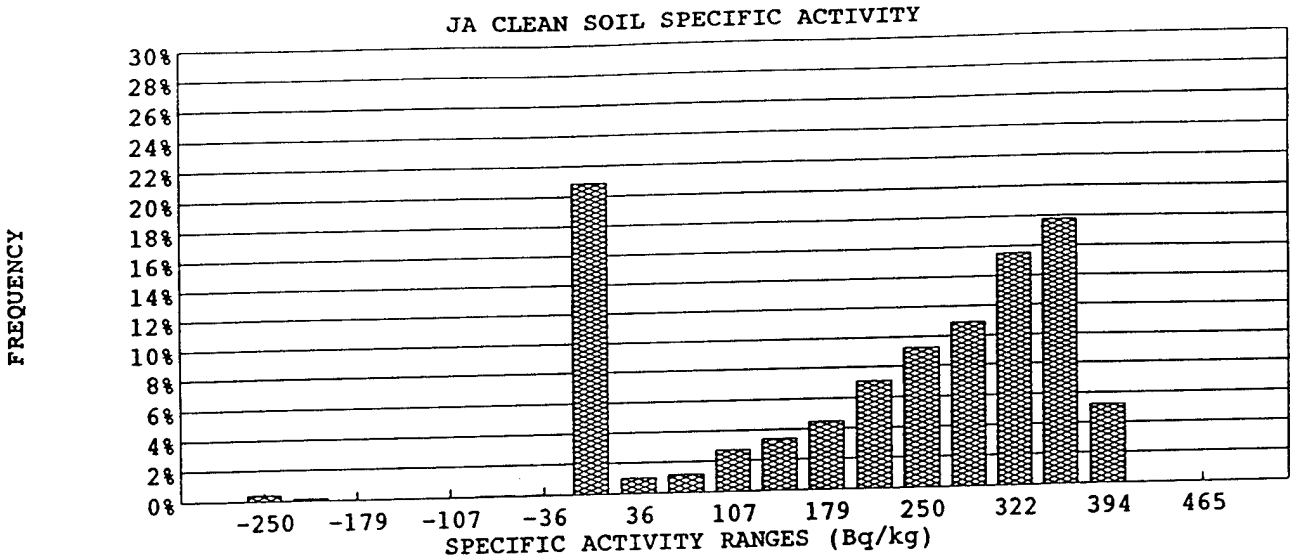
DET	SORTS	FREQ%
9	100	10.9%
10	152	16.6%
11	193	21.0%
12	165	18.0%
13	157	17.1%
14	115	12.5%
15	36	3.9%
TOTAL	918	

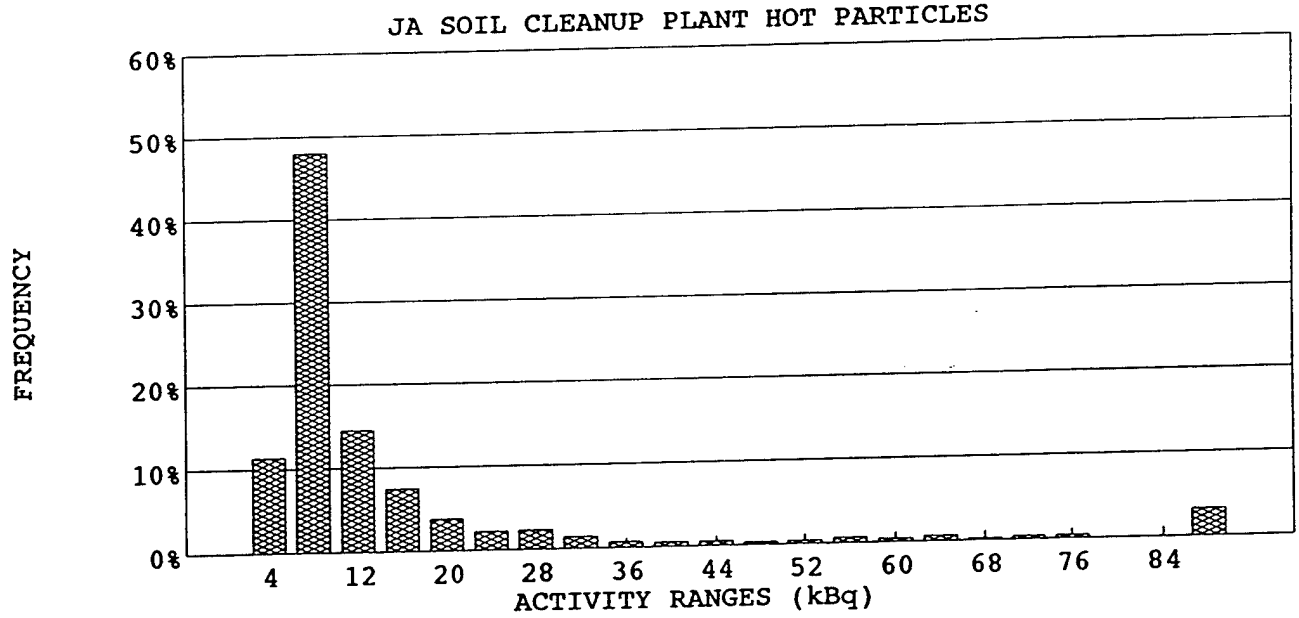
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	5	-250	0.4%	4	211	11.3%
-12000	2	-215	0.2%	8	897	48.0%
-10000	0	-179	0.0%	12	271	14.5%
-8000	0	-143	0.0%	16	139	7.4%
-6000	0	-107	0.0%	20	71	3.8%
-4000	1	-72	0.1%	24	43	2.3%
-2000	1	-36	0.1%	28	44	2.4%
0	262	0	20.9%	32	27	1.4%
2000	13	36	1.0%	36	14	0.7%
4000	15	72	1.2%	40	11	0.6%
6000	34	107	2.7%	44	10	0.5%
8000	42	143	3.3%	48	6	0.3%
10000	56	179	4.5%	52	7	0.4%
12000	89	215	7.1%	56	12	0.6%
14000	116	250	9.2%	60	8	0.4%
16000	137	286	10.9%	64	12	0.6%
18000	195	322	15.5%	68	5	0.3%
20000	223	358	17.8%	72	8	0.4%
22000	65	394	5.2%	76	8	0.4%
24000	0	429	0.0%	80	1	0.1%
26000	0	465	0.0%	84	1	0.1%
>28000	0	0	0.0%	>84	62	3.3%
TOTAL	1,256			TOTAL	1,868	

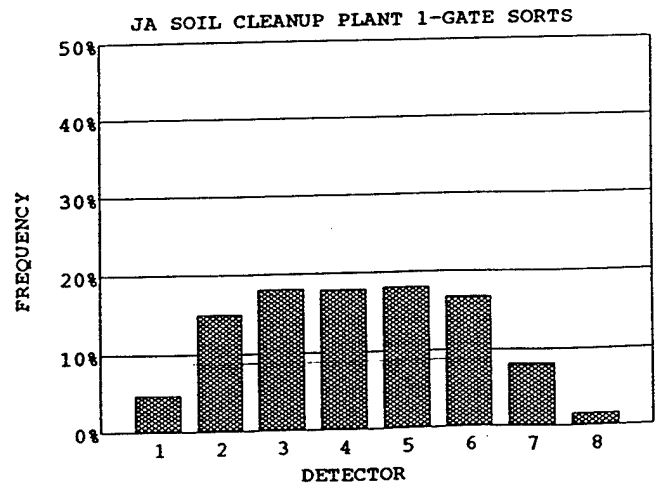
EVENT TYPES HPE 1,874 MPE 63 DISE 20906

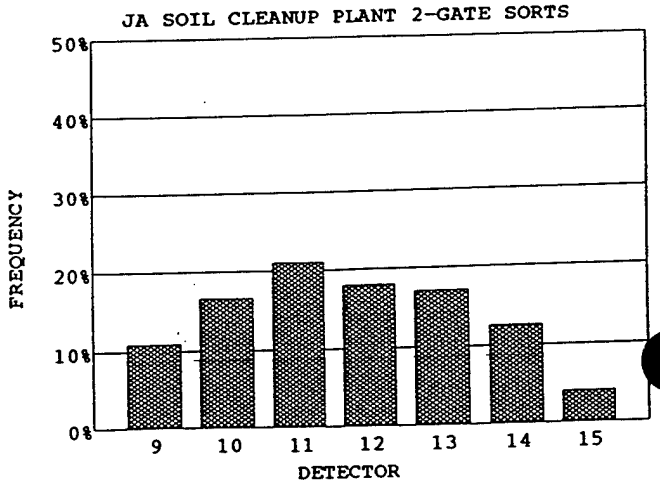
SORTER 2

15-Mar-94









WORK HISTORY – JA SOIL CLEANUP PLANT 16-Mar-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	8.3 hr	0.0 hr	0.0 hr	18.5 hr
SORTER START-UP	06:00	08:00	NA	NA	
START SOIL PROCESSING	08:10	08:09	NA	NA	
TIME REQUIRED TO START-UP	2.2 hr	0.2 hr	0.0 hr	0.0 hr	2.3 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:56	15:55	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	7.2 hr	7.3 hr	0.0 hr	0.0 hr	14.5 hr
DOWN-TIME	3.1 hr	1.0 hr	0.0 hr	0.0 hr	4.1 hr
SYSTEM PAUSE	0.6 hr	0.5 hr	0.0 hr	0.0 hr	1.1 hr
SORTER NONAVAILABLE TIME	0.2 hr	2.2 hr	10.0 hr	10.0 hr	22.5 hr
AUTHORIZED DELAY TIME	2.5 hr	2.5 hr	10.0 hr	10.0 hr	25.0 hr
PLANT PERFORMANCE					78.1%
PRODUCTIVTY					34.4%

PRODUCTIVITY

Date	16-Mar-94
Contract day (from 6 Sep)	153
Current Contract week	26
Soil production for Day	145 MT
Cumlative Soil Production for Week	287 MT
Total Soil production for contract	
Since 6 Sep 93	34,755 MT
Since 6 Aug 93	36,346 MT
Total Soil production for project	62,632 MT

MT = metric tons

Excused Delays for day (sorter-hrs)	25 hr
Excused delays for contract (sorter-hrs)	2,431 hr
Excused delay days (plant-days)	61 days
Excused delay months (plant-month)	2.34 months
Percent of contract completed	36.3%
Tons Ahead or Behind Schedule	1,752 MT
Days ahead or behind schedule	6 days

16-Mar-94

SORTER 1

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.3 tons	68.9 tons	72.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	2.6 yd³	54.6 yd³	57.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	57,596 kBq	18,862 kBq	13,484 kBq
MAXIMUM/SORT	6,808 kBq	3,990 kBq	20 kBq
MINIMUM/SORT	3 kBq	(9,757)Bq	-12 kBq
SPECIFIC ACTIVITY		5,694 Bq/kg	196 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,291		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			47		09:10	09:04
NONE (AD=0 & MD=0 & MND>0)			859		09:50	09:21
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			385		13:01	09:51
UNEXPLAINED RECORDS			0		14:55	
0<AD<1kBq & MD>0			2			
AD=0 & MD>0			1			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				12,910		
2-SEC RECORDS WITH SORTS			918			
2-SEC RECORDS WITHOUT SORTS			11,992			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,209		
NONPROCESSING RECORDS (Test, calibration, etc)				5		
2-SEC SORT DETECTORS						
1 DET	655	71.4%	5 DET	5	0.5%	
2 DET	205	22.3%	6 DET	0	0.0%	
3 DET	42	4.6%	7 DET	0	0.0%	
4 DET	11	1.2%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			39.4 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	7	1.5%
2	30	6.5%
3	62	13.4%
4	70	15.1%
5	109	23.5%
6	93	20.1%
7	69	14.9%
8	23	5.0%
TOTAL	463	

2-GATE SORTS

DET	SORTS	FREQ%
9	19	4.2%
10	36	7.9%
11	73	16.0%
12	97	21.3%
13	108	23.7%
14	69	15.2%
15	53	11.6%
TOTAL	455	

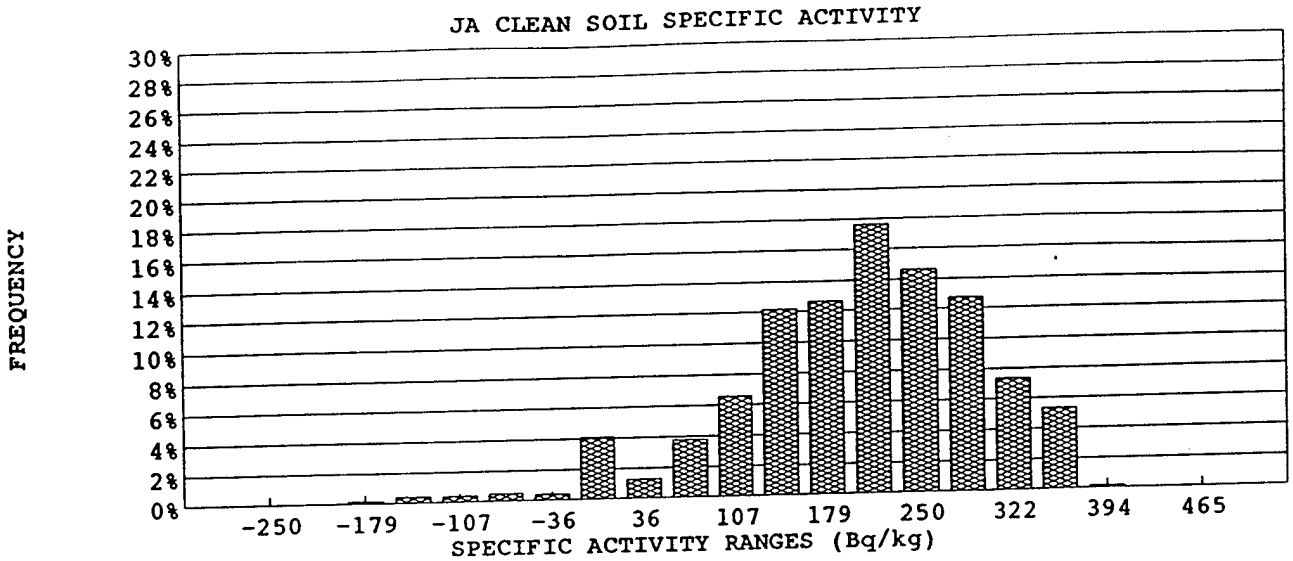
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	2
-8000	5
-6000	5
-4000	6
-2000	5
0	53
2000	16
4000	49
6000	85
8000	158
10000	164
12000	229
14000	189
16000	165
18000	95
20000	69
22000	2
24000	0
26000	0
>28000	0
TOTAL	1,297

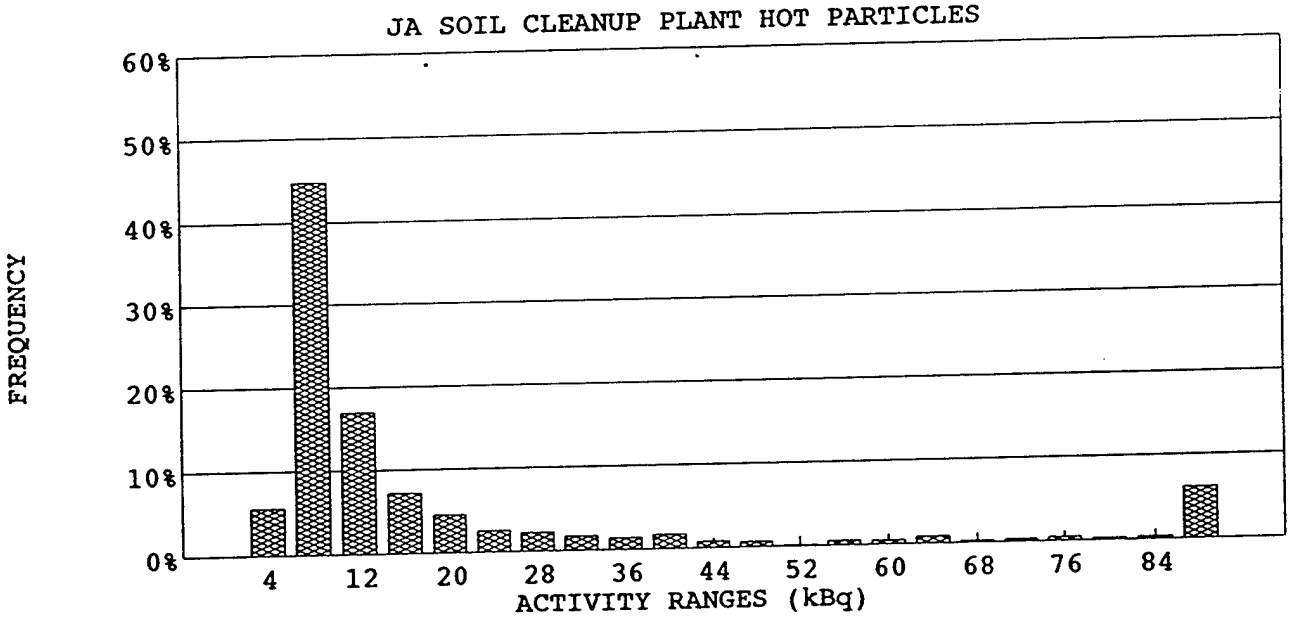
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.2%
-143	0.4%
-107	0.4%
-72	0.5%
-36	0.4%
0	4.1%
36	1.2%
72	3.8%
107	6.6%
143	12.2%
179	12.6%
215	17.7%
250	14.6%
286	12.7%
322	7.3%
358	5.3%
394	0.2%
429	0.0%
465	0.0%
0	0.0%

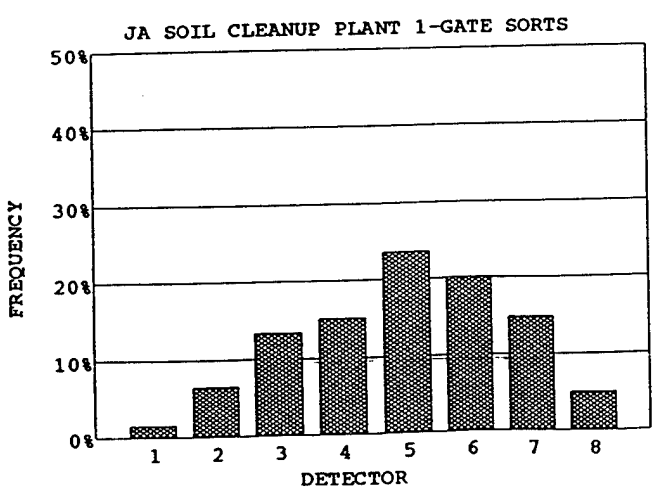
ACT_P (kBq)	NUM (#)	FREQ%
4	52	5.7%
8	411	44.8%
12	155	16.9%
16	67	7.3%
20	42	4.6%
24	23	2.5%
28	21	2.3%
32	16	1.7%
36	13	1.4%
40	16	1.7%
44	7	0.8%
48	6	0.7%
52	1	0.1%
56	5	0.5%
60	4	0.4%
64	8	0.9%
68	2	0.2%
72	3	0.3%
76	4	0.4%
80	2	0.2%
84	3	0.3%
>84	57	6.2%
TOTAL	918	

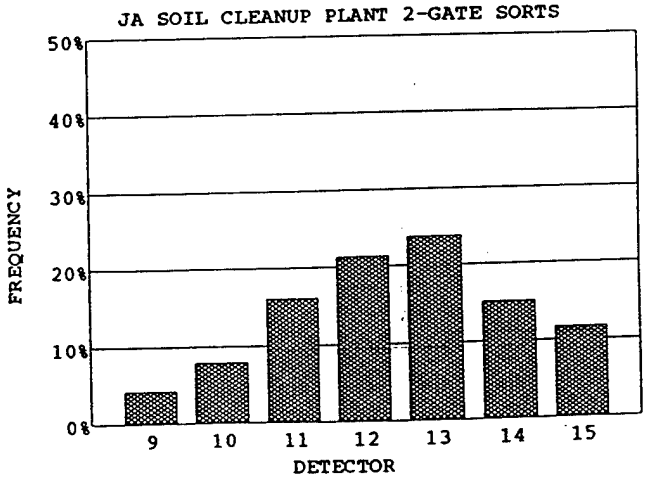
EVENT TYPES HPE 925 MPE 31 DISE 3783

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

16-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.0 tons	70.2 tons	73.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	2.4 yd³	55.7 yd³	58.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	64,737 kBq	20,914 kBq	13,754 kBq
MAXIMUM/SORT	7,737 kBq	4,599 kBq	21 kBq
MINIMUM/SORT	2 kBq	(31,425)Bq	-15 kBq
SPECIFIC ACTIVITY		6,987 Bq/kg	196 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,310		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	37		09:50	09:21
NONE (AD=0 & MD=0 & MND>0)	772		11:12	09:51
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	500		14:23	
UNEXPLAINED RECORDS	1		15:02	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		13,100		
2-SEC RECORDS WITH SORTS	1,282			
2-SEC RECORDS WITHOUT SORTS	11,818			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,592		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

1 DET	918	71.6%	5 DET	3	0.2%
2 DET	302	23.6%	6 DET	0	0.0%
3 DET	50	3.9%	7 DET	0	0.0%
4 DET	9	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 28.5 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	37	5.7%
2	135	21.0%
3	117	18.2%
4	115	17.9%
5	108	16.8%
6	81	12.6%
7	43	6.7%
8	8	1.2%
TOTAL	644	

2-GATE SORTS

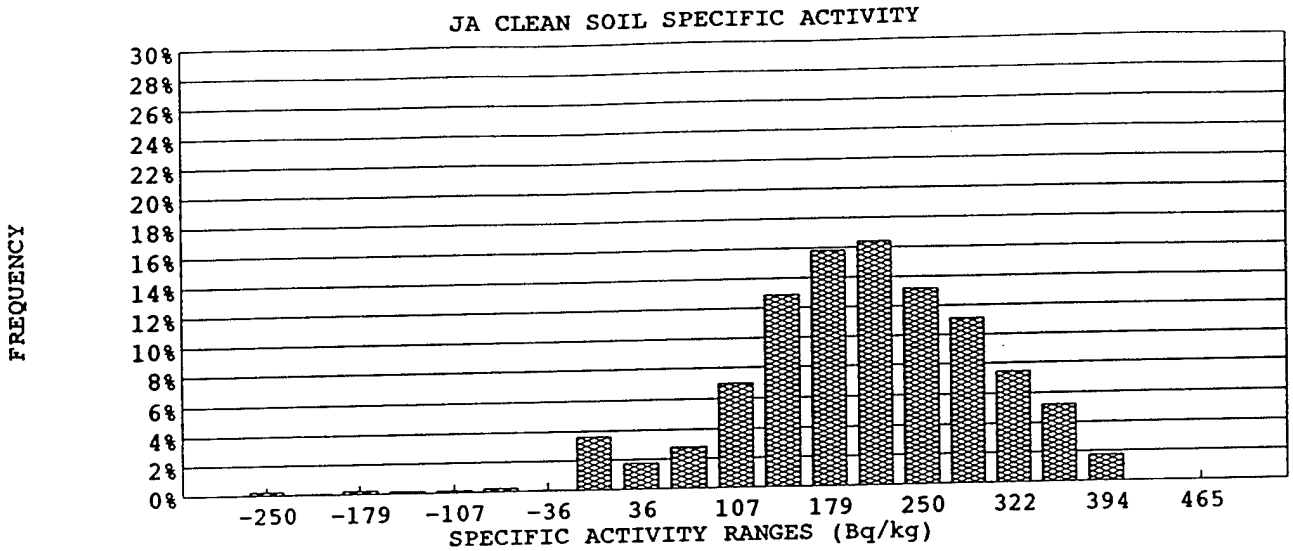
DET	SORTS	FREQ%
9	96	15.0%
10	131	20.5%
11	128	20.1%
12	105	16.5%
13	99	15.5%
14	59	9.2%
15	20	3.1%
TOTAL	638	

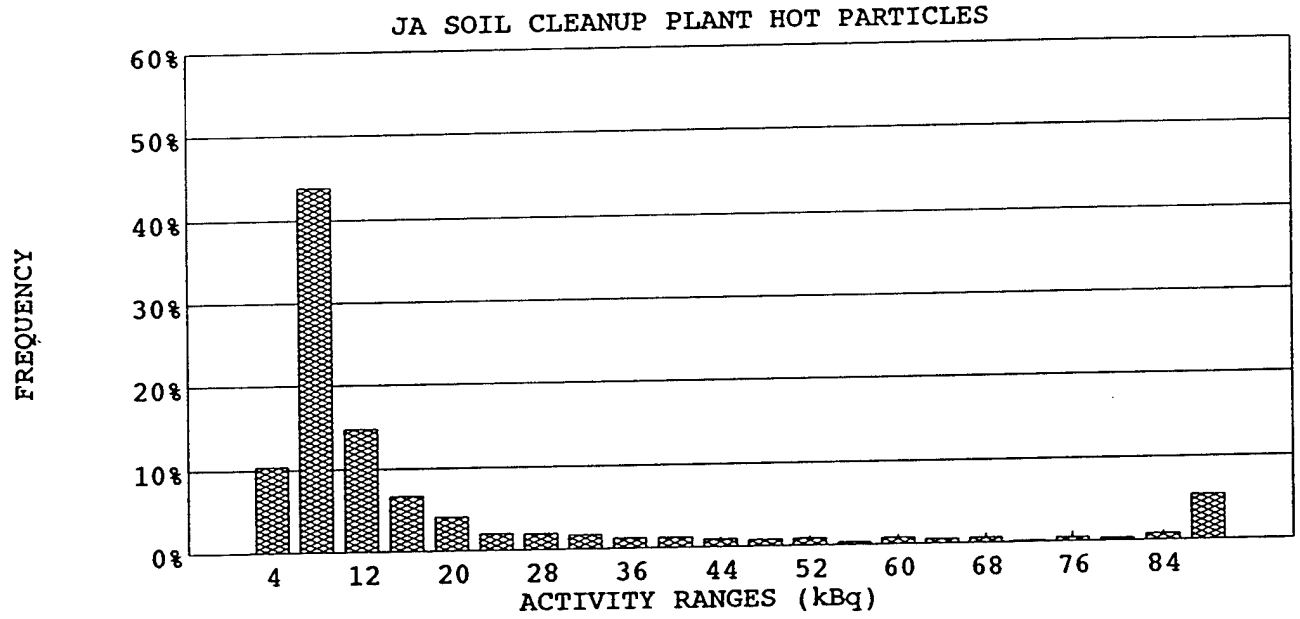
ACT_ND (Bq)	NUM (#)
-14000	3
-12000	1
-10000	3
-8000	2
-6000	2
-4000	3
-2000	1
0	47
2000	23
4000	37
6000	92
8000	169
10000	208
12000	215
14000	173
16000	146
18000	98
20000	68
22000	23
24000	0
26000	0
>28000	0
TOTAL	1,314

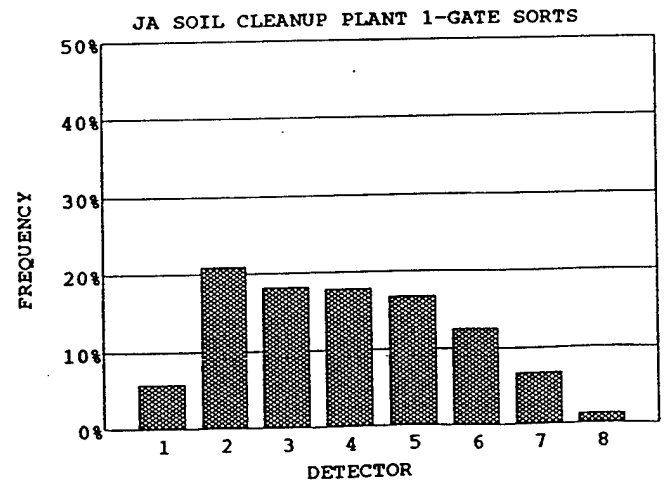
SPEC_A (Bq/kg)	FREQ%
-250	0.2%
-215	0.1%
-179	0.2%
-143	0.2%
-107	0.2%
-72	0.2%
-36	0.1%
0	3.6%
36	1.8%
72	2.8%
107	7.0%
143	12.9%
179	15.8%
215	16.4%
250	13.2%
286	11.1%
322	7.5%
358	5.2%
394	1.8%
429	0.0%
465	0.0%
0	0.0%

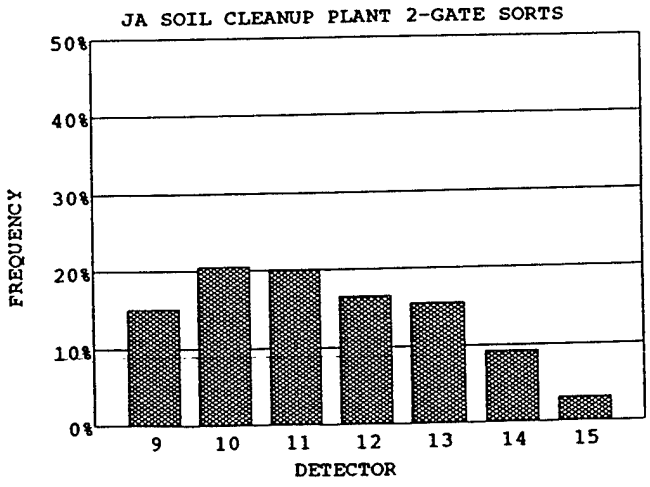
ACT_P (kBq)	NUM (#)	FREQ%
4	133	10.4%
8	562	43.8%
12	189	14.7%
16	86	6.7%
20	53	4.1%
24	26	2.0%
28	25	2.0%
32	22	1.7%
36	16	1.2%
40	16	1.2%
44	12	0.9%
48	10	0.8%
52	11	0.9%
56	4	0.3%
60	10	0.8%
64	7	0.5%
68	8	0.6%
72	2	0.2%
76	6	0.5%
80	4	0.3%
84	10	0.8%
>84	70	5.5%
TOTAL	1,282	

EVENT TYPES HPE 1,281 MPE 37 DISE 3044


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 17–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:15	06:15	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:52	15:53	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	9.6 hr	9.5 hr	0.0 hr	0.0 hr	19.1 hr
DOWN–TIME	0.6 hr	0.8 hr	0.0 hr	0.0 hr	1.4 hr
SYSTEM PAUSE	0.0 hr	0.2 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					93.1%
PRODUCTIVTY					45.4%

PRODUCTIVITY

Date	17–Mar–94
Contract day (from 6 Sep)	154
Current Contract week	26
Soil production for Day	192 MT
Cumlative Soil Production for Week	479 MT
Total Soil production for contract	
Since 6 Sep 93	34,947 MT
Since 6 Aug 93	36,538 MT
Total Soil production for project	62,825 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,451 hr
Excused delay days (plant–days)	61 days
Excused delay months (plant–month)	2.36 months
Percent of contract completed	36.5%
Tons Ahead or Behind Schedule	1,785 MT
Days ahead or behind schedule	6 days

File Report1 Printed on 18-Mar-94 at 11:45:06 AM

SORTER 1

17-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.68 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.2 tons	95.6 tons	96.8 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	1.0 yd³	75.8 yd³	76.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	31,263 kBq	10,673 kBq	11,523 kBq
MAXIMUM/SORT	5,688 kBq	3,062 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		8,553 Bq/kg	121 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,732		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		10		11:34	None
NONE (AD=0 & MD=0 & MND>0)		1,344			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		378			
UNEXPLAINED RECORDS		0			
0<AD<1kBq & MD>0		1			
AD=0 & MD>0		0			
AD<0 & MD >0		0			
2-SEC COUNT PERIODS			17,320		
2-SEC RECORDS WITH SORTS		877			
2-SEC RECORDS WITHOUT SORTS		16,443			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,609		
NONPROCESSING RECORDS (Test, calibration, etc)			6		

2-SEC SORT DETECTORS

1 DET	619	70.6%	5 DET	3	0.3%
2 DET	202	23.0%	6 DET	0	0.0%
3 DET	45	5.1%	7 DET	0	0.0%
4 DET	8	0.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 56.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	6	1.4%
2	29	6.5%
3	66	14.9%
4	79	17.8%
5	93	20.9%
6	76	17.1%
7	74	16.7%
8	21	4.7%
TOTAL	444	

2-GATE SORTS

DET	SORTS	FREQ%
9	9	2.1%
10	49	11.3%
11	72	16.6%
12	92	21.2%
13	88	20.3%
14	72	16.6%
15	51	11.8%
TOTAL	433	

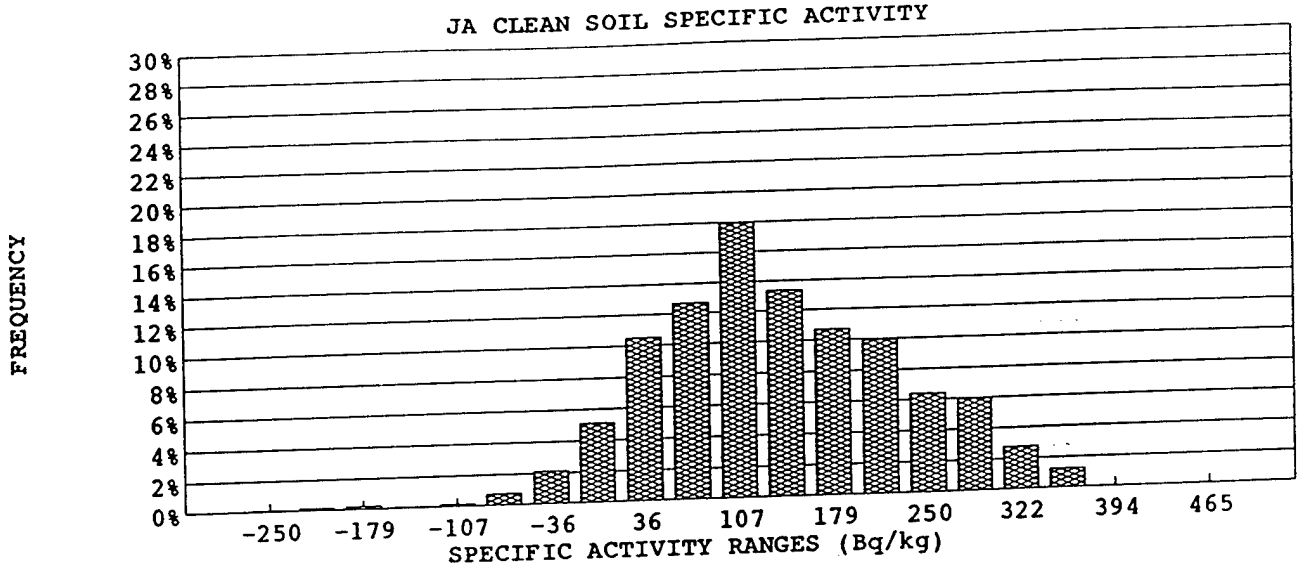
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	2
-10000	3
-8000	1
-6000	2
-4000	13
-2000	37
0	89
2000	183
4000	221
6000	312
8000	232
10000	186
12000	172
14000	111
16000	104
18000	48
20000	21
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,738

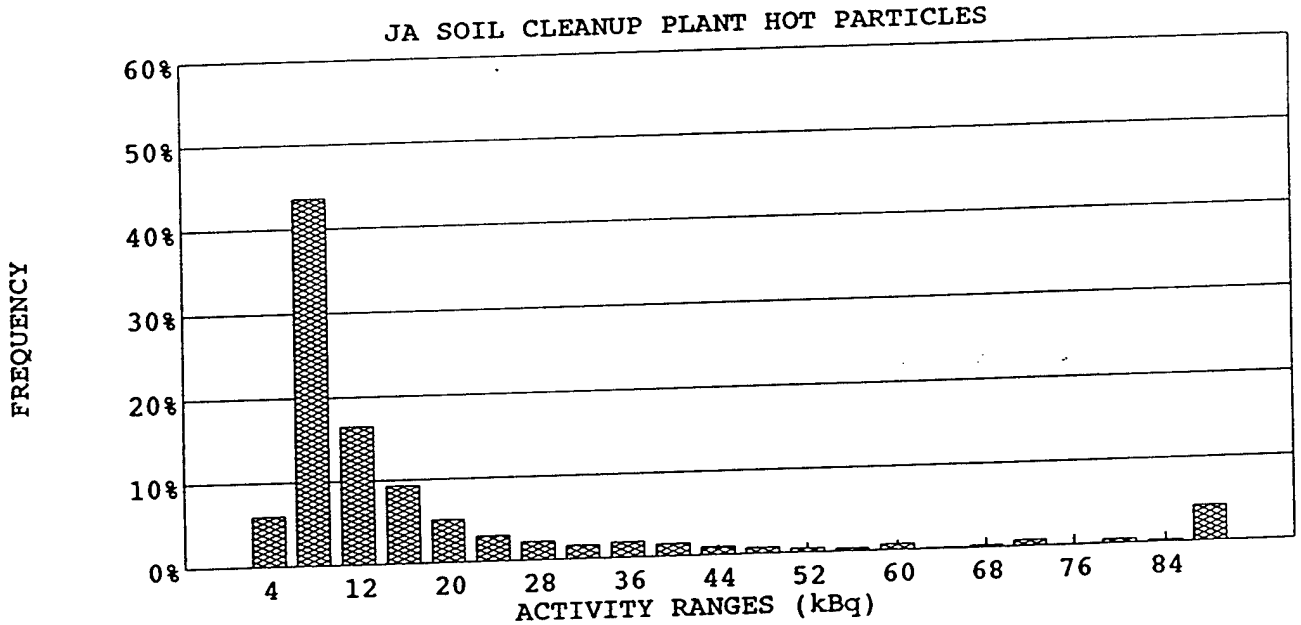
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.2%
-143	0.1%
-107	0.1%
-72	0.7%
-36	2.1%
0	5.1%
36	10.5%
72	12.7%
107	18.0%
143	13.3%
179	10.7%
215	9.9%
250	6.4%
286	6.0%
322	2.8%
358	1.2%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

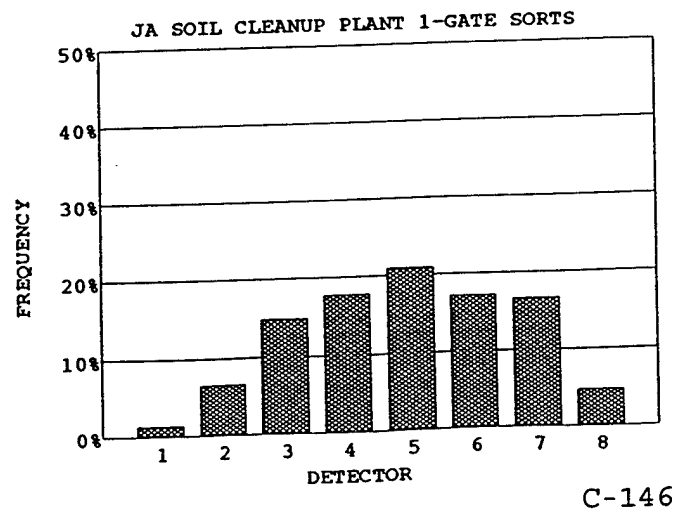
ACT_P (kBq)	NUM (#)	FREQ%
4	53	6.0%
8	383	43.7%
12	145	16.5%
16	82	9.4%
20	45	5.1%
24	27	3.1%
28	20	2.3%
32	14	1.6%
36	16	1.8%
40	13	1.5%
44	8	0.9%
48	6	0.7%
52	4	0.5%
56	3	0.3%
60	6	0.7%
64	1	0.1%
68	2	0.2%
72	6	0.7%
76	0	0.0%
80	4	0.5%
84	2	0.2%
>84	37	4.2%
TOTAL	877	

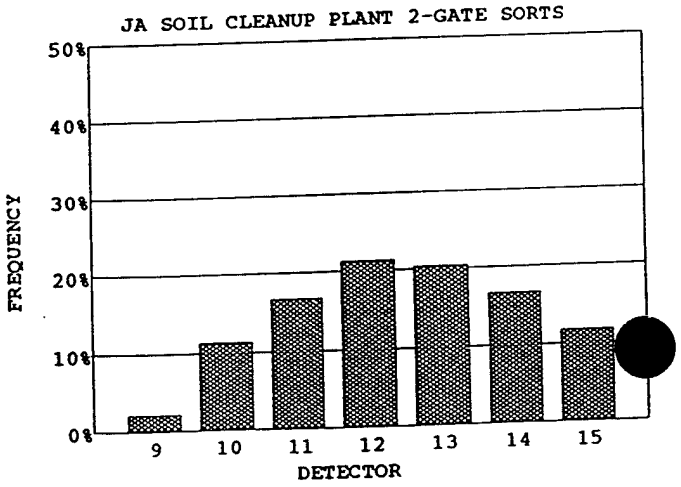
EVENT TYPES HPE 885 MPE 28 DISE 871

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

17-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.1 tons	94.2 tons	95.3 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	0.9 yd³	74.6 yd³	75.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	23,096 kBq	7,590 kBq	12,654 kBq
MAXIMUM/SORT	1,814 kBq	974 kBq	21 kBq
MINIMUM/SORT	3 kBq	(364)Bq	-18 kBq
SPECIFIC ACTIVITY		6,986 Bq/kg	134 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,704		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			6		06:32	06:44
NONE (AD=0 & MD=0 & MND>0)			1,262		08:10	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			435		09:45	
UNEXPLAINED RECORDS			1		09:55	
0<AD<1kBq & MD>0			6		11:31	
AD=0 & MD>0			0		12:13	
AD<0 & MD >0			1		13:17	
2-SEC COUNT PERIODS				17,040		
2-SEC RECORDS WITH SORTS			993			
2-SEC RECORDS WITHOUT SORTS			16,047			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,697		
NONPROCESSING RECORDS (Test, calibration, etc)				6		
2-SEC SORT DETECTORS						
1 DET	723	72.8%	5 DET	2	0.2%	
2 DET	223	22.5%	6 DET	0	0.0%	
3 DET	37	3.7%	7 DET	0	0.0%	
4 DET	8	0.8%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			47.1 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	30	6.0%
2	75	15.1%
3	80	16.1%
4	86	17.3%
5	99	19.9%
6	78	15.7%
7	44	8.9%
8	5	1.0%
TOTAL	497	

2-GATE SORTS

DET	SORTS	FREQ%
9	61	12.3%
10	74	14.9%
11	98	19.8%
12	91	18.3%
13	80	16.1%
14	70	14.1%
15	22	4.4%
TOTAL	496	

ACT_ND (Bq)	NUM (#)
-14000	3
-12000	2
-10000	0
-8000	0
-6000	4
-4000	15
-2000	40
0	78
2000	118
4000	203
6000	231
8000	240
10000	236
12000	189
14000	152
16000	110
18000	57
20000	26
22000	6
24000	0
26000	0
>28000	0
TOTAL	1,710

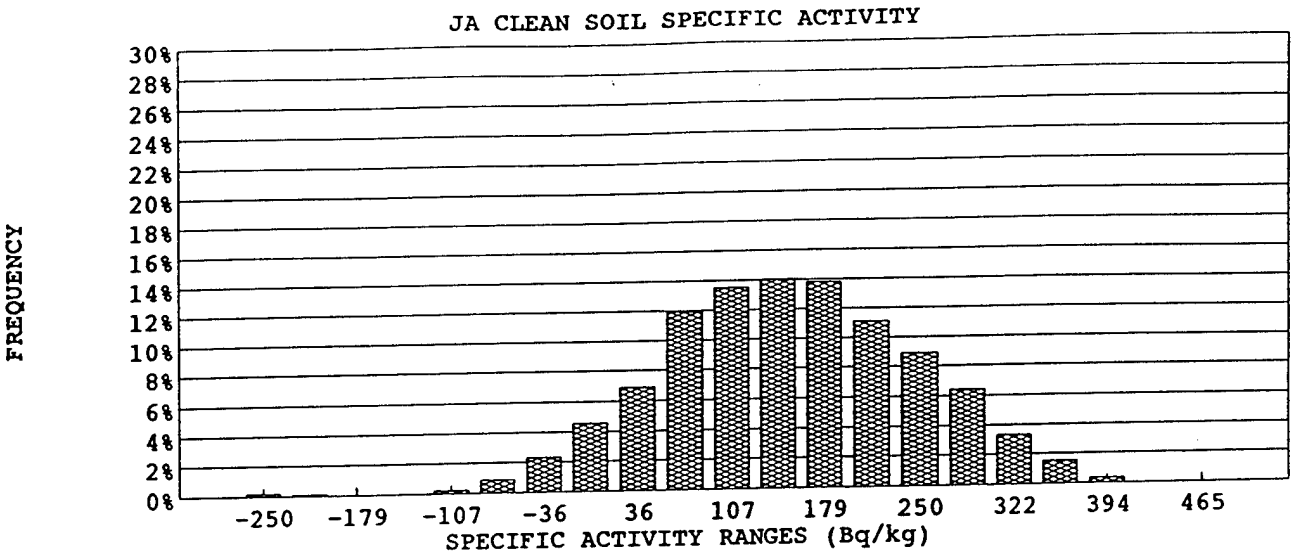
SPEC_A (Bq/kg)	FREQ%
-250	0.2%
-215	0.1%
-179	0.0%
-143	0.0%
-107	0.2%
-72	0.9%
-36	2.3%
0	4.6%
36	6.9%
72	11.9%
107	13.5%
143	14.0%
179	13.8%
215	11.1%
250	8.9%
286	6.4%
322	3.3%
358	1.5%
394	0.4%
429	0.0%
465	0.0%
0	0.0%

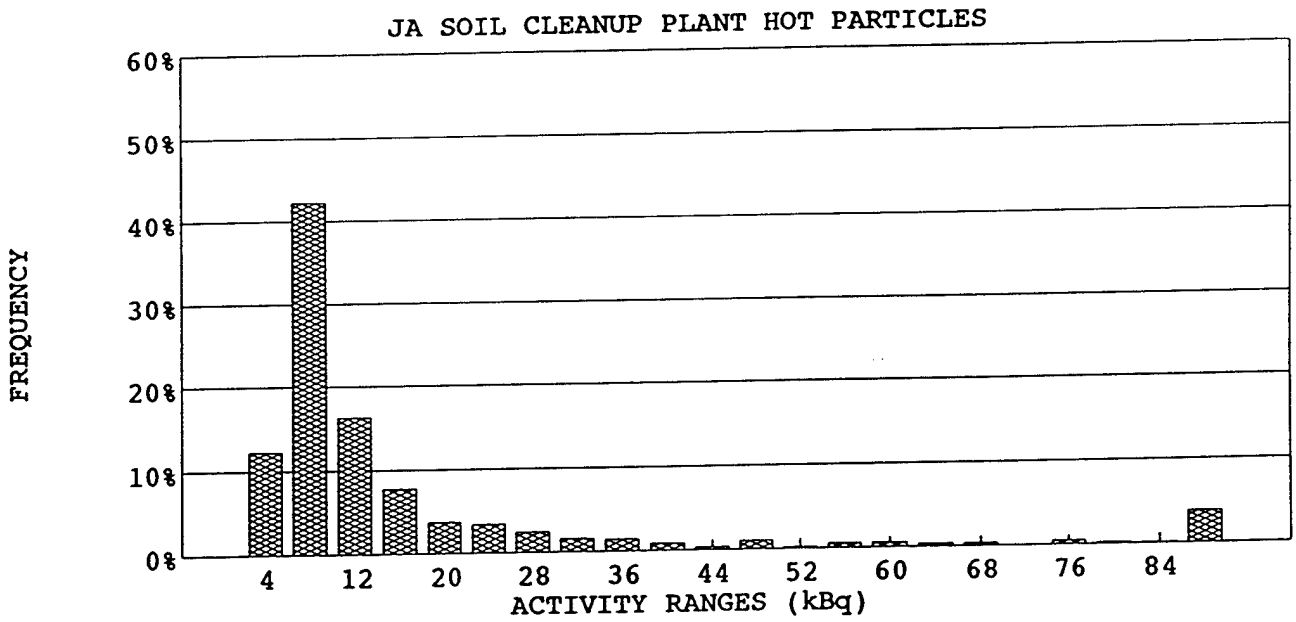
ACT_P (kBq)	NUM (#)	FREQ%
4	122	12.3%
8	419	42.2%
12	162	16.3%
16	77	7.8%
20	37	3.7%
24	34	3.4%
28	24	2.4%
32	16	1.6%
36	14	1.4%
40	9	0.9%
44	3	0.3%
48	10	1.0%
52	2	0.2%
56	6	0.6%
60	6	0.6%
64	3	0.3%
68	3	0.3%
72	0	0.0%
76	5	0.5%
80	2	0.2%
84	1	0.1%
>84	38	3.8%
TOTAL	993	

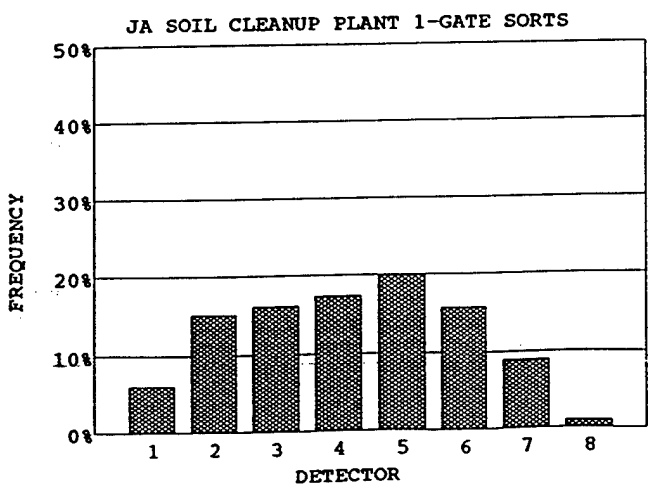
EVENT TYPES HPE 1,025 MPE 29 DISE 499

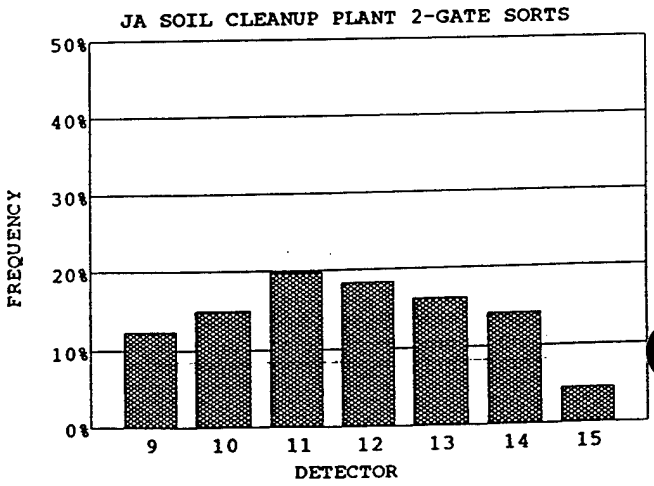
SORTER 2

17-Mar-94









SORTER 1

18-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.68 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	64.0 tons	64.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	0.6 yd³	50.7 yd³	51.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	16,743 kBq	5,453 kBq	7,716 kBq
MAXIMUM/SORT	1,471 kBq	849 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-4 kBq
SPECIFIC ACTIVITY		7,230 Bq/kg	121 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,158		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	5		None	10:22
NONE (AD=0 & MD=0 & MND>0)	881			10:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	272			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,580		
2-SEC RECORDS WITH SORTS	629			
2-SEC RECORDS WITHOUT SORTS	10,951			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,787		
NONPROCESSING RECORDS (Test, calibration, etc)		6		

2-SEC SORT DETECTORS

1 DET	464	73.8%	5 DET	0	0.0%
2 DET	139	22.1%	6 DET	0	0.0%
3 DET	23	3.7%	7 DET	0	0.0%
4 DET	3	0.5%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 49.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	5	1.6%
2	21	6.6%
3	50	15.7%
4	53	16.6%
5	61	19.1%
6	60	18.8%
7	54	16.9%
8	15	4.7%
TOTAL	319	

2-GATE SORTS

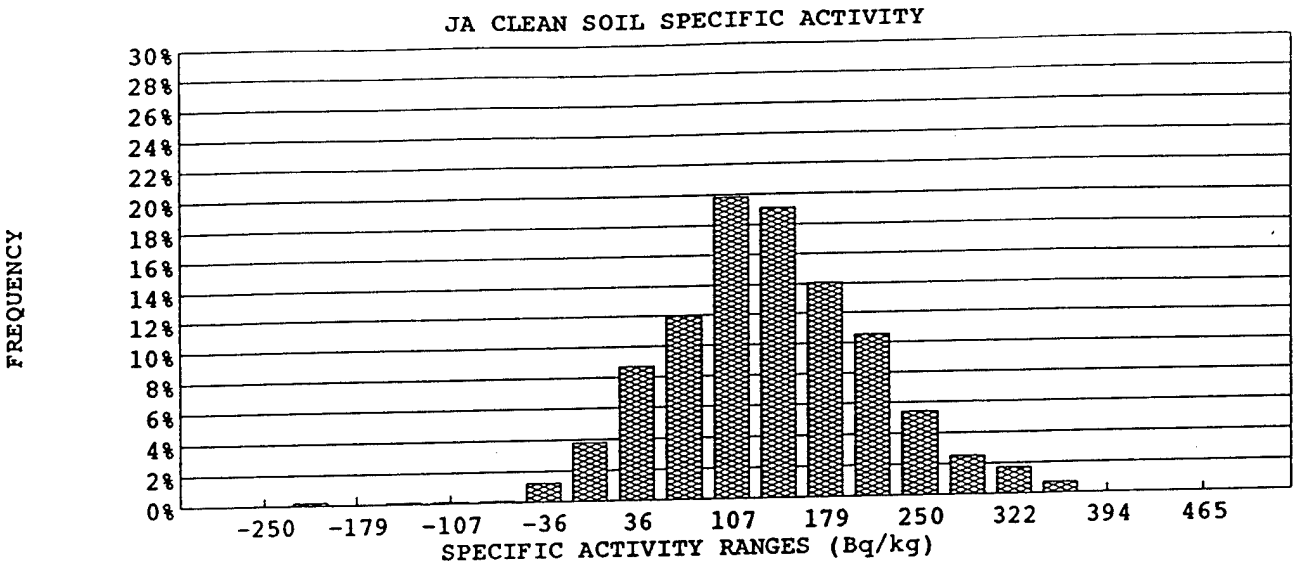
DET	SORTS	FREQ%
9	12	3.9%
10	33	10.6%
11	54	17.4%
12	55	17.7%
13	71	22.9%
14	53	17.1%
15	32	10.3%
TOTAL	310	

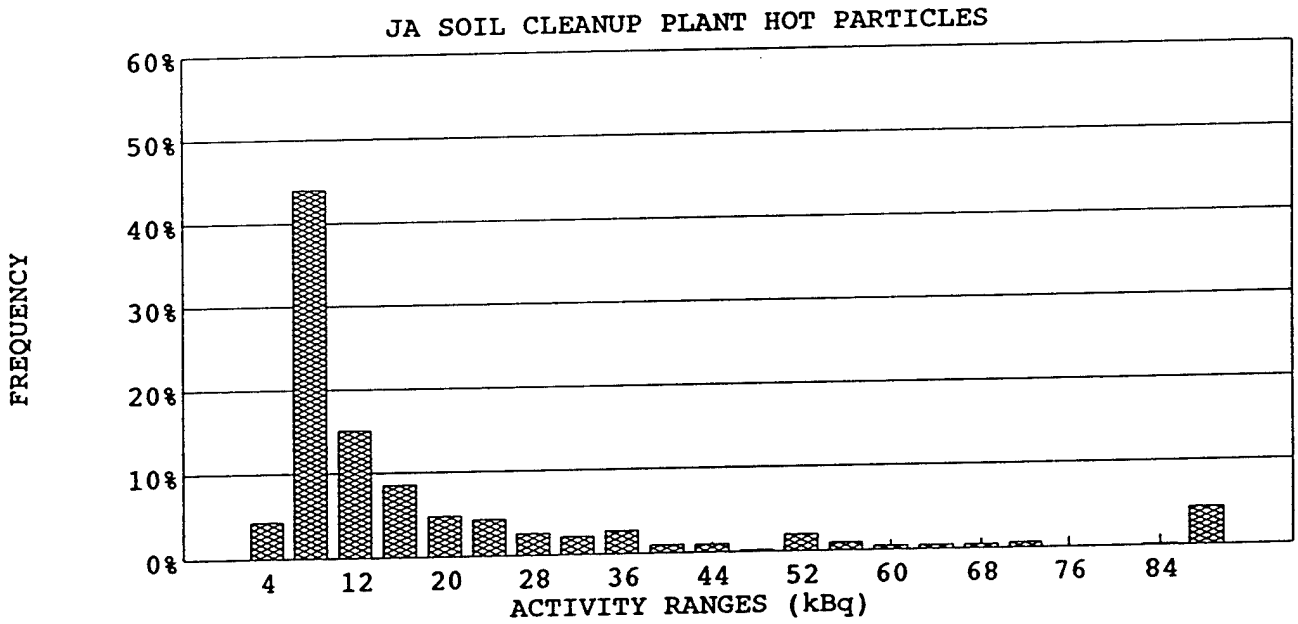
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	27	4.3%
-12000	2	-215	0.2%	8	277	44.0%
-10000	0	-179	0.0%	12	95	15.1%
-8000	1	-143	0.1%	16	54	8.6%
-6000	1	-107	0.1%	20	30	4.8%
-4000	1	-72	0.1%	24	27	4.3%
-2000	14	-36	1.2%	28	16	2.5%
0	44	0	3.8%	32	13	2.1%
2000	101	36	8.7%	36	17	2.7%
4000	140	72	12.0%	40	6	1.0%
6000	231	107	19.8%	44	6	1.0%
8000	222	143	19.1%	48	1	0.2%
10000	164	179	14.1%	52	12	1.9%
12000	123	215	10.6%	56	6	1.0%
14000	63	250	5.4%	60	3	0.5%
16000	29	286	2.5%	64	3	0.5%
18000	20	322	1.7%	68	3	0.5%
20000	8	358	0.7%	72	4	0.6%
22000	0	394	0.0%	76	0	0.0%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	1	0.2%
>28000	0	0	0.0%	>84	28	4.5%
TOTAL	1,164			TOTAL	629	

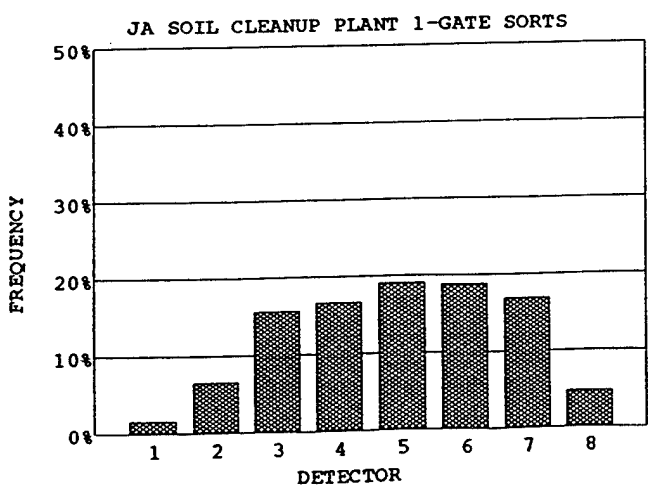
EVENT TYPES HPE 636 MPE 20 DISE 422

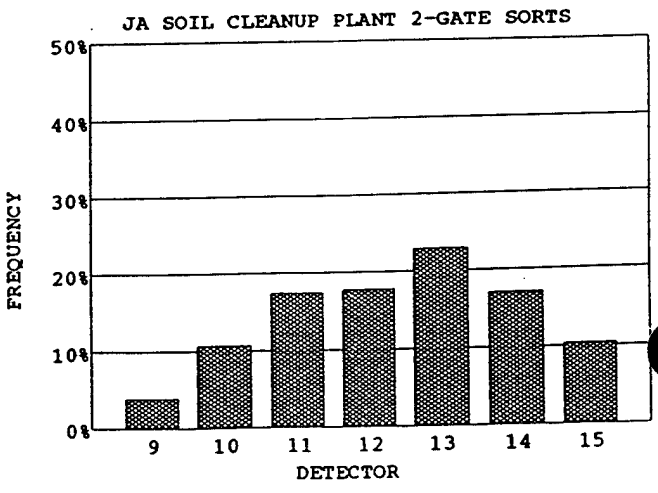
SORTER 1

18--Mar--94









SORTER 2

18-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	64.1 tons	64.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.4 yd³	50.8 yd³	51.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	18,270 kBq	5,774 kBq	7,782 kBq
MAXIMUM/SORT	692 kBq	464 kBq	18 kBq
MINIMUM/SORT	2 kBq	0 Bq	-4 kBq
SPECIFIC ACTIVITY		10,196 Bq/kg	121 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,157		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1	13:13	10:22
NONE (AD=0 & MD=0 & MND>0)			854	13:22	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			302	14:13	
UNEXPLAINED RECORDS			0	14:22	
0<AD<1kBq & MD>0			4		
AD=0 & MD>0			0		
AD<0 & MD >0			0		
2-SEC COUNT PERIODS			11,570		
2-SEC RECORDS WITH SORTS			705		
2-SEC RECORDS WITHOUT SORTS			10,865		
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,862		
NONPROCESSING RECORDS (Test, calibration, etc)			4		
2-SEC SORT DETECTORS					
1 DET	512	72.6%	5 DET	0	0.0%
2 DET	152	21.6%	6 DET	0	0.0%
3 DET	33	4.7%	7 DET	0	0.0%
4 DET	8	1.1%	8 DET	0	0.0%
AVERAGE TIME BETWEEN 2-SEC SORTS	45.2 sec				

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	16	4.6%
2	55	15.8%
3	67	19.2%
4	56	16.0%
5	69	19.8%
6	45	12.9%
7	34	9.7%
8	7	2.0%
TOTAL	349	

2-GATE SORTS

DET	SORTS	FREQ%
9	39	11.0%
10	66	18.5%
11	64	18.0%
12	63	17.7%
13	59	16.6%
14	42	11.8%
15	23	6.5%
TOTAL	356	

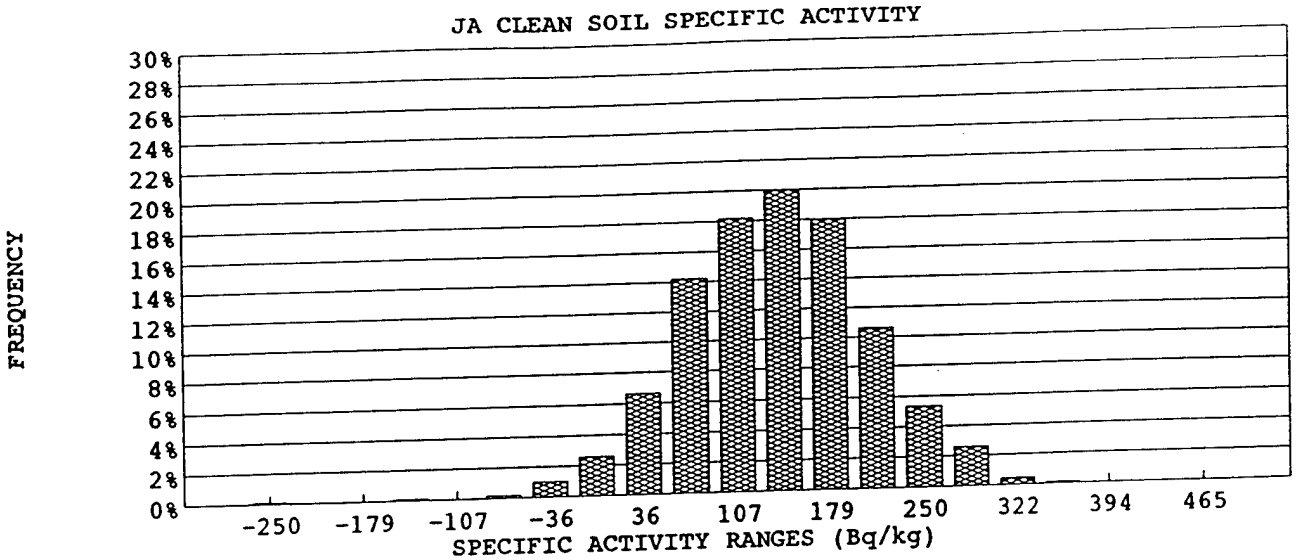
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	0
-10000	0
-8000	1
-6000	0
-4000	2
-2000	12
0	30
2000	77
4000	165
6000	211
8000	232
10000	209
12000	123
14000	62
16000	30
18000	5
20000	1
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,161

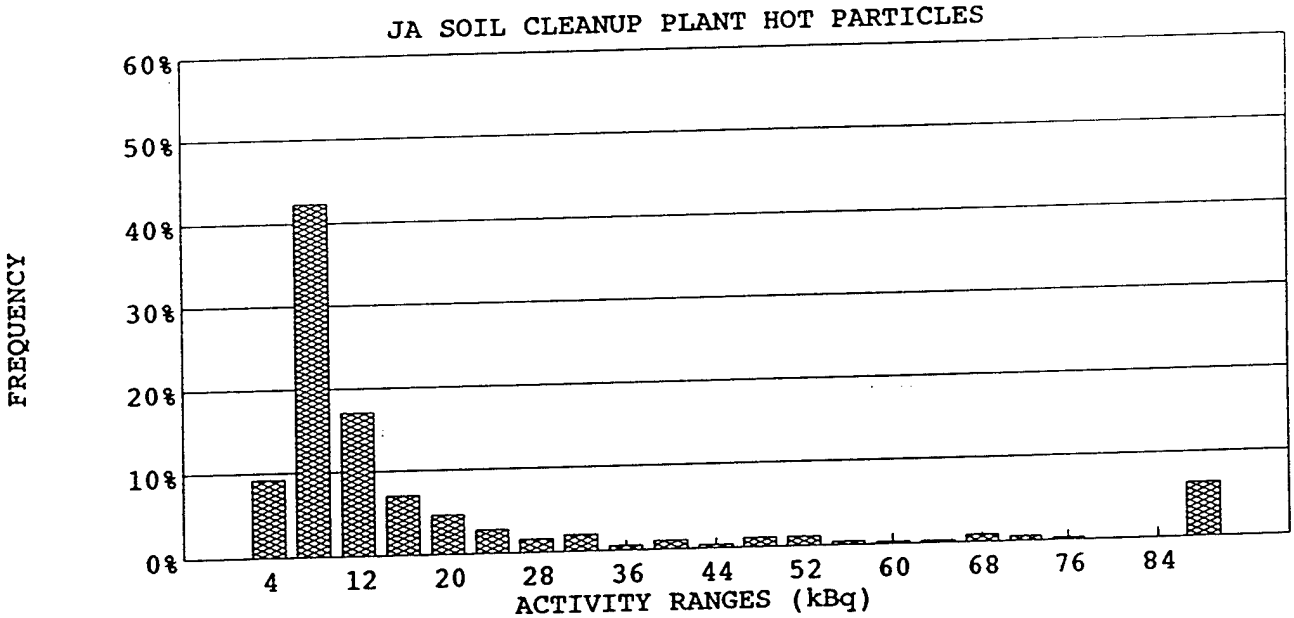
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.0%
-179	0.0%
-143	0.1%
-107	0.0%
-72	0.2%
-36	1.0%
0	2.6%
36	6.6%
72	14.2%
107	18.2%
143	20.0%
179	18.0%
215	10.6%
250	5.3%
286	2.6%
322	0.4%
358	0.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

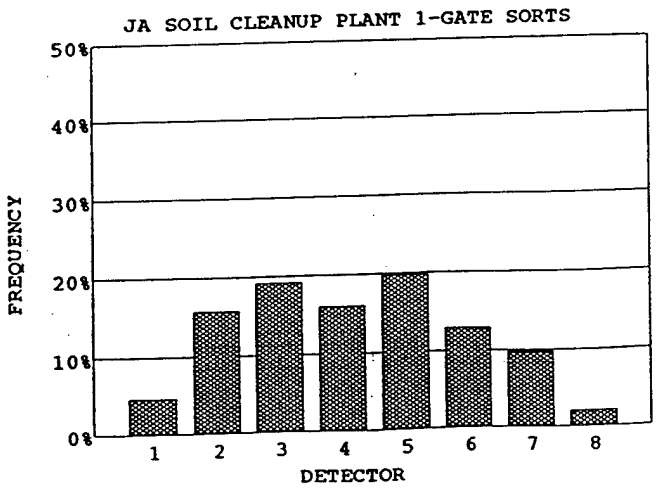
ACT_P (kBq)	NUM (#)	FREQ%
4	65	9.2%
8	298	42.3%
12	120	17.0%
16	50	7.1%
20	33	4.7%
24	20	2.8%
28	11	1.6%
32	14	2.0%
36	4	0.6%
40	7	1.0%
44	3	0.4%
48	8	1.1%
52	8	1.1%
56	3	0.4%
60	2	0.3%
64	2	0.3%
68	6	0.9%
72	4	0.6%
76	2	0.3%
80	0	0.0%
84	0	0.0%
>84	45	6.4%
TOTAL	705	

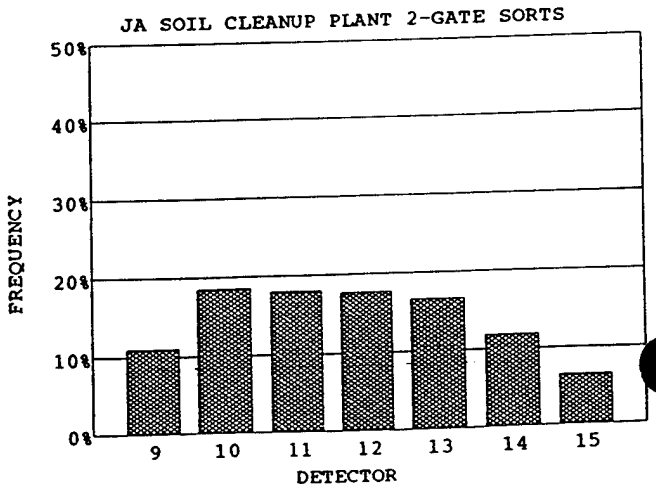
EVENT TYPES HPE 708 MPE 18 DISE 83

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 19–Mar–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:30 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	6.5 hr	6.5 hr	0.0 hr	0.0 hr	13.0 hr
SORTER START–UP	05:00	05:00	NA	NA	
START SOIL PROCESSING	05:25	05:24	NA	NA	
TIME REQUIRED TO START–UP	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
SORTER SHUT–DOWN	11:30	11:30	NA	NA	
END SOIL PROCESSING	11:16	11:16	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
ACTUAL PROCESS HOURS	5.9 hr	5.9 hr	0.0 hr	0.0 hr	11.7 hr
DOWN–TIME	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.3 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	3.5 hr	3.5 hr	10.0 hr	10.0 hr	27.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					90.2%
PRODUCTIVTY					29.3%

PRODUCTIVITY

Date	19–Mar–94
Contract day (from 6 Sep)	156
Current Contract week	26
Soil production for Day	118 MT
Cumlative Soil Production for Week	726 MT
Total Soil production for contract	
Since 6 Sep 93	35,194 MT
Since 6 Aug 93	36,785 MT
Total Soil production for project	63,072 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,502 hr
Excused delay days (plant–days)	63 days
Excused delay months (plant–month)	2.41 months
Percent of contract completed	36.8%
Tons Ahead or Behind Schedule	1,803 MT
Days ahead or behind schedule	6 days

SORTER 1

19-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	58.7 tons	58.9 tons
MAXIMUM/SORT	7.0 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.2 yd³	46.5 yd³	46.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,242 kBq	3,335 kBq	3,863 kBq
MAXIMUM/SORT	1,481 kBq	878 kBq	15 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		12,603 Bq/kg	66 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,054		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		06:26	None
NONE (AD=0 & MD=0 & MND>0)			886			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			168			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				10,540		
2-SEC RECORDS WITH SORTS			352			
2-SEC RECORDS WITHOUT SORTS			10,188			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,406		
NONPROCESSING RECORDS (Test, calibration, etc)				7		
2-SEC SORT DETECTORS						
1 DET	251	71.3%	5 DET	0	0.0%	
2 DET	77	21.9%	6 DET	0	0.0%	
3 DET	21	6.0%	7 DET	0	0.0%	
4 DET	3	0.9%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			84.0 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	2	1.2%
2	11	6.5%
3	29	17.2%
4	33	19.5%
5	36	21.3%
6	18	10.7%
7	31	18.3%
8	9	5.3%
TOTAL	169	

2-GATE SORTS DET	SORTS	FREQ%
9	8	4.4%
10	16	8.7%
11	35	19.1%
12	34	18.6%
13	34	18.6%
14	31	16.9%
15	25	13.7%
TOTAL	183	

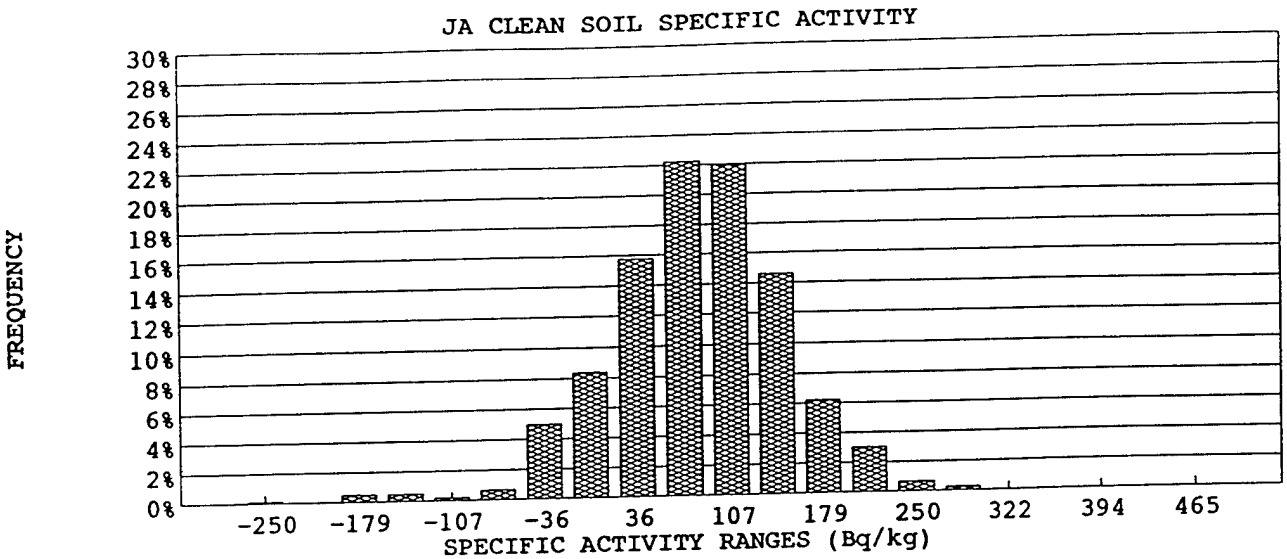
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	0
-10000	5
-8000	5
-6000	2
-4000	7
-2000	53
0	89
2000	167
4000	236
6000	233
8000	155
10000	66
12000	32
14000	7
16000	3
18000	0
20000	0
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,061

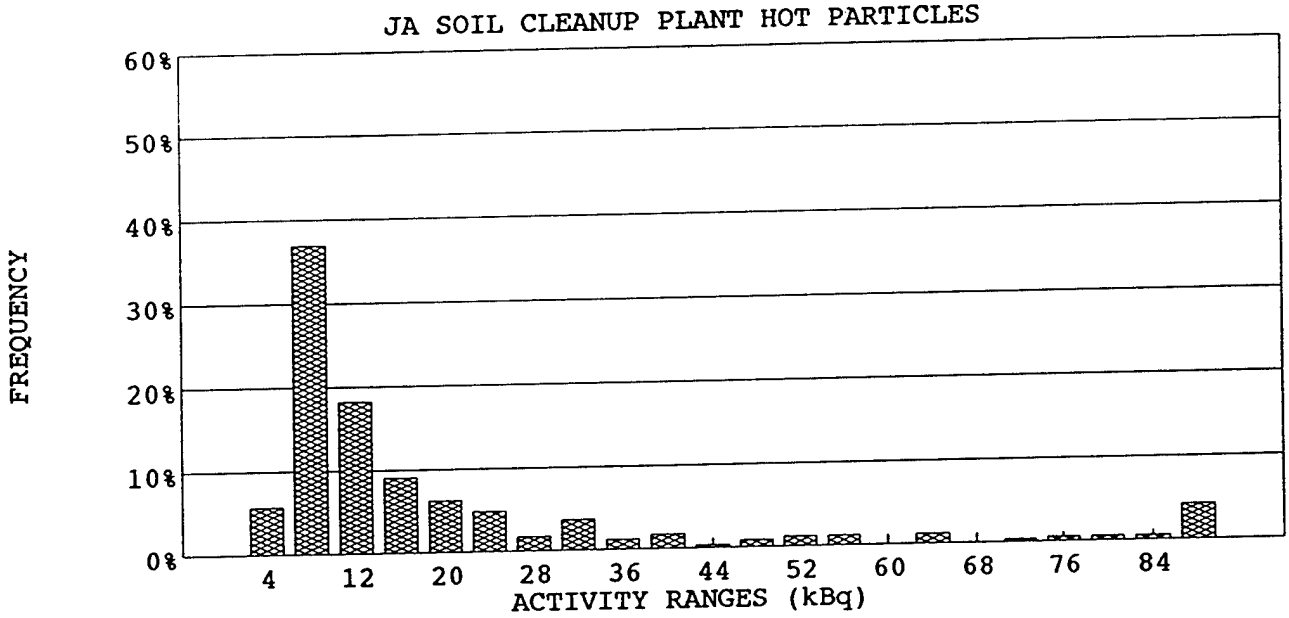
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.0%
-179	0.5%
-143	0.5%
-107	0.2%
-72	0.7%
-36	5.0%
0	8.4%
36	15.7%
72	22.2%
107	22.0%
143	14.6%
179	6.2%
215	3.0%
250	0.7%
286	0.3%
322	0.0%
358	0.0%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

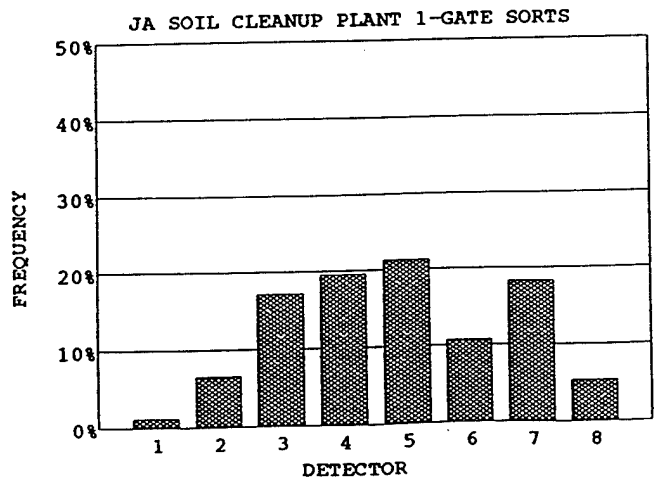
ACT_P (kBq)	NUM (#)	FREQ%
4	20	5.7%
8	130	36.9%
12	64	18.2%
16	32	9.1%
20	22	6.3%
24	17	4.8%
28	6	1.7%
32	13	3.7%
36	4	1.1%
40	6	1.7%
44	1	0.3%
48	3	0.9%
52	4	1.1%
56	4	1.1%
60	0	0.0%
64	4	1.1%
68	0	0.0%
72	1	0.3%
76	2	0.6%
80	2	0.6%
84	2	0.6%
>84	15	4.3%
TOTAL	352	

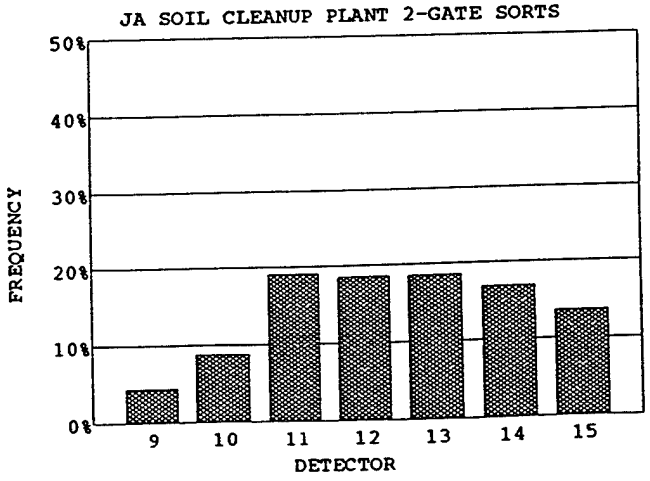
EVENT TYPES	HPE	MPE	DISE
	365	13	0

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

19-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	58.8 tons	59.1 tons
MAXIMUM/SORT	4.2 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	0.2 yd³	46.6 yd³	46.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	9,598 kBq	3,050 kBq	5,297 kBq
MAXIMUM/SORT	425 kBq	262 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		11,680 Bq/kg	90 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,057		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0		08:04	None
NONE (AD=0 & MD=0 & MND>0)			899		08:39	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			158			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		2				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				10,570		
2-SEC RECORDS WITH SORTS			366			
2-SEC RECORDS WITHOUT SORTS			10,204			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,423		
NONPROCESSING RECORDS (Test, calibration, etc)				5		
2-SEC SORT DETECTORS						
1 DET	248	67.8%	5 DET	5	1.4%	
2 DET	86	23.5%	6 DET	0	0.0%	
3 DET	19	5.2%	7 DET	0	0.0%	
4 DET	8	2.2%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS		85.2 sec				

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	12	6.5%
2	33	17.8%
3	24	13.0%
4	30	16.2%
5	36	19.5%
6	29	15.7%
7	16	8.6%
8	5	2.7%
TOTAL	185	

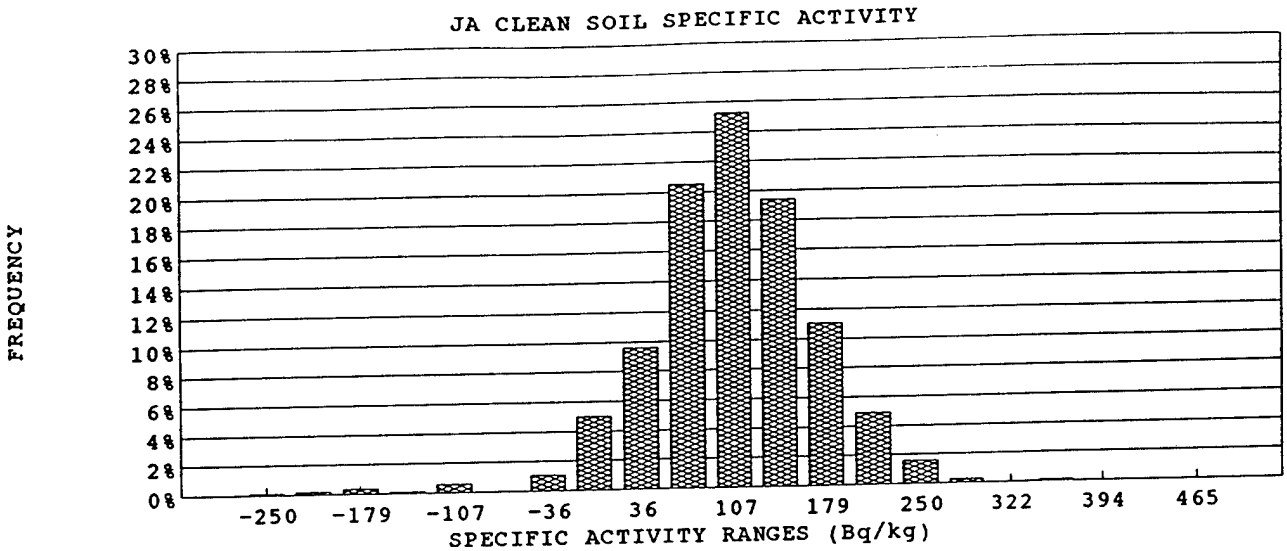
2-GATE SORTS DET	SORTS	FREQ%
9	19	10.5%
10	30	16.6%
11	37	20.4%
12	32	17.7%
13	36	19.9%
14	17	9.4%
15	10	5.5%
TOTAL	181	

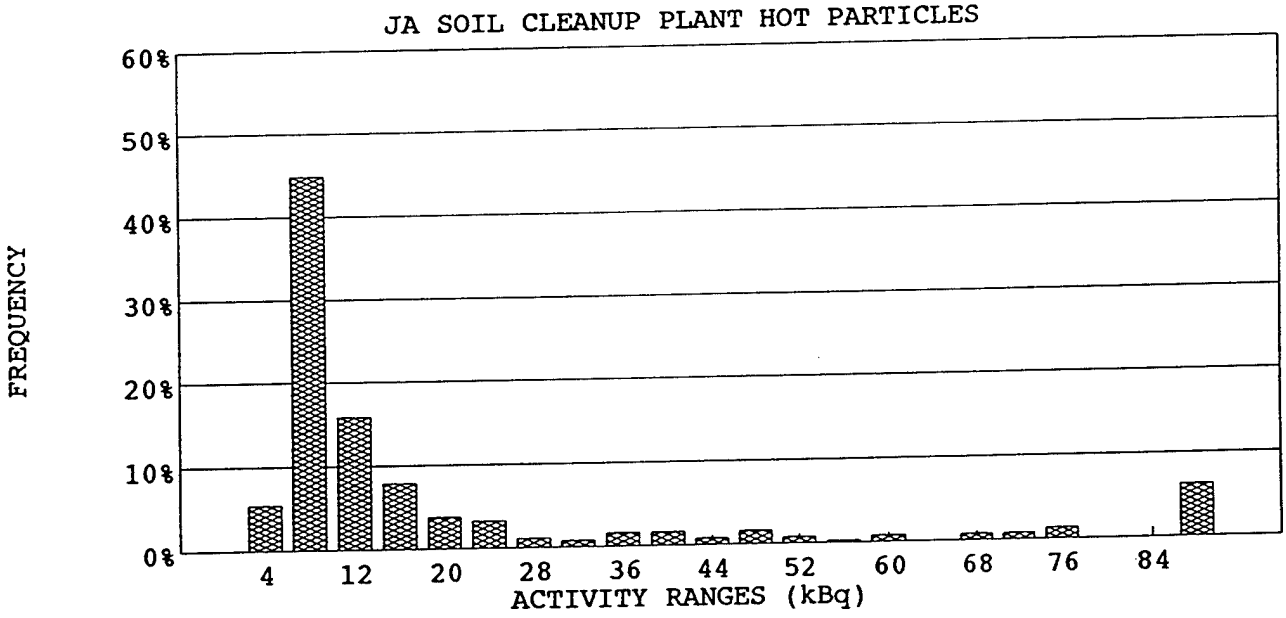
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	2
-10000	4
-8000	1
-6000	6
-4000	0
-2000	11
0	53
2000	102
4000	218
6000	268
8000	206
10000	117
12000	52
14000	17
16000	3
18000	0
20000	1
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,062

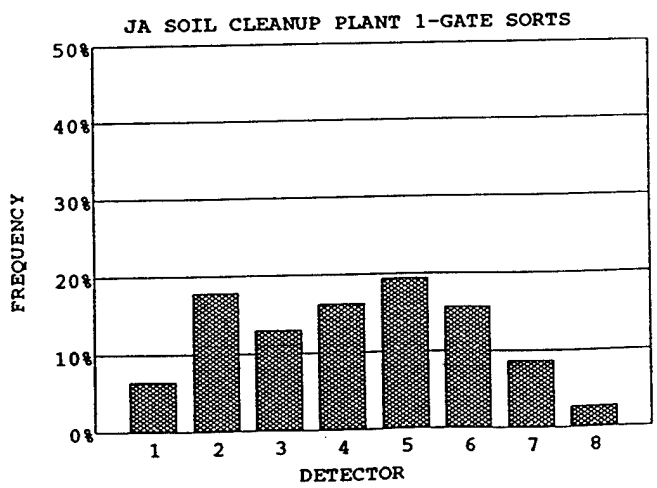
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.2%
-179	0.4%
-143	0.1%
-107	0.6%
-72	0.0%
-36	1.0%
0	5.0%
36	9.6%
72	20.5%
107	25.2%
143	19.4%
179	11.0%
215	4.9%
250	1.6%
286	0.3%
322	0.0%
358	0.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

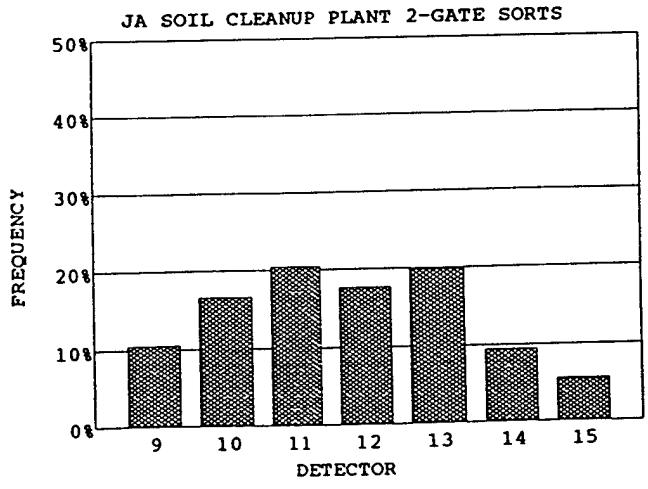
ACT_P (kBq)	NUM (#)	FREQ%
4	20	5.5%
8	164	44.8%
12	58	15.8%
16	29	7.9%
20	14	3.8%
24	12	3.3%
28	4	1.1%
32	3	0.8%
36	6	1.6%
40	6	1.6%
44	3	0.8%
48	6	1.6%
52	3	0.8%
56	1	0.3%
60	3	0.8%
64	0	0.0%
68	3	0.8%
72	3	0.8%
76	5	1.4%
80	0	0.0%
84	0	0.0%
>84	23	6.3%
TOTAL	366	

EVENT TYPES HPE 361 MPE 12 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 21–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:28	06:28	NA	NA	
TIME REQUIRED TO START–UP	0.5 hr	0.5 hr	0.0 hr	0.0 hr	0.9 hr
SORTER SHUT–DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:57	15:56	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	7.8 hr	7.8 hr	0.0 hr	0.0 hr	15.5 hr
DOWN–TIME	2.5 hr	2.5 hr	0.0 hr	0.0 hr	5.0 hr
SYSTEM PAUSE	1.8 hr	1.8 hr	0.0 hr	0.0 hr	3.6 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
PLANT PERFORMANCE					75.8%
PRODUCTIVTY					37.0%

PRODUCTIVITY

Date	21–Mar–94
Contract day (from 6 Sep)	157
Current Contract week	27
Soil production for Day	156 MT
Cumlative Soil Production for Week	156 MT
Total Soil production for contract	
Since 6 Sep 93	35,350 MT
Since 6 Aug 93	36,941 MT
Total Soil production for project	63,228 MT

Excused Delays for day (sorter–hrs)	21 hr
Excused delays for contract (sorter–hrs)	2,523 hr
Excused delay days (plant–days)	63 days
Excused delay months (plant–month)	2.43 months
Percent of contract completed	36.9%
Tons Ahead or Behind Schedule	1,809 MT
Days ahead or behind schedule	6 days

MT = metric tons

File Report1 Printed on 31-Mar-94 at 08:52:25 AM

SORTER 1

21-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	34.6 tons	43.4 tons	78.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	27.5 yd³	34.4 yd³	61.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	55.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	90,298 kBq	60,686 kBq	5,194 kBq
MAXIMUM/SORT	4,372 kBq	2,596 kBq	20 kBq
MINIMUM/SORT	2 kBq	(14,735)Bq	-19 kBq
SPECIFIC ACTIVITY		1,752 Bq/kg	120 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,396		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		613		06:47	06:32
NONE (AD=0 & MD=0 & MND>0)		583		07:16	09:58
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		200		10:30	11:16
UNEXPLAINED RECORDS	0			11:34	11:21
0<AD<1kBq & MD>0	2				11:23
AD=0 & MD>0	1				11:29
AD<0 & MD >0	1				11:43
2-SEC COUNT PERIODS			13,960		12:48
2-SEC RECORDS WITH SORTS		3,984			13:50
2-SEC RECORDS WITHOUT SORTS		9,976			14:25
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,380		14:59
NONPROCESSING RECORDS (Test, calibration, etc)			3		15:33

2-SEC SORT DETECTORS					
1 DET	2,683	67.3%	5 DET	16	0.4%
2 DET	966	24.2%	6 DET	0	0.0%
3 DET	257	6.5%	7 DET	0	0.0%
4 DET	62	1.6%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	37	1.9%
2	184	9.3%
3	297	15.0%
4	361	18.2%
5	413	20.8%
6	345	17.4%
7	283	14.2%
8	66	3.3%
TOTAL	1,986	

2-GATE SORTS DET	SORTS	FREQ%
9	106	5.3%
10	242	12.1%
11	341	17.1%
12	420	21.0%
13	434	21.7%
14	285	14.3%
15	170	8.5%
TOTAL	1,998	

ACT_ND (Bq)	NUM (#)
-14000	8
-12000	2
-10000	9
-8000	3
-6000	2
-4000	5
-2000	14
0	642
2000	60
4000	112
6000	118
8000	132
10000	90
12000	72
14000	51
16000	32
18000	25
20000	22
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,399

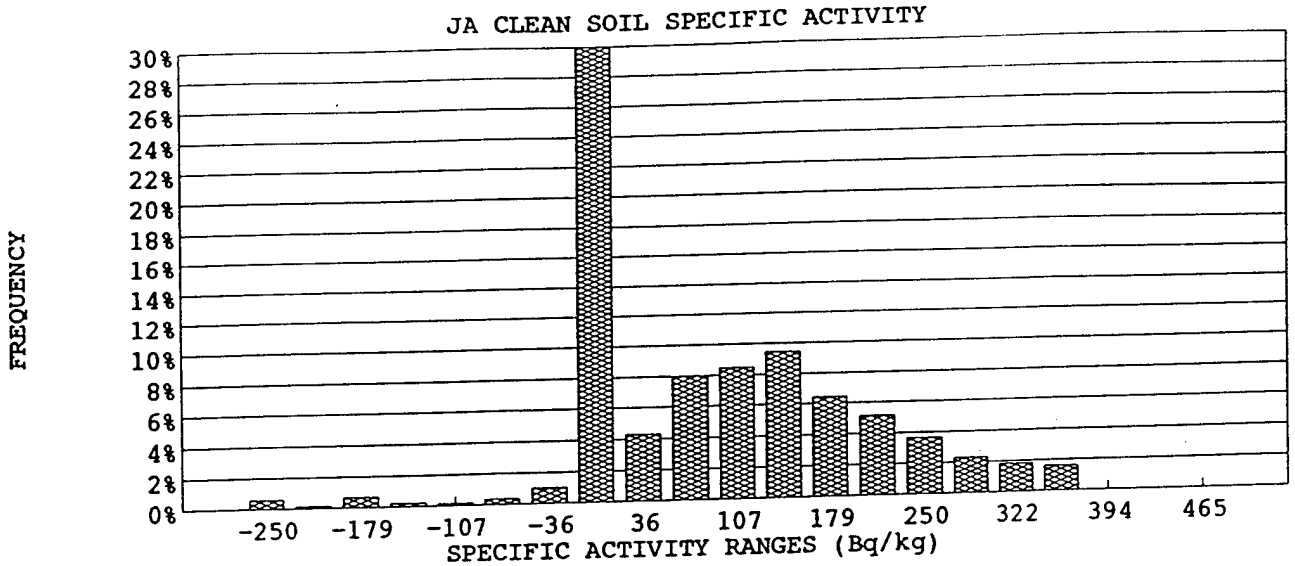
SPEC_A (Bq/kg)	FREQ%
-250	0.6%
-215	0.1%
-179	0.6%
-143	0.2%
-107	0.1%
-72	0.4%
-36	1.0%
0	45.9%
36	4.3%
72	8.0%
107	8.4%
143	9.4%
179	6.4%
215	5.1%
250	3.6%
286	2.3%
322	1.8%
358	1.6%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

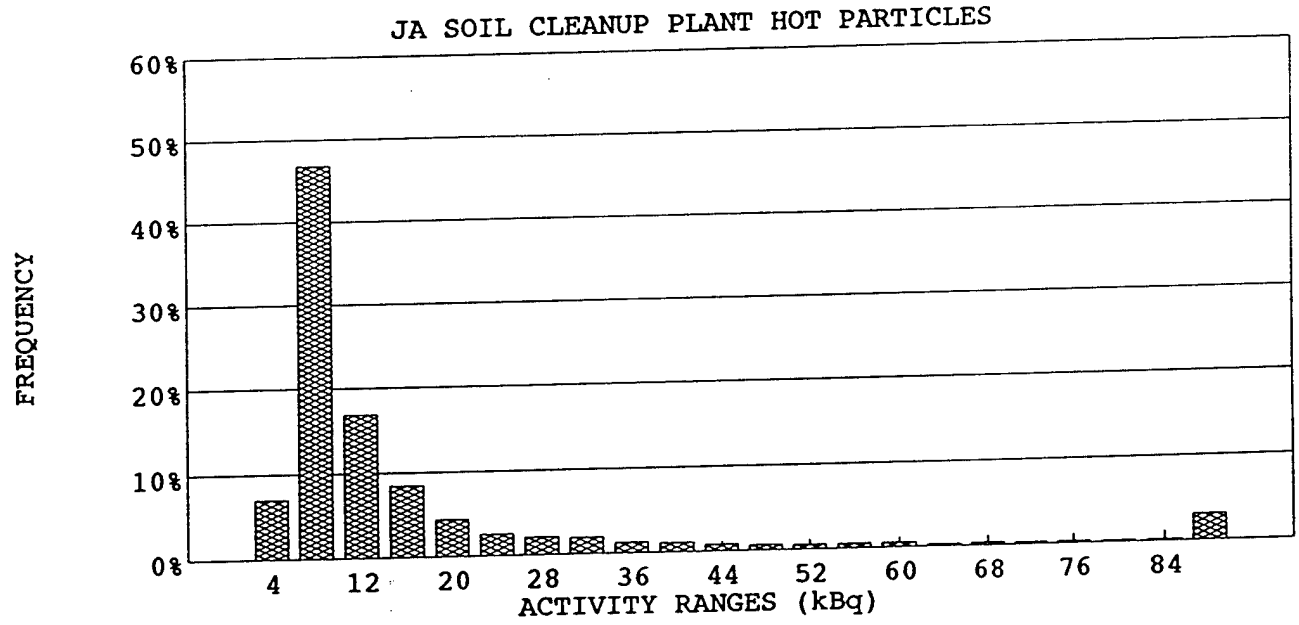
ACT_P (kBq)	NUM (#)	FREQ%
4	281	7.1%
8	1,865	46.8%
12	674	16.9%
16	337	8.5%
20	176	4.4%
24	102	2.6%
28	83	2.1%
32	76	1.9%
36	49	1.2%
40	45	1.1%
44	30	0.8%
48	25	0.6%
52	21	0.5%
56	23	0.6%
60	21	0.5%
64	10	0.3%
68	12	0.3%
72	10	0.3%
76	11	0.3%
80	5	0.1%
84	6	0.2%
>84	122	3.1%
TOTAL	3,984	

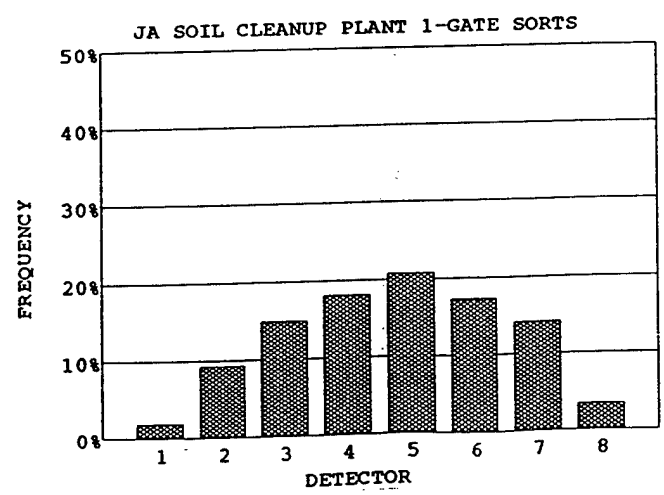
EVENT TYPES HPE 3,690 MPE 158 DISE 45725

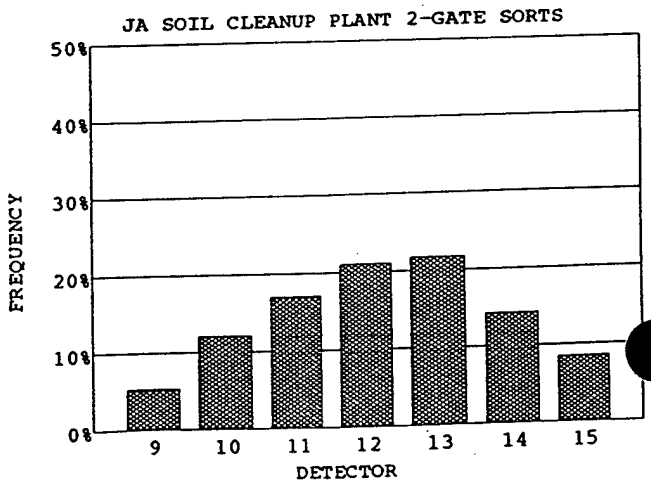
SORTER 1

21-Mar-94









SORTER 2

21-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	32.9 tons	45.4 tons	78.3 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	35.6 kg	
VOLUME IN-GROUND	26.1 yd³	36.0 yd³	62.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	57.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	94,074 kBq	61,482 kBq	6,065 kBq
MAXIMUM/SORT	8,480 kBq	2,827 kBq	20 kBq
MINIMUM/SORT	2 kBq	(9,562)Bq	-15 kBq
SPECIFIC ACTIVITY		1,868 Bq/kg	134 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,400		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			580		06:47	06:32
NONE (AD=0 & MD=0 & MND>0)			577		11:34	09:59
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			243			11:16
UNEXPLAINED RECORDS			0			11:21
0<AD<1kBq & MD>0			0			11:23
AD=0 & MD>0			1			11:28
AD<0 & MD >0			1			11:43
2-SEC COUNT PERIODS				14,000		11:46
2-SEC RECORDS WITH SORTS			4,398			12:48
2-SEC RECORDS WITHOUT SORTS			9,602			13:50
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,798		14:25
NONPROCESSING RECORDS (Test, calibration, etc)				3		14:59
2-SEC SORT DETECTORS						15:33
1 DET	2,888	65.7%	5 DET	23	0.5%	
2 DET	1,094	24.9%	6 DET	0	0.0%	
3 DET	308	7.0%	7 DET	2	0.0%	
4 DET	85	1.9%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			9.7 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	95	4.4%
2	415	19.0%
3	433	19.9%
4	451	20.7%
5	383	17.6%
6	250	11.5%
7	115	5.3%
8	37	1.7%
TOTAL	2,179	

2-GATE SORTS DET	SORTS	FREQ%
9	273	12.3%
10	459	20.7%
11	491	22.1%
12	427	19.2%
13	326	14.7%
14	180	8.1%
15	63	2.8%
TOTAL	2,219	

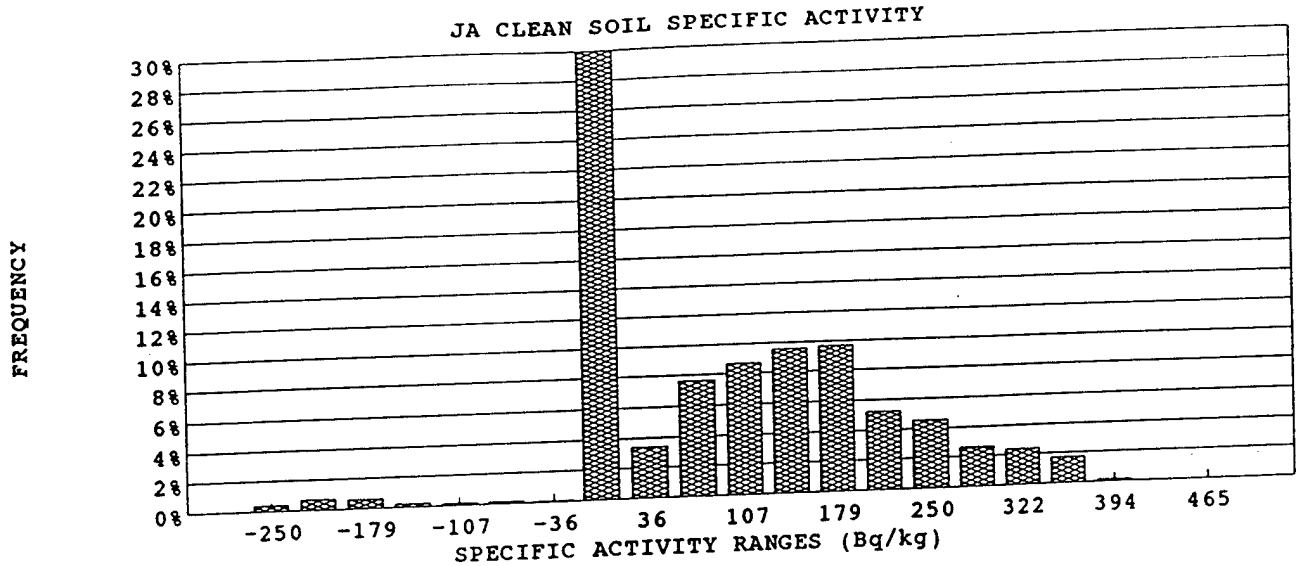
ACT_ND (Bq)	NUM (#)
-14000	6
-12000	10
-10000	9
-8000	3
-6000	2
-4000	2
-2000	1
0	591
2000	47
4000	107
6000	122
8000	134
10000	136
12000	73
14000	64
16000	37
18000	33
20000	24
22000	2
24000	0
26000	0
>28000	0
TOTAL	1,403

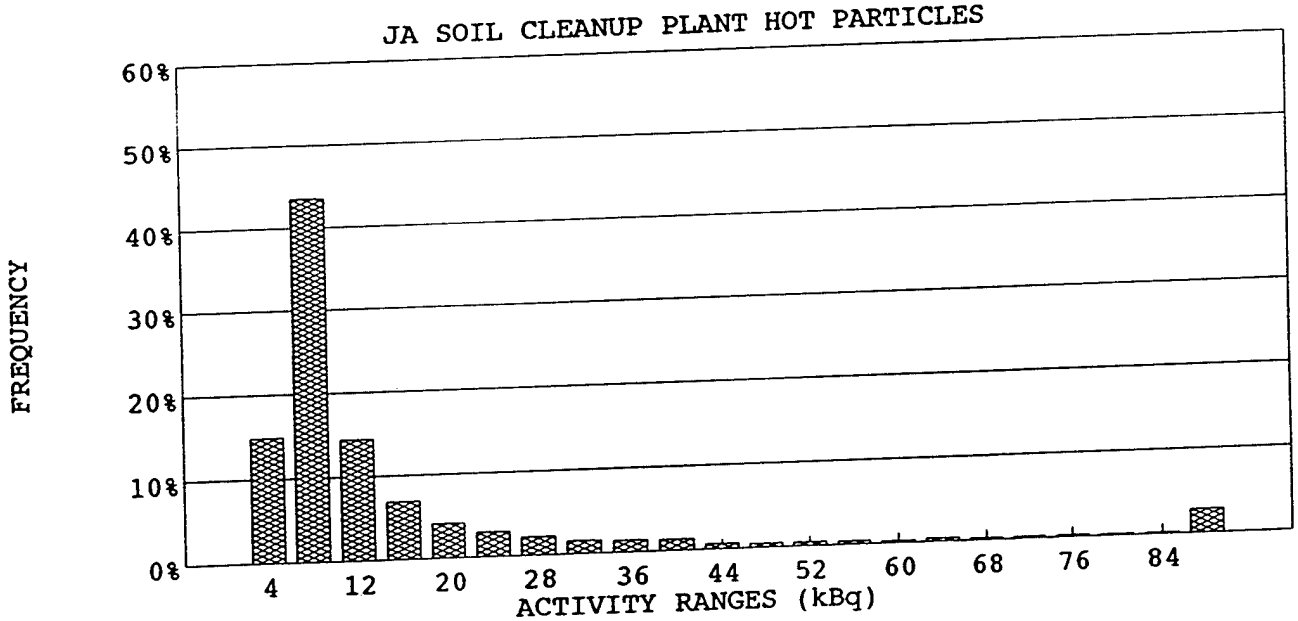
SPEC_A (Bq/kg)	FREQ%
-250	0.4%
-215	0.7%
-179	0.6%
-143	0.2%
-107	0.1%
-72	0.1%
-36	0.1%
0	42.1%
36	3.3%
72	7.6%
107	8.7%
143	9.6%
179	9.7%
215	5.2%
250	4.6%
286	2.6%
322	2.4%
358	1.7%
394	0.1%
429	0.0%
465	0.0%
0	0.0%

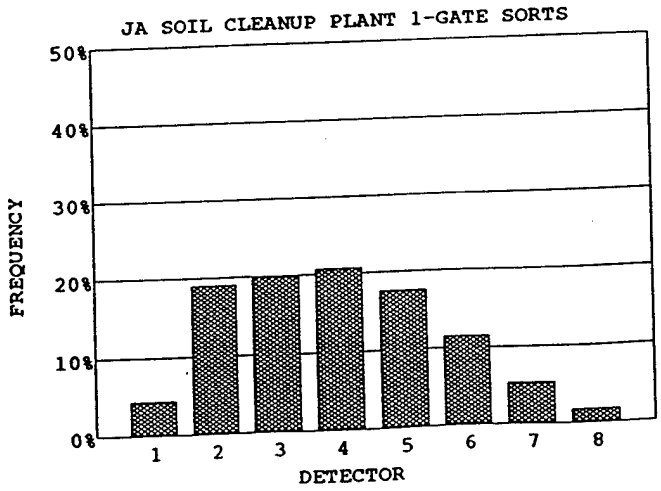
ACT_P (kBq)	NUM (#)	FREQ%
4	655	14.9%
8	1,915	43.5%
12	633	14.4%
16	303	6.9%
20	181	4.1%
24	131	3.0%
28	97	2.2%
32	68	1.5%
36	62	1.4%
40	57	1.3%
44	28	0.6%
48	21	0.5%
52	22	0.5%
56	18	0.4%
60	13	0.3%
64	19	0.4%
68	13	0.3%
72	10	0.2%
76	11	0.3%
80	8	0.2%
84	8	0.2%
>84	125	2.8%
TOTAL	4,398	

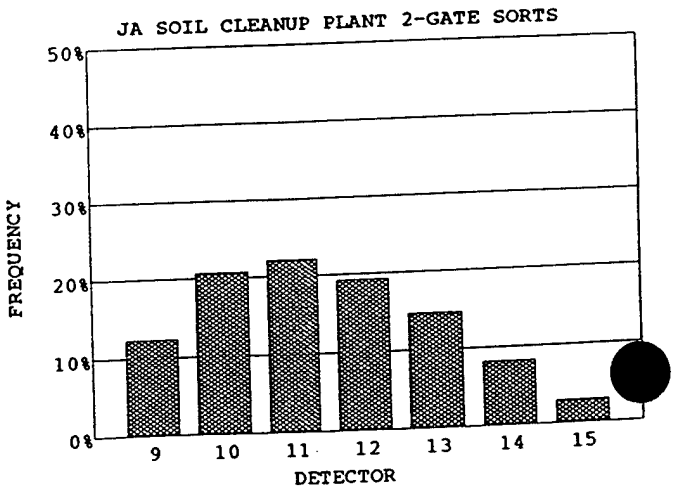
EVENT TYPES HPE 4,018 MPE 164 DISE 42923

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 22–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.2 hr	10.2 hr	0.0 hr	0.0 hr	20.3 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:21	06:20	NA	NA	
TIME REQUIRED TO START–UP	0.4 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
SORTER SHUT–DOWN	16:10	16:10	NA	NA	
END SOIL PROCESSING	16:01	16:02	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.3 hr
ACTUAL PROCESS HOURS	9.3 hr	9.3 hr	0.0 hr	0.0 hr	18.6 hr
DOWN–TIME	0.9 hr	0.8 hr	0.0 hr	0.0 hr	1.7 hr
SYSTEM PAUSE	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
SORTER NONAVAILABLE TIME	0.3 hr	0.3 hr	10.0 hr	10.0 hr	20.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					91.6%
PRODUCTIVTY					44.4%

PRODUCTIVITY

Date	22–Mar–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	158	Excused delays for contract (sorter–hrs)	2,543 hr
Current Contract week	27	Excused delay days (plant–days)	64 days
		Excused delay months (plant–month)	2.45 months
Soil production for Day	187 MT		
Cumlative Soil Production for Week	344 MT	Percent of contract completed	37.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,838 MT
Since 6 Sep 93	35,538 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	37,129 MT		
Total Soil production for project	63,416 MT		

MT = metric tons

File Report1 Printed on 31-Mar-94 at 09:07:51 AM

SORTER 1

22-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	32.5 tons	61.0 tons	93.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	40.5 kg	
VOLUME IN-GROUND	25.8 yd³	48.3 yd³	74.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	65.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	114,176 kBq	62,969 kBq	14,369 kBq
MAXIMUM/SORT	5,350 kBq	3,273 kBq	20 kBq
MINIMUM/SORT	2 kBq	(17,288)Bq	-16 kBq
SPECIFIC ACTIVITY		1,937 Bq/kg	236 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,672		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			561		08:33	08:30
NONE (AD=0 & MD=0 & MND>0)			593		08:35	08:33
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			518		09:06	09:02
UNEXPLAINED RECORDS			0			09:36
0<AD<1kBq & MD>0			0			10:16
AD=0 & MD>0			1			12:32
AD<0 & MD >0			2			
2-SEC COUNT PERIODS				16,720		
2-SEC RECORDS WITH SORTS			3,935			
2-SEC RECORDS WITHOUT SORTS			12,785			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,607		
NONPROCESSING RECORDS (Test, calibration, etc)				6		
2-SEC SORT DETECTORS						
1 DET	2,690	68.4%	5 DET	6	0.2%	
2 DET	939	23.9%	6 DET	0	0.0%	
3 DET	254	6.5%	7 DET	0	0.0%	
4 DET	46	1.2%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			12.4 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	29	1.5%
2	207	10.4%
3	301	15.2%
4	339	17.1%
5	457	23.1%
6	339	17.1%
7	267	13.5%
8	42	2.1%
TOTAL	1,981	

2-GATE SORTS

DET	SORTS	FREQ%
9	100	5.1%
10	263	13.5%
11	321	16.4%
12	407	20.8%
13	441	22.6%
14	272	13.9%
15	150	7.7%
TOTAL	1,954	

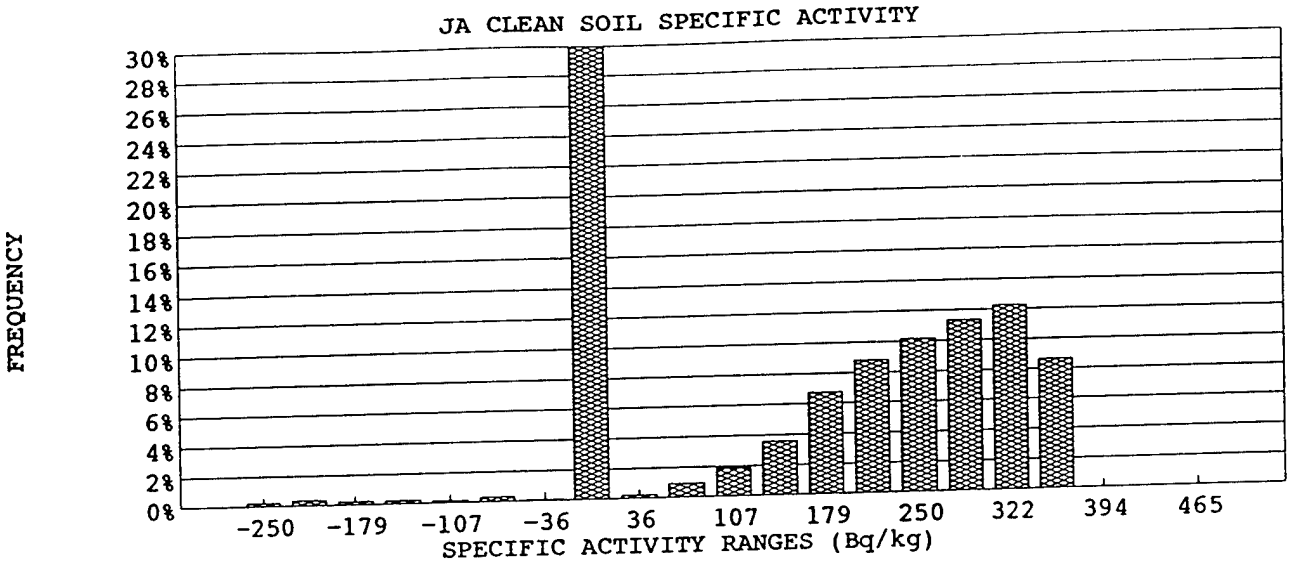
ACT_ND (Bq)	NUM (#)
-14000	4
-12000	6
-10000	4
-8000	4
-6000	2
-4000	5
-2000	1
0	569
2000	4
4000	15
6000	31
8000	60
10000	113
12000	148
14000	171
16000	190
18000	206
20000	145
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,678

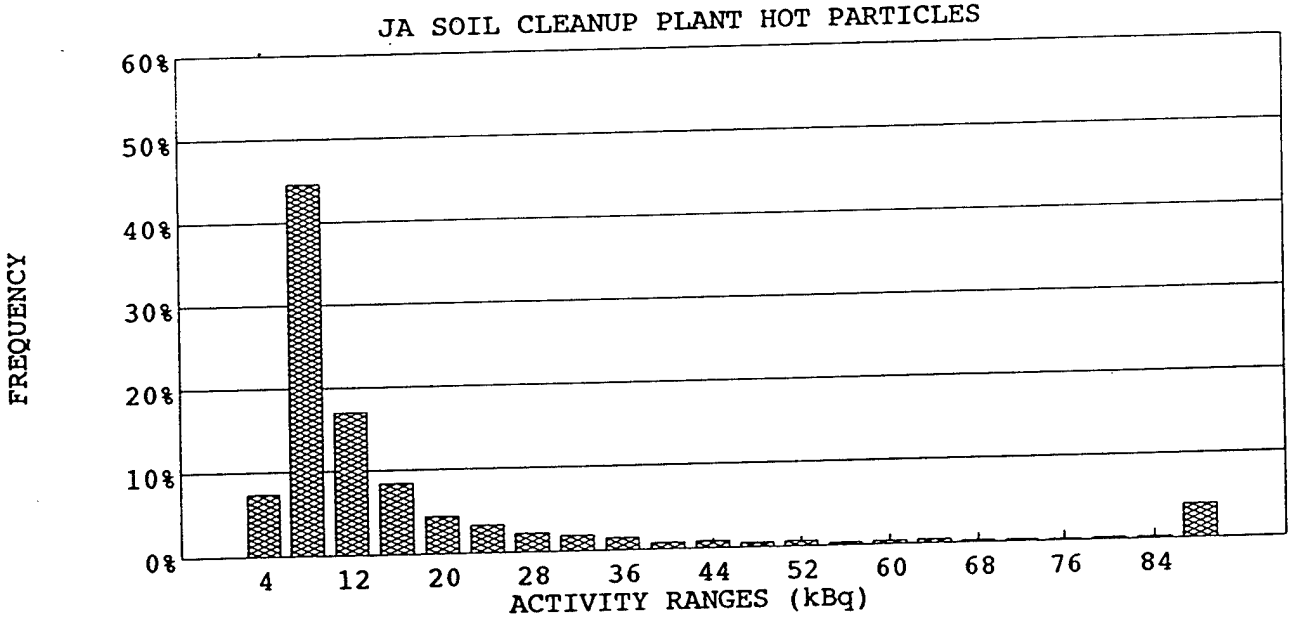
SPEC_A (Bq/kg)	FREQ%
-250	0.2%
-215	0.4%
-179	0.2%
-143	0.2%
-107	0.1%
-72	0.3%
-36	0.1%
0	33.9%
36	0.2%
72	0.9%
107	1.8%
143	3.6%
179	6.7%
215	8.8%
250	10.2%
286	11.3%
322	12.3%
358	8.6%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

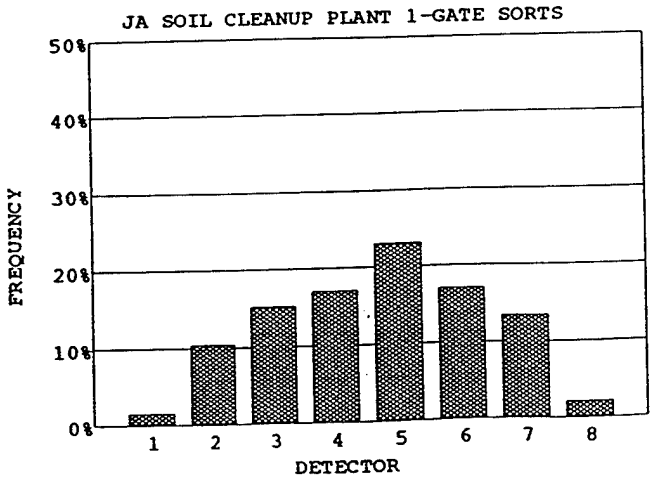
ACT_P (kBq)	NUM (#)	FREQ%
4	291	7.4%
8	1,757	44.7%
12	666	16.9%
16	335	8.5%
20	177	4.5%
24	131	3.3%
28	87	2.2%
32	73	1.9%
36	57	1.4%
40	31	0.8%
44	33	0.8%
48	23	0.6%
52	25	0.6%
56	13	0.3%
60	14	0.4%
64	19	0.5%
68	10	0.3%
72	9	0.2%
76	7	0.2%
80	9	0.2%
84	11	0.3%
>84	157	4.0%
TOTAL	3,935	

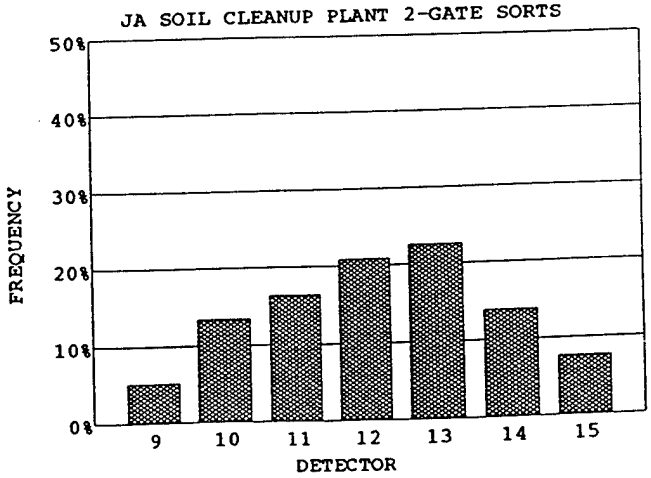
EVENT TYPES HPE 3,696 MPE 148 DISE 42682

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

22-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	27.9 tons	66.0 tons	94.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	22.1 yd³	52.3 yd³	74.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	70.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	74,057 kBq	46,837 kBq	15,208 kBq
MAXIMUM/SORT	2,681 kBq	1,506 kBq	20 kBq
MINIMUM/SORT	2 kBq	(2,688)Bq	-15 kBq
SPECIFIC ACTIVITY		1,677 Bq/kg	230 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,681		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			475		08:33	08:30
NONE (AD=0 & MD=0 & MND>0)			607		09:06	09:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			599		15:20	09:36
UNEXPLAINED RECORDS			0		16:02	10:16
0<AD<1kBq & MD>0			2			12:32
AD=0 & MD>0			0			
AD<0 & MD >0			2			
2-SEC COUNT PERIODS				16,810		
2-SEC RECORDS WITH SORTS			4,179			
2-SEC RECORDS WITHOUT SORTS			12,631			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,860		
NONPROCESSING RECORDS (Test, calibration, etc)				1		
2-SEC SORT DETECTORS						
1 DET	2,888	69.1%	5 DET	15	0.4%	
2 DET	976	23.4%	6 DET	0	0.0%	
3 DET	242	5.8%	7 DET	0	0.0%	
4 DET	58	1.4%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			11.6 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	100	4.8%
2	443	21.4%
3	411	19.8%
4	418	20.2%
5	341	16.4%
6	227	10.9%
7	109	5.3%
8	25	1.2%
TOTAL	2,074	

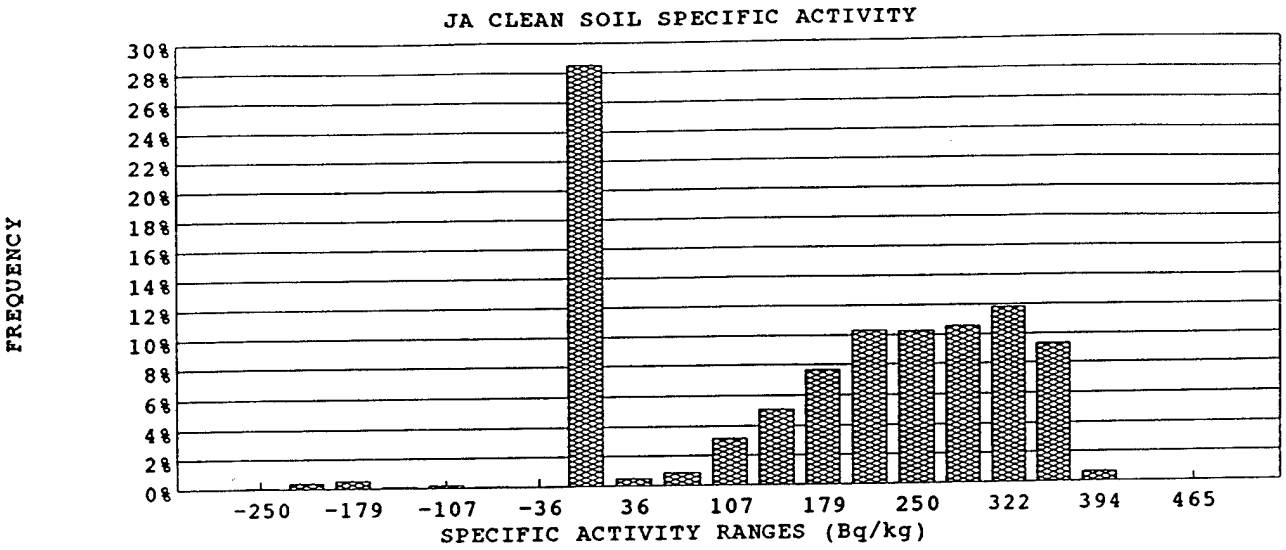
2-GATE SORTS DET	SORTS	FREQ%
9	286	13.6%
10	461	21.9%
11	464	22.0%
12	393	18.7%
13	289	13.7%
14	157	7.5%
15	55	2.6%
TOTAL	2,105	

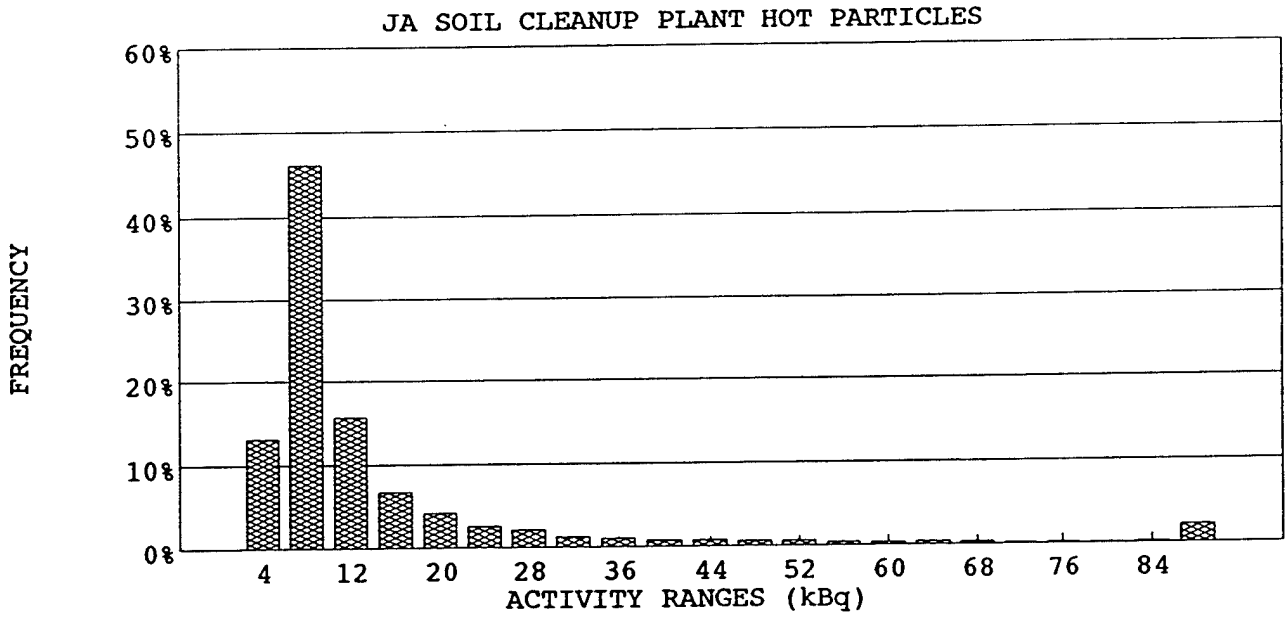
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	7
-10000	9
-8000	2
-6000	3
-4000	1
-2000	0
0	480
2000	8
4000	15
6000	53
8000	85
10000	129
12000	173
14000	172
16000	177
18000	199
20000	157
22000	11
24000	0
26000	0
>28000	0
TOTAL	1,682

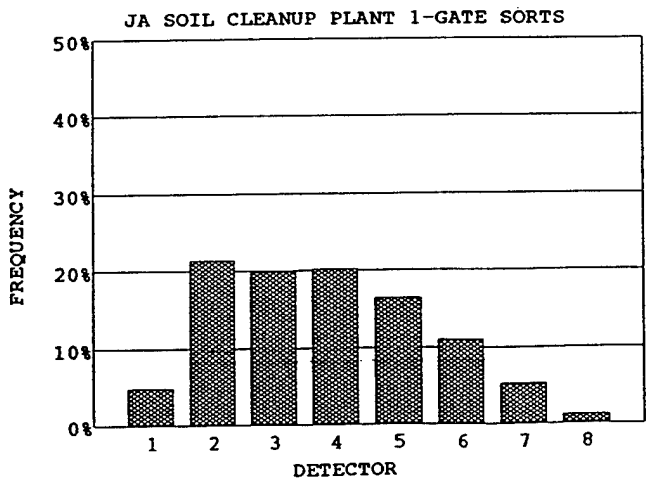
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.4%
-179	0.5%
-143	0.1%
-107	0.2%
-72	0.1%
-36	0.0%
0	28.5%
36	0.5%
72	0.9%
107	3.2%
143	5.1%
179	7.7%
215	10.3%
250	10.2%
286	10.5%
322	11.8%
358	9.3%
394	0.7%
429	0.0%
465	0.0%
0	0.0%

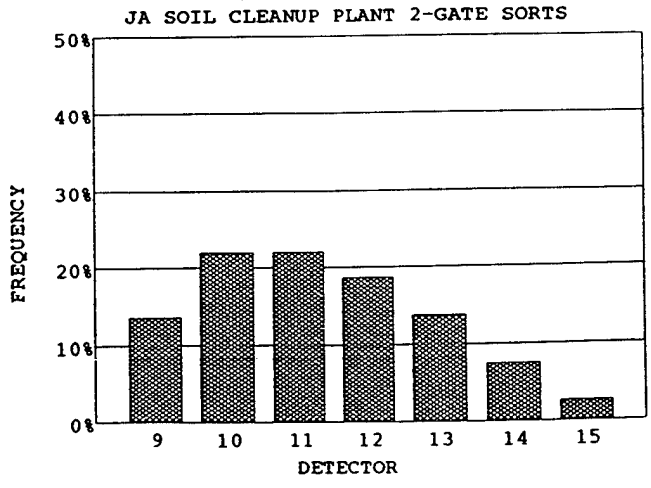
ACT_P (kBq)	NUM (#)	FREQ%
4	547	13.1%
8	1,928	46.1%
12	655	15.7%
16	283	6.8%
20	176	4.2%
24	107	2.6%
28	88	2.1%
32	54	1.3%
36	42	1.0%
40	34	0.8%
44	33	0.8%
48	28	0.7%
52	26	0.6%
56	17	0.4%
60	14	0.3%
64	16	0.4%
68	13	0.3%
72	7	0.2%
76	9	0.2%
80	5	0.1%
84	6	0.1%
>84	91	2.2%
TOTAL	4,179	

EVENT TYPES					
	HPE	3,948	MPE	114	DISE	35913


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 23-Mar-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:28	06:28	NA	NA	
TIME REQUIRED TO START-UP	0.5 hr	0.5 hr	0.0 hr	0.0 hr	1.0 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:51	15:52	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	8.5 hr	8.5 hr	0.0 hr	0.0 hr	17.1 hr
DOWN-TIME	1.7 hr	1.7 hr	0.0 hr	0.0 hr	3.4 hr
SYSTEM PAUSE	0.9 hr	0.9 hr	0.0 hr	0.0 hr	1.8 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					83.3%
PRODUCTIVTY					40.7%

PRODUCTIVITY

Date	23-Mar-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	159	Excused delays for contract (sorter-hrs)	2,563 hr
Current Contract week	27	Excused delay days (plant-days)	64 days
		Excused delay months (plant-month)	2.46 months
Soil production for Day	172 MT		
Cumlative Soil Production for Week	516 MT	Percent of contract completed	37.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,852 MT
Since 6 Sep 93	35,710 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	37,301 MT		
Total Soil production for project	63,587 MT		

MT = metric tons

SORTER 1

23-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	46.1 tons	39.8 tons	85.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	36.6 yd³	31.5 yd³	68.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	46.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	105,346 kBq	75,815 kBq	8,270 kBq
MAXIMUM/SORT	4,435 kBq	3,031 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		1,644 Bq/kg	208 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,537		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		808		None	08:27
NONE (AD=0 & MD=0 & MND>0)		336			08:58
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		393			09:31
UNEXPLAINED RECORDS	0				10:02
0<AD<1kBq & MD>0	0				10:33
AD=0 & MD>0	0				13:09
AD<0 & MD >0	0				13:37
2-SEC COUNT PERIODS			15,370		14:06
2-SEC RECORDS WITH SORTS		5,557			14:35
2-SEC RECORDS WITHOUT SORTS		9,813			15:05
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			7,094		15:33
NONPROCESSING RECORDS (Test, calibration, etc)			3		

2-SEC SORT DETECTORS

1 DET	3,731	67.1%	5 DET	20	0.4%
2 DET	1,379	24.8%	6 DET	0	0.0%
3 DET	341	6.1%	7 DET	1	0.0%
4 DET	86	1.5%	8 DET	1	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	47	1.6%
2	206	7.2%
3	415	14.6%
4	508	17.8%
5	658	23.1%
6	509	17.9%
7	401	14.1%
8	105	3.7%
TOTAL	2,849	

2-GATE SORTS

DET	SORTS	FREQ%
9	105	3.9%
10	262	9.7%
11	474	17.5%
12	594	21.9%
13	614	22.7%
14	396	14.6%
15	263	9.7%
TOTAL	2,708	

ACT_ND (Bq)	NUM (#)
-14000	11
-12000	10
-10000	4
-8000	3
-6000	4
-4000	3
-2000	4
0	810
2000	7
4000	14
6000	29
8000	53
10000	84
12000	105
14000	128
16000	105
18000	103
20000	61
22000	2
24000	0
26000	0
>28000	0
TOTAL	1,540

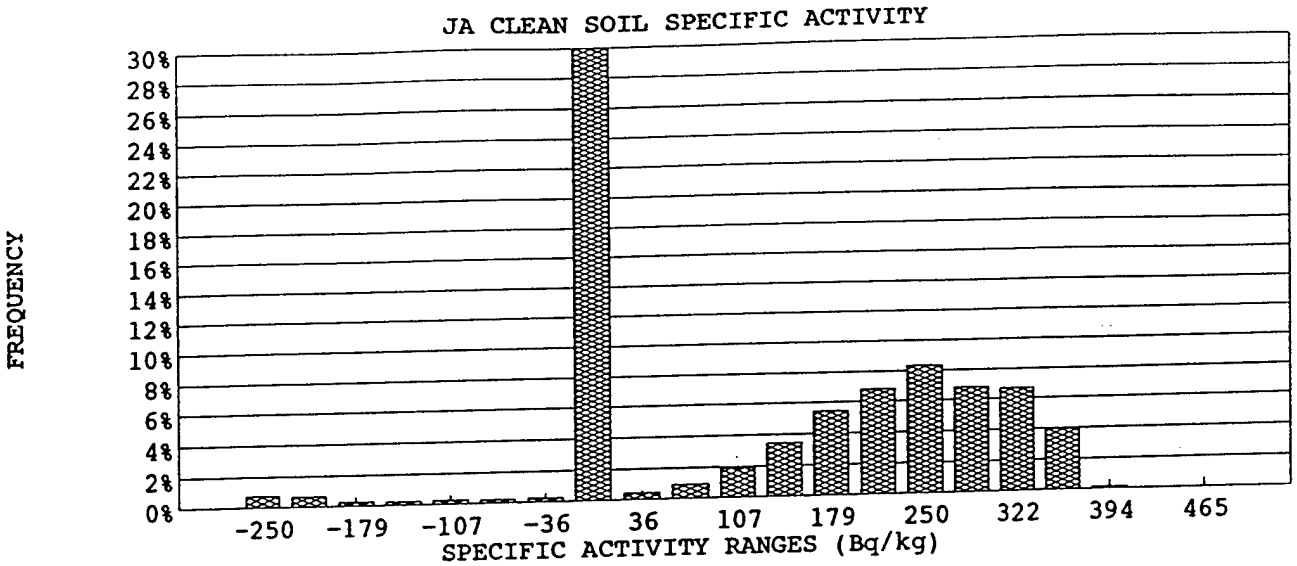
SPEC_A (Bq/kg)	FREQ%
-250	0.7%
-215	0.6%
-179	0.3%
-143	0.2%
-107	0.3%
-72	0.2%
-36	0.3%
0	52.6%
36	0.5%
72	0.9%
107	1.9%
143	3.4%
179	5.5%
215	6.8%
250	8.3%
286	6.8%
322	6.7%
358	4.0%
394	0.1%
429	0.0%
465	0.0%
0	0.0%

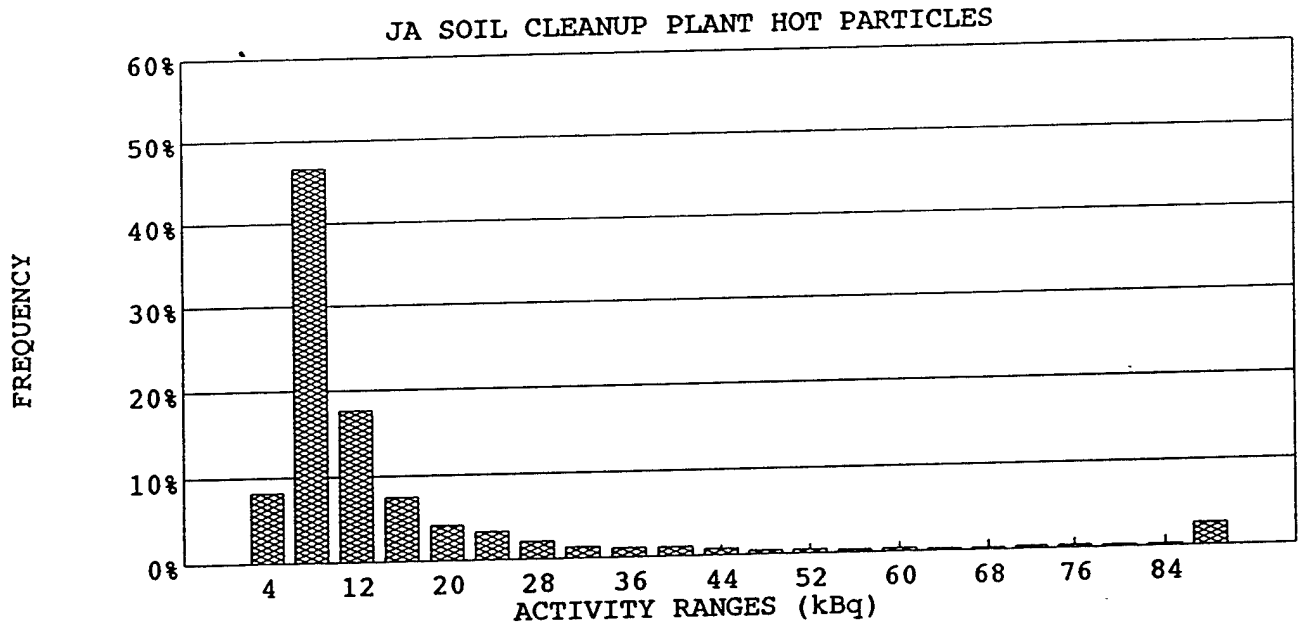
ACT_P (kBq)	NUM (#)	FREQ%
4	458	8.2%
8	2,591	46.6%
12	983	17.7%
16	419	7.5%
20	233	4.2%
24	185	3.3%
28	115	2.1%
32	73	1.3%
36	61	1.1%
40	61	1.1%
44	44	0.8%
48	27	0.5%
52	27	0.5%
56	16	0.3%
60	22	0.4%
64	14	0.3%
68	15	0.3%
72	17	0.3%
76	19	0.3%
80	15	0.3%
84	15	0.3%
>84	147	2.6%
TOTAL	5,557	

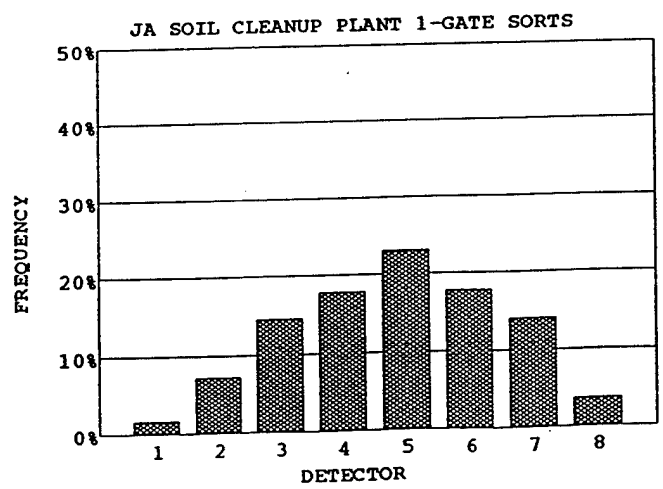
EVENT TYPES HPE 5,142 MPE 180 DISE 60677

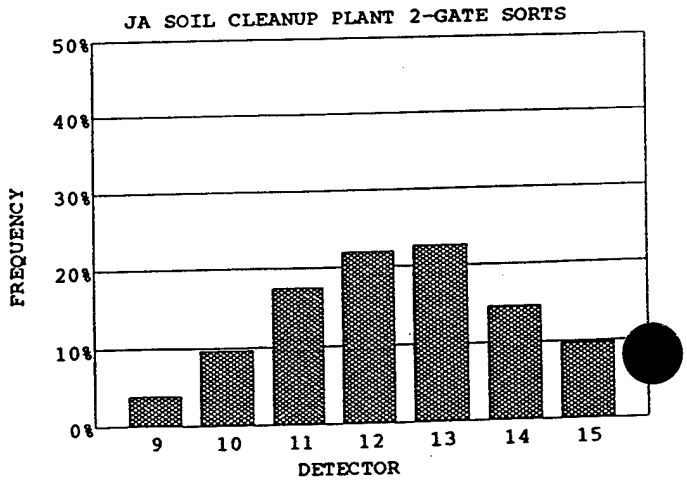
SORTER 1

23-Mar-94









SORTER 2

23-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	44.5 tons	41.4 tons	85.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	42.6 kg	
VOLUME IN-GROUND	35.3 yd³	32.8 yd³	68.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	48.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	110,828 kBq	78,055 kBq	9,301 kBq
MAXIMUM/SORT	4,376 kBq	2,642 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	-17 kBq
SPECIFIC ACTIVITY		1,752 Bq/kg	225 Bq/kg

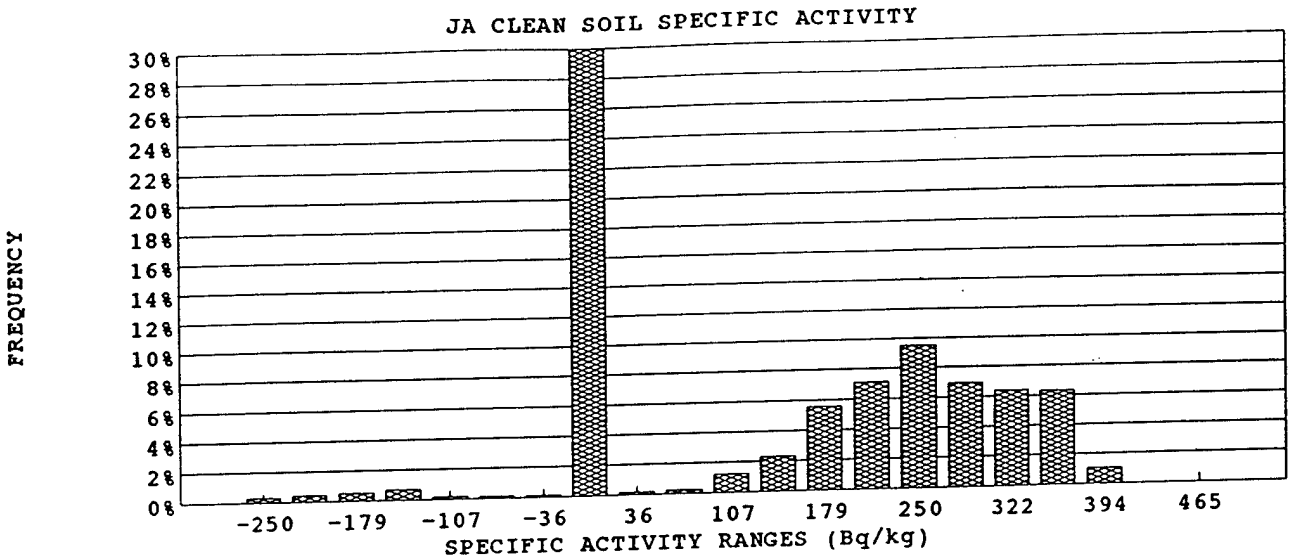
SORTS

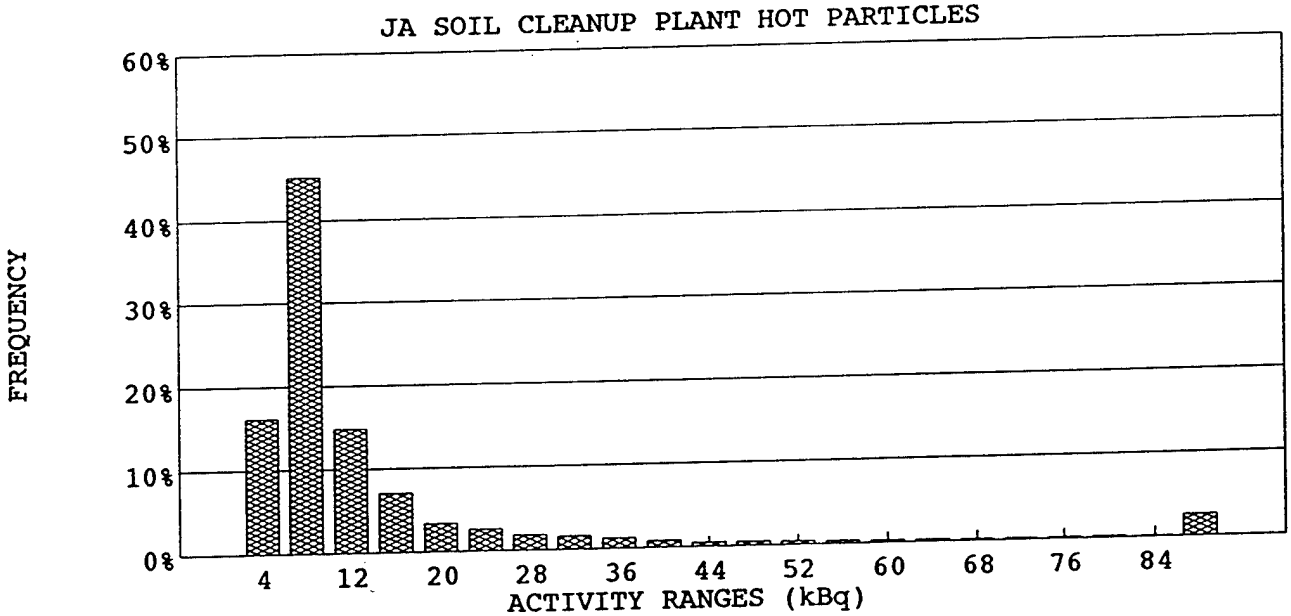
						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,537			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			779				
NONE (AD=0 & MD=0 & MND>0)			332			10:54	08:27
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			426			12:17	08:59
UNEXPLAINED RECORDS			0				09:32
0<AD<1kBq & MD>0			2				10:01
AD=0 & MD>0			0				10:33
AD<0 & MD >0			0				13:09
2-SEC COUNT PERIODS				15,370			13:37
2-SEC RECORDS WITH SORTS			6,473				14:06
2-SEC RECORDS WITHOUT SORTS			8,897				14:35
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				8,010			15:05
NONPROCESSING RECORDS (Test, calibration, etc)				1			15:33
2-SEC SORT DETECTORS							
1 DET	4,377	67.6%	5 DET	20	0.3%		
2 DET	1,585	24.5%	6 DET	0	0.0%		
3 DET	406	6.3%	7 DET	0	0.0%		
4 DET	85	1.3%	8 DET	0	0.0%		
AVERAGE TIME BETWEEN 2-SEC SORTS			7.0 sec				

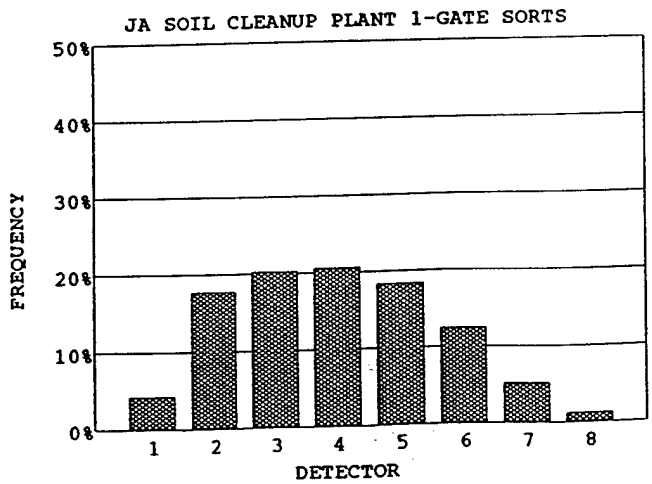
FREQUENCY DISTRIBUTIONS

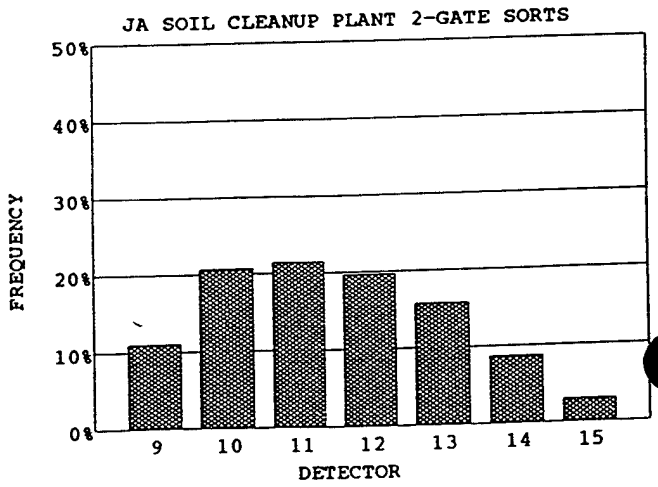
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	137	4.2%	-14000	5	-250	0.3%	4	1,045	16.1%
2	571	17.7%	-12000	7	-215	0.5%	8	2,918	45.1%
3	653	20.2%	-10000	8	-179	0.5%	12	958	14.8%
4	665	20.6%	-8000	11	-143	0.7%	16	457	7.1%
5	591	18.3%	-6000	3	-107	0.2%	20	217	3.4%
6	401	12.4%	-4000	2	-72	0.1%	24	165	2.5%
7	169	5.2%	-2000	2	-36	0.1%	28	116	1.8%
8	40	1.2%	0	780	0	50.7%	32	100	1.5%
TOTAL	3,227		2000	3	36	0.2%	36	76	1.2%
			4000	4	72	0.3%	40	53	0.8%
2-GATE	SORTS		6000	19	107	1.2%	44	32	0.5%
DET	SORTS	FREQ%	8000	36	143	2.3%	48	33	0.5%
9	355	10.9%	10000	85	179	5.5%	52	26	0.4%
10	671	20.7%	12000	109	215	7.1%	56	20	0.3%
11	696	21.4%	14000	146	250	9.5%	60	18	0.3%
12	639	19.7%	16000	107	286	7.0%	64	17	0.3%
13	511	15.7%	18000	98	322	6.4%	68	10	0.2%
14	280	8.6%	20000	97	358	6.3%	72	14	0.2%
15	94	2.9%	22000	16	394	1.0%	76	11	0.2%
TOTAL	3,246		24000	0	429	0.0%	80	12	0.2%
			26000	0	465	0.0%	84	7	0.1%
			>28000	0	0	0.0%	>84	168	2.6%
			TOTAL	1,538			TOTAL	6,473	

EVENT TYPES HPE 5,943 MPE 204 DISE 57593


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 24–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.4 hr	10.4 hr	0.0 hr	0.0 hr	20.8 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:35	06:34	NA	NA	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SORTER SHUT–DOWN	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:02	16:00	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	8.9 hr	8.8 hr	0.0 hr	0.0 hr	17.7 hr
DOWN–TIME	1.5 hr	1.6 hr	0.0 hr	0.0 hr	3.1 hr
SYSTEM PAUSE	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.3 hr
SORTER NONAVAILABLE TIME	0.1 hr	0.1 hr	10.0 hr	10.0 hr	20.2 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					85.0%
PRODUCTIVTY					42.2%

PRODUCTIVITY

Date	24–Mar–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	160	Excused delays for contract (sorter–hrs)	2,583 hr
Current Contract week	27	Excused delay days (plant–days)	65 days
		Excused delay months (plant–month)	2.48 months
Soil production for Day	178 MT		
Cumlative Soil Production for Week	694 MT	Percent of contract completed	37.5%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,872 MT
Since 6 Sep 93	35,888 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	37,479 MT		
Total Soil production for project	63,766 MT		

MT = metric tons

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SORTER 1

24-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.65 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	33.2 tons	56.1 tons	89.3 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	26.3 yd³	44.5 yd³	70.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	62.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	58,359 kBq	46,007 kBq	12,756 kBq
MAXIMUM/SORT	2,066 kBq	1,414 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,387 Bq/kg	227 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,597		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			579		07:38	08:10
NONE (AD=0 & MD=0 & MND>0)			653			08:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			365			09:22
UNEXPLAINED RECORDS			0			09:52
0<AD<1kBq & MD>0			1			10:23
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				15,970		
2-SEC RECORDS WITH SORTS			3,392			
2-SEC RECORDS WITHOUT SORTS			12,578			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				4,989		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2-SEC SORT DETECTORS						
1 DET	2,320	68.4%	5 DET	11	0.3%	
2 DET	821	24.2%	6 DET	0	0.0%	
3 DET	199	5.9%	7 DET	0	0.0%	
4 DET	41	1.2%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			13.8 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	34	1.9%
2	160	9.1%
3	284	16.2%
4	309	17.7%
5	361	20.6%
6	303	17.3%
7	239	13.7%
8	59	3.4%
TOTAL	1,749	

2-GATE SORTS

DET	SORTS	FREQ%
9	80	4.9%
10	207	12.6%
11	284	17.3%
12	338	20.6%
13	348	21.2%
14	232	14.1%
15	154	9.4%
TOTAL	1,643	

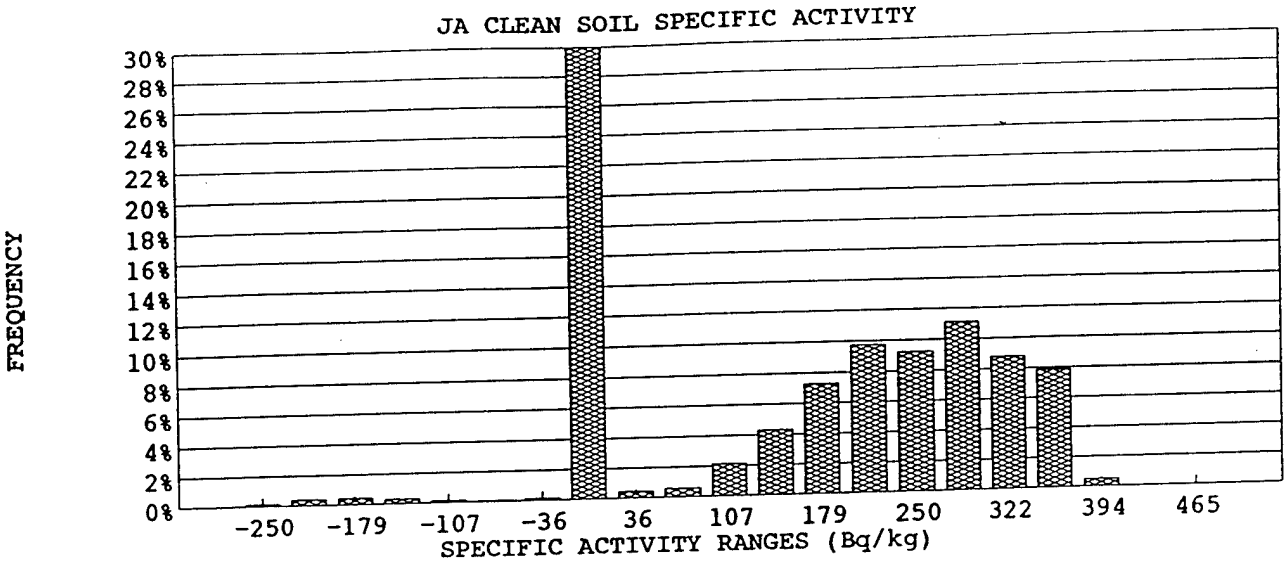
ACT_ND (Bq)	NUM (#)
-14000	2
-12000	6
-10000	7
-8000	5
-6000	2
-4000	1
-2000	2
0	583
2000	7
4000	9
6000	34
8000	69
10000	117
12000	156
14000	148
16000	178
18000	141
20000	126
22000	8
24000	0
26000	0
>28000	0
TOTAL	1,601

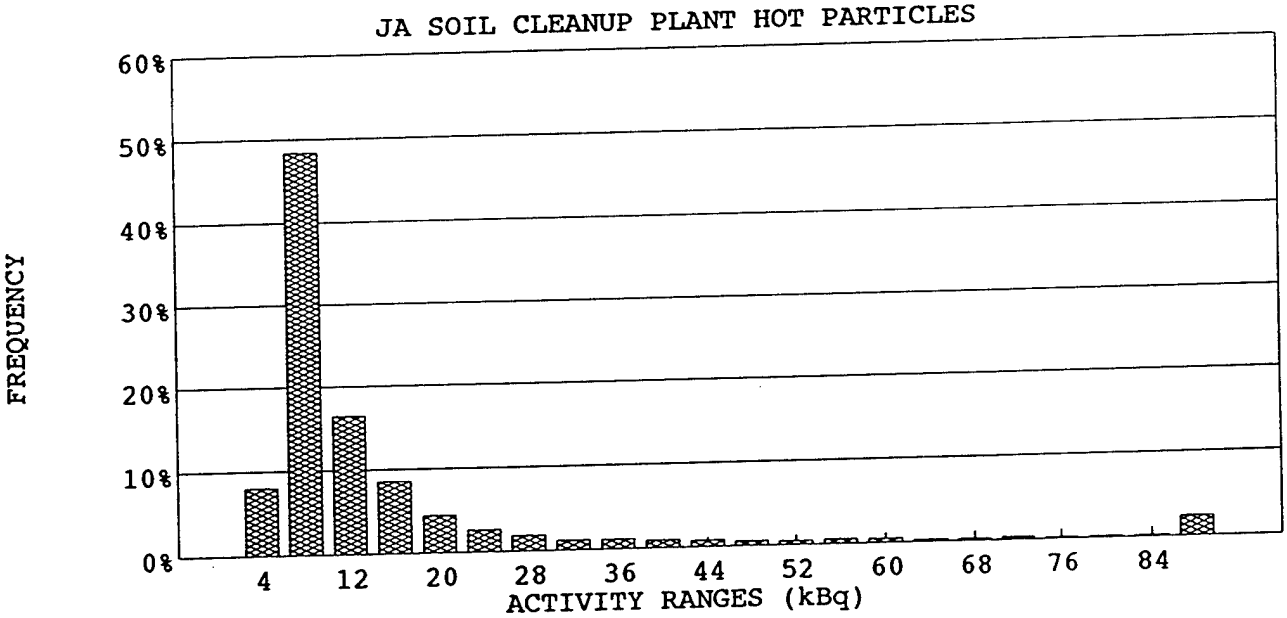
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.4%
-179	0.4%
-143	0.3%
-107	0.1%
-72	0.1%
-36	0.1%
0	36.4%
36	0.4%
72	0.6%
107	2.1%
143	4.3%
179	7.3%
215	9.7%
250	9.2%
286	11.1%
322	8.8%
358	7.9%
394	0.5%
429	0.0%
465	0.0%
0	0.0%

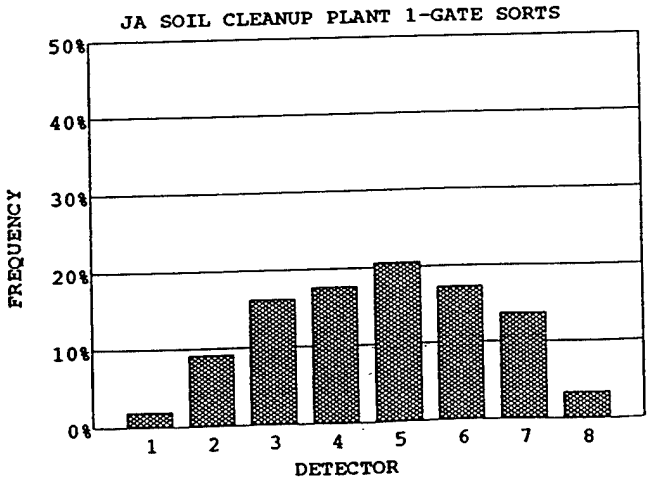
ACT_P (kBq)	NUM (#)	FREQ%
4	271	8.0%
8	1,643	48.4%
12	558	16.5%
16	290	8.5%
20	151	4.5%
24	90	2.7%
28	63	1.9%
32	39	1.1%
36	40	1.2%
40	32	0.9%
44	26	0.8%
48	18	0.5%
52	15	0.4%
56	18	0.5%
60	15	0.4%
64	8	0.2%
68	9	0.3%
72	11	0.3%
76	5	0.1%
80	5	0.1%
84	4	0.1%
>84	81	2.4%
TOTAL	3,392	

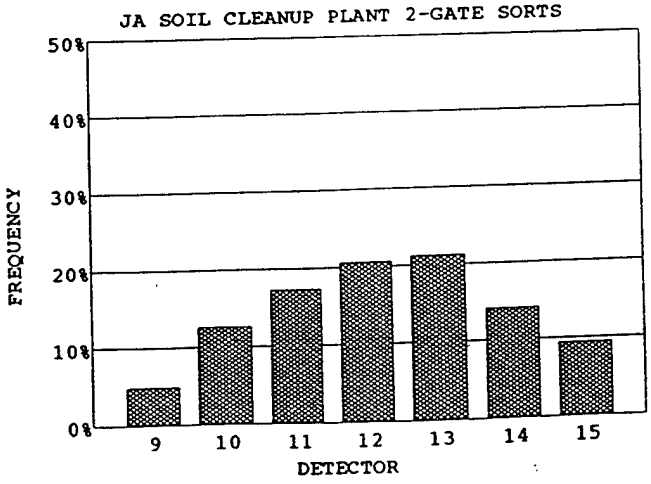
EVENT TYPES	HPE	MPE	DISE
	3,178	127	44176

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

24-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	31.5 tons	57.4 tons	88.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	25.0 yd³	45.5 yd³	70.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	64.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	52,260 kBq	41,567 kBq	13,030 kBq
MAXIMUM/SORT	2,319 kBq	1,345 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		1,320 Bq/kg	227 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,590		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		548		07:06	08:10
NONE (AD=0 & MD=0 & MND>0)		671			08:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		371			09:23
UNEXPLAINED RECORDS	0				09:51
0<AD<1kBq & MD>0	1				10:24
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			15,900		
2-SEC RECORDS WITH SORTS		3,565			
2-SEC RECORDS WITHOUT SORTS		12,335			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,155		
NONPROCESSING RECORDS (Test, calibration, etc)			2		

2-SEC SORT DETECTORS

1 DET	2,429	68.1%	5 DET	6	0.2%
2 DET	865	24.3%	6 DET	0	0.0%
3 DET	220	6.2%	7 DET	0	0.0%
4 DET	45	1.3%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 13.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	92	5.2%
2	334	18.8%
3	337	19.0%
4	373	21.0%
5	338	19.0%
6	208	11.7%
7	79	4.5%
8	14	0.8%
TOTAL	1,775	

2-GATE SORTS

DET	SORTS	FREQ%
9	203	11.3%
10	371	20.7%
11	390	21.8%
12	364	20.3%
13	267	14.9%
14	155	8.7%
15	40	2.2%
TOTAL	1,790	

ACT_ND (Bq)	NUM (#)
-14000	2
-12000	6
-10000	4
-8000	8
-6000	5
-4000	3
-2000	0
0	550
2000	2
4000	21
6000	30
8000	67
10000	117
12000	141
14000	189
16000	173
18000	148
20000	117
22000	9
24000	0
26000	0
>28000	0
TOTAL	1,592

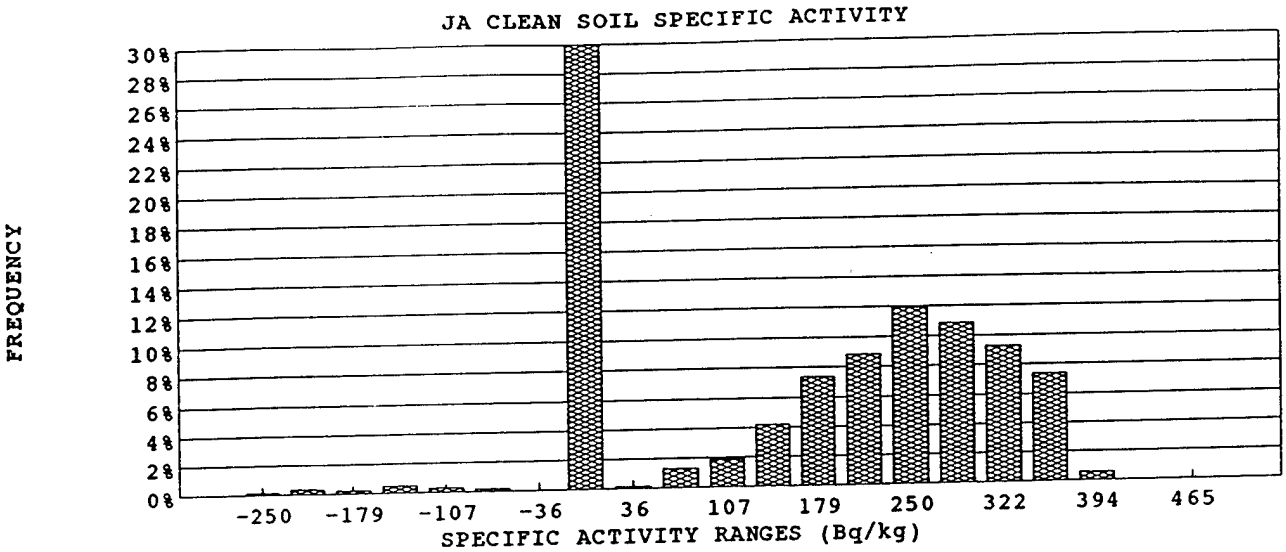
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.4%
-179	0.3%
-143	0.5%
-107	0.3%
-72	0.2%
-36	0.0%
0	34.5%
36	0.1%
72	1.3%
107	1.9%
143	4.2%
179	7.3%
215	8.9%
250	11.9%
286	10.9%
322	9.3%
358	7.3%
394	0.6%
429	0.0%
465	0.0%
0	0.0%

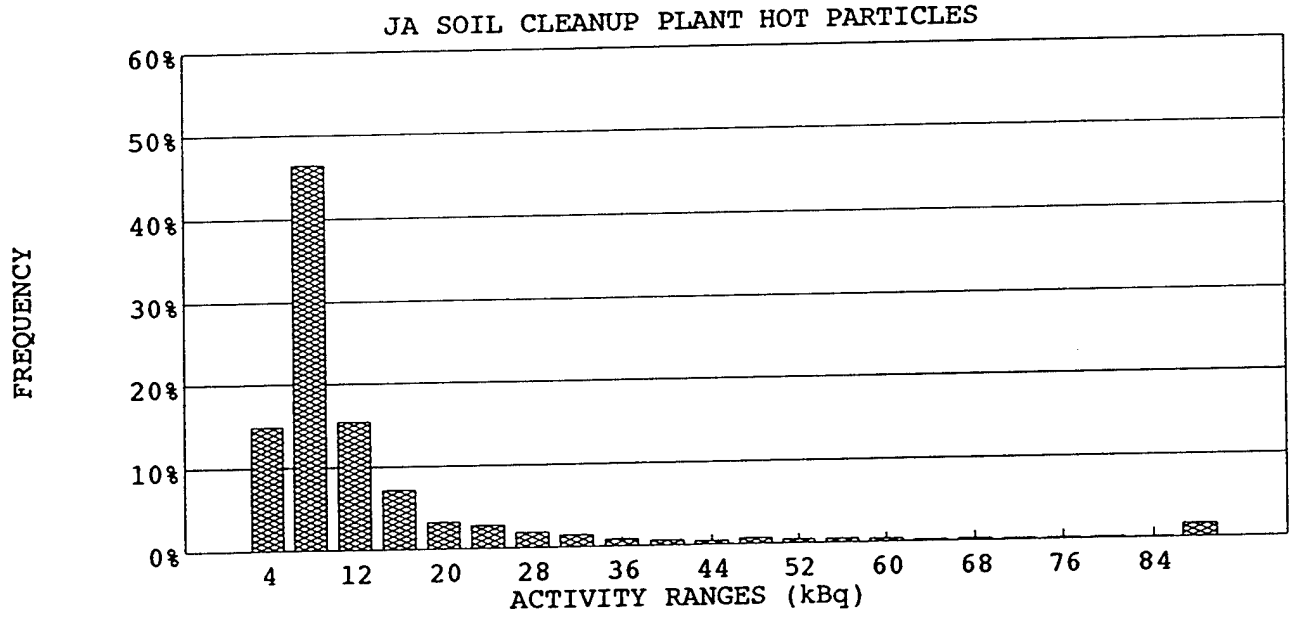
ACT_P (kBq)	NUM (#)	FREQ%
4	530	14.9%
8	1,653	46.4%
12	550	15.4%
16	258	7.2%
20	118	3.3%
24	100	2.8%
28	66	1.9%
32	52	1.5%
36	30	0.8%
40	22	0.6%
44	19	0.5%
48	25	0.7%
52	17	0.5%
56	16	0.4%
60	14	0.4%
64	7	0.2%
68	9	0.3%
72	5	0.1%
76	5	0.1%
80	6	0.2%
84	4	0.1%
>84	59	1.7%
TOTAL	3,565	

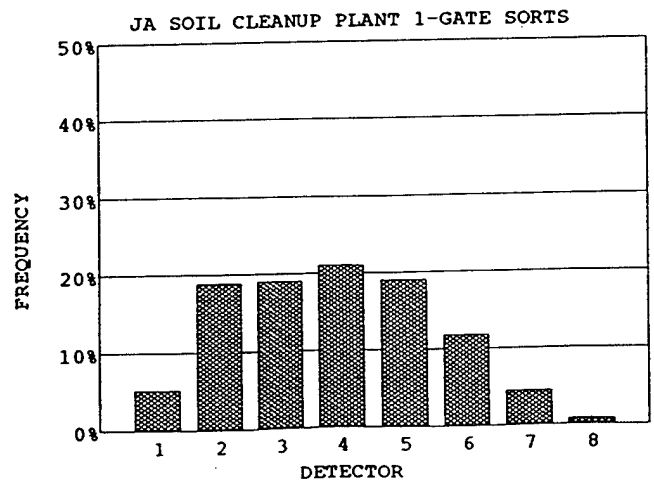
EVENT TYPES HPE 3,327 MPE 94 DISE 41658

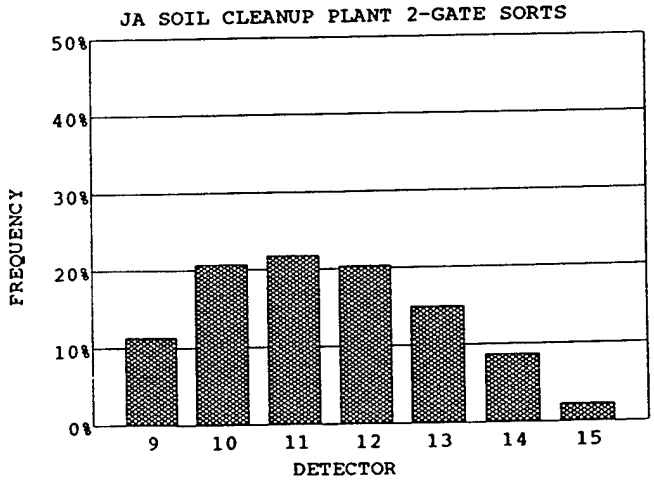
SORTER 2

24-Mar-94









WORK HISTORY – JA SOIL CLEANUP PLANT 25–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.4 hr	10.4 hr	0.0 hr	0.0 hr	20.8 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:38	06:38	NA	NA	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.3 hr
SORTER SHUT–DOWN	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:09	16:08	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	9.4 hr	9.3 hr	0.0 hr	0.0 hr	18.7 hr
DOWN–TIME	1.0 hr	1.1 hr	0.0 hr	0.0 hr	2.1 hr
SYSTEM PAUSE	0.0 hr	0.2 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	0.1 hr	0.1 hr	10.0 hr	10.0 hr	20.2 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					89.9%
PRODUCTIVTY					44.6%

PRODUCTIVITY

Date	25–Mar–94
Contract day (from 6 Sep)	161
Current Contract week	27
Soil production for Day	188 MT
Cumlative Soil Production for Week	882 MT
Total Soil production for contract	
Since 6 Sep 93	36,076 MT
Since 6 Aug 93	37,667 MT
Total Soil production for project	63,954 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,603 hr
Excused delay days (plant–days)	65 days
Excused delay months (plant–month)	2.50 months
Percent of contract completed	37.7%
Tons Ahead or Behind Schedule	1,902 MT
Days ahead or behind schedule	6 days

SORTER 1

25-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	14.0 tons	80.9 tons	94.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	11.1 yd³	64.1 yd³	75.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	85.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	21,974 kBq	13,980 kBq	6,083 kBq
MAXIMUM/SORT	4,614 kBq	1,756 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		1,000 Bq/kg	75 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,697		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			243			
NONE (AD=0 & MD=0 & MND>0)			1,152		None	07:39
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			302			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				16,970		
2-SEC RECORDS WITH SORTS			581			
2-SEC RECORDS WITHOUT SORTS			16,389			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,278		
NONPROCESSING RECORDS (Test, calibration, etc)				11		

2-SEC SORT DETECTORS

1 DET	421	72.5%	5 DET	2	0.3%
2 DET	127	21.9%	6 DET	0	0.0%
3 DET	26	4.5%	7 DET	0	0.0%
4 DET	5	0.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 80.6 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	4	1.3%
2	32	10.6%
3	50	16.5%
4	48	15.8%
5	61	20.1%
6	55	18.2%
7	41	13.5%
8	12	4.0%
TOTAL	303	

2-GATE SORTS

DET	SORTS	FREQ%
9	19	6.8%
10	38	13.7%
11	50	18.0%
12	53	19.1%
13	51	18.3%
14	38	13.7%
15	29	10.4%
TOTAL	278	

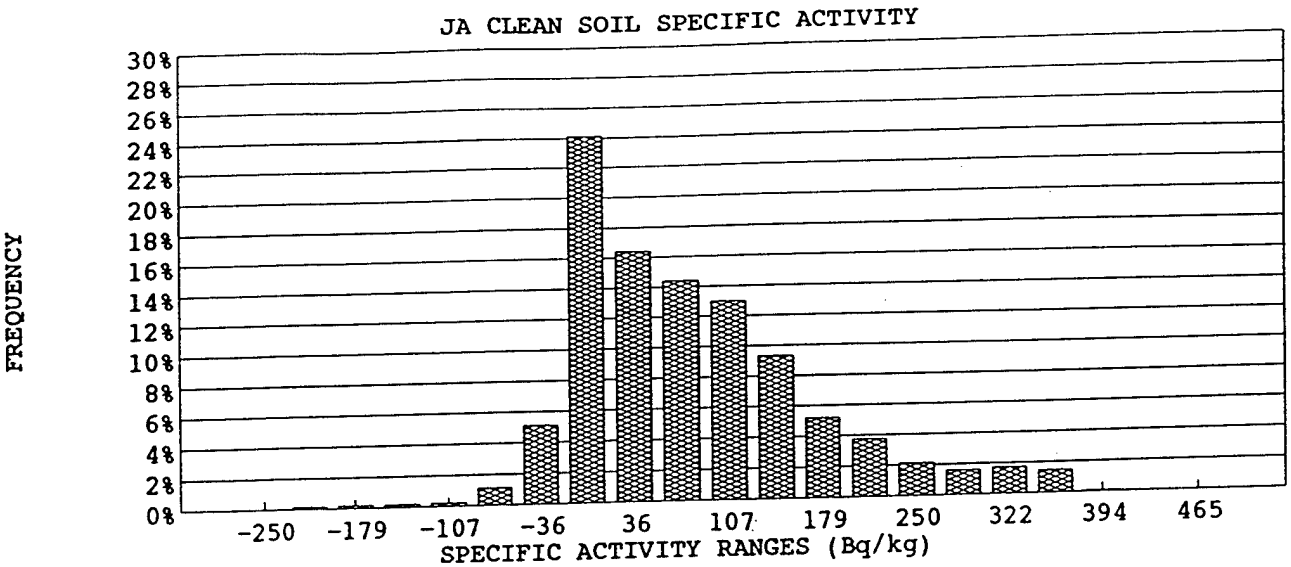
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	2
-10000	3
-8000	3
-6000	4
-4000	19
-2000	87
0	412
2000	280
4000	246
6000	222
8000	159
10000	89
12000	64
14000	36
16000	27
18000	29
20000	25
22000	1
24000	0
26000	0
>28000	0
TOTAL	1,708

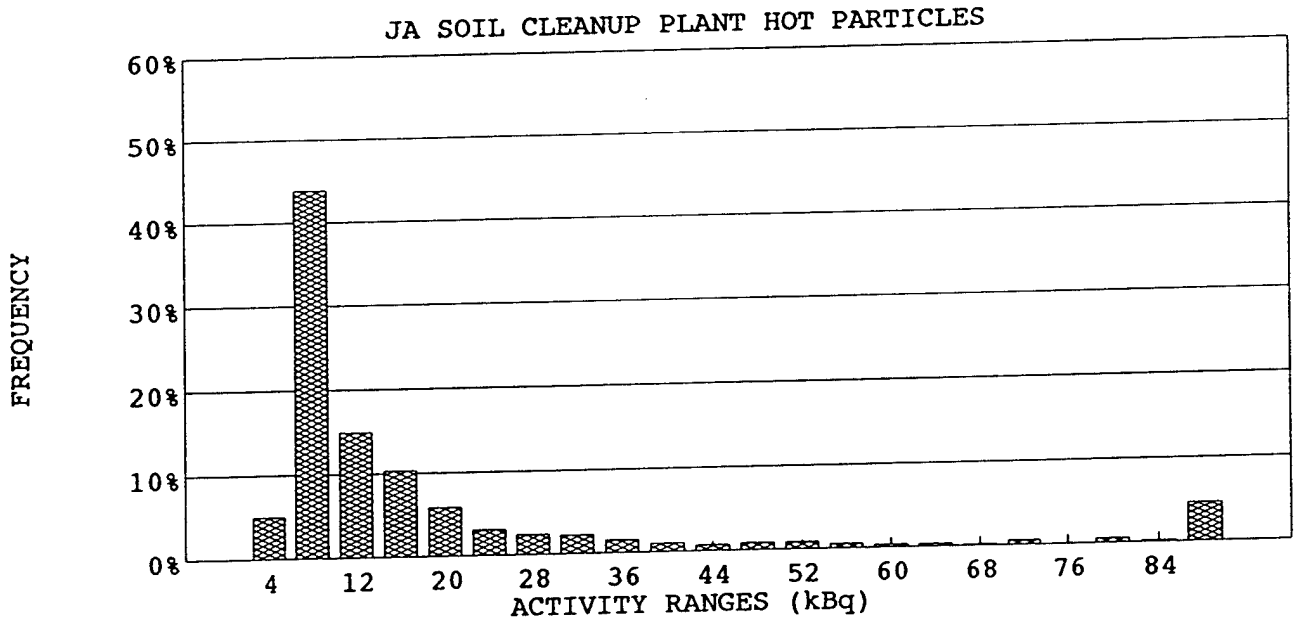
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.1%
-179	0.2%
-143	0.2%
-107	0.2%
-72	1.1%
-36	5.1%
0	24.1%
36	16.4%
72	14.4%
107	13.0%
143	9.3%
179	5.2%
215	3.7%
250	2.1%
286	1.6%
322	1.7%
358	1.5%
394	0.1%
429	0.0%
465	0.0%
0	0.0%

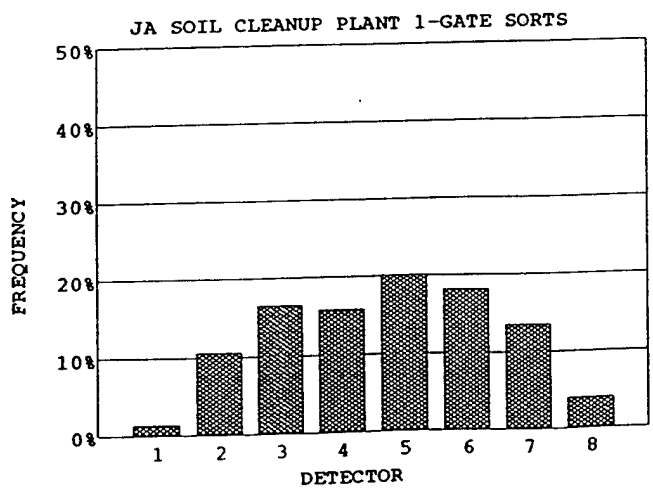
ACT_P (kBq)	NUM (#)	FREQ%
4	29	5.0%
8	255	43.9%
12	87	15.0%
16	60	10.3%
20	34	5.9%
24	18	3.1%
28	14	2.4%
32	13	2.2%
36	9	1.5%
40	6	1.0%
44	4	0.7%
48	5	0.9%
52	5	0.9%
56	3	0.5%
60	2	0.3%
64	2	0.3%
68	1	0.2%
72	3	0.5%
76	0	0.0%
80	3	0.5%
84	1	0.2%
>84	27	4.6%
TOTAL	581	

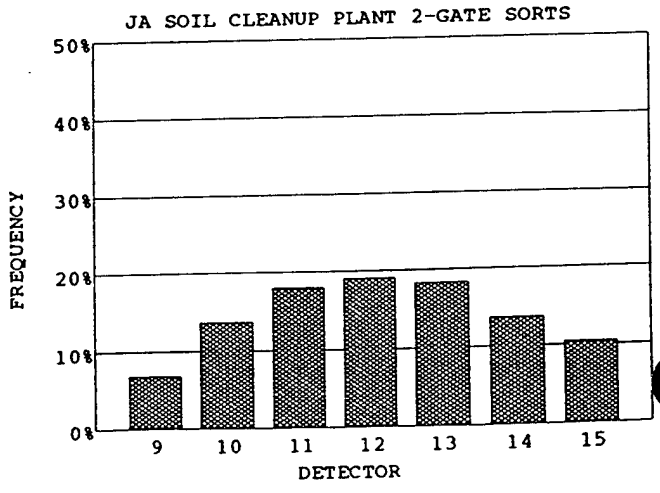
EVENT TYPES HPE 562 MPE 594 DISE 18844

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

25-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.73 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	10.6 tons	83.1 tons	93.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	8.4 yd³	65.8 yd³	74.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	11,325 kBq	8,674 kBq	6,896 kBq
MAXIMUM/SORT	2,156 kBq	991 kBq	20 kBq
MINIMUM/SORT	2 kBq	(6,087)Bq	-11 kBq
SPECIFIC ACTIVITY		821 Bq/kg	83 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,675		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			180		09:38	07:36
NONE (AD=0 & MD=0 & MND>0)			1,178		12:35	09:32
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			317		12:35	
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			2			
AD=0 & MD>0			0			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				16,750		
2-SEC RECORDS WITH SORTS			491			
2-SEC RECORDS WITHOUT SORTS			16,259			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,166		
NONPROCESSING RECORDS (Test, calibration, etc)				7		
2-SEC SORT DETECTORS						
1 DET	356	72.5%	5 DET	0	0.0%	
2 DET	112	22.8%	6 DET	0	0.0%	
3 DET	20	4.1%	7 DET	0	0.0%	
4 DET	3	0.6%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS	94.1 sec					

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	12	5.0%
2	47	19.4%
3	44	18.2%
4	47	19.4%
5	47	19.4%
6	33	13.6%
7	9	3.7%
8	3	1.2%
TOTAL	242	

2-GATE SORTS

DET	SORTS	FREQ%
9	30	12.0%
10	51	20.5%
11	58	23.3%
12	43	17.3%
13	38	15.3%
14	23	9.2%
15	6	2.4%
TOTAL	249	

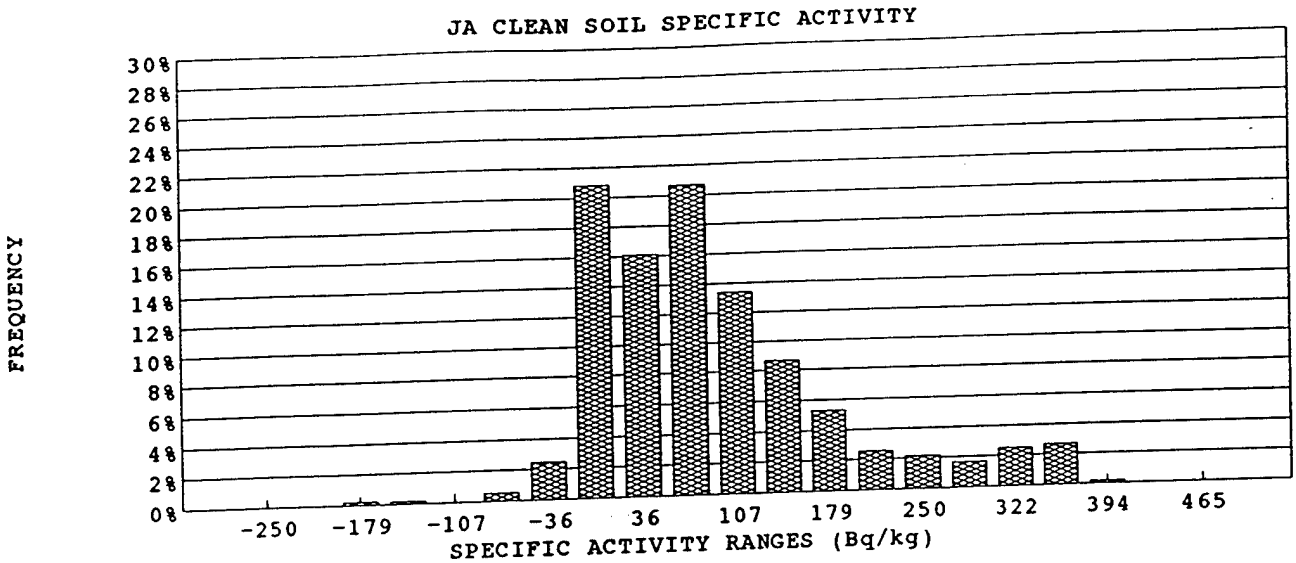
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	4
-8000	3
-6000	0
-4000	9
-2000	41
0	350
2000	270
4000	348
6000	225
8000	146
10000	89
12000	43
14000	36
16000	28
18000	42
20000	45
22000	3
24000	0
26000	0
>28000	0
TOTAL	1,682

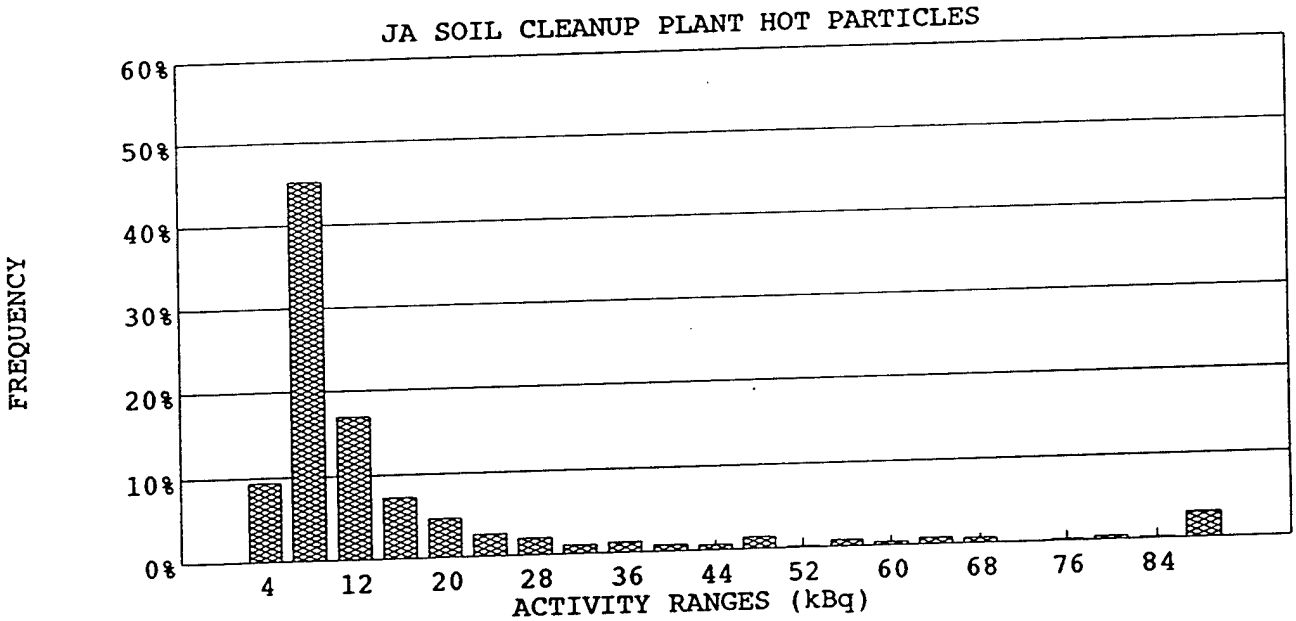
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.2%
-143	0.2%
-107	0.0%
-72	0.5%
-36	2.4%
0	20.8%
36	16.1%
72	20.7%
107	13.4%
143	8.7%
179	5.3%
215	2.6%
250	2.1%
286	1.7%
322	2.5%
358	2.7%
394	0.2%
429	0.0%
465	0.0%
0	0.0%

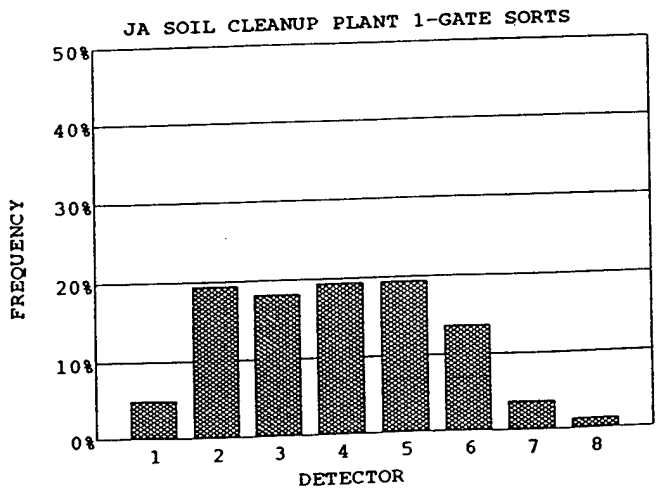
ACT_P (kBq)	NUM (#)	FREQ%
4	46	9.4%
8	222	45.2%
12	83	16.9%
16	36	7.3%
20	23	4.7%
24	13	2.6%
28	10	2.0%
32	5	1.0%
36	6	1.2%
40	4	0.8%
44	3	0.6%
48	7	1.4%
52	1	0.2%
56	4	0.8%
60	2	0.4%
64	4	0.8%
68	3	0.6%
72	0	0.0%
76	1	0.2%
80	2	0.4%
84	1	0.2%
>84	15	3.1%
TOTAL	491	

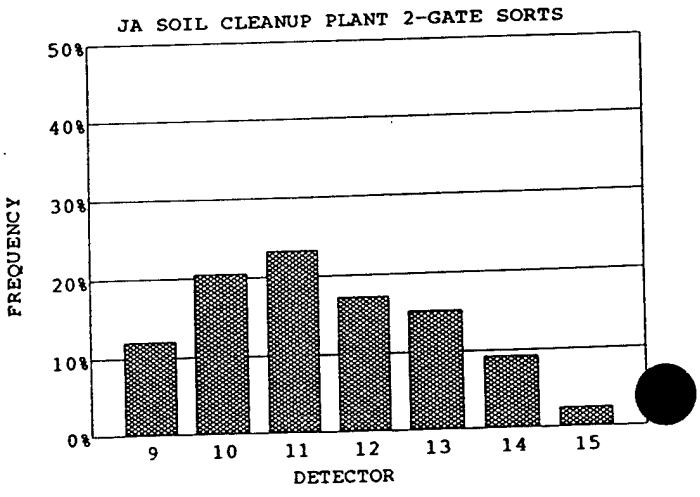
EVENT TYPES HPE 496 MPE 501 DISE 14120

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 26-Mar-94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	5.2 hr	5.2 hr	0.0 hr	0.0 hr	10.5 hr
SORTER START-UP	05:45	05:45	NA	NA	
START SOIL PROCESSING	06:04	06:04	NA	NA	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
SORTER SHUT-DOWN	11:00	11:00	NA	NA	
END SOIL PROCESSING	10:38	10:39	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	4.6 hr	4.6 hr	0.0 hr	0.0 hr	9.2 hr
DOWN-TIME	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.3 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	4.8 hr	4.8 hr	10.0 hr	10.0 hr	29.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					87.1%
PRODUCTIVTY					22.9%

PRODUCTIVITY

Date	26-Mar-94
Contract day (from 6 Sep)	162
Current Contract week	27
Soil production for Day	92 MT
Cumlative Soil Production for Week	974 MT
Total Soil production for contract	
Since 6 Sep 93	36,168 MT
Since 6 Aug 93	37,759 MT
Total Soil production for project	64,046 MT

MT = metric tons

Excused Delays for day (sorter-hrs)	20 hr
Excused delays for contract (sorter-hrs)	2,623 hr
Excused delay days (plant-days)	66 days
Excused delay months (plant-month)	2.52 months
Percent of contract completed	37.8%
Tons Ahead or Behind Schedule	1,835 MT
Days ahead or behind schedule	6 days

File Report1 Printed on 31-Mar-94 at 10:14:45 AM

SORTER 1

26-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.3 tons	42.7 tons	45.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.7 kg	
VOLUME IN-GROUND	2.6 yd³	33.8 yd³	36.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	92.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,225 kBq	3,152 kBq	5,252 kBq
MAXIMUM/SORT	303 kBq	164 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		966 Bq/kg	123 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			822		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		52		None	None
NONE (AD=0 & MD=0 & MND>0)		490			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		280			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			8,220		
2-SEC RECORDS WITH SORTS		247			
2-SEC RECORDS WITHOUT SORTS		7,973			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,069		
NONPROCESSING RECORDS (Test, calibration, etc)			6		

2-SEC SORT DETECTORS

1 DET	180	72.9%	5 DET	1	0.4%
2 DET	54	21.9%	6 DET	0	0.0%
3 DET	11	4.5%	7 DET	0	0.0%
4 DET	1	0.4%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 91.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	4	3.2%
2	13	10.3%
3	8	6.3%
4	23	18.3%
5	29	23.0%
6	20	15.9%
7	26	20.6%
8	3	2.4%
TOTAL	126	

2-GATE SORTS

DET	SORTS	FREQ%
9	7	5.8%
10	14	11.6%
11	15	12.4%
12	32	26.4%
13	24	19.8%
14	15	12.4%
15	14	11.6%
TOTAL	121	

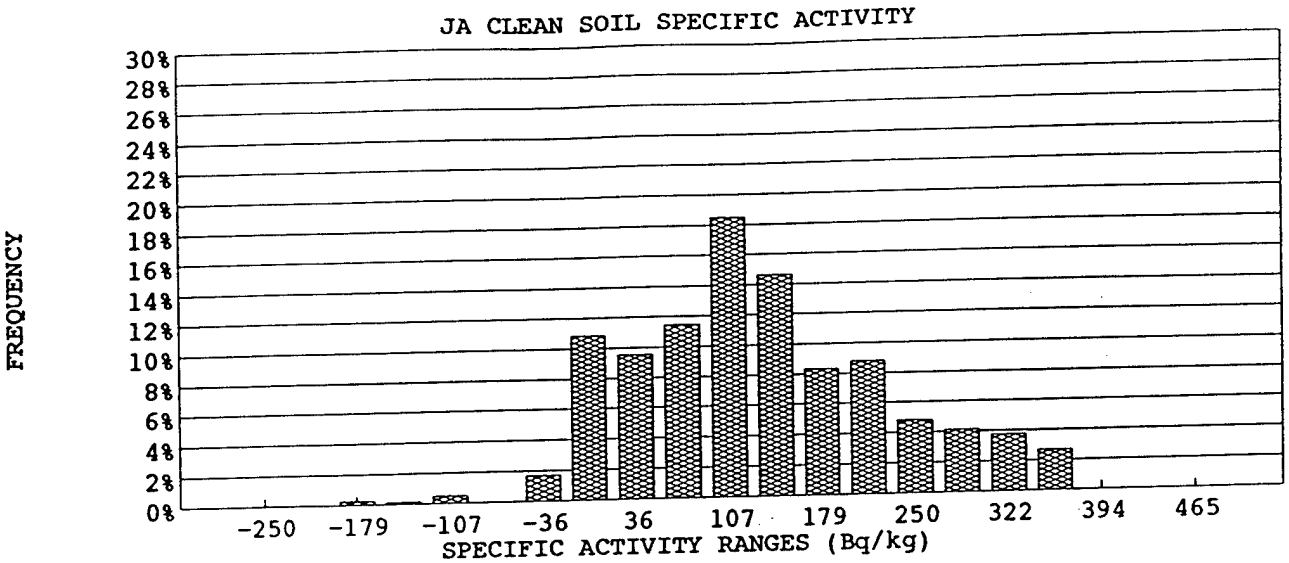
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	2
-8000	1
-6000	4
-4000	0
-2000	14
0	90
2000	79
4000	95
6000	153
8000	121
10000	69
12000	73
14000	40
16000	34
18000	31
20000	22
22000	0
24000	0
26000	0
>28000	0
TOTAL	828

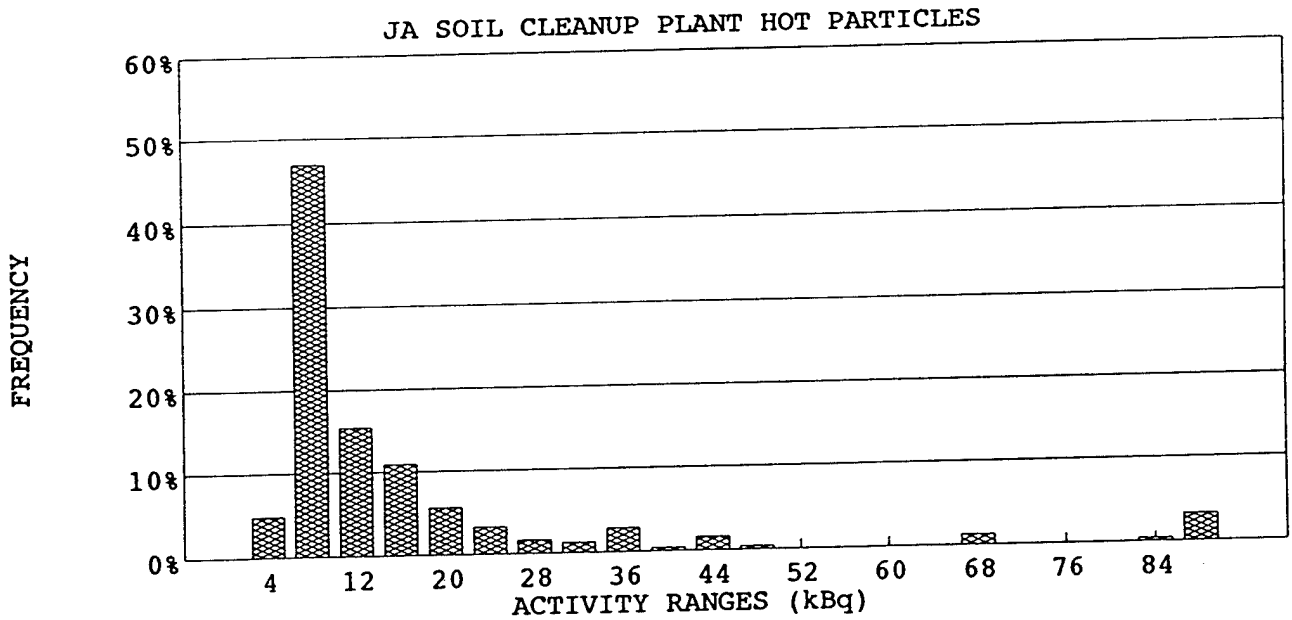
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.2%
-143	0.1%
-107	0.5%
-72	0.0%
-36	1.7%
0	10.9%
36	9.5%
72	11.5%
107	18.5%
143	14.6%
179	8.3%
215	8.8%
250	4.8%
286	4.1%
322	3.7%
358	2.7%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

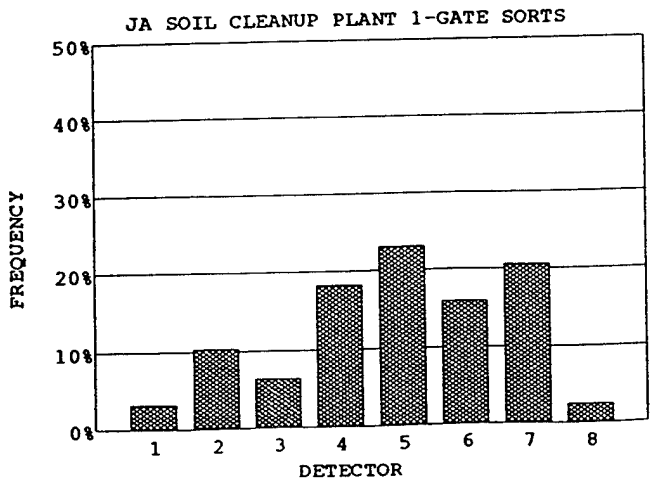
ACT_P (kBq)	NUM (#)	FREQ%
4	12	4.9%
8	116	47.0%
12	38	15.4%
16	27	10.9%
20	14	5.7%
24	8	3.2%
28	4	1.6%
32	3	1.2%
36	7	2.8%
40	1	0.4%
44	4	1.6%
48	1	0.4%
52	0	0.0%
56	0	0.0%
60	0	0.0%
64	0	0.0%
68	3	1.2%
72	0	0.0%
76	0	0.0%
80	0	0.0%
84	1	0.4%
>84	8	3.2%
TOTAL	247	

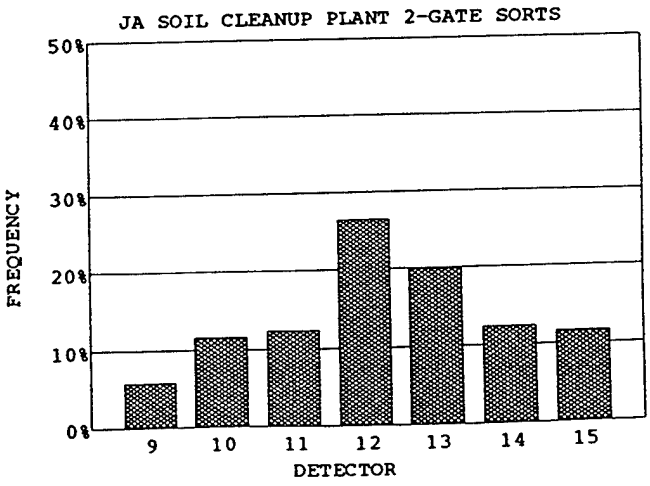
EVENT TYPES HPE 248 MPE 369 DISE 4054

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

26-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.71 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.1 tons	45.0 tons	46.1 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	0.9 yd³	35.7 yd³	36.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,305 kBq	2,198 kBq	5,193 kBq
MAXIMUM/SORT	399 kBq	278 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		1,940 Bq/kg	115 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				825	None	None
ALL 80 ELEMENTS SORT (MD>0&MND=0)			14			
NONE (AD=0 & MD=0 & MND>0)			554			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			257			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				8,250		
2-SEC RECORDS WITH SORTS			259			
2-SEC RECORDS WITHOUT SORTS			7,991			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,084		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2-SEC SORT DETECTORS						
1 DET	196	75.7%	5 DET	0	0.0%	
2 DET	55	21.2%	6 DET	0	0.0%	
3 DET	8	3.1%	7 DET	0	0.0%	
4 DET	0	0.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			84.2 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	10	7.8%
2	23	17.8%
3	28	21.7%
4	23	17.8%
5	20	15.5%
6	19	14.7%
7	4	3.1%
8	2	1.6%
TOTAL	129	

2-GATE SORTS

DET	SORTS	FREQ%
9	22	16.9%
10	28	21.5%
11	34	26.2%
12	19	14.6%
13	21	16.2%
14	5	3.8%
15	1	0.8%
TOTAL	130	

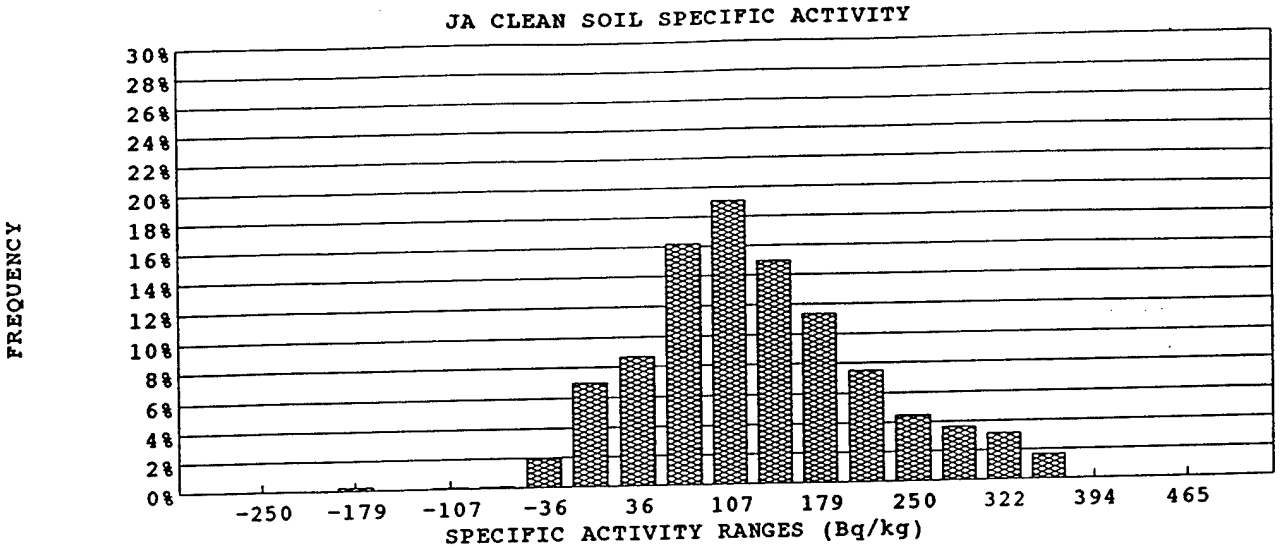
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	2
-8000	0
-6000	1
-4000	1
-2000	16
0	58
2000	72
4000	134
6000	158
8000	124
10000	94
12000	62
14000	37
16000	30
18000	26
20000	14
22000	0
24000	0
26000	0
>28000	0
TOTAL	829

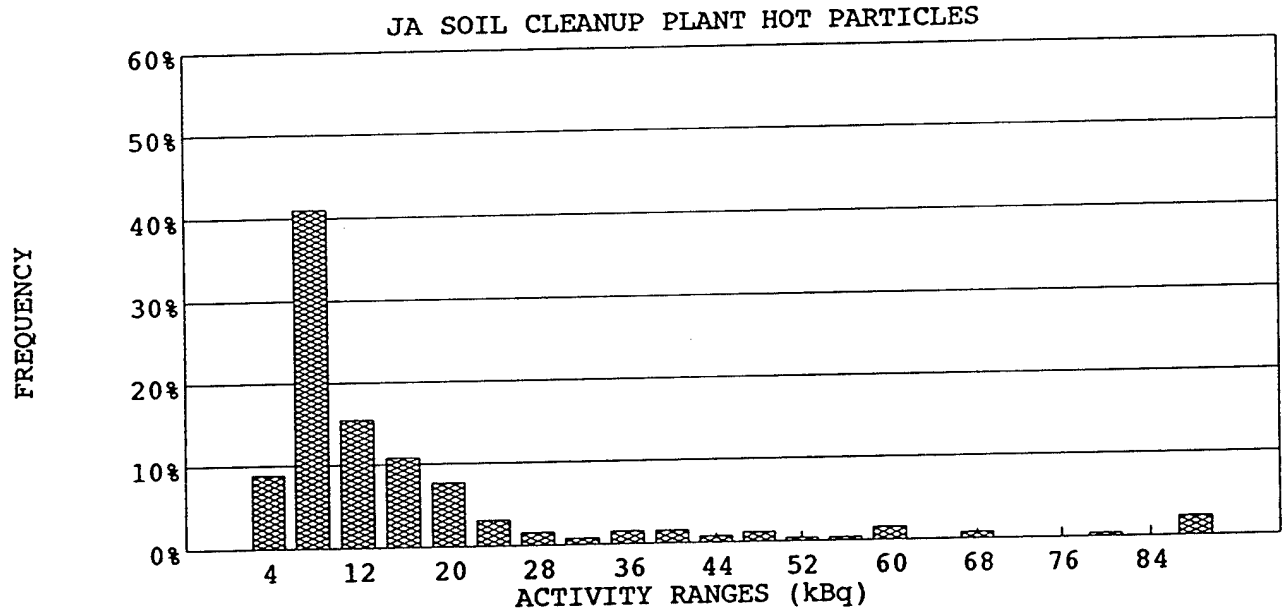
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.2%
-143	0.0%
-107	0.1%
-72	0.1%
-36	1.9%
0	7.0%
36	8.7%
72	16.2%
107	19.1%
143	15.0%
179	11.3%
215	7.5%
250	4.5%
286	3.6%
322	3.1%
358	1.7%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

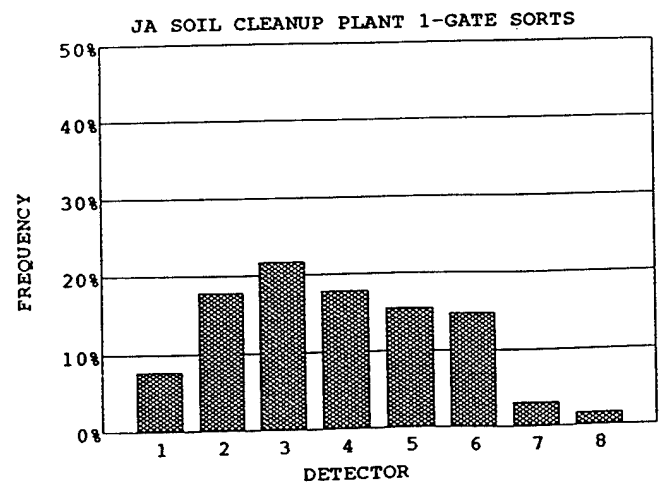
ACT_P (kBq)	NUM (#)	FREQ%
4	23	8.9%
8	106	40.9%
12	40	15.4%
16	28	10.8%
20	20	7.7%
24	8	3.1%
28	4	1.5%
32	2	0.8%
36	4	1.5%
40	4	1.5%
44	2	0.8%
48	3	1.2%
52	1	0.4%
56	1	0.4%
60	4	1.5%
64	0	0.0%
68	2	0.8%
72	0	0.0%
76	0	0.0%
80	1	0.4%
84	0	0.0%
>84	6	2.3%
TOTAL	259	

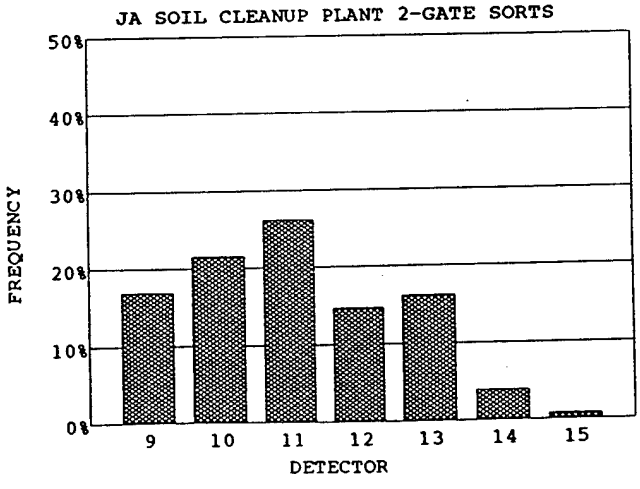
EVENT TYPES HPE 266 MPE 264 DISE 1090

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 28-Mar-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.5 hr	10.5 hr	0.0 hr	0.0 hr	21.0 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:41	06:41	NA	NA	
TIME REQUIRED TO START-UP	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SORTER SHUT-DOWN	16:30	16:30	NA	NA	
END SOIL PROCESSING	16:10	16:11	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	8.5 hr	9.3 hr	0.0 hr	0.0 hr	17.8 hr
DOWN-TIME	2.0 hr	1.2 hr	0.0 hr	0.0 hr	3.2 hr
SYSTEM PAUSE	1.0 hr	0.3 hr	0.0 hr	0.0 hr	1.3 hr
SORTER NONAVAILABLE TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					84.7%
PRODUCTIVTY					42.3%

PRODUCTIVITY

Date	28-Mar-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	163	Excused delays for contract (sorter-hrs)	2,643 hr
Current Contract week	28	Excused delay days (plant-days)	66 days
		Excused delay months (plant-month)	2.54 months
Soil production for Day	179 MT		
Cumlative Soil Production for Week	179 MT	Percent of contract completed	37.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,856 MT
Since 6 Sep 93	36,347 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	37,938 MT		
Total Soil production for project	64,225 MT		

MT = metric tons

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SORTER 1

28-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.64 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	31.8 tons	53.7 tons	85.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	25.2 yd³	42.6 yd³	67.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	62.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	23,400 kBq	27,280 kBq	6,825 kBq
MAXIMUM/SORT	1,850 kBq	1,076 kBq	20 kBq
MINIMUM/SORT	3 kBq	(17,159)Bq	-14 kBq
SPECIFIC ACTIVITY		858 Bq/kg	127 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,529		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		555		08:32	08:28
NONE (AD=0 & MD=0 & MND>0)		570		10:17	10:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		404		10:19	10:17
UNEXPLAINED RECORDS	0			13:01	11:18
0<AD<1kBq & MD>0	0			13:02	12:06
AD=0 & MD>0	1				12:22
AD<0 & MD >0	4				13:01
2-SEC COUNT PERIODS			15,290		13:40
2-SEC RECORDS WITH SORTS		1,426			
2-SEC RECORDS WITHOUT SORTS		13,864			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,955		
NONPROCESSING RECORDS (Test, calibration, etc)			6		

2-SEC SORT DETECTORS

1 DET	1,053	73.8%	5 DET	0	0.0%
2 DET	303	21.2%	6 DET	0	0.0%
3 DET	63	4.4%	7 DET	0	0.0%
4 DET	7	0.5%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 29.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	17	2.3%
2	81	10.8%
3	103	13.7%
4	117	15.6%
5	174	23.1%
6	112	14.9%
7	124	16.5%
8	24	3.2%
TOTAL	752	

2-GATE SORTS

DET	SORTS	FREQ%
9	46	6.8%
10	87	12.9%
11	105	15.6%
12	140	20.8%
13	137	20.3%
14	86	12.8%
15	73	10.8%
TOTAL	674	

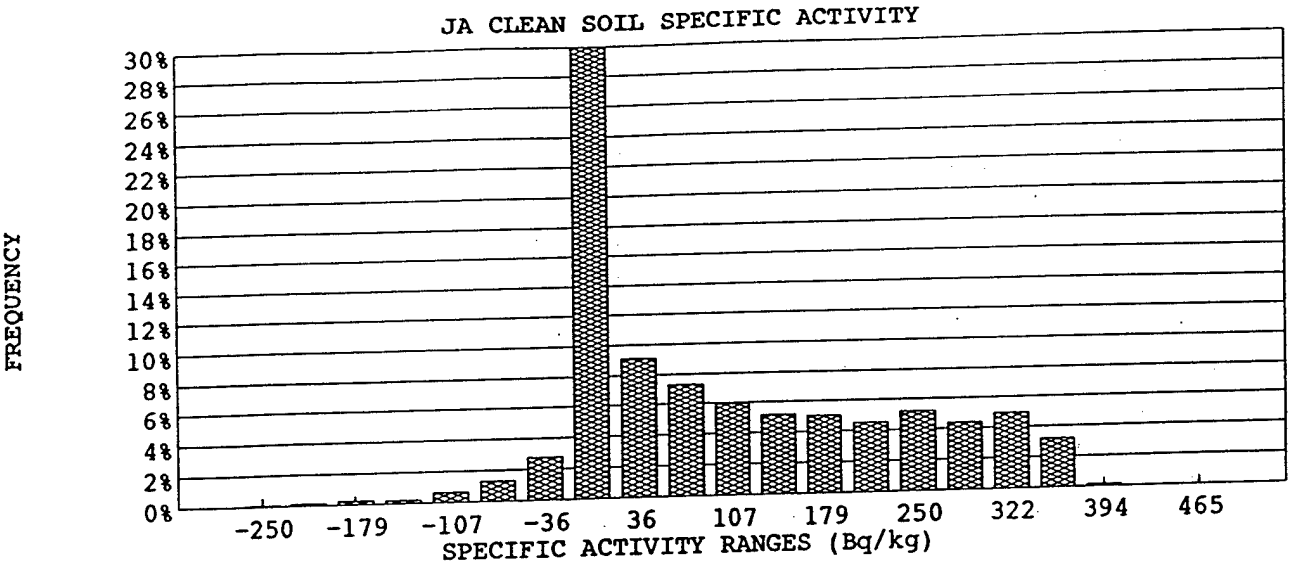
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	2
-10000	4
-8000	3
-6000	10
-4000	20
-2000	42
0	611
2000	140
4000	112
6000	91
8000	79
10000	77
12000	69
14000	80
16000	67
18000	76
20000	49
22000	2
24000	0
26000	0
>28000	0
TOTAL	1,535

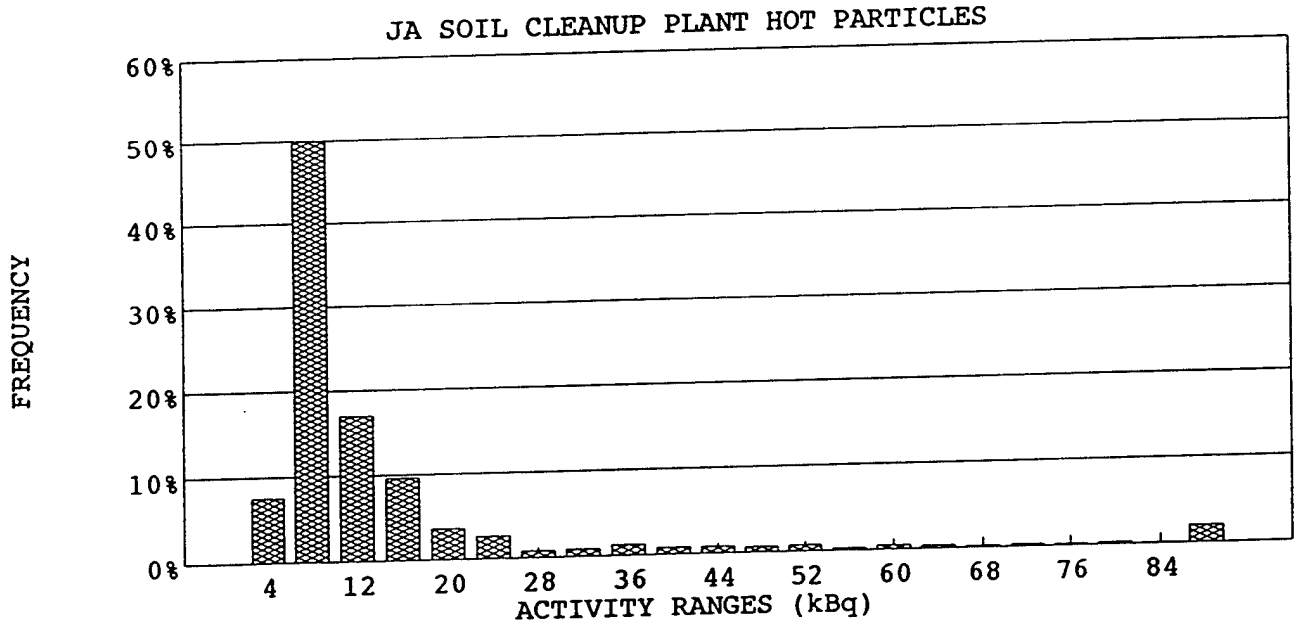
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.3%
-143	0.2%
-107	0.7%
-72	1.3%
-36	2.7%
0	39.8%
36	9.1%
72	7.3%
107	5.9%
143	5.1%
179	5.0%
215	4.5%
250	5.2%
286	4.4%
322	5.0%
358	3.2%
394	0.1%
429	0.0%
465	0.0%
0	0.0%

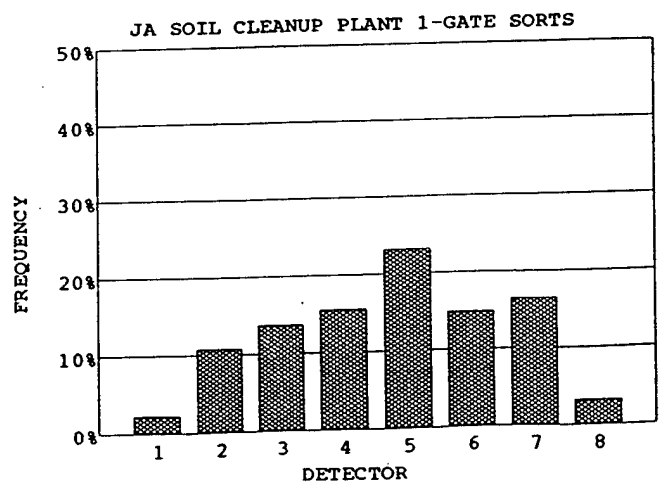
ACT_P (kBq)	NUM (#)	FREQ%
4	108	7.6%
8	712	49.9%
12	242	17.0%
16	138	9.7%
20	52	3.6%
24	38	2.7%
28	11	0.8%
32	12	0.8%
36	18	1.3%
40	11	0.8%
44	11	0.8%
48	9	0.6%
52	10	0.7%
56	3	0.2%
60	7	0.5%
64	4	0.3%
68	2	0.1%
72	3	0.2%
76	2	0.1%
80	3	0.2%
84	1	0.1%
>84	29	2.0%
TOTAL	1,426	

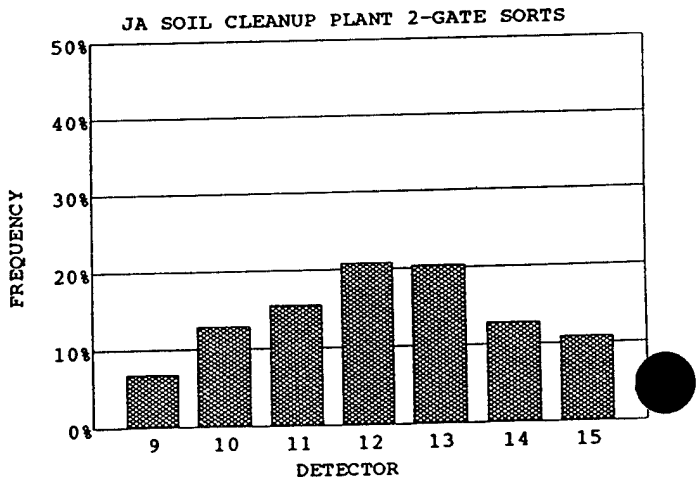
EVENT TYPES HPE 1,415 MPE 2786 DISE 41279

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

28-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.73 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	26.7 tons	66.8 tons	93.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	21.2 yd³	52.9 yd³	74.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	71.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	40,961 kBq	30,232 kBq	9,842 kBq
MAXIMUM/SORT	6,264 kBq	4,089 kBq	21 kBq
MINIMUM/SORT	2 kBq	(12,130)Bq	-12 kBq
SPECIFIC ACTIVITY		1,133 Bq/kg	147 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,672		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			454		08:32	08:28
NONE (AD=0 & MD=0 & MND>0)			610		08:41	08:42
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			608		10:17	08:44
UNEXPLAINED RECORDS			0			10:13
0<AD<1kBq & MD>0			1			11:18
AD=0 & MD>0			0			
AD<0 & MD >0			2			
2-SEC COUNT PERIODS				16,720		
2-SEC RECORDS WITH SORTS			1,583			
2-SEC RECORDS WITHOUT SORTS			15,137			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,255		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2-SEC SORT DETECTORS						
1 DET	1,170	73.9%	5 DET	10	0.6%	
2 DET	335	21.2%	6 DET	0	0.0%	
3 DET	53	3.3%	7 DET	0	0.0%	
4 DET	15	0.9%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS	28.6 sec					

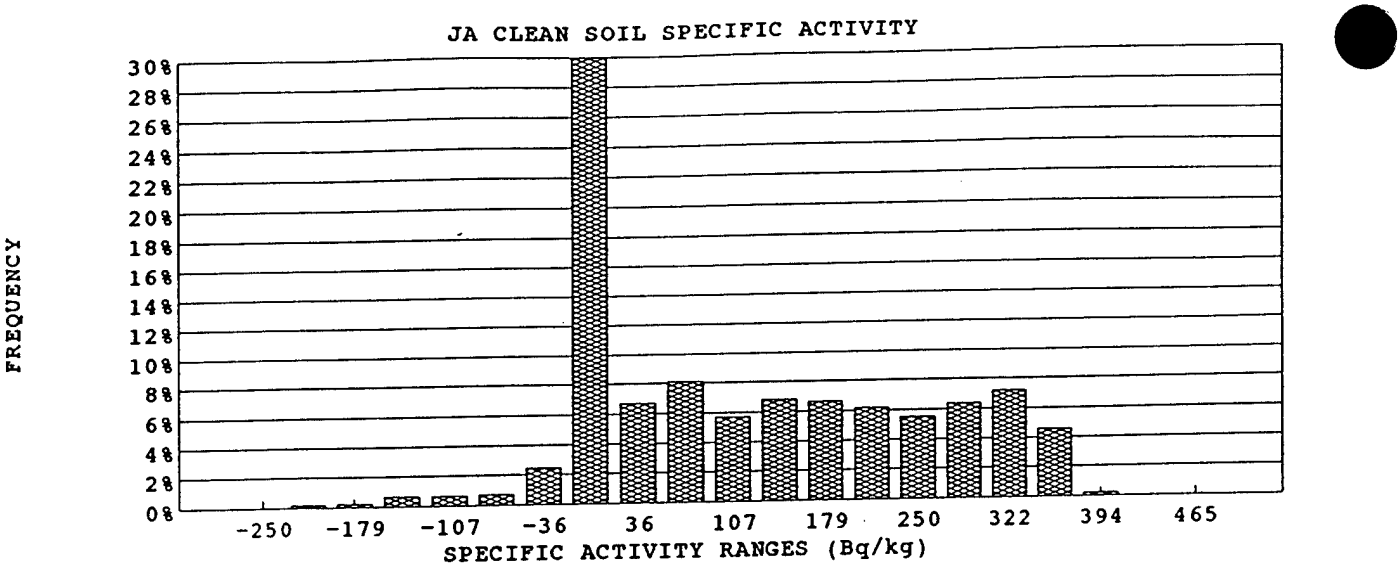
FREQUENCY DISTRIBUTIONS

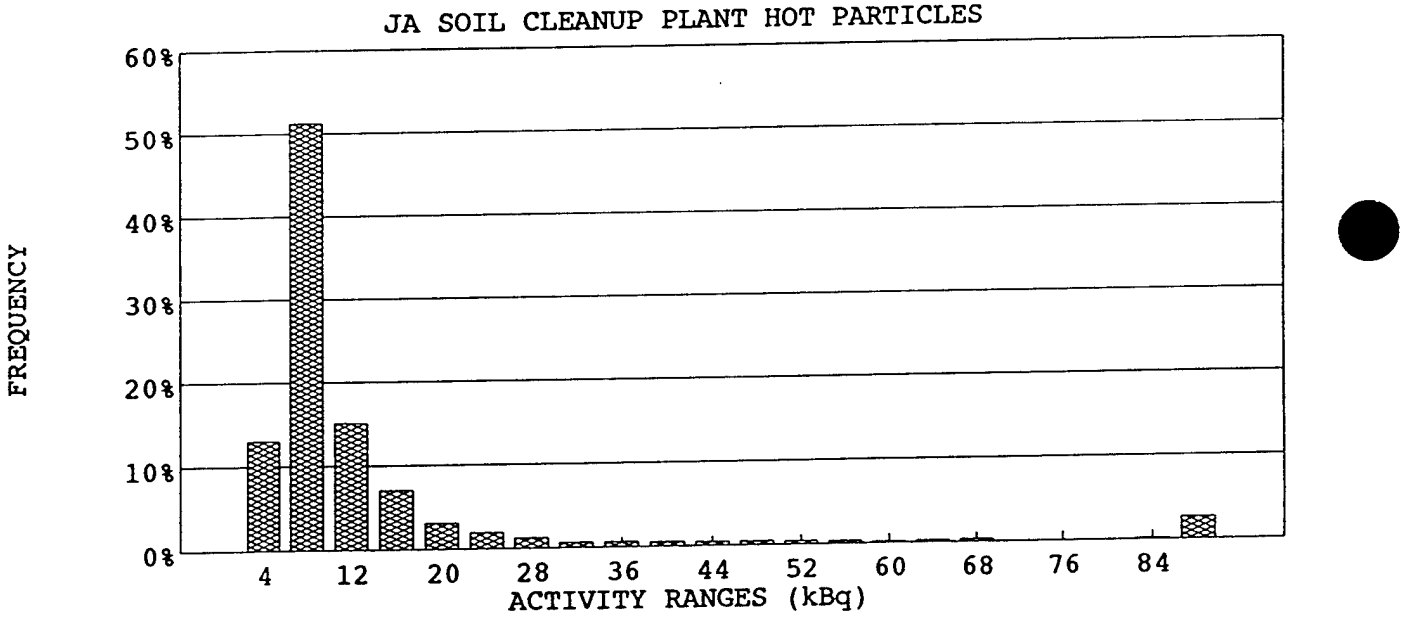
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	56	7.2%	-14000	0	-250	0.0%	4	206	13.0%
2	147	19.0%	-12000	3	-215	0.2%	8	811	51.2%
3	154	19.9%	-10000	4	-179	0.2%	12	239	15.1%
4	147	19.0%	-8000	11	-143	0.7%	16	112	7.1%
5	151	19.5%	-6000	11	-107	0.7%	20	49	3.1%
6	86	11.1%	-4000	12	-72	0.7%	24	31	2.0%
7	27	3.5%	-2000	41	-36	2.4%	28	20	1.3%
8	7	0.9%	0	523	0	31.2%	32	10	0.6%
TOTAL	775		2000	112	36	6.7%	36	10	0.6%
			4000	136	72	8.1%	40	9	0.6%
2-GATE SORTS			6000	95	107	5.7%	44	8	0.5%
DET	SORTS	FREQ%	8000	114	143	6.8%	48	8	0.5%
9	110	13.6%	10000	111	179	6.6%	52	6	0.4%
10	172	21.3%	12000	103	215	6.1%	56	5	0.3%
11	166	20.5%	14000	92	250	5.5%	60	3	0.2%
12	159	19.7%	16000	107	286	6.4%	64	4	0.3%
13	127	15.7%	18000	121	322	7.2%	68	5	0.3%
14	52	6.4%	20000	76	358	4.5%	72	0	0.0%
15	22	2.7%	22000	4	394	0.2%	76	1	0.1%
TOTAL	808		24000	0	429	0.0%	80	1	0.1%
			26000	0	465	0.0%	84	3	0.2%
			>28000	0	0	0.0%	>84	42	2.7%
			TOTAL	1,676			TOTAL	1,583	

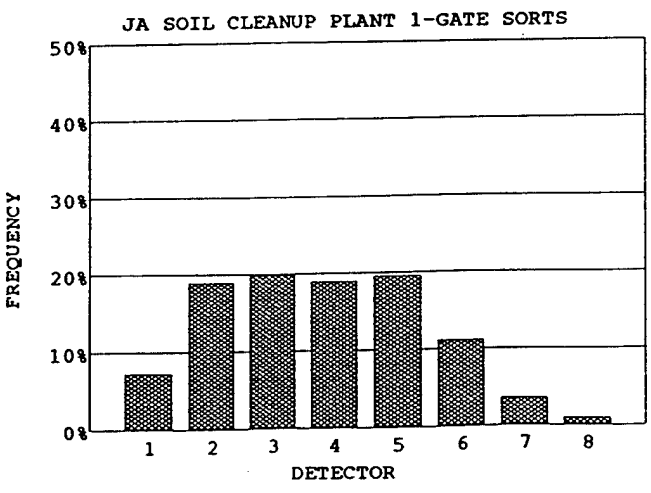
EVENT TYPES HPE 1,641 MPE 3269 DISE 33273

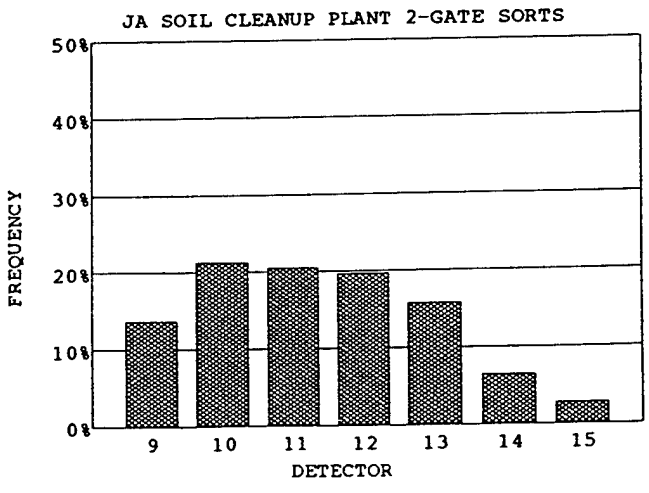
SORTER 2

28-Mar-94









WORK HISTORY – JA SOIL CLEANUP PLANT 29-Mar-94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START-UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START-UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT-DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN-TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	29-Mar-94	Excused Delays for day (sorter-hrs)	40 hr
Contract day (from 6 Sep)	164	Excused delays for contract (sorter-hrs)	2,683 hr
Current Contract week	28	Excused delay days (plant-days)	67 days
		Excused delay months (plant-month)	2.58 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	179 MT	Percent of contract completed	37.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,856 MT
Since 6 Sep 93	36,347 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	37,938 MT		
Total Soil production for project	64,225 MT		

MT = metric tons

File Report1 Printed on 02-Apr-94 at 05:21:53 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 30–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	3.0 hr	3.0 hr	7.3 hr	7.3 hr	20.5 hr
SORTER START–UP	06:00	06:00	08:30	08:30	
START SOIL PROCESSING	06:31	06:31	10:50	08:57	
TIME REQUIRED TO START–UP	0.5 hr	0.5 hr	2.3 hr	0.5 hr	3.9 hr
SORTER SHUT–DOWN	09:00	09:00	15:45	15:45	
END SOIL PROCESSING	08:40	08:41	15:30	15:25	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.2 hr	0.3 hr	1.2 hr
ACTUAL PROCESS HOURS	2.2 hr	2.2 hr	4.3 hr	4.7 hr	13.3 hr
DOWN–TIME	0.8 hr	0.8 hr	3.0 hr	2.5 hr	7.2 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.4 hr	1.8 hr	2.3 hr
SORTER NONAVAILABLE TIME	7.5 hr	7.5 hr	3.3 hr	3.3 hr	21.5 hr
AUTHORIZED DELAY TIME	7.0 hr	7.0 hr	2.5 hr	2.5 hr	19.0 hr
PLANT PERFORMANCE					65.0%
PRODUCTIVTY					31.7%

PRODUCTIVITY

Date	30–Mar–94
Contract day (from 6 Sep)	165
Current Contract week	28
Soil production for Day	134 MT
Cumlative Soil Production for Week	313 MT
Total Soil production for contract	
Since 6 Sep 93	36,481 MT
Since 6 Aug 93	38,072 MT
Total Soil production for project	64,359 MT

Excused Delays for day (sorter–hrs)	19 hr
Excused delays for contract (sorter–hrs)	2,702 hr
Excused delay days (plant–days)	68 days
Excused delay months (plant–month)	2.60 months
Percent of contract completed	38.1%
Tons Ahead or Behind Schedule	1,824 MT
Days ahead or behind schedule	6 days

MT = metric tons

SORTER 1

30-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.64 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.2 tons	13.6 tons	21.7 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	6.5 yd³	10.7 yd³	17.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	62.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	8,400 kBq	8,369 kBq	619 kBq
MAXIMUM/SORT	885 kBq	701 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		1,021 Bq/kg	46 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			389		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		145		07:11	None
NONE (AD=0 & MD=0 & MND>0)		198			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		46			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	1				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			3,890		
2-SEC RECORDS WITH SORTS		500			
2-SEC RECORDS WITHOUT SORTS		3,390			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			889		
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	352	70.4%	5 DET	0	0.0%
2 DET	124	24.8%	6 DET	0	0.0%
3 DET	23	4.6%	7 DET	0	0.0%
4 DET	1	0.2%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 22.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	5	2.0%
2	23	9.1%
3	49	19.4%
4	49	19.4%
5	54	21.3%
6	43	17.0%
7	21	8.3%
8	9	3.6%
TOTAL	253	

2-GATE SORTS

DET	SORTS	FREQ%
9	19	7.7%
10	28	11.3%
11	56	22.7%
12	45	18.2%
13	59	23.9%
14	26	10.5%
15	14	5.7%
TOTAL	247	

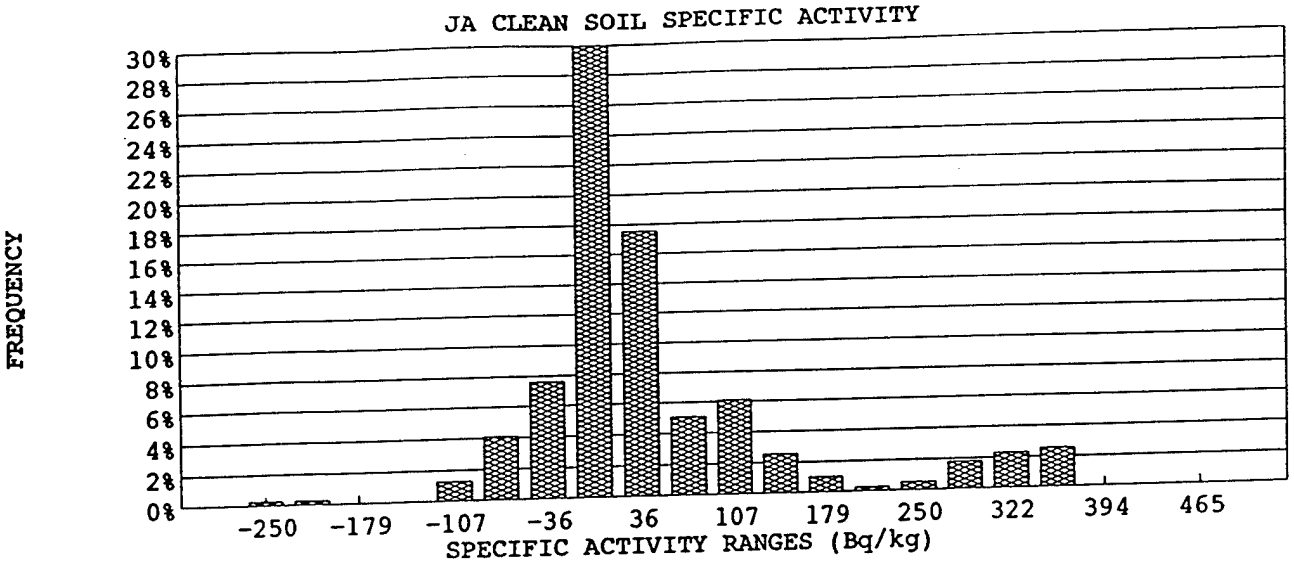
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	1
-10000	0
-8000	0
-6000	5
-4000	16
-2000	30
0	185
2000	69
4000	20
6000	24
8000	10
10000	4
12000	1
14000	2
16000	7
18000	9
20000	10
22000	0
24000	0
26000	0
>28000	0
TOTAL	394

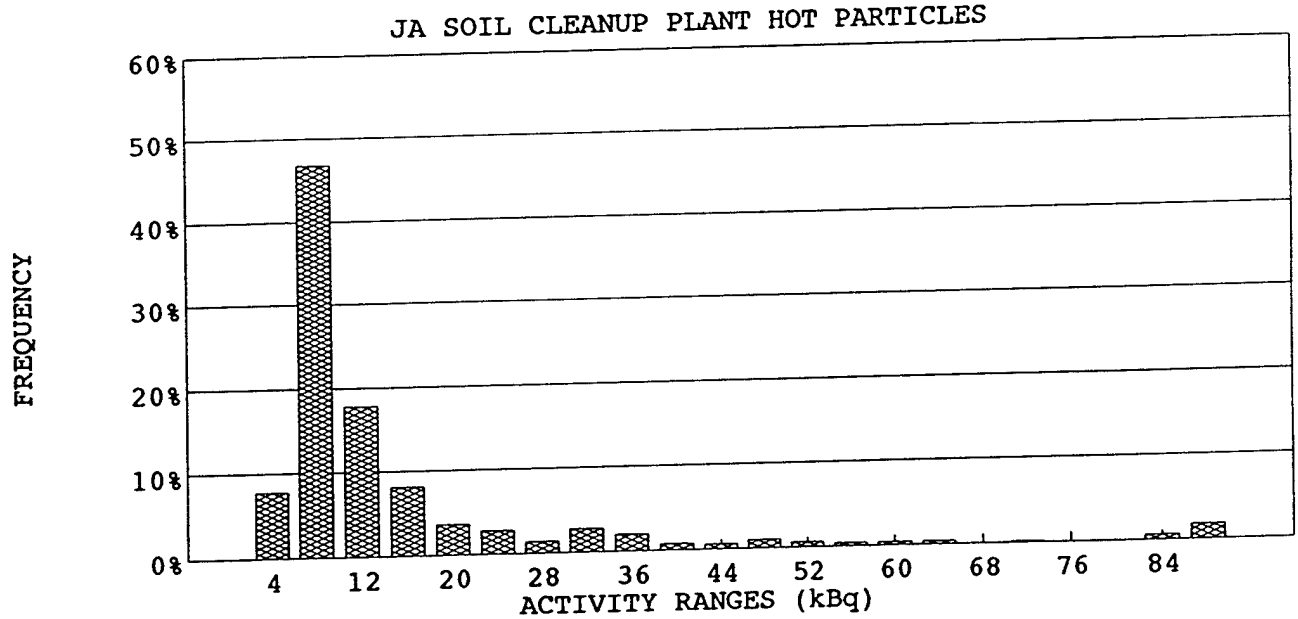
SPEC_A (Bq/kg)	FREQ%
-250	0.3%
-215	0.3%
-179	0.0%
-143	0.0%
-107	1.3%
-72	4.1%
-36	7.6%
0	47.0%
36	17.5%
72	5.1%
107	6.1%
143	2.5%
179	1.0%
215	0.3%
250	0.5%
286	1.8%
322	2.3%
358	2.5%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

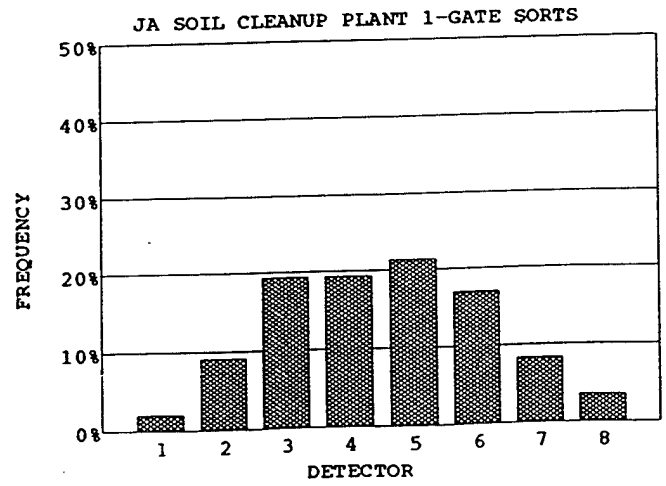
ACT_P (kBq)	NUM (#)	FREQ%
4	39	7.8%
8	234	46.8%
12	89	17.8%
16	41	8.2%
20	18	3.6%
24	14	2.8%
28	7	1.4%
32	14	2.8%
36	10	2.0%
40	4	0.8%
44	3	0.6%
48	5	1.0%
52	3	0.6%
56	2	0.4%
60	2	0.4%
64	2	0.4%
68	0	0.0%
72	1	0.2%
76	0	0.0%
80	0	0.0%
84	3	0.6%
>84	9	1.8%
TOTAL	500	

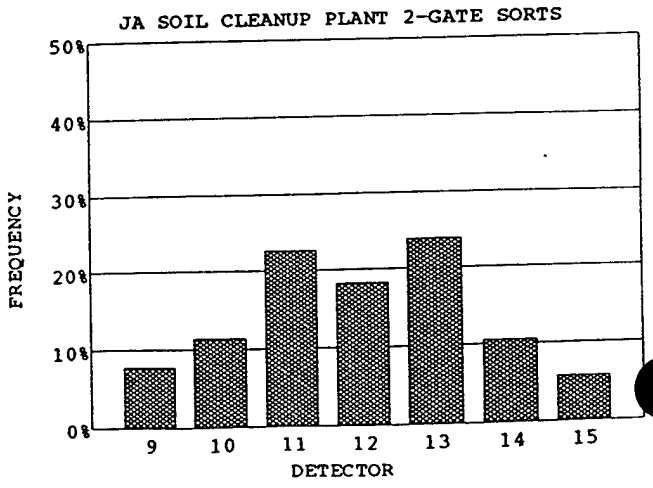
EVENT TYPES HPE 467 MPE 855 DISE 10404

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

30-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.73 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.6 tons	13.3 tons	21.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	49.6 kg	
VOLUME IN-GROUND	6.8 yd³	10.5 yd³	17.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	60.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	8,529 kBq	8,932 kBq	782 kBq
MAXIMUM/SORT	520 kBq	455 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		1,035 Bq/kg	59 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				392		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			153		None	None
NONE (AD=0 & MD=0 & MND>0)			199			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			40			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				3,920		
2-SEC RECORDS WITH SORTS			596			
2-SEC RECORDS WITHOUT SORTS			3,324			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				988		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	406	68.1%	5 DET	4	0.7%	
2 DET	143	24.0%	6 DET	0	0.0%	
3 DET	31	5.2%	7 DET	1	0.2%	
4 DET	12	2.0%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			19.3 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	13	4.3%
2	62	20.3%
3	61	20.0%
4	47	15.4%
5	53	17.4%
6	42	13.8%
7	22	7.2%
8	5	1.6%
TOTAL	305	

2-GATE SORTS

DET	SORTS	FREQ%
9	45	15.5%
10	70	24.1%
11	45	15.5%
12	49	16.8%
13	45	15.5%
14	26	8.9%
15	11	3.8%
TOTAL	291	

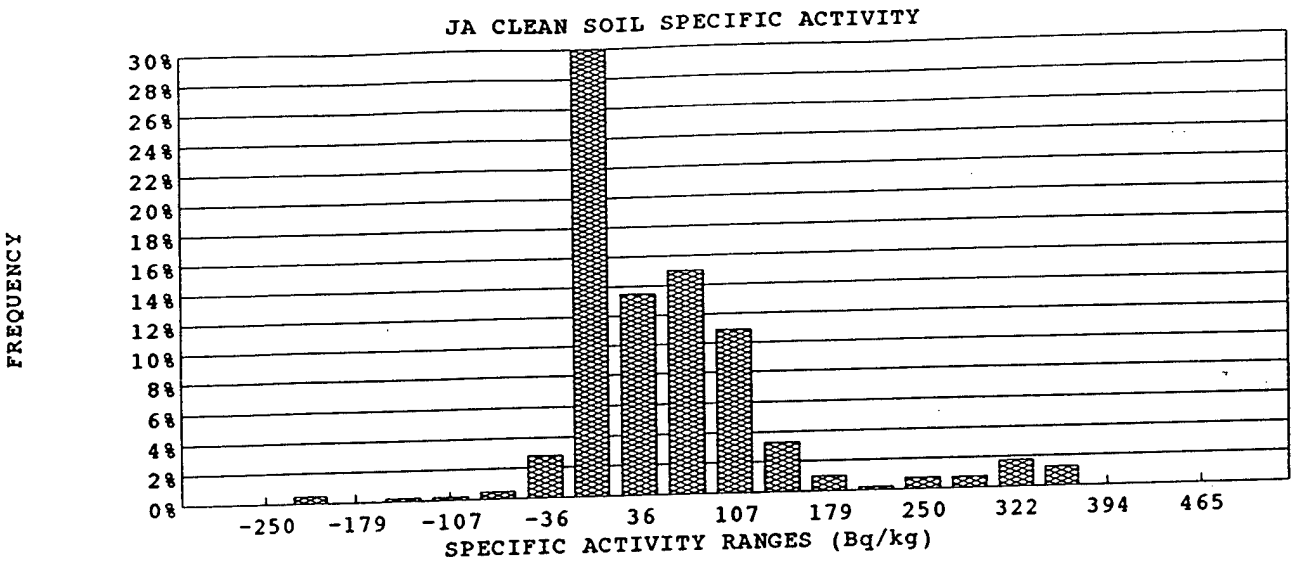
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	2
-10000	0
-8000	1
-6000	1
-4000	2
-2000	11
0	186
2000	53
4000	59
6000	43
8000	13
10000	4
12000	1
14000	3
16000	3
18000	7
20000	5
22000	0
24000	0
26000	0
>28000	0
TOTAL	394

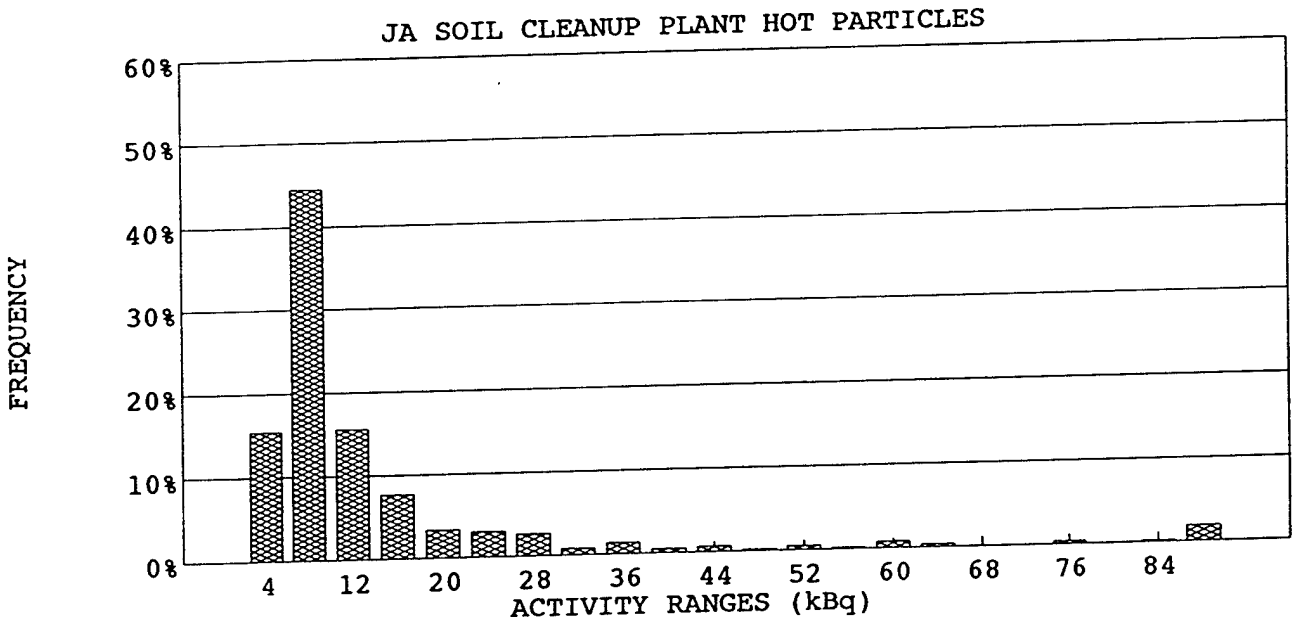
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.5%
-179	0.0%
-143	0.3%
-107	0.3%
-72	0.5%
-36	2.8%
0	47.2%
36	13.5%
72	15.0%
107	10.9%
143	3.3%
179	1.0%
215	0.3%
250	0.8%
286	0.8%
322	1.8%
358	1.3%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

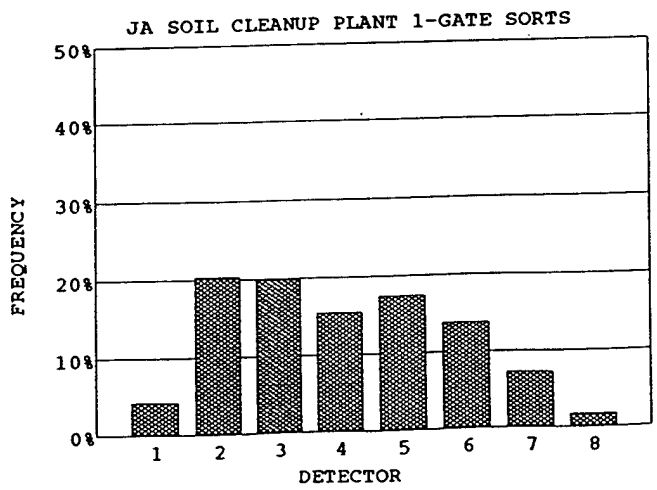
ACT_P (kBq)	NUM (#)	FREQ%
4	92	15.4%
8	265	44.5%
12	93	15.6%
16	46	7.7%
20	20	3.4%
24	18	3.0%
28	16	2.7%
32	5	0.8%
36	8	1.3%
40	3	0.5%
44	4	0.7%
48	1	0.2%
52	3	0.5%
56	1	0.2%
60	5	0.8%
64	2	0.3%
68	0	0.0%
72	0	0.0%
76	2	0.3%
80	0	0.0%
84	1	0.2%
>84	11	1.8%
TOTAL	596	

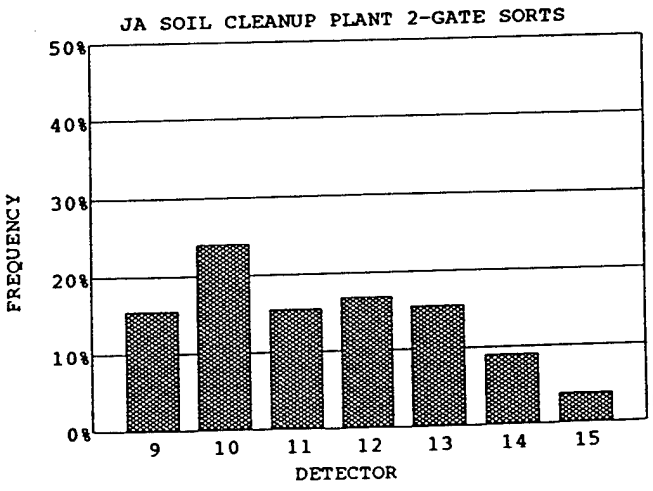
EVENT TYPES HPE 552 MPE 1200 DISE 10600

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 3

30-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.6 tons	41.3 tons	42.9 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	1.3 yd³	32.7 yd³	34.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,526 kBq	2,605 kBq	8,251 kBq
MAXIMUM/SORT	88 kBq	68 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		1,596 Bq/kg	200 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			768		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		17		None	12:34
NONE (AD=0 & MD=0 & MND>0)		270			12:58
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		481			13:10
UNEXPLAINED RECORDS	0				14:23
0<AD<1kBq & MD>0	0				14:51
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			7,680		
2-SEC RECORDS WITH SORTS		373			
2-SEC RECORDS WITHOUT SORTS		7,307			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,141		
NONPROCESSING RECORDS (Test, calibration, etc)			3		

2-SEC SORT DETECTORS

1 DET	309	82.8%	5 DET	0	0.0%
2 DET	57	15.3%	6 DET	0	0.0%
3 DET	6	1.6%	7 DET	0	0.0%
4 DET	1	0.3%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 49.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	4	2.2%
2	13	7.1%
3	20	10.9%
4	15	8.2%
5	35	19.1%
6	52	28.4%
7	34	18.6%
8	10	5.5%
TOTAL	183	

2-GATE SORTS

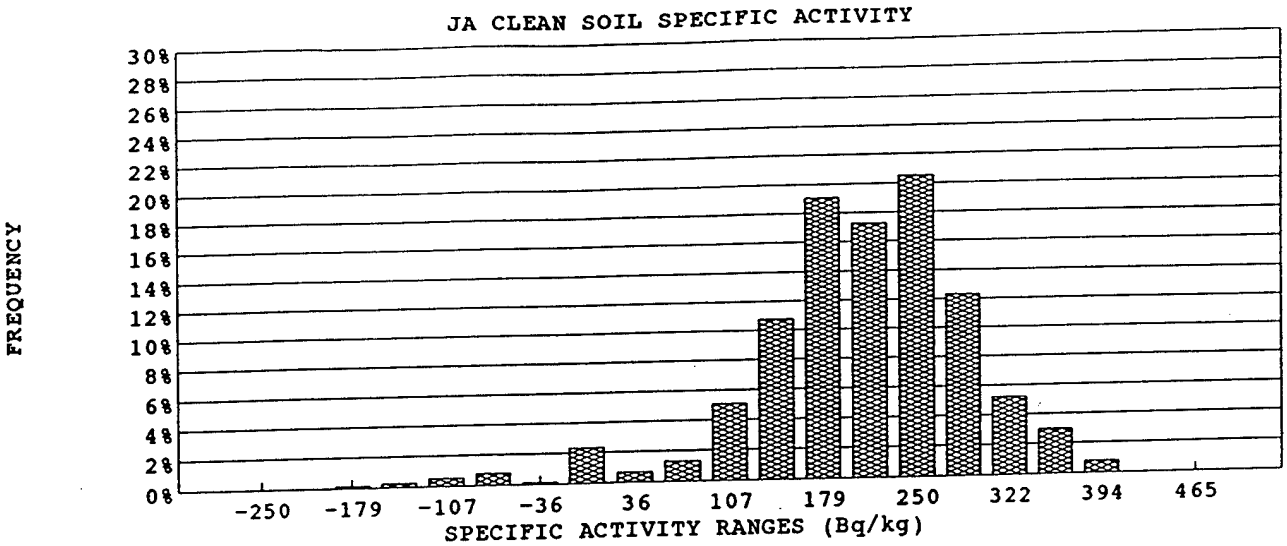
DET	SORTS	FREQ%
9	5	2.6%
10	11	5.8%
11	21	11.1%
12	29	15.3%
13	40	21.1%
14	49	25.8%
15	35	18.4%
TOTAL	190	

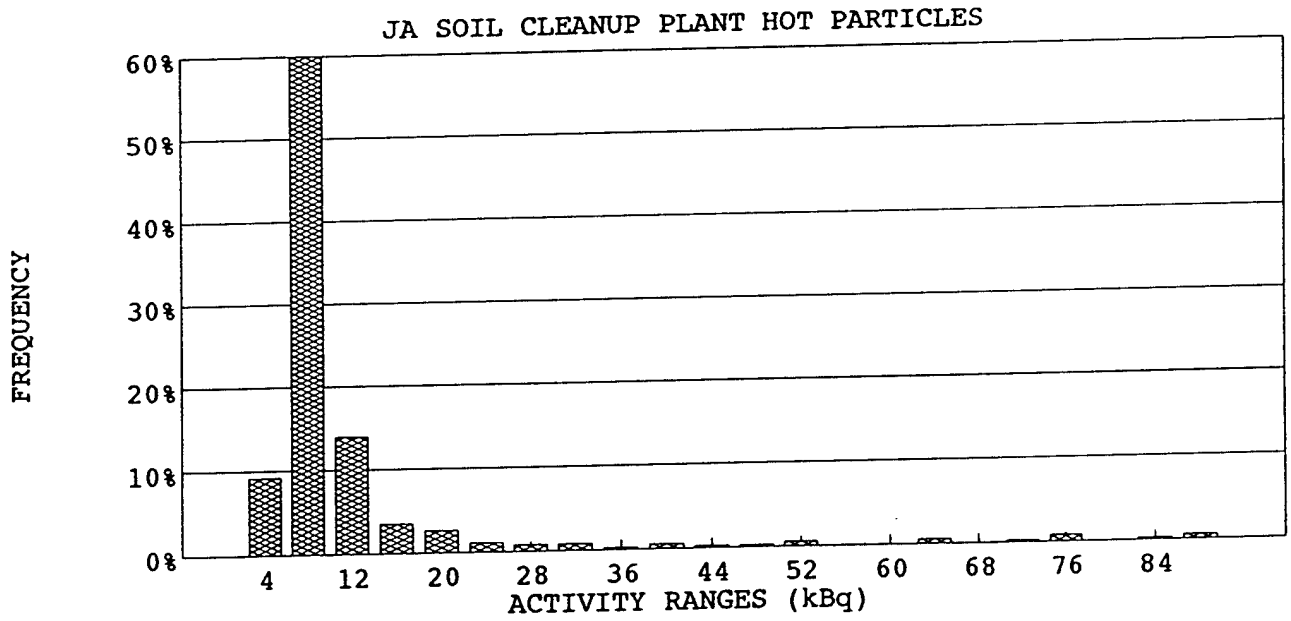
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	1
-8000	2
-6000	4
-4000	6
-2000	1
0	18
2000	5
4000	10
6000	39
8000	83
10000	147
12000	133
14000	158
16000	95
18000	40
20000	23
22000	6
24000	0
26000	0
>28000	0
TOTAL	771

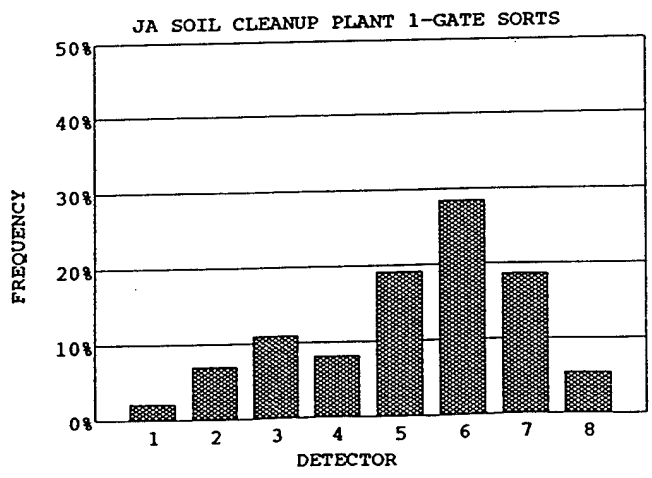
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.1%
-143	0.3%
-107	0.5%
-72	0.8%
-36	0.1%
0	2.3%
36	0.6%
72	1.3%
107	5.1%
143	10.8%
179	19.1%
215	17.3%
250	20.5%
286	12.3%
322	5.2%
358	3.0%
394	0.8%
429	0.0%
465	0.0%
0	0.0%

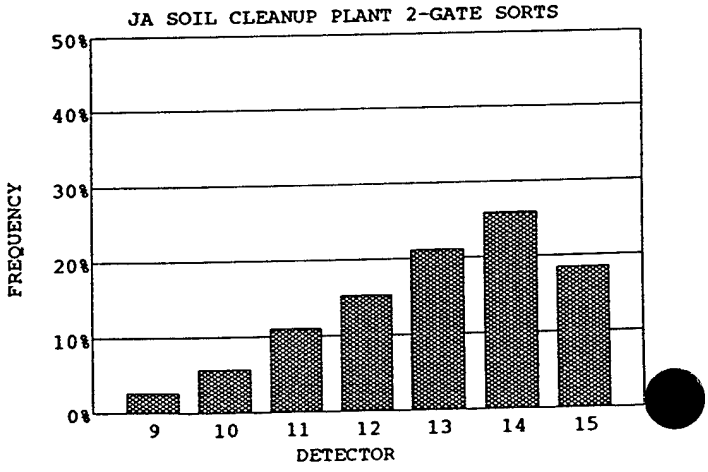
ACT_P (kBq)	NUM (#)	FREQ%
4	34	9.1%
8	238	63.8%
12	52	13.9%
16	13	3.5%
20	10	2.7%
24	4	1.1%
28	3	0.8%
32	3	0.8%
36	1	0.3%
40	2	0.5%
44	1	0.3%
48	1	0.3%
52	2	0.5%
56	0	0.0%
60	0	0.0%
64	2	0.5%
68	0	0.0%
72	1	0.3%
76	3	0.8%
80	0	0.0%
84	1	0.3%
>84	2	0.5%
TOTAL	373	

EVENT TYPES HPE 418 MPE 570 DISE 1346


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 4

30-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	15.9 tons	31.6 tons	47.4 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	50.3 kg	
VOLUME IN-GROUND	12.6 yd³	25.0 yd³	37.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	66.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,336 kBq	10,320 kBq	8,812 kBq
MAXIMUM/SORT	121 kBq	93 kBq	21 kBq
MINIMUM/SORT	3 kBq	(8,044)Bq	-8 kBq
SPECIFIC ACTIVITY		650 Bq/kg	279 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		848		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	272			
NONE (AD=0 & MD=0 & MND>0)	177		09:45	09:11
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	399		10:46	09:44
UNEXPLAINED RECORDS	0			09:58
0<AD<1kBq & MD>0	0			10:31
AD=0 & MD>0	1			11:58
AD<0 & MD >0	1			12:34
2-SEC COUNT PERIODS		8,480		12:52
2-SEC RECORDS WITH SORTS	423			12:54
2-SEC RECORDS WITHOUT SORTS	8,057			12:58
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,271		13:03
NONPROCESSING RECORDS (Test, calibration, etc)		1		13:10
2-SEC SORT DETECTORS				13:14

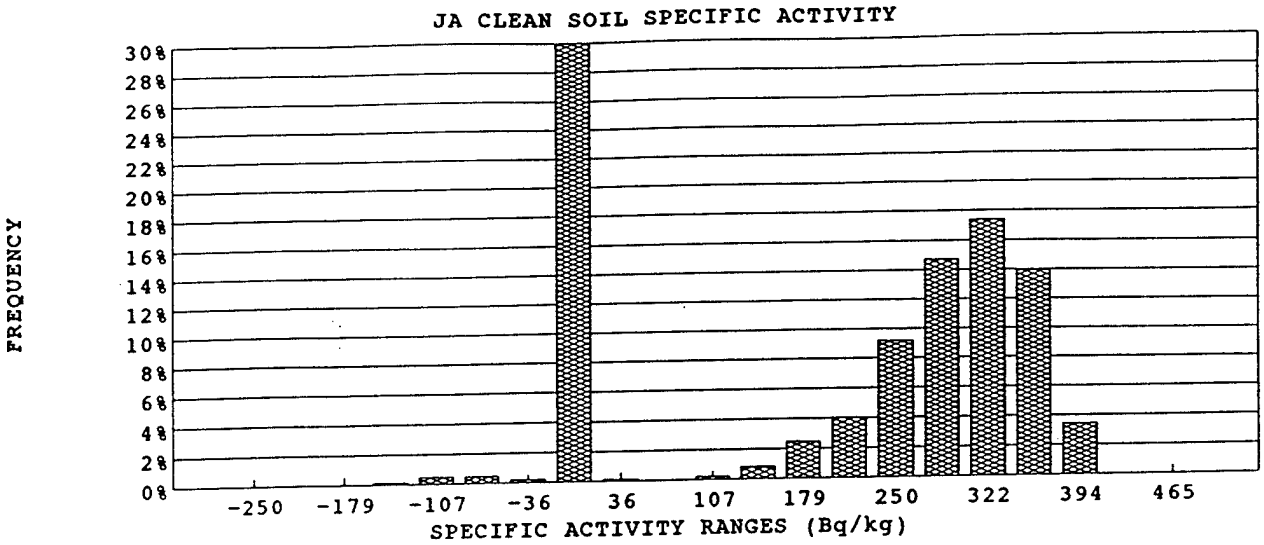
1 DET	363	85.8%	5 DET	0	0.0%	14:23
2 DET	52	12.3%	6 DET	0	0.0%	14:40
3 DET	6	1.4%	7 DET	0	0.0%	14:44
4 DET	2	0.5%	8 DET	0	0.0%	

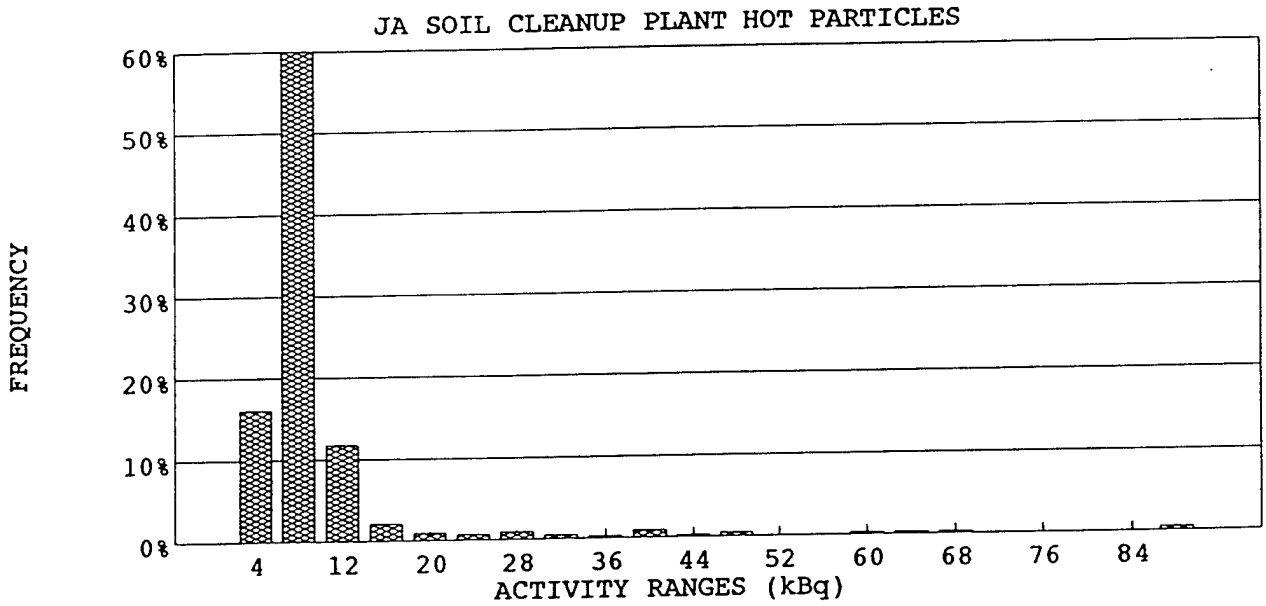
AVERAGE TIME BETWEEN 2-SEC SORTS 46.7 sec

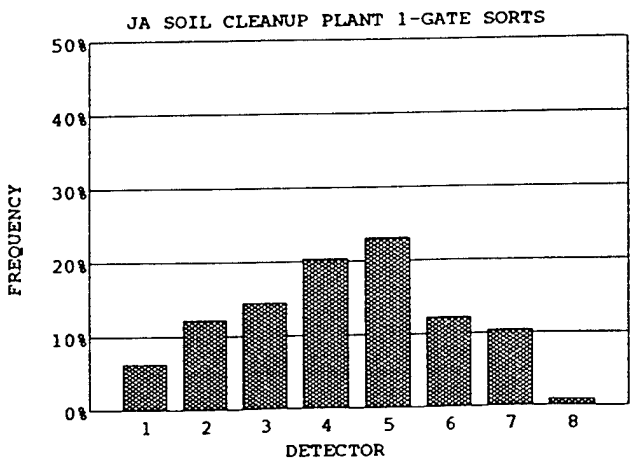
FREQUENCY DISTRIBUTIONS

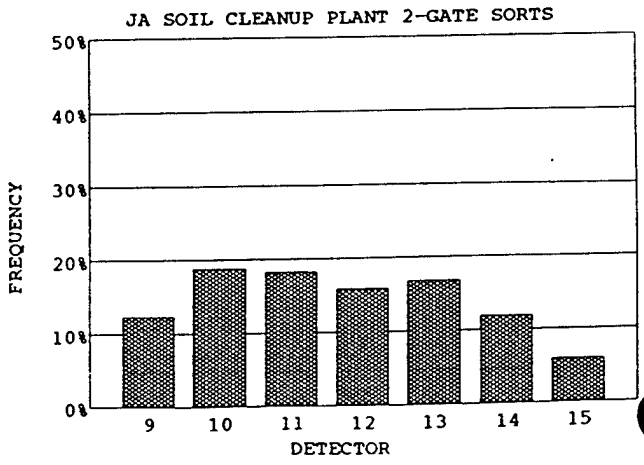
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	14	6.3%	-14000	0	-250	0.0%	4	68	16.1%
2	27	12.2%	-12000	0	-215	0.0%	8	270	63.8%
3	32	14.5%	-10000	0	-179	0.0%	12	50	11.8%
4	45	20.4%	-8000	1	-143	0.1%	16	9	2.1%
5	51	23.1%	-6000	4	-107	0.5%	20	4	0.9%
6	27	12.2%	-4000	4	-72	0.5%	24	3	0.7%
7	23	10.4%	-2000	2	-36	0.2%	28	4	0.9%
8	2	0.9%	0	275	0	32.4%	32	2	0.5%
TOTAL	221		2000	1	36	0.1%	36	1	0.2%
			4000	0	72	0.0%	40	4	0.9%
2-GATE SORTS			6000	2	107	0.2%	44	1	0.2%
DET	SORTS	FREQ%	8000	7	143	0.8%	48	2	0.5%
9	25	12.4%	10000	21	179	2.5%	52	0	0.0%
10	38	18.8%	12000	34	215	4.0%	56	0	0.0%
11	37	18.3%	14000	78	250	9.2%	60	1	0.2%
12	32	15.8%	16000	125	286	14.7%	64	1	0.2%
13	34	16.8%	18000	148	322	17.4%	68	1	0.2%
14	24	11.9%	20000	118	358	13.9%	72	0	0.0%
15	12	5.9%	22000	29	394	3.4%	76	0	0.0%
TOTAL	202		24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	2	0.5%
			TOTAL	849			TOTAL	423	

EVENT TYPES HPE 486 MPE 1103 DISE 21124


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 31–Mar–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.5 hr	10.5 hr	0.0 hr	0.0 hr	21.0 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:35	06:35	NA	NA	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SORTER SHUT–DOWN	16:30	16:30	NA	NA	
END SOIL PROCESSING	16:06	16:06	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
ACTUAL PROCESS HOURS	8.8 hr	8.8 hr	0.0 hr	0.0 hr	17.5 hr
DOWN–TIME	1.7 hr	1.7 hr	0.0 hr	0.0 hr	3.5 hr
SYSTEM PAUSE	0.8 hr	0.8 hr	0.0 hr	0.0 hr	1.5 hr
SORTER NONAVAILABLE TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					83.5%
PRODUCTIVTY					41.7%

PRODUCTIVITY

Date	31–Mar–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	166	Excused delays for contract (sorter–hrs)	2,722 hr
Current Contract week	28	Excused delay days (plant–days)	68 days
		Excused delay months (plant–month)	2.62 months
Soil production for Day	176 MT		
Cumlative Soil Production for Week	489 MT	Percent of contract completed	38.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,842 MT
Since 6 Sep 93	36,658 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	38,249 MT		
Total Soil production for project	64,536 MT		

MT = metric tons

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SORTER 1

31-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	24.5 tons	63.7 tons	88.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	19.4 yd³	50.5 yd³	69.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	72.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	26,271 kBq	27,449 kBq	3,609 kBq
MAXIMUM/SORT	621 kBq	422 kBq	19 kBq
MINIMUM/SORT	2 kBq	(8,644)Bq	-14 kBq
SPECIFIC ACTIVITY		1,122 Bq/kg	57 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,577		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			430		07:44	07:05
NONE (AD=0 & MD=0 & MND>0)			873		10:13	14:00
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			274		14:05	15:03
UNEXPLAINED RECORDS			0		15:06	
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			3			
2-SEC COUNT PERIODS				15,770		
2-SEC RECORDS WITH SORTS			1,845			
2-SEC RECORDS WITHOUT SORTS			13,925			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,422		
NONPROCESSING RECORDS (Test, calibration, etc)				3		

2-SEC SORT DETECTORS

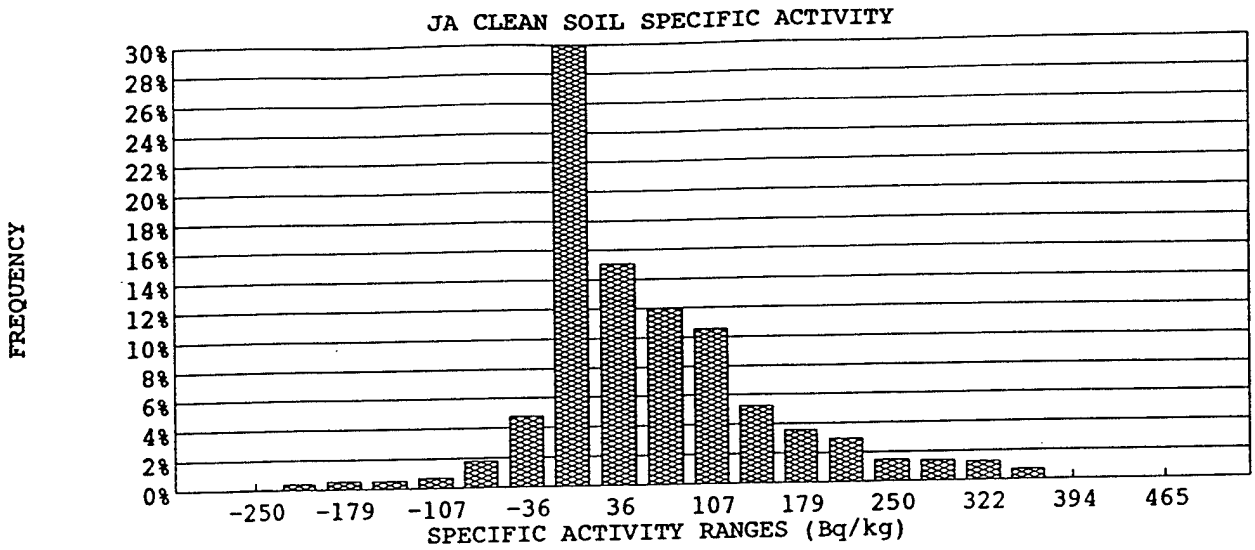
1 DET	1,297	70.3%	5 DET	4	0.2%
2 DET	421	22.8%	6 DET	0	0.0%
3 DET	107	5.8%	7 DET	0	0.0%
4 DET	16	0.9%	8 DET	0	0.0%

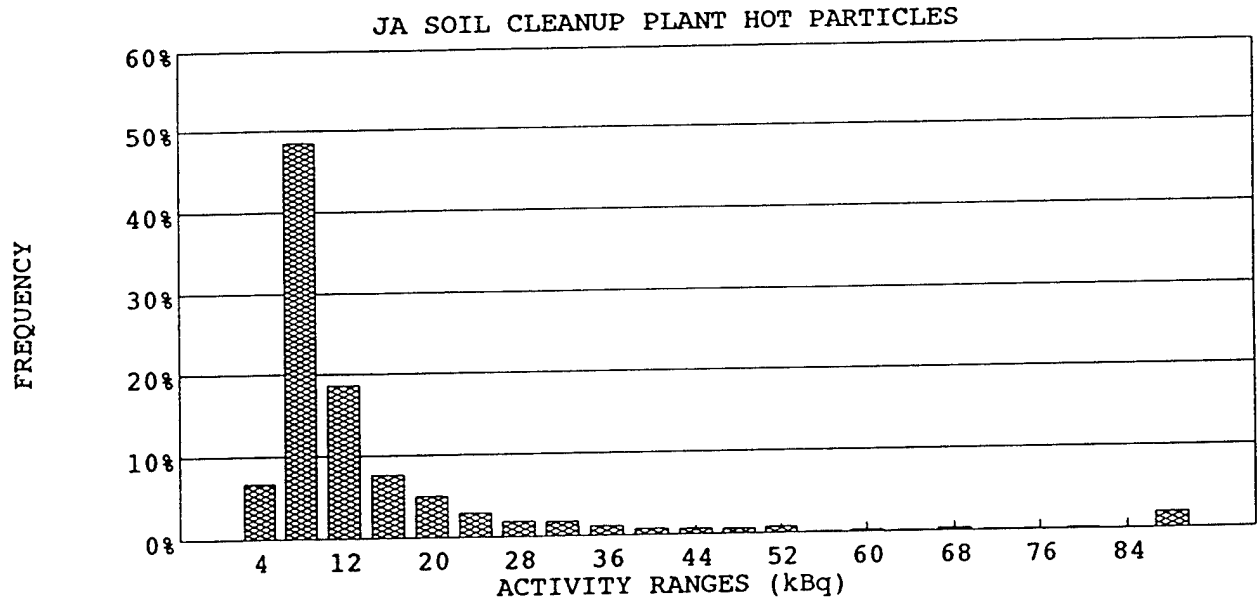
AVERAGE TIME BETWEEN 2-SEC SORTS 24.3 sec

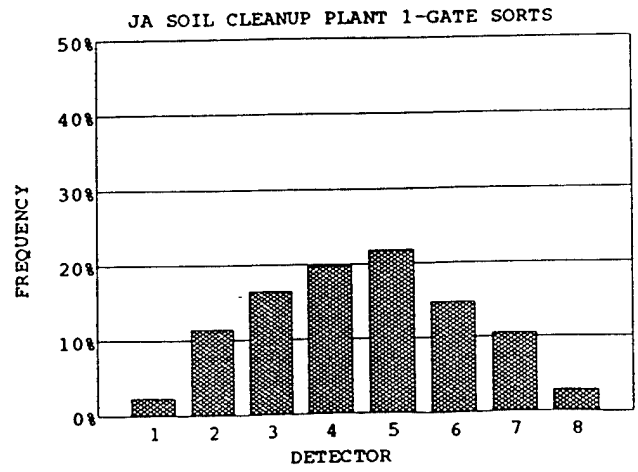
FREQUENCY DISTRIBUTIONS

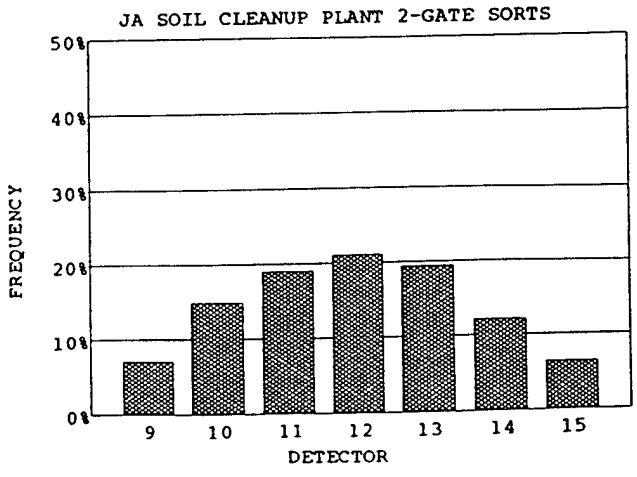
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	22	2.3%	-14000	1	-250	0.1%	4	124	6.7%
2	109	11.5%	-12000	6	-215	0.4%	8	894	48.5%
3	157	16.5%	-10000	8	-179	0.5%	12	343	18.6%
4	188	19.8%	-8000	8	-143	0.5%	16	141	7.6%
5	208	21.9%	-6000	11	-107	0.7%	20	92	5.0%
6	140	14.7%	-4000	28	-72	1.8%	24	54	2.9%
7	100	10.5%	-2000	75	-36	4.7%	28	34	1.8%
8	27	2.8%	0	587	0	37.2%	32	33	1.8%
TOTAL	951		2000	238	36	15.1%	36	21	1.1%
			4000	190	72	12.0%	40	14	0.8%
2-GATE SORTS			6000	167	107	10.6%	44	13	0.7%
DET	SORTS	FREQ%	8000	83	143	5.3%	48	11	0.6%
9	63	7.0%	10000	56	179	3.5%	52	14	0.8%
10	133	14.9%	12000	46	215	2.9%	56	2	0.1%
11	170	19.0%	14000	23	250	1.5%	60	5	0.3%
12	189	21.1%	16000	22	286	1.4%	64	2	0.1%
13	174	19.5%	18000	20	322	1.3%	68	6	0.3%
14	108	12.1%	20000	11	358	0.7%	72	2	0.1%
15	57	6.4%	22000	0	394	0.0%	76	2	0.1%
TOTAL	894		24000	0	429	0.0%	80	3	0.2%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	35	1.9%
			TOTAL	1,580			TOTAL	1,845	

EVENT TYPES HPE 1,760 MPE 3364 DISE 29888


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

31-Mar-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.74 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	25.2 tons	63.0 tons	88.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	20.0 yd³	49.9 yd³	69.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	71.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	33,431 kBq	28,727 kBq	4,252 kBq
MAXIMUM/SORT	2,154 kBq	1,549 kBq	20 kBq
MINIMUM/SORT	2 kBq	(11,594)Bq	-14 kBq
SPECIFIC ACTIVITY		1,140 Bq/kg	67 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,578		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		442		07:44	07:06
NONE (AD=0 & MD=0 & MND>0)		823		08:01	14:00
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		313		12:58	15:03
UNEXPLAINED RECORDS	0			14:05	
0<AD<1kBq & MD>0	2			15:06	
AD=0 & MD>0	0				
AD<0 & MD >0	3				
2-SEC COUNT PERIODS			15,780		
2-SEC RECORDS WITH SORTS		1,926			
2-SEC RECORDS WITHOUT SORTS		13,854			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,504		
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	1,375	71.4%	5 DET	5	0.3%
2 DET	423	22.0%	6 DET	0	0.0%
3 DET	97	5.0%	7 DET	0	0.0%
4 DET	26	1.3%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 23.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

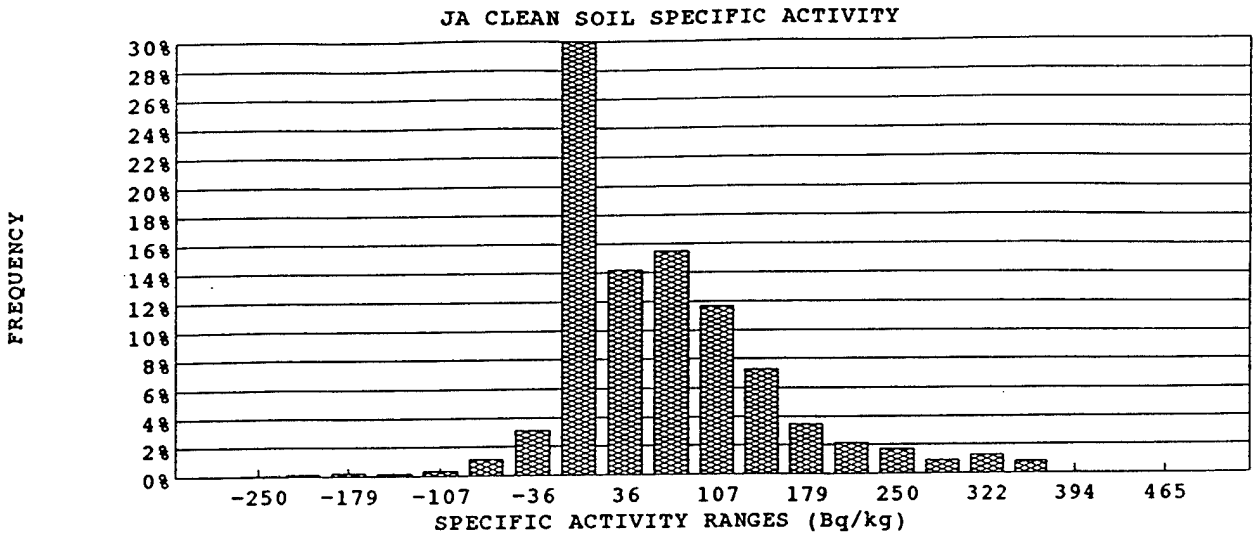
DET	SORTS	FREQ%
1	64	6.8%
2	192	20.3%
3	196	20.7%
4	195	20.6%
5	164	17.3%
6	97	10.2%
7	34	3.6%
8	6	0.6%
TOTAL	948	

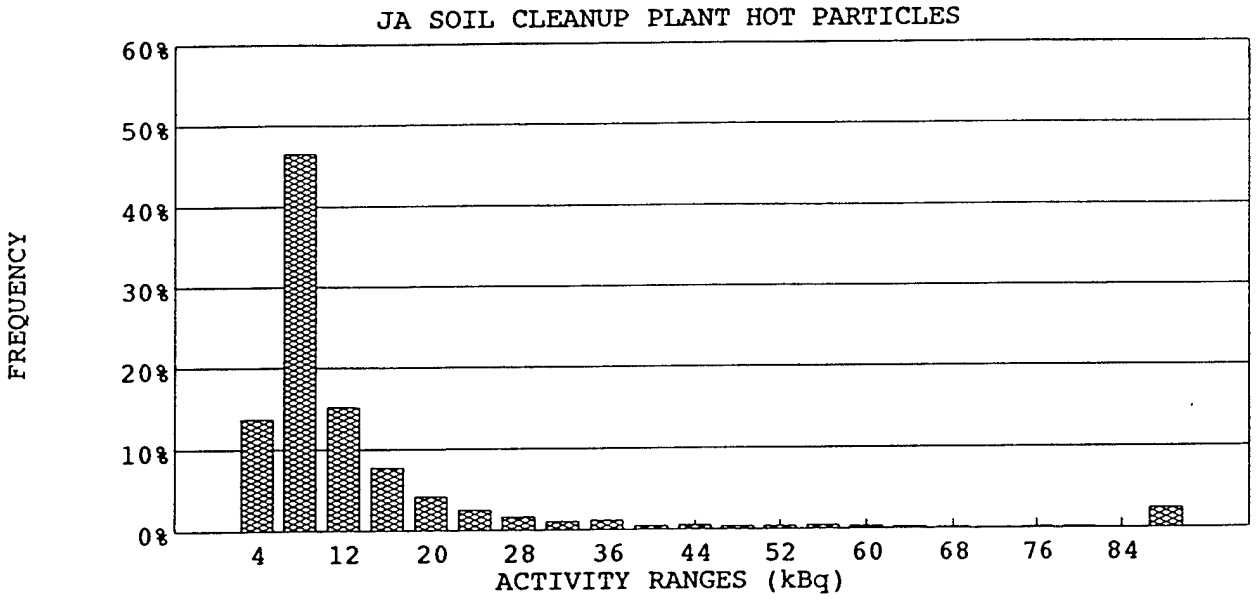
2-GATE SORTS

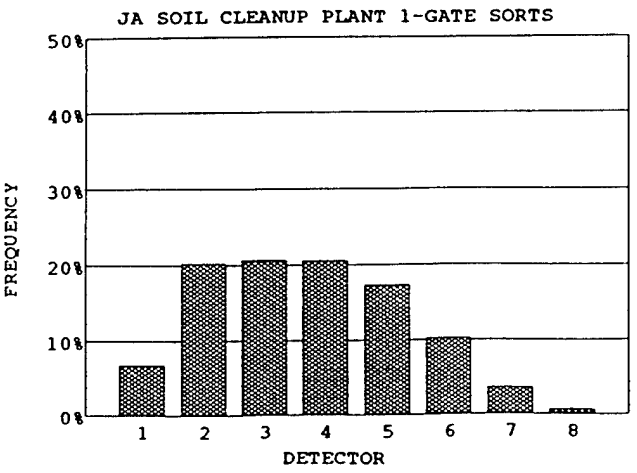
DET	SORTS	FREQ%
9	133	13.6%
10	239	24.4%
11	200	20.4%
12	186	19.0%
13	141	14.4%
14	58	5.9%
15	21	2.1%
TOTAL	978	

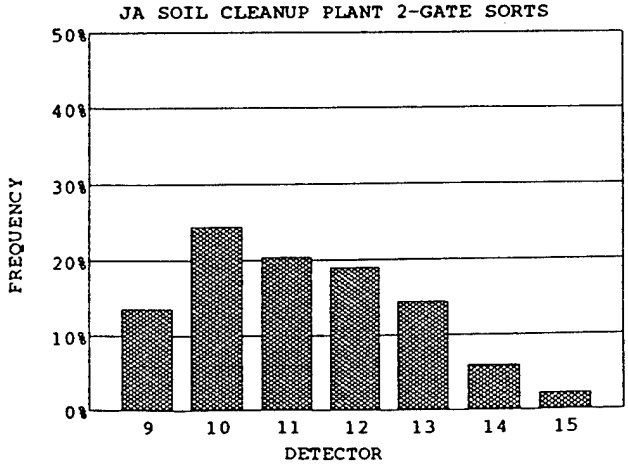
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	264	13.7%
-12000	2	-215	0.1%	8	897	46.6%
-10000	4	-179	0.3%	12	293	15.2%
-8000	3	-143	0.2%	16	149	7.7%
-6000	6	-107	0.4%	20	81	4.2%
-4000	18	-72	1.1%	24	48	2.5%
-2000	49	-36	3.1%	28	32	1.7%
0	567	0	35.8%	32	19	1.0%
2000	224	36	14.2%	36	23	1.2%
4000	245	72	15.5%	40	10	0.5%
6000	185	107	11.7%	44	11	0.6%
8000	115	143	7.3%	48	8	0.4%
10000	55	179	3.5%	52	8	0.4%
12000	34	215	2.1%	56	10	0.5%
14000	27	250	1.7%	60	7	0.4%
16000	15	286	0.9%	64	5	0.3%
18000	20	322	1.3%	68	4	0.2%
20000	13	358	0.8%	72	2	0.1%
22000	0	394	0.0%	76	4	0.2%
24000	0	429	0.0%	80	4	0.2%
26000	0	465	0.0%	84	1	0.1%
>28000	0	0	0.0%	>84	46	2.4%
TOTAL	1,583			TOTAL	1,926	

EVENT TYPES	HPE	1,899	MPE	3545	DISE	30626


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 01–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.1 hr	10.1 hr	0.0 hr	0.0 hr	20.2 hr
SORTER START–UP	06:15	06:15	NA	NA	
START SOIL PROCESSING	06:26	06:26	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:04	16:06	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	8.9 hr	9.0 hr	0.0 hr	0.0 hr	17.9 hr
DOWN–TIME	1.2 hr	1.1 hr	0.0 hr	0.0 hr	2.3 hr
SYSTEM PAUSE	0.8 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SORTER NONAVAILABLE TIME	0.4 hr	0.4 hr	10.0 hr	10.0 hr	20.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.8%
PRODUCTIVTY					42.6%

PRODUCTIVITY

Date	01–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	167	Excused delays for contract (sorter–hrs)	2,742 hr
Current Contract week	28	Excused delay days (plant–days)	69 days
		Excused delay months (plant–month)	2.64 months
Soil production for Day	180 MT		
Cumlative Soil Production for Week	670 MT	Percent of contract completed	38.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,864 MT
Since 6 Sep 93	36,838 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	38,429 MT		
Total Soil production for project	64,716 MT		

MT = metric tons

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SORTER 1

01-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.65 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	19.0 tons	70.4 tons	89.4 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	15.1 yd³	55.8 yd³	70.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	78.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	38,414 kBq	30,141 kBq	3,325 kBq
MAXIMUM/SORT	1,928 kBq	1,322 kBq	19 kBq
MINIMUM/SORT	2 kBq	(17,894) Bq	-14 kBq
SPECIFIC ACTIVITY		1,587 Bq/kg	47 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,599		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		333		12:49	09:46
NONE (AD=0 & MD=0 & MND>0)		1,018		13:54	13:49
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		248			14:44
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	1				
AD=0 & MD>0	0				
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			15,990		
2-SEC RECORDS WITH SORTS		1,961			
2-SEC RECORDS WITHOUT SORTS		14,029			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,560		
NONPROCESSING RECORDS (Test, calibration, etc)			1		

2-SEC SORT DETECTORS

1 DET	1,336	68.1%	5 DET	9	0.5%
2 DET	465	23.7%	6 DET	0	0.0%
3 DET	118	6.0%	7 DET	0	0.0%
4 DET	33	1.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 23.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	28	2.8%
2	138	13.9%
3	152	15.3%
4	169	17.0%
5	198	19.9%
6	162	16.3%
7	118	11.9%
8	28	2.8%
TOTAL	993	

2-GATE SORTS

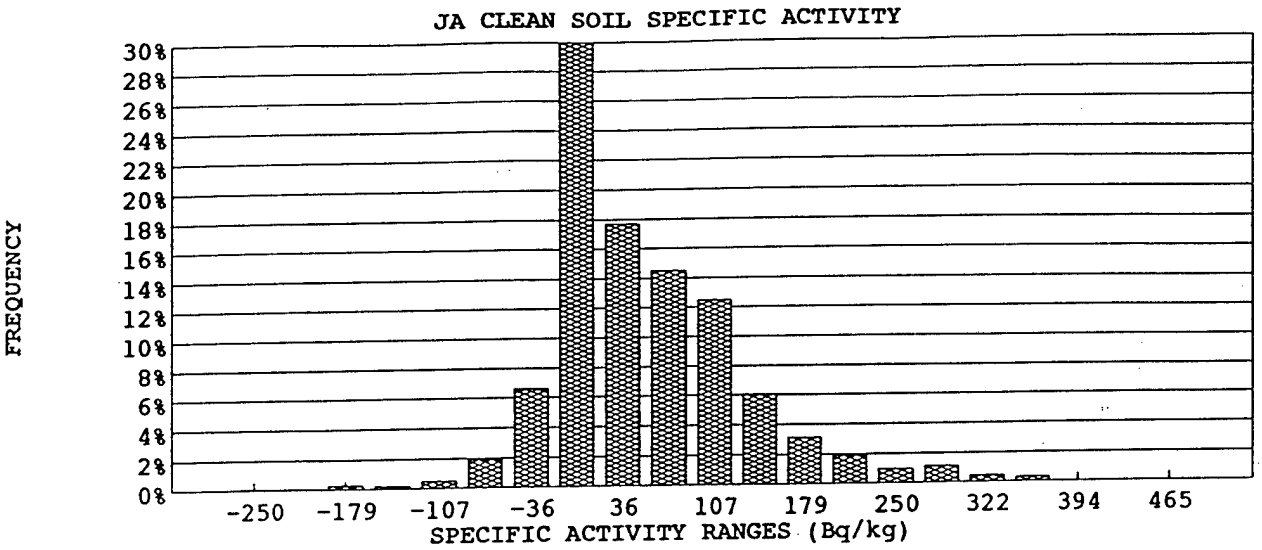
DET	SORTS	FREQ%
9	83	8.6%
10	160	16.5%
11	169	17.5%
12	164	16.9%
13	189	19.5%
14	131	13.5%
15	72	7.4%
TOTAL	968	

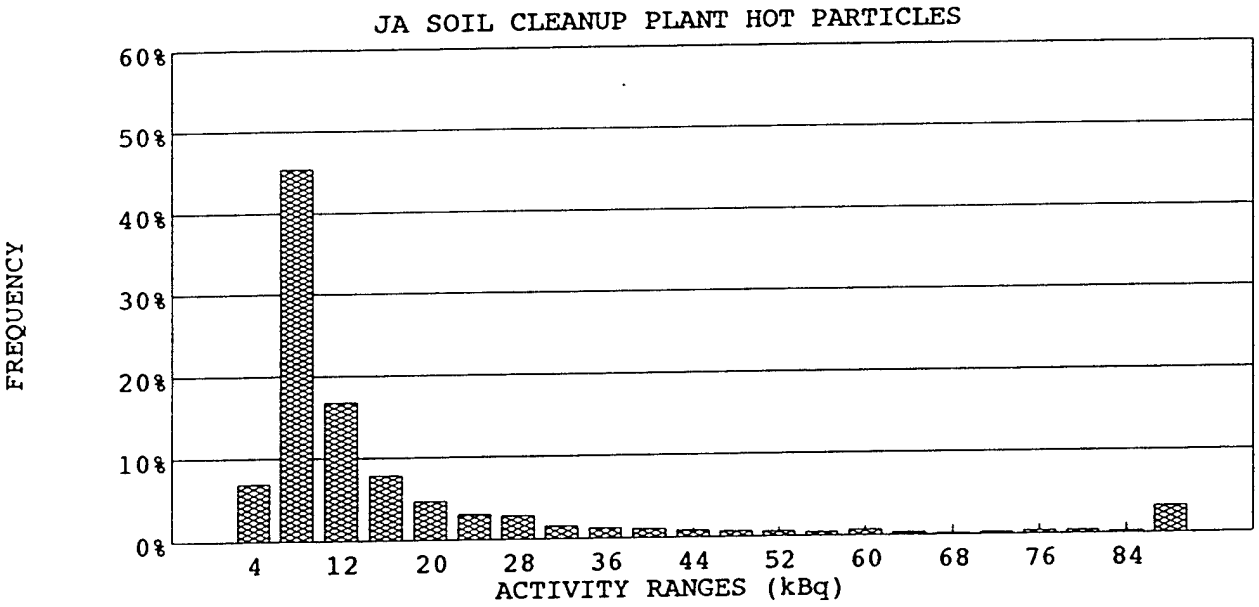
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	136	6.9%
-12000	1	-215	0.1%	8	890	45.4%
-10000	4	-179	0.3%	12	330	16.8%
-8000	3	-143	0.2%	16	155	7.9%
-6000	8	-107	0.5%	20	93	4.7%
-4000	30	-72	1.9%	24	61	3.1%
-2000	106	-36	6.6%	28	56	2.9%
0	510	0	31.9%	32	30	1.5%
2000	283	36	17.7%	36	24	1.2%
4000	232	72	14.5%	40	22	1.1%
6000	200	107	12.5%	44	17	0.9%
8000	97	143	6.1%	48	13	0.7%
10000	50	179	3.1%	52	12	0.6%
12000	30	215	1.9%	56	10	0.5%
14000	15	250	0.9%	60	14	0.7%
16000	18	286	1.1%	64	6	0.3%
18000	7	322	0.4%	68	4	0.2%
20000	5	358	0.3%	72	5	0.3%
22000	0	394	0.0%	76	7	0.4%
24000	0	429	0.0%	80	7	0.4%
26000	0	465	0.0%	84	5	0.3%
>28000	0	0	0.0%	>84	64	3.3%
TOTAL	1,600			TOTAL	1,961	

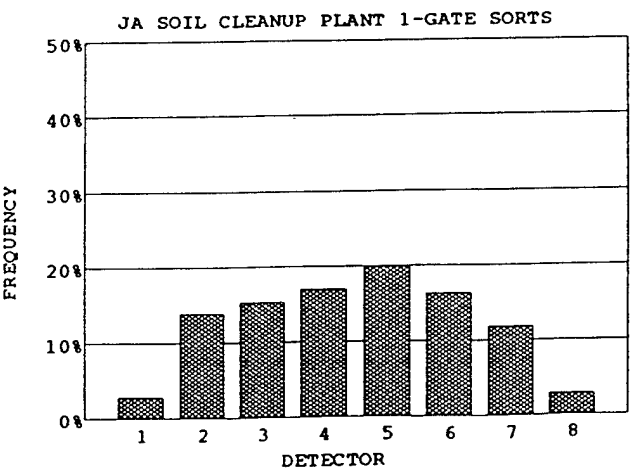
EVENT TYPES HPE 1,842 MPE 3686 DISE 21654

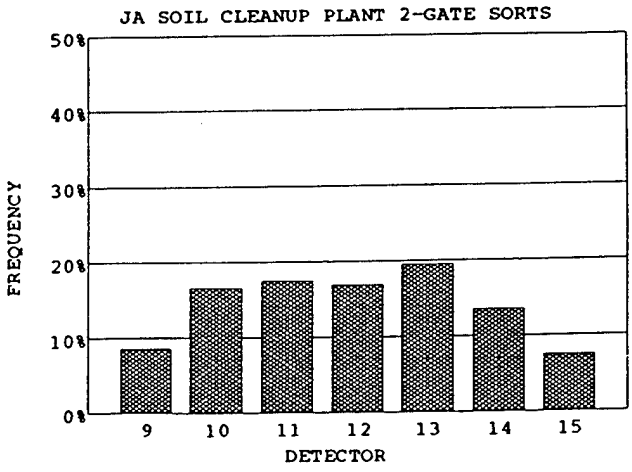
SORTER 1

01-Apr-94









SORTER 2

01-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.72 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	19.4 tons	71.5 tons	90.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	15.3 yd³	56.7 yd³	72.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	78.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	34,459 kBq	28,164 kBq	4,931 kBq
MAXIMUM/SORT	843 kBq	591 kBq	20 kBq
MINIMUM/SORT	2 kBq	(16,192)Bq	-12 kBq
SPECIFIC ACTIVITY		1,455 Bq/kg	69 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,625		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	338		12:44	09:46
NONE (AD=0 & MD=0 & MND>0)	1,013		13:54	13:51
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	273		14:49	14:44
UNEXPLAINED RECORDS	1			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	3			
2-SEC COUNT PERIODS		16,250		
2-SEC RECORDS WITH SORTS	2,212			
2-SEC RECORDS WITHOUT SORTS	14,038			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,837		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	1,517	68.6%	5 DET	2	0.1%
2 DET	546	24.7%	6 DET	0	0.0%
3 DET	121	5.5%	7 DET	0	0.0%
4 DET	26	1.2%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 21.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	59	5.4%
2	205	18.6%
3	206	18.7%
4	215	19.5%
5	198	18.0%
6	130	11.8%
7	70	6.4%
8	18	1.6%
TOTAL	1,101	

2-GATE SORTS

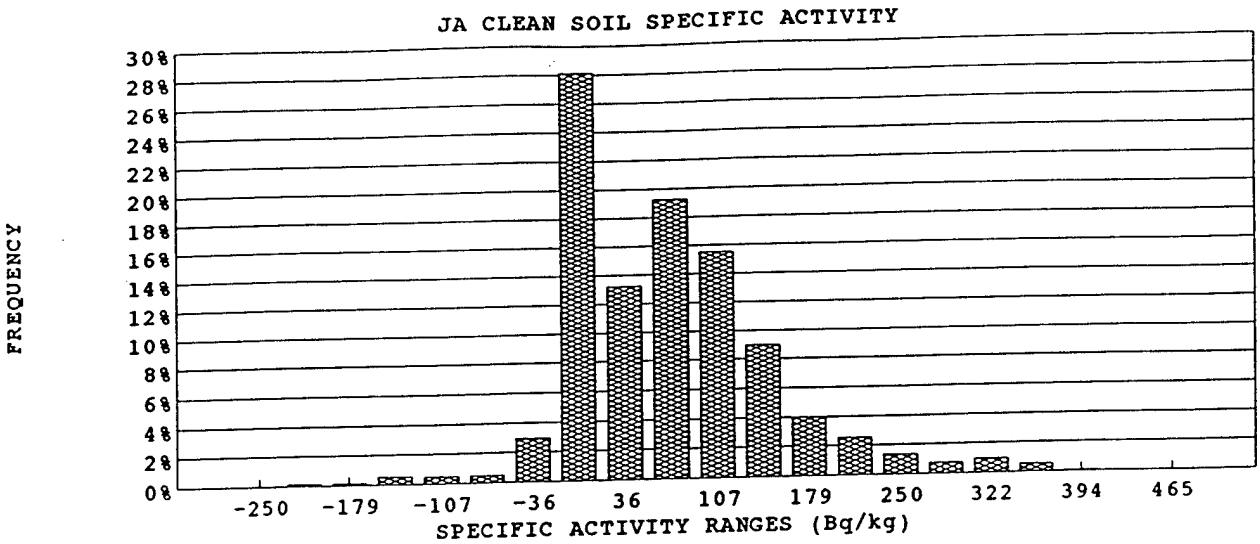
DET	SORTS	FREQ%
9	139	12.5%
10	235	21.2%
11	232	20.9%
12	202	18.2%
13	172	15.5%
14	90	8.1%
15	41	3.7%
TOTAL	1,111	

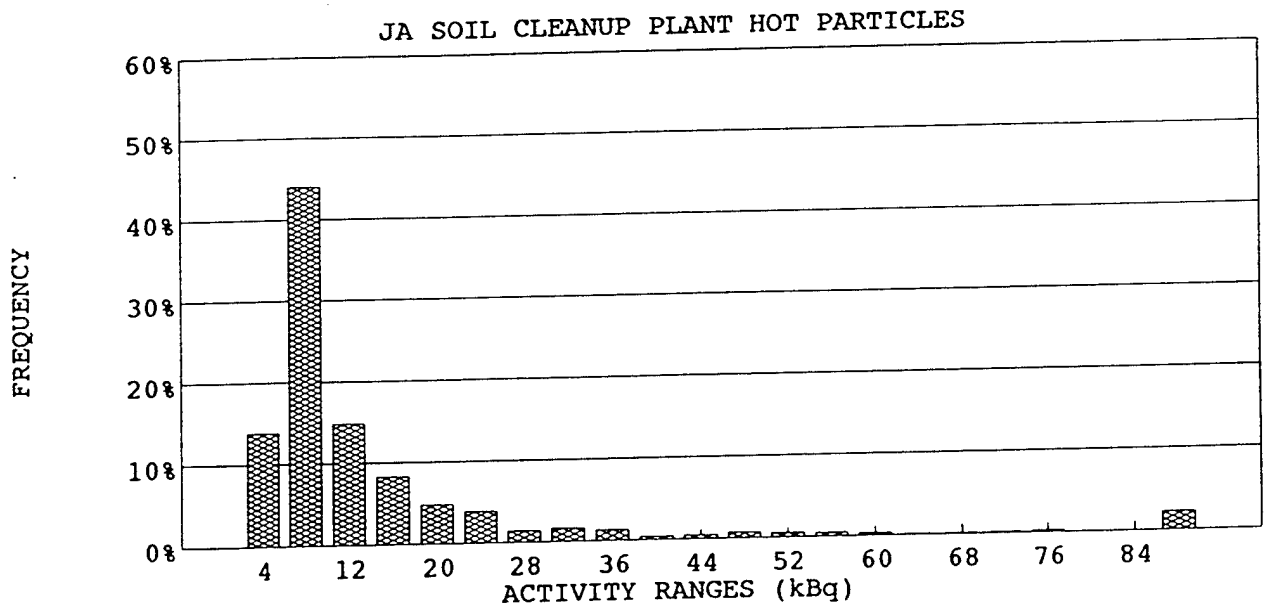
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	305	13.8%
-12000	2	-215	0.1%	8	973	44.0%
-10000	2	-179	0.1%	12	327	14.8%
-8000	9	-143	0.6%	16	184	8.3%
-6000	8	-107	0.5%	20	106	4.8%
-4000	8	-72	0.5%	24	86	3.9%
-2000	48	-36	3.0%	28	31	1.4%
0	457	0	28.1%	32	37	1.7%
2000	215	36	13.2%	36	29	1.3%
4000	313	72	19.2%	40	9	0.4%
6000	252	107	15.5%	44	10	0.5%
8000	146	143	9.0%	48	17	0.8%
10000	65	179	4.0%	52	12	0.5%
12000	41	215	2.5%	56	10	0.5%
14000	22	250	1.4%	60	8	0.4%
16000	12	286	0.7%	64	2	0.1%
18000	16	322	1.0%	68	2	0.1%
20000	9	358	0.6%	72	5	0.2%
22000	1	394	0.1%	76	6	0.3%
24000	0	429	0.0%	80	1	0.0%
26000	0	465	0.0%	84	1	0.0%
>28000	0	0	0.0%	>84	51	2.3%
TOTAL	1,626			TOTAL	2,212	

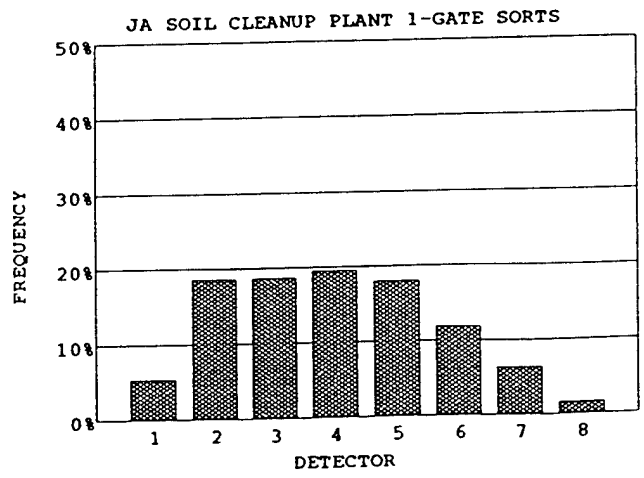
EVENT TYPES HPE 2,050 MPE 4205 DISE 21442

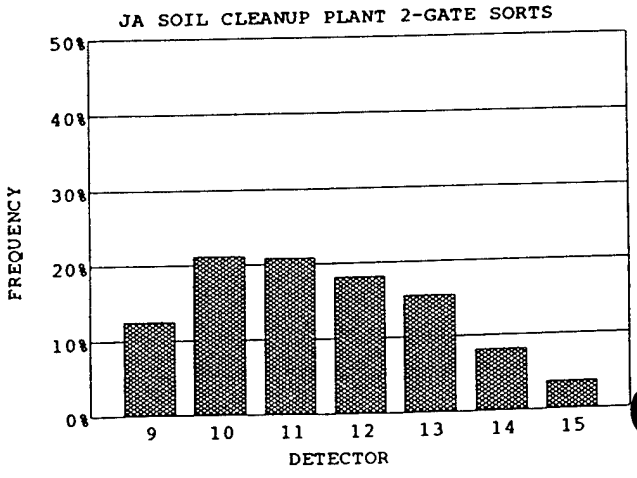
SORTER 2

01-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 02–Apr–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	7.7 hr	7.7 hr	0.0 hr	0.0 hr	15.3 hr
SORTER START–UP	05:20	05:20	NA	NA	
START SOIL PROCESSING	05:33	05:33	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	13:00	13:00	NA	NA	
END SOIL PROCESSING	12:43	12:42	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	7.0 hr	7.1 hr	0.0 hr	0.0 hr	14.1 hr
DOWN–TIME	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	2.8 hr	2.8 hr	10.0 hr	10.0 hr	25.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					91.9%
PRODUCTIVTY					33.6%

PRODUCTIVITY

Date	02–Apr–94
Contract day (from 6 Sep)	168
Current Contract week	28
Soil production for Day	142 MT
Cumlative Soil Production for Week	811 MT
Total Soil production for contract	
Since 6 Sep 93	36,980 MT
Since 6 Aug 93	38,571 MT
Total Soil production for project	64,858 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,762 hr
Excused delay days (plant–days)	69 days
Excused delay months (plant–month)	2.66 months
Percent of contract completed	38.6%
Tons Ahead or Behind Schedule	1,847 MT
Days ahead or behind schedule	6 days

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SORTER 1

02-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.65 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	15.1 tons	55.6 tons	70.7 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	11.9 yd³	44.1 yd³	56.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	78.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	35,375 kBq	22,460 kBq	5,707 kBq
MAXIMUM/SORT	4,384 kBq	3,158 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		1,491 Bq/kg	103 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,264	07:36	09:32
ALL 80 ELEMENTS SORT (MD>0&MND=0)			257			
NONE (AD=0 & MD=0 & MND>0)			609			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			398			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				12,640		
2-SEC RECORDS WITH SORTS			1,509			
2-SEC RECORDS WITHOUT SORTS			11,131			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,773		
NONPROCESSING RECORDS (Test, calibration, etc)				4		

2-SEC SORT DETECTORS					
1 DET	1,084	71.8%	5 DET	0	0.0%
2 DET	344	22.8%	6 DET	0	0.0%
3 DET	64	4.2%	7 DET	0	0.0%
4 DET	17	1.1%	8 DET	0	0.0%

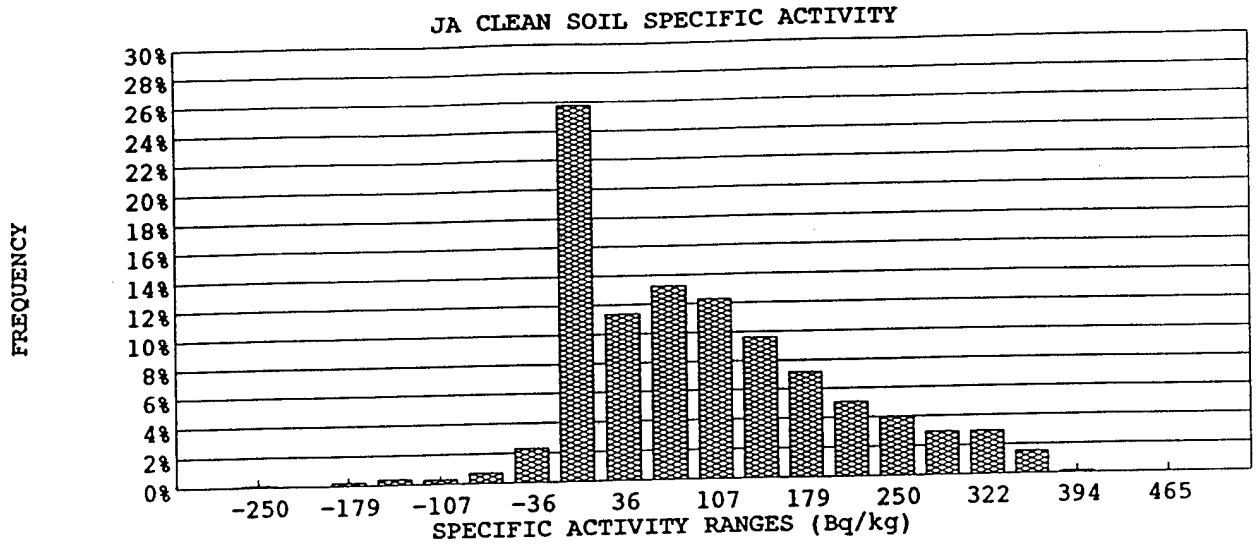
AVERAGE TIME BETWEEN 2-SEC SORTS 23.3 sec

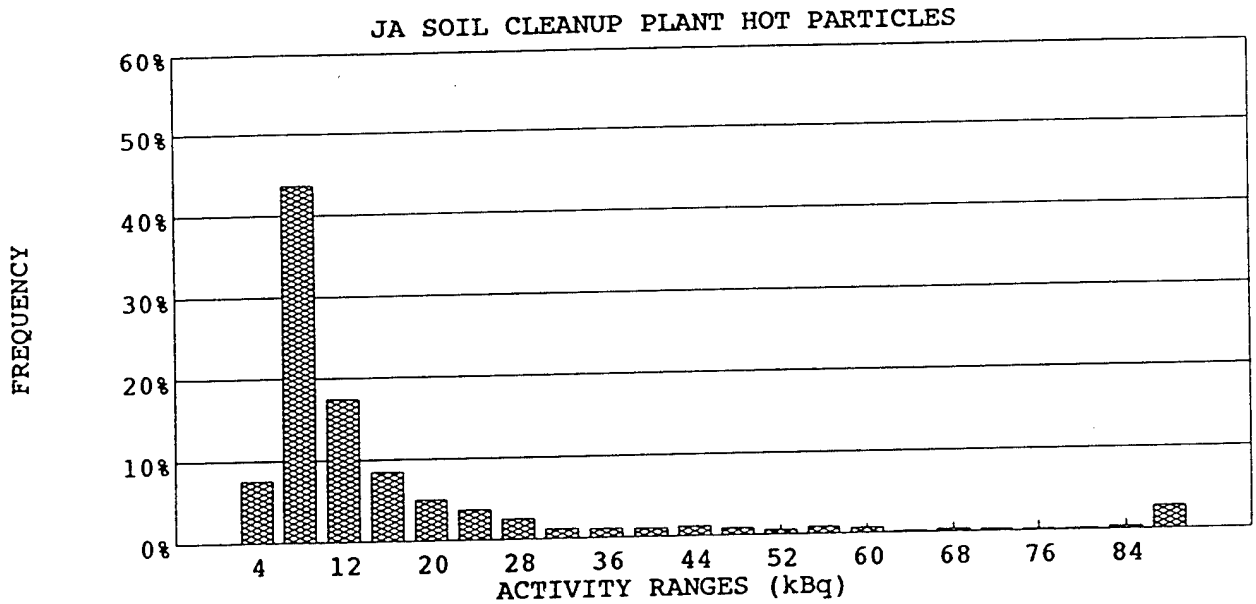
FREQUENCY DISTRIBUTIONS

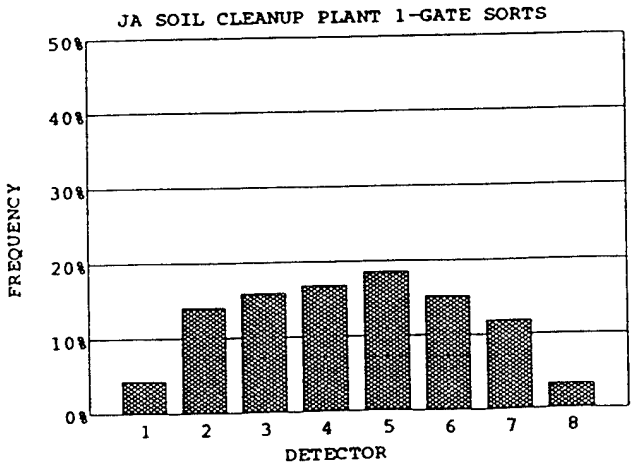
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	33	4.3%	-14000	1	-250	0.1%	4	114	7.6%
2	107	14.0%	-12000	0	-215	0.0%	8	659	43.7%
3	121	15.9%	-10000	3	-179	0.2%	12	263	17.4%
4	128	16.8%	-8000	5	-143	0.4%	16	128	8.5%
5	142	18.6%	-6000	4	-107	0.3%	20	76	5.0%
6	116	15.2%	-4000	9	-72	0.7%	24	56	3.7%
7	90	11.8%	-2000	29	-36	2.3%	28	37	2.5%
8	25	3.3%	0	327	0	25.8%	32	18	1.2%
TOTAL	762		2000	144	36	11.4%	36	17	1.1%
			4000	168	72	13.2%	40	15	1.0%
			6000	156	107	12.3%	44	18	1.2%
2-GATE SORTS DET	SORTS	FREQ%	8000	122	143	9.6%	48	13	0.9%
9	73	9.8%	10000	91	179	7.2%	52	8	0.5%
10	112	15.0%	12000	64	215	5.0%	56	13	0.9%
11	124	16.6%	14000	50	250	3.9%	60	9	0.6%
12	156	20.9%	16000	37	286	2.9%	64	3	0.2%
13	123	16.5%	18000	37	322	2.9%	68	5	0.3%
14	95	12.7%	20000	19	358	1.5%	72	4	0.3%
15	64	8.6%	22000	2	394	0.2%	76	3	0.2%
TOTAL	747		24000	0	429	0.0%	80	3	0.2%
			26000	0	465	0.0%	84	5	0.3%
			>28000	0	0	0.0%	>84	42	2.8%
			TOTAL	1,268			TOTAL	1,509	
EVENT TYPES		HPE	1,449	MPE	1962	DISE	18140		

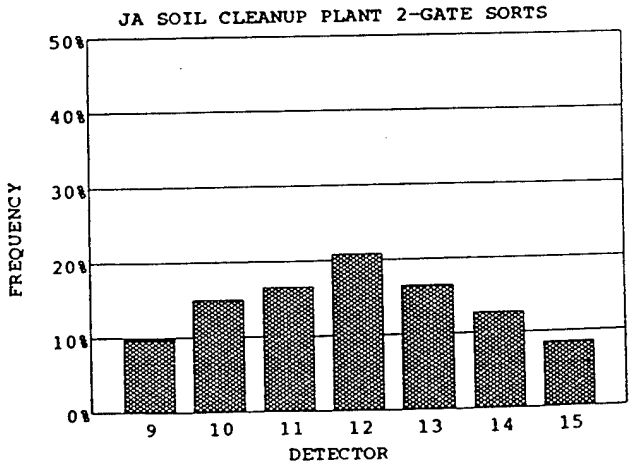
SORTER 1

02-Apr-94









SORTER 2

02-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.74 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	12.6 tons	58.5 tons	71.2 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	10.0 yd³	46.4 yd³	56.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	82.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	28,795 kBq	18,150 kBq	5,542 kBq
MAXIMUM/SORT	3,002 kBq	1,571 kBq	20 kBq
MINIMUM/SORT	2 kBq	(61)Bq	−15 kBq
SPECIFIC ACTIVITY		1,437 Bq/kg	95 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,273		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		213		10:07	09:35
NONE (AD=0 & MD=0 & MND>0)		645		11:37	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		413		11:48	
UNEXPLAINED RECORDS	2			11:49	
0<AD<1kBq & MD>0	3			12:14	
AD=0 & MD>0	0				
AD<0 & MD >0	2				
2-SEC COUNT PERIODS			12,730		
2-SEC RECORDS WITH SORTS		1,456			
2-SEC RECORDS WITHOUT SORTS		11,274			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,729		
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	1,005	69.0%	5 DET	3	0.2%
2 DET	345	23.7%	6 DET	0	0.0%
3 DET	82	5.6%	7 DET	0	0.0%
4 DET	21	1.4%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 25.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	30	4.1%
2	148	20.3%
3	146	20.0%
4	161	22.1%
5	117	16.0%
6	81	11.1%
7	36	4.9%
8	10	1.4%
TOTAL	729	

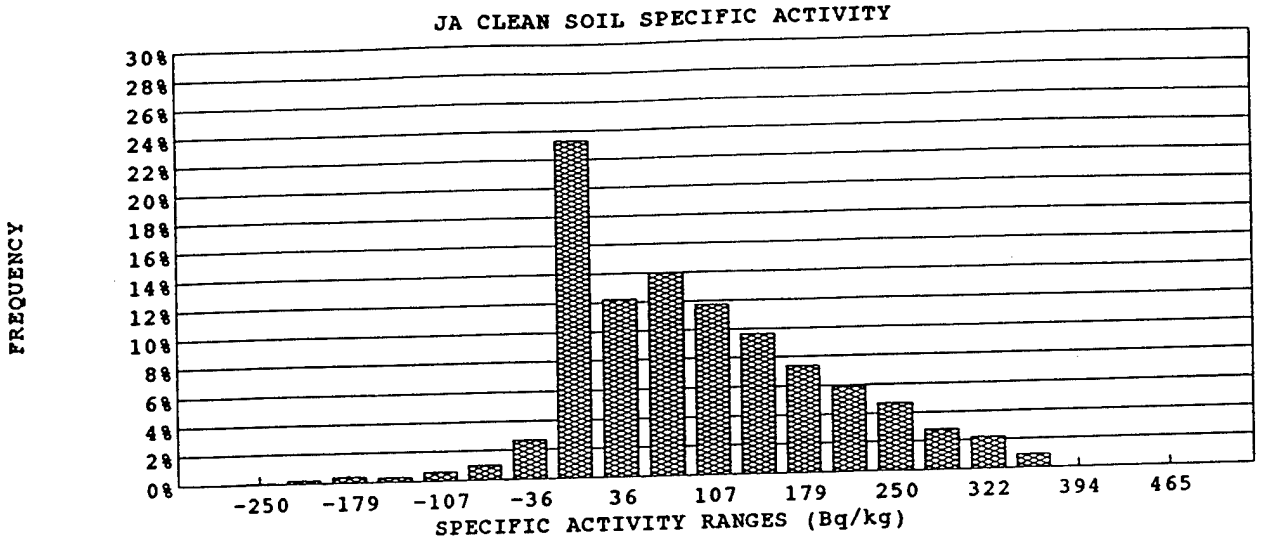
2-GATE SORTS

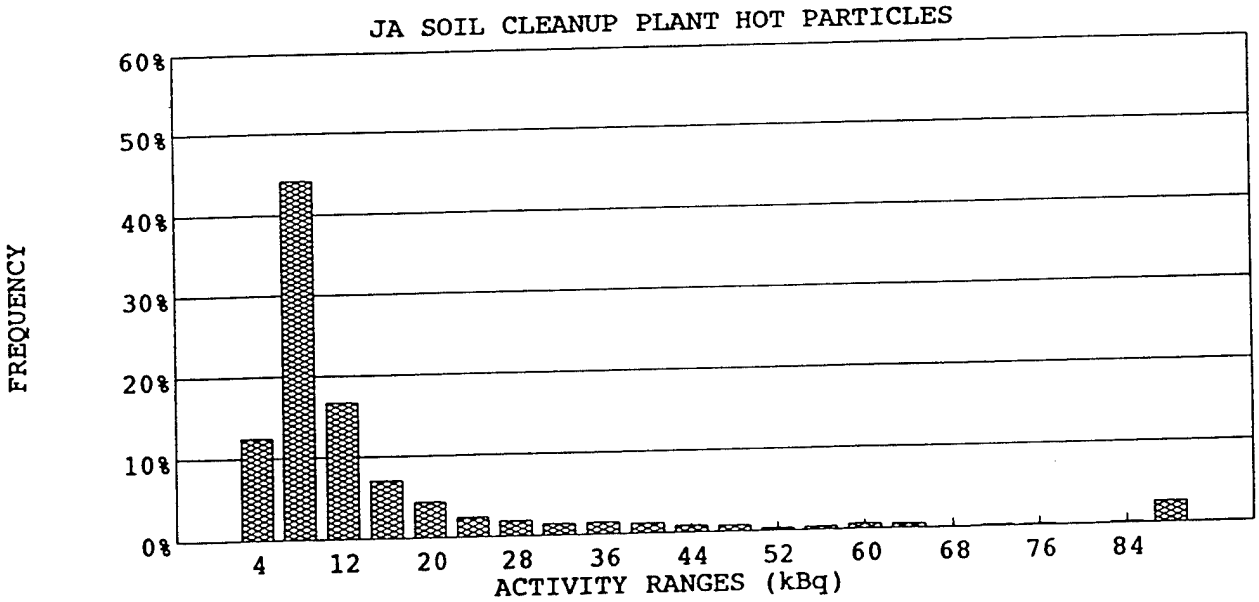
DET	SORTS	FREQ%
9	88	12.1%
10	156	21.5%
11	152	20.9%
12	130	17.9%
13	117	16.1%
14	63	8.7%
15	21	2.9%
TOTAL	727	

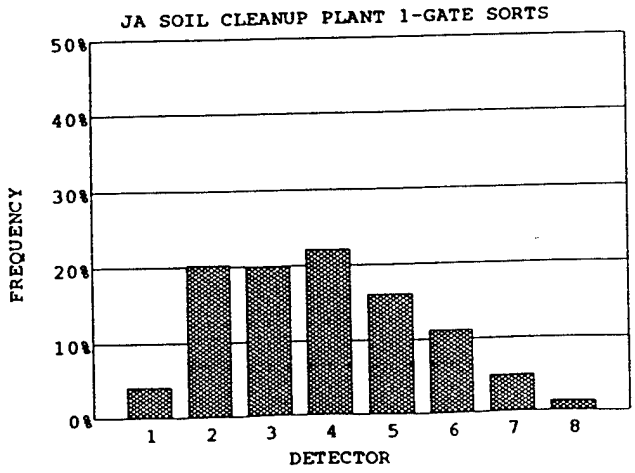
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
−14000	1	−250	0.1%	4	182	12.5%
−12000	3	−215	0.2%	8	643	44.2%
−10000	5	−179	0.4%	12	243	16.7%
−8000	4	−143	0.3%	16	103	7.1%
−6000	8	−107	0.6%	20	64	4.4%
−4000	13	−72	1.0%	24	35	2.4%
−2000	34	−36	2.7%	28	28	1.9%
0	298	0	23.3%	32	21	1.4%
2000	156	36	12.2%	36	22	1.5%
4000	178	72	13.9%	40	18	1.2%
6000	150	107	11.7%	44	13	0.9%
8000	123	143	9.6%	48	12	0.8%
10000	94	179	7.4%	52	5	0.3%
12000	75	215	5.9%	56	6	0.4%
14000	60	250	4.7%	60	9	0.6%
16000	36	286	2.8%	64	8	0.5%
18000	28	322	2.2%	68	0	0.0%
20000	12	358	0.9%	72	2	0.1%
22000	0	394	0.0%	76	2	0.1%
24000	0	429	0.0%	80	0	0.0%
26000	0	465	0.0%	84	2	0.1%
>28000	0	0	0.0%	>84	38	2.6%
TOTAL	1,278			TOTAL	1,456	

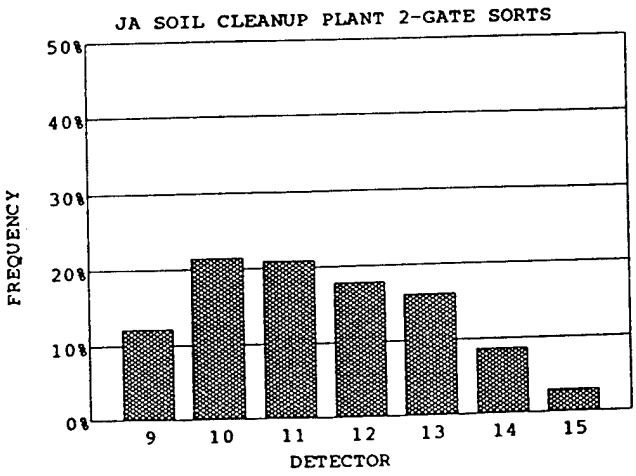
EVENT TYPES HPE 1,380 MPE 2114 DISE 14578

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 04-Apr-94

WORK DAY START	06:00	AM	WORK DAY END	16:30	PM
LUNCH START	11:00	AM	TIME LOST DURING LUNCH	0.5	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER START-UP	NA	NA	NA	NA	
START SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO START-UP	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER SHUT-DOWN	NA	NA	NA	NA	
END SOIL PROCESSING	NA	NA	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
ACTUAL PROCESS HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
DOWN-TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					NA
PRODUCTIVTY					0.0%

PRODUCTIVITY

Date	04-Apr-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	169	Excused delays for contract (sorter-hrs)	2,782 hr
Current Contract week	29	Excused delay days (plant-days)	70 days
		Excused delay months (plant-month)	2.68 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	38.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,689 MT
Since 6 Sep 93	36,980 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	38,571 MT		
Total Soil production for project	64,858 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 05–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.7 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:07	06:07	NA	NA	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.3 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:08	16:06	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
ACTUAL PROCESS HOURS	9.5 hr	9.5 hr	0.0 hr	0.0 hr	19.0 hr
DOWN–TIME	0.8 hr	0.8 hr	0.0 hr	0.0 hr	1.6 hr
SYSTEM PAUSE	0.5 hr	0.5 hr	0.0 hr	0.0 hr	1.0 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					92.1%
PRODUCTIVTY					45.3%

PRODUCTIVITY

Date	05–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	170	Excused delays for contract (sorter–hrs)	2,802 hr
Current Contract week	29	Excused delay days (plant–days)	70 days
		Excused delay months (plant–month)	2.69 months
Soil production for Day	192 MT		
Cumlative Soil Production for Week	192 MT	Percent of contract completed	38.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,722 MT
Since 6 Sep 93	37,171 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	38,762 MT		
Total Soil production for project	65,049 MT		

MT = metric tons

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SORTER 1

05-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	10.8 tons	85.1 tons	95.9 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	8.6 yd³	67.4 yd³	76.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	23,405 kBq	16,978 kBq	5,681 kBq
MAXIMUM/SORT	1,738 kBq	1,020 kBq	20 kBq
MINIMUM/SORT	3 kBq	(25,426)Bq	-14 kBq
SPECIFIC ACTIVITY		1,565 Bq/kg	67 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,716		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	183		15:31	06:07
NONE (AD=0 & MD=0 & MND>0)	1,139			15:27
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	394			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		17,160		
2-SEC RECORDS WITH SORTS	1,277			
2-SEC RECORDS WITHOUT SORTS	15,883			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,993		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	901	70.6%	5 DET	2	0.2%
2 DET	306	24.0%	6 DET	0	0.0%
3 DET	56	4.4%	7 DET	0	0.0%
4 DET	12	0.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 38.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

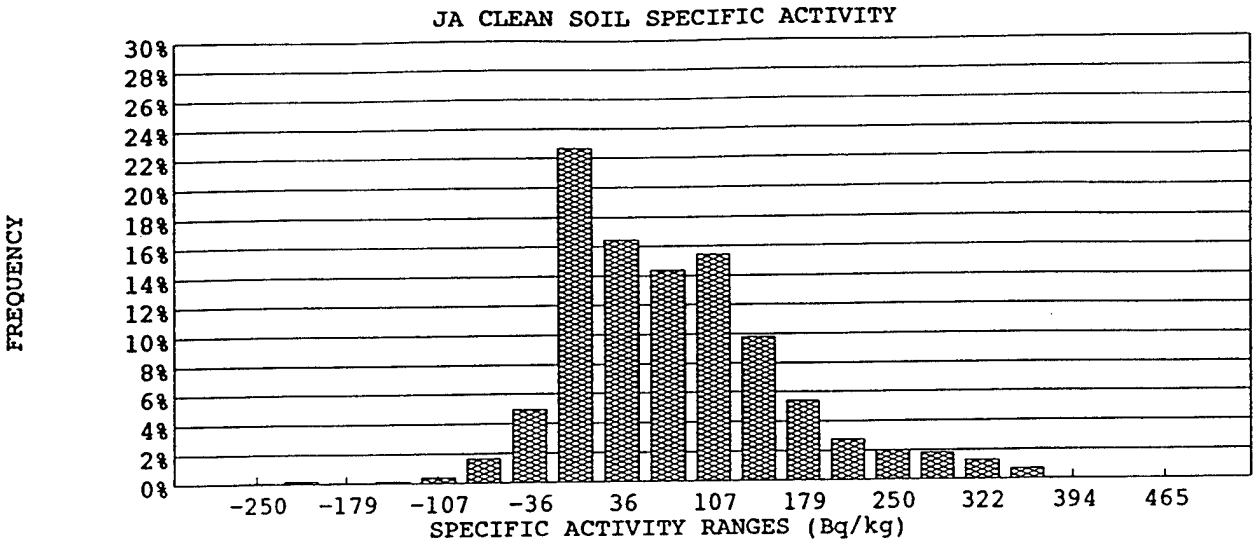
DET	SORTS	FREQ%
1	19	2.9%
2	86	13.1%
3	106	16.2%
4	111	16.9%
5	119	18.1%
6	94	14.3%
7	94	14.3%
8	27	4.1%
TOTAL	656	

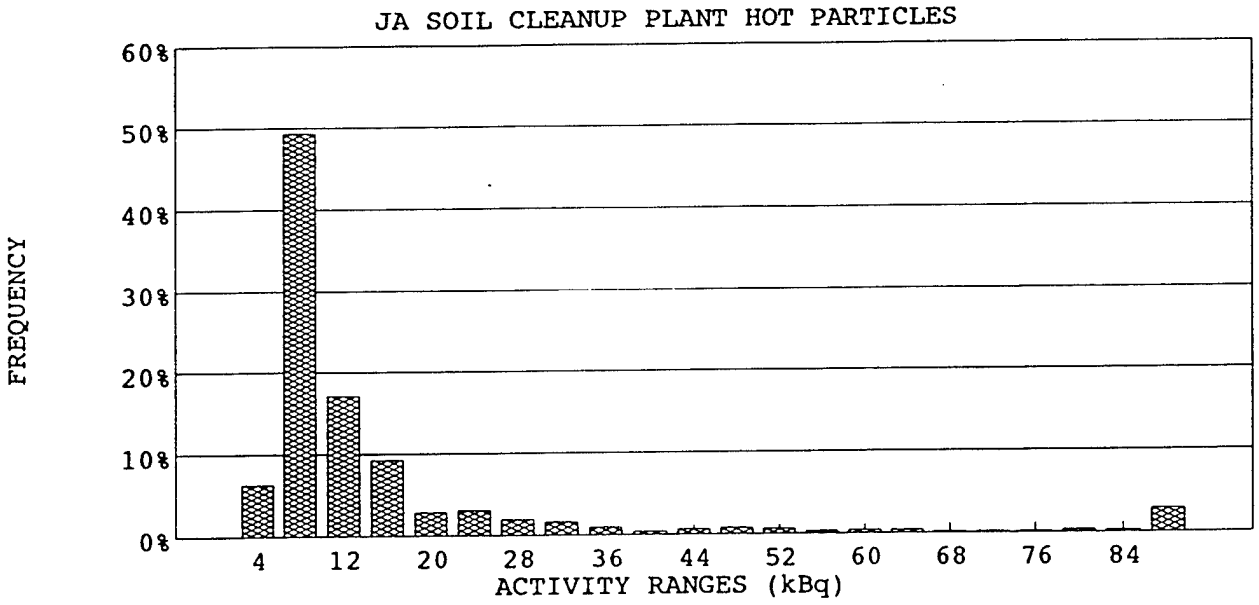
2-GATE SORTS

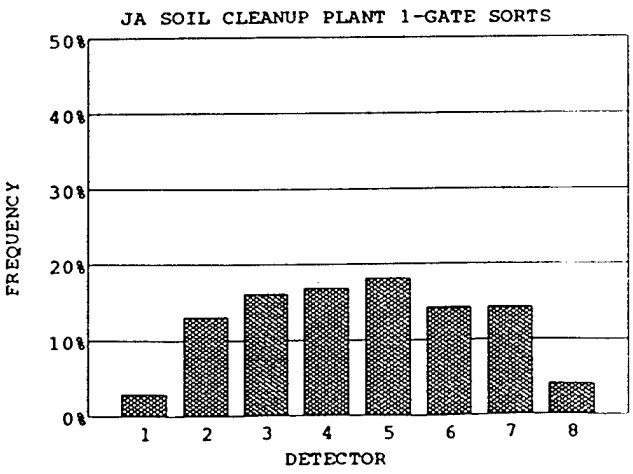
DET	SORTS	FREQ%
9	44	7.1%
10	97	15.6%
11	108	17.4%
12	118	19.0%
13	105	16.9%
14	81	13.0%
15	68	11.0%
TOTAL	621	

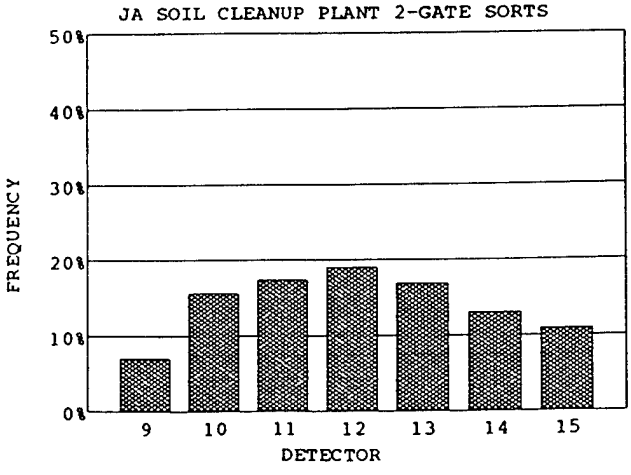
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	81	6.3%
-12000	3	-215	0.2%	8	630	49.3%
-10000	1	-179	0.1%	12	219	17.1%
-8000	2	-143	0.1%	16	118	9.2%
-6000	7	-107	0.4%	20	37	2.9%
-4000	28	-72	1.6%	24	40	3.1%
-2000	85	-36	5.0%	28	25	2.0%
0	389	0	22.7%	32	21	1.6%
2000	282	36	16.4%	36	12	0.9%
4000	247	72	14.4%	40	5	0.4%
6000	265	107	15.4%	44	8	0.6%
8000	168	143	9.8%	48	10	0.8%
10000	93	179	5.4%	52	8	0.6%
12000	47	215	2.7%	56	4	0.3%
14000	34	250	2.0%	60	5	0.4%
16000	31	286	1.8%	64	5	0.4%
18000	22	322	1.3%	68	2	0.2%
20000	12	358	0.7%	72	2	0.2%
22000	0	394	0.0%	76	2	0.2%
24000	0	429	0.0%	80	4	0.3%
26000	0	465	0.0%	84	3	0.2%
>28000	0	0	0.0%	>84	36	2.8%
TOTAL	1,717			TOTAL	1,277	

EVENT TYPES HPE 1,218 MPE 2110 DISE 12195


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

05-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.74 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.8 tons	85.8 tons	95.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	7.8 yd³	68.0 yd³	75.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	89.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	49,235 kBq	23,949 kBq	6,575 kBq
MAXIMUM/SORT	5,390 kBq	3,731 kBq	20 kBq
MINIMUM/SORT	2 kBq	(19,987)Bq	-12 kBq
SPECIFIC ACTIVITY		2,440 Bq/kg	77 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,711		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			162		06:07	06:08
NONE (AD=0 & MD=0 & MND>0)			1,115		08:40	15:27
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			434		15:31	
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			2			
2-SEC COUNT PERIODS				17,110		
2-SEC RECORDS WITH SORTS			1,503			
2-SEC RECORDS WITHOUT SORTS			15,607			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,214		
NONPROCESSING RECORDS (Test, calibration, etc)				7		
2-SEC SORT DETECTORS						
1 DET	1,040	69.2%	5 DET	9	0.6%	
2 DET	364	24.2%	6 DET	0	0.0%	
3 DET	73	4.9%	7 DET	1	0.1%	
4 DET	17	1.1%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			32.9 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	47	6.4%
2	148	20.1%
3	134	18.2%
4	155	21.0%
5	128	17.3%
6	75	10.2%
7	35	4.7%
8	16	2.2%
TOTAL	738	

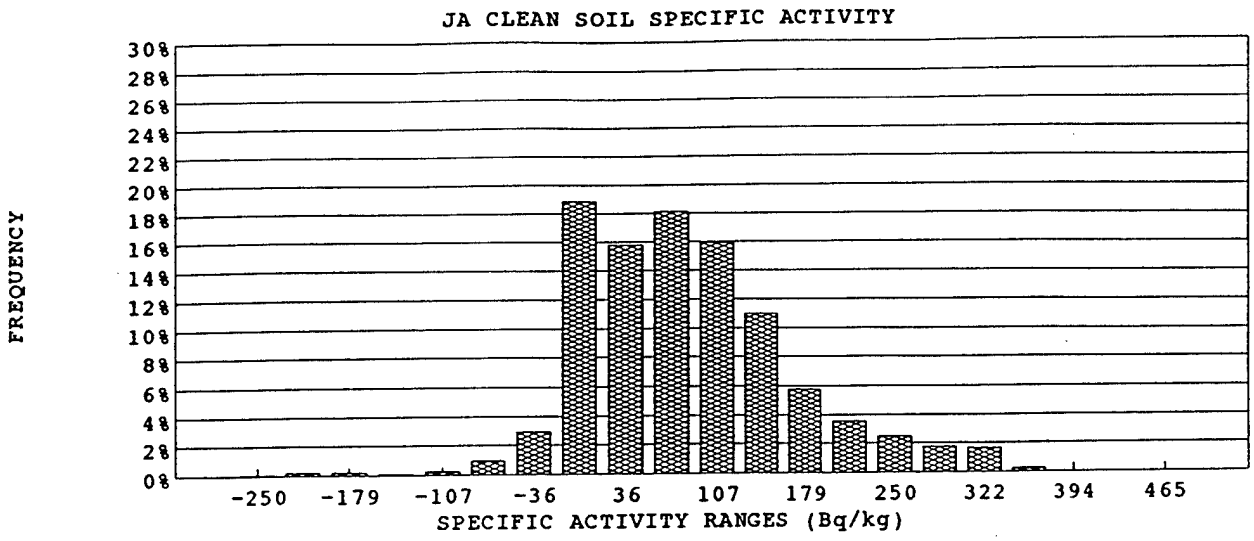
2-GATE SORTS DET	SORTS	FREQ%
9	100	13.1%
10	169	22.1%
11	161	21.0%
12	154	20.1%
13	112	14.6%
14	43	5.6%
15	26	3.4%
TOTAL	765	

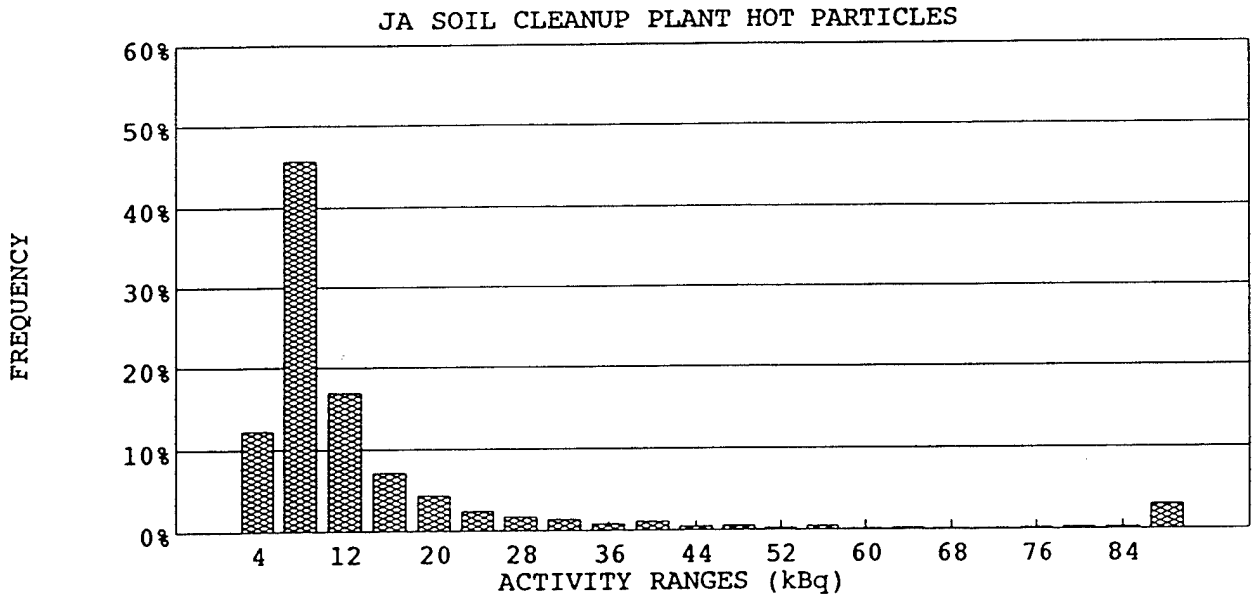
ACT_ND (Bq)	NUM (#)
-14000	1
-12000	4
-10000	4
-8000	2
-6000	5
-4000	17
-2000	50
0	324
2000	271
4000	311
6000	273
8000	189
10000	99
12000	61
14000	43
16000	30
18000	29
20000	5
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,718

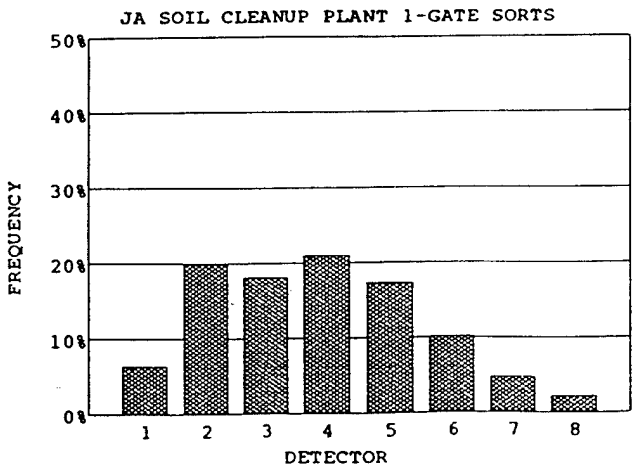
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.2%
-179	0.2%
-143	0.1%
-107	0.3%
-72	1.0%
-36	2.9%
0	18.9%
36	15.8%
72	18.1%
107	15.9%
143	11.0%
179	5.8%
215	3.6%
250	2.5%
286	1.7%
322	1.7%
358	0.3%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

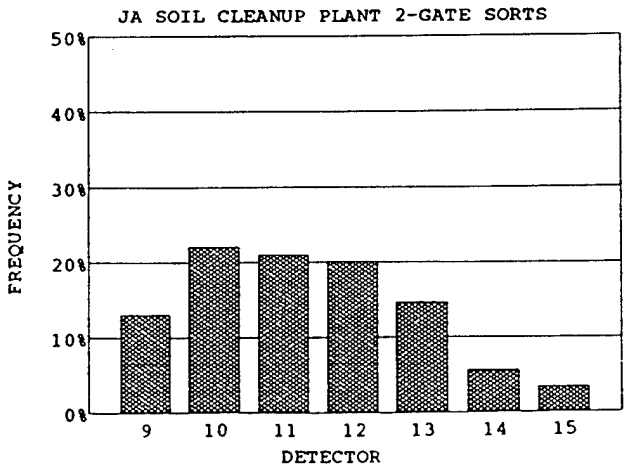
ACT_P (kBq)	NUM (#)	FREQ%
4	184	12.2%
8	687	45.7%
12	254	16.9%
16	107	7.1%
20	66	4.4%
24	37	2.5%
28	26	1.7%
32	21	1.4%
36	12	0.8%
40	17	1.1%
44	8	0.5%
48	9	0.6%
52	4	0.3%
56	7	0.5%
60	2	0.1%
64	3	0.2%
68	1	0.1%
72	1	0.1%
76	3	0.2%
80	4	0.3%
84	4	0.3%
>84	46	3.1%
TOTAL	1,503	

EVENT TYPES	HPE	MPE	DISE
	1,458	2108	10477


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 06–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.2 hr	10.2 hr	0.0 hr	0.0 hr	20.3 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:27	06:28	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:04	16:04	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	8.7 hr	8.8 hr	0.0 hr	0.0 hr	17.4 hr
DOWN–TIME	1.5 hr	1.4 hr	0.0 hr	0.0 hr	2.9 hr
SYSTEM PAUSE	1.0 hr	0.9 hr	0.0 hr	0.0 hr	2.0 hr
SORTER NONAVAILABLE TIME	0.3 hr	0.3 hr	10.0 hr	10.0 hr	20.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					85.8%
PRODUCTIVTY					41.5%

PRODUCTIVITY

Date	06–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	171	Excused delays for contract (sorter–hrs)	2,822 hr
Current Contract week	29	Excused delay days (plant–days)	71 days
		Excused delay months (plant–month)	2.71 months
Soil production for Day	176 MT		
Cumlative Soil Production for Week	367 MT	Percent of contract completed	38.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,739 MT
Since 6 Sep 93	37,347 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	38,938 MT		
Total Soil production for project	65,225 MT		

MT = metric tons

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SORTER 1

06-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	68.0 tons	19.4 tons	87.4 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	53.9 yd³	15.4 yd³	69.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	22.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	176,569 kBq	121,595 kBq	2,788 kBq
MAXIMUM/SORT	12,333 kBq	9,712 kBq	20 kBq
MINIMUM/SORT	2 kBq	(34,086)Bq	-21 kBq
SPECIFIC ACTIVITY		1,788 Bq/kg	144 Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,563		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1,206			10:21	08:17
NONE (AD=0 & MD=0 & MND>0)			145			12:36	09:10
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			212			12:37	10:02
UNEXPLAINED RECORDS			0			12:38	10:03
0<AD<1kBq & MD>0			0			13:40	10:41
AD=0 & MD>0			1			13:40	10:43
AD<0 & MD >0			7			14:30	11:16
2-SEC COUNT PERIODS					15,630	15:24	12:31
2-SEC RECORDS WITH SORTS			6,659				12:37
2-SEC RECORDS WITHOUT SORTS			8,971				12:57
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					8,222		13:00
NONPROCESSING RECORDS (Test, calibration, etc)					2		13:20
2-SEC SORT DETECTORS							13:22
1 DET	4,516	67.8%	5 DET		33	0.5%	13:34
2 DET	1,604	24.1%	6 DET		0	0.0%	14:27
3 DET	397	6.0%	7 DET		3	0.0%	15:21
4 DET	109	1.6%	8 DET		0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			6.9 sec				

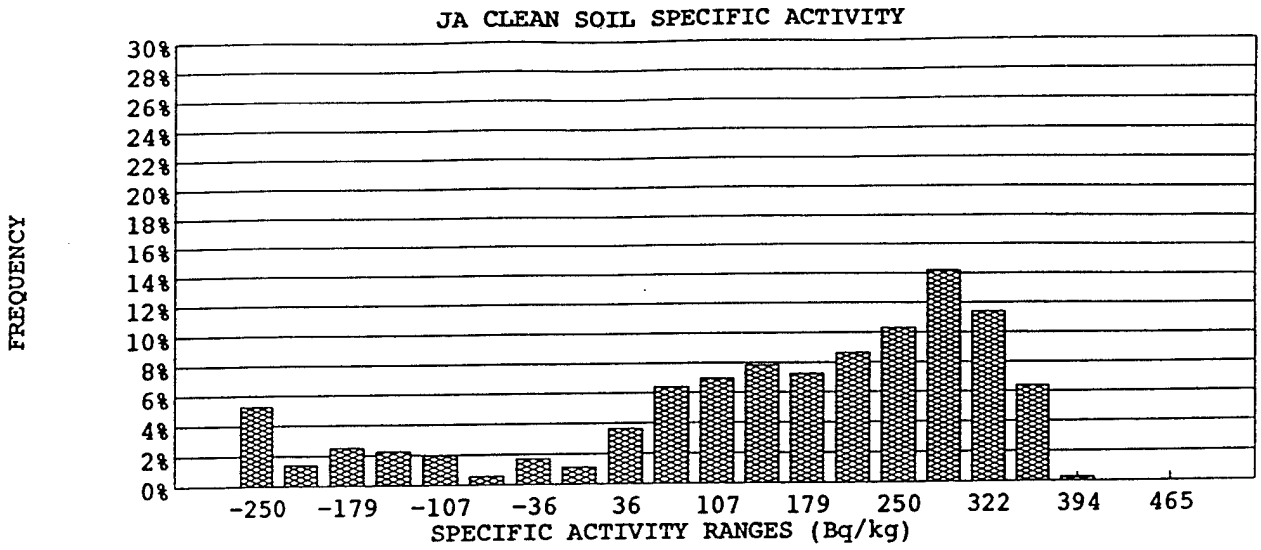
FREQUENCY DISTRIBUTIONS

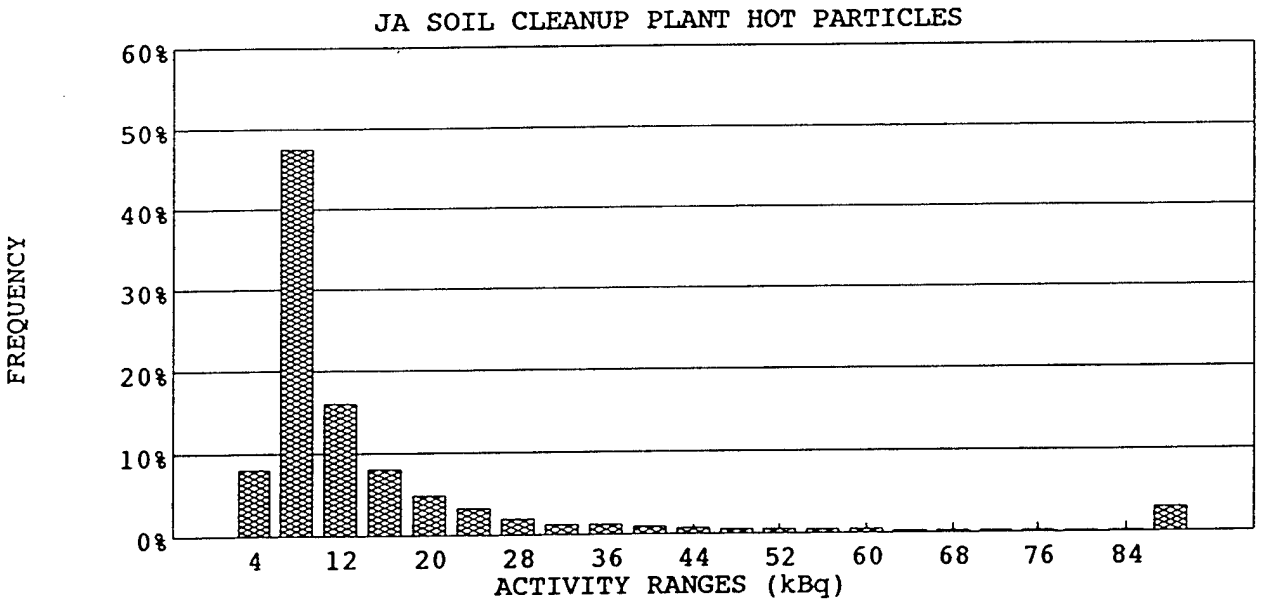
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	90	2.7%	-14000	19	-250	5.3%	4	539	8.1%
2	472	13.9%	-12000	5	-215	1.4%	8	3,161	47.5%
3	659	19.4%	-10000	9	-179	2.5%	12	1,066	16.0%
4	659	19.4%	-8000	8	-143	2.2%	16	537	8.1%
5	670	19.7%	-6000	7	-107	1.9%	20	325	4.9%
6	430	12.7%	-4000	2	-72	0.6%	24	215	3.2%
7	349	10.3%	-2000	6	-36	1.7%	28	126	1.9%
8	64	1.9%	0	4	0	1.1%	32	81	1.2%
TOTAL	3,393		2000	13	36	3.6%	36	82	1.2%
			4000	23	72	6.4%	40	60	0.9%
2-GATE SORTS			6000	25	107	7.0%	44	47	0.7%
DET	SORTS	FREQ%	8000	28	143	7.8%	48	37	0.6%
9	244	7.5%	10000	26	179	7.2%	52	39	0.6%
10	549	16.8%	12000	31	215	8.6%	56	32	0.5%
11	652	20.0%	14000	37	250	10.3%	60	31	0.5%
12	703	21.5%	16000	51	286	14.2%	64	18	0.3%
13	587	18.0%	18000	41	322	11.4%	68	15	0.2%
14	349	10.7%	20000	23	358	6.4%	72	14	0.2%
15	182	5.6%	22000	1	394	0.3%	76	17	0.3%
TOTAL	3,266		24000	0	429	0.0%	80	13	0.2%
			26000	0	465	0.0%	84	9	0.1%
			>28000	0	0	0.0%	>84	195	2.9%
			TOTAL	359			TOTAL	6,659	

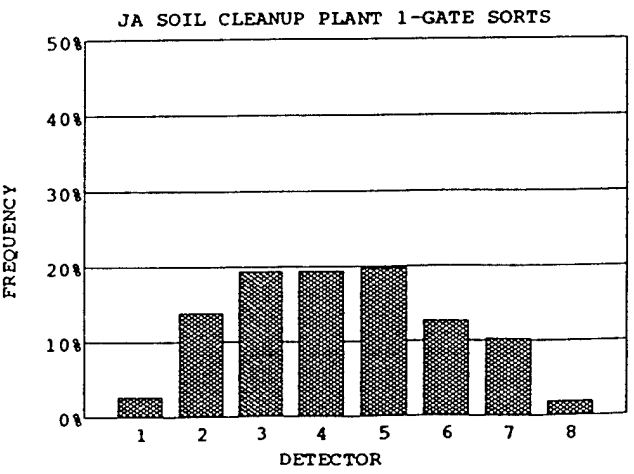
EVENT TYPES HPE 6,126 MPE 14,669 DISE 76,527

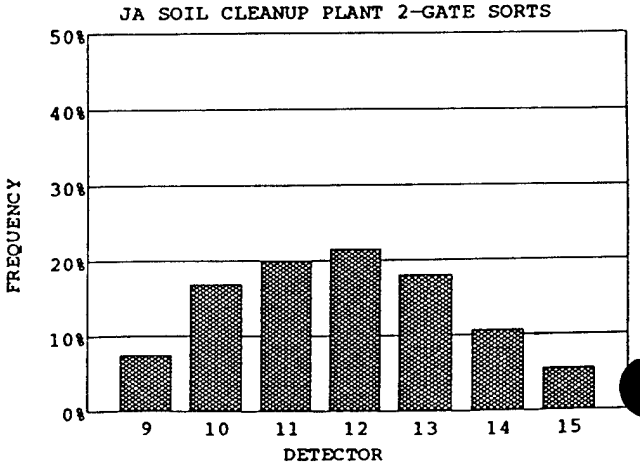
SORTER 1

06-Apr-94









SORTER 2

06-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	66.4 tons	21.7 tons	88.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	52.7 yd³	17.2 yd³	69.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	24.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	142,457 kBq	104,394 kBq	3,113 kBq
MAXIMUM/SORT	3,367 kBq	2,568 kBq	20 kBq
MINIMUM/SORT	2 kBq	(20,795)Bq	-19 kBq
SPECIFIC ACTIVITY		1,571 Bq/kg	144 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,576		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1,175		10:21	08:17
NONE (AD=0 & MD=0 & MND>0)	148		12:36	09:09
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	252		12:37	10:02
UNEXPLAINED RECORDS	1		12:38	10:43
0<AD<1kBq & MD>0	0		13:40	11:17
AD=0 & MD>0	0		13:40	12:32
AD<0 & MD >0	11		13:42	12:37
2-SEC COUNT PERIODS		15,760	14:30	13:34
2-SEC RECORDS WITH SORTS	6,754		15:24	13:41
2-SEC RECORDS WITHOUT SORTS	9,006		15:25	14:27
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		8,330	16:03	15:21
NONPROCESSING RECORDS (Test, calibration, etc)		5		15:25

2-SEC SORT DETECTORS					
1 DET	4,597	68.1%	5 DET	31	0.5%
2 DET	1,600	23.7%	6 DET	0	0.0%
3 DET	424	6.3%	7 DET	2	0.0%
4 DET	102	1.5%	8 DET	1	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 6.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

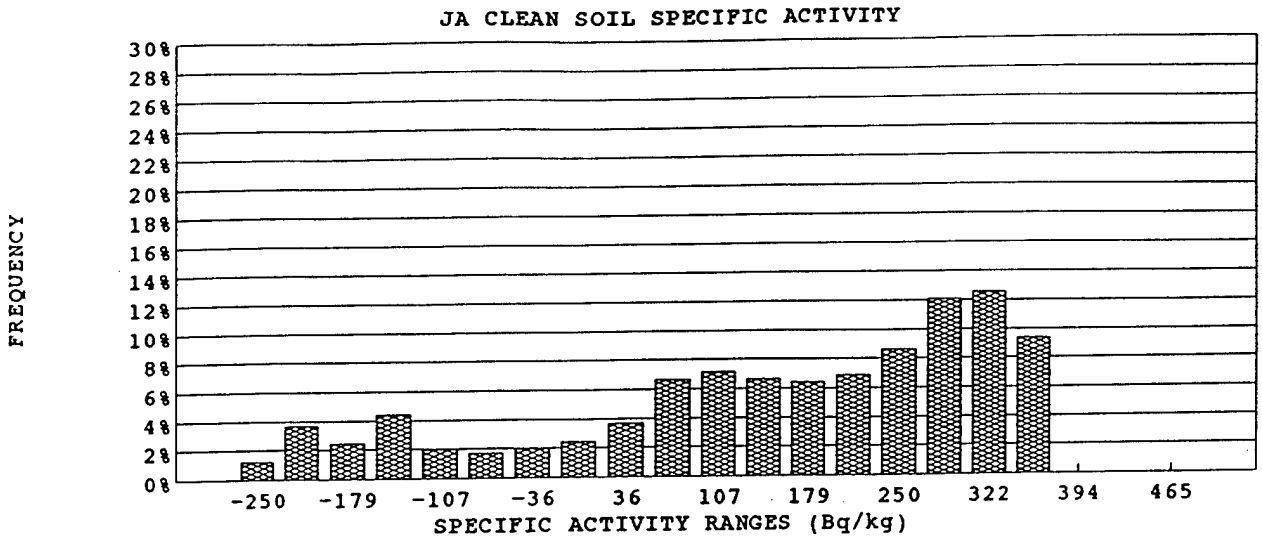
DET	SORTS	FREQ%
1	192	5.6%
2	724	21.2%
3	658	19.3%
4	635	18.6%
5	580	17.0%
6	376	11.0%
7	206	6.0%
8	40	1.2%
TOTAL	3,411	

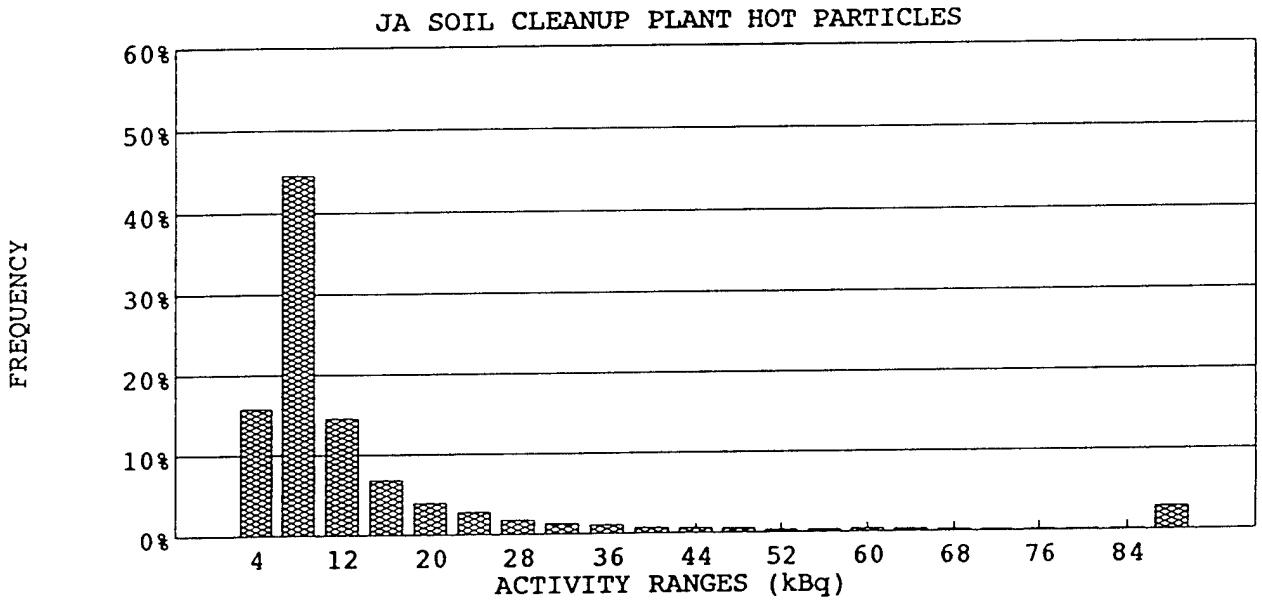
2-GATE SORTS

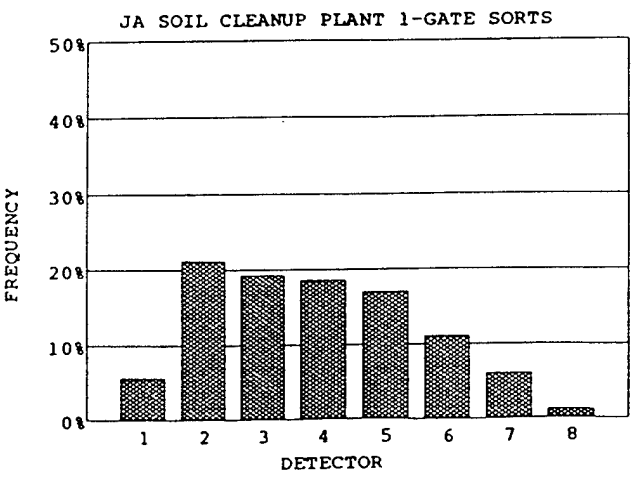
DET	SORTS	FREQ%
9	435	13.0%
10	746	22.3%
11	688	20.6%
12	616	18.4%
13	481	14.4%
14	269	8.0%
15	108	3.2%
TOTAL	3,343	

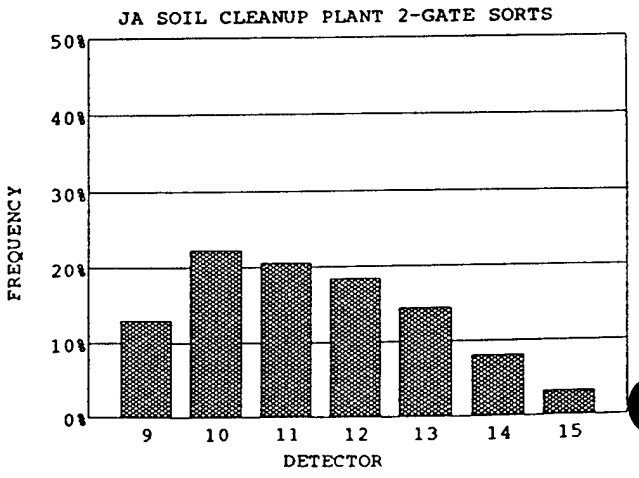
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	5	-250	1.2%	4	1,068	15.8%
-12000	15	-215	3.7%	8	3,009	44.6%
-10000	10	-179	2.5%	12	983	14.6%
-8000	18	-143	4.4%	16	459	6.8%
-6000	8	-107	2.0%	20	270	4.0%
-4000	7	-72	1.7%	24	192	2.8%
-2000	8	-36	2.0%	28	122	1.8%
0	10	0	2.5%	32	88	1.3%
2000	15	36	3.7%	36	73	1.1%
4000	27	72	6.7%	40	50	0.7%
6000	29	107	7.1%	44	41	0.6%
8000	27	143	6.7%	48	38	0.6%
10000	26	179	6.4%	52	23	0.3%
12000	28	215	6.9%	56	22	0.3%
14000	35	250	8.6%	60	29	0.4%
16000	49	286	12.1%	64	23	0.3%
18000	51	322	12.6%	68	18	0.3%
20000	38	358	9.4%	72	15	0.2%
22000	0	394	0.0%	76	12	0.2%
24000	0	429	0.0%	80	11	0.2%
26000	0	465	0.0%	84	11	0.2%
>28000	0	0	0.0%	>84	197	2.9%
TOTAL	406			TOTAL	6,754	

EVENT TYPES HPE 6,350 MPE 15,051 DISE 73,683


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 07–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.0 hr	10.0 hr	0.0 hr	0.0 hr	20.0 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:17	06:17	NA	NA	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
SORTER SHUT–DOWN	16:10	16:10	NA	NA	
END SOIL PROCESSING	15:51	15:50	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	8.9 hr	8.9 hr	0.0 hr	0.0 hr	17.7 hr
DOWN–TIME	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.3 hr
SYSTEM PAUSE	0.8 hr	0.8 hr	0.0 hr	0.0 hr	1.6 hr
SORTER NONAVAILABLE TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.7%
PRODUCTIVTY					42.2%

PRODUCTIVITY

Date	07–Apr–94
Contract day (from 6 Sep)	172
Current Contract week	29
Soil production for Day	178 MT
Cumlative Soil Production for Week	546 MT
Total Soil production for contract	
Since 6 Sep 93	37,525 MT
Since 6 Aug 93	39,116 MT
Total Soil production for project	65,403 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,842 hr
Excused delay days (plant–days)	71 days
Excused delay months (plant–month)	2.73 months
Percent of contract completed	39.1%
Tons Ahead or Behind Schedule	1,760 MT
Days ahead or behind schedule	6 days

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SORTER 1

07-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	82.5 tons	6.8 tons	89.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	22.4 kg	
VOLUME IN-GROUND	65.4 yd³	5.4 yd³	70.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	7.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	186,250 kBq	156,028 kBq	(154)kBq
MAXIMUM/SORT	10,745 kBq	6,521 kBq	20 kBq
MINIMUM/SORT	2 kBq	(25,426)Bq	-23 kBq
SPECIFIC ACTIVITY		1,892 Bq/kg	(23)Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,596			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1,470			07:06	07:01
NONE (AD=0 & MD=0 & MND>0)			71			07:55	07:03
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			55			08:39	07:06
UNEXPLAINED RECORDS		0				08:40	07:52
0<AD<1kBq & MD>0		0				09:25	08:37
AD=0 & MD>0		2				10:03	08:40
AD<0 & MD >0		10				10:05	09:23
2-SEC COUNT PERIODS				15,960		10:51	09:59
2-SEC RECORDS WITH SORTS			7,812			10:52	10:03
2-SEC RECORDS WITHOUT SORTS			8,148			12:34	10:49
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				9,408		12:35	10:51
NONPROCESSING RECORDS (Test, calibration, etc)				0		13:56	11:32
2-SEC SORT DETECTORS							
1 DET	5,381	68.9%	5 DET	41	0.5%		12:28
2 DET	1,807	23.1%	6 DET	0	0.0%		12:34
3 DET	460	5.9%	7 DET	2	0.0%		13:52
4 DET	123	1.6%	8 DET	0	0.0%		15:12
AVERAGE TIME BETWEEN 2-SEC SORTS			6.2 sec				

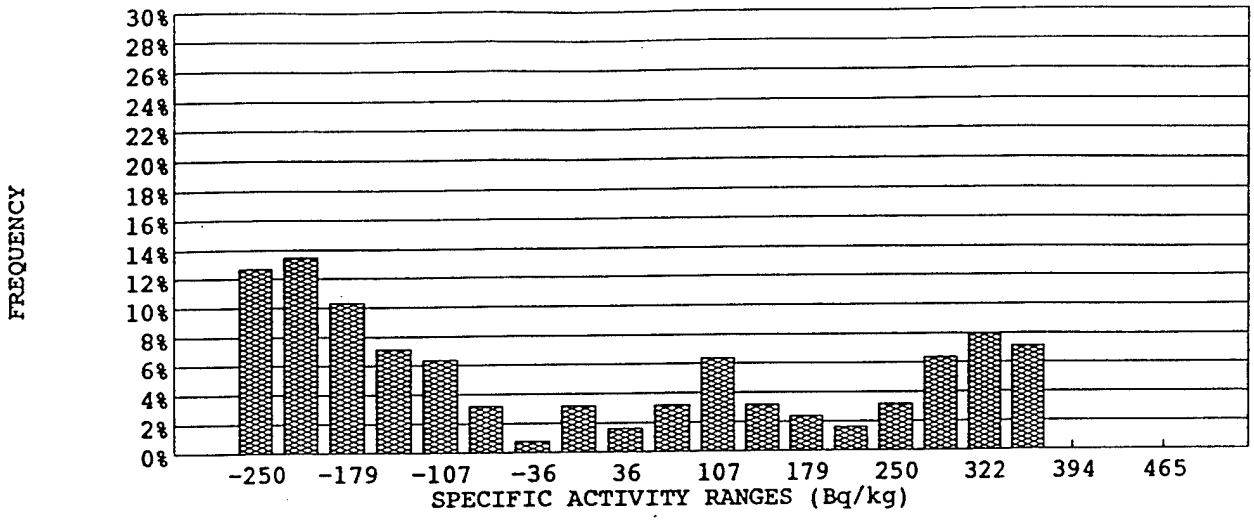
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	106	2.7%	-14000	16	-250	12.7%	4	965	12.4%
2	641	16.1%	-12000	17	-215	13.5%	8	3,865	49.5%
3	757	19.0%	-10000	13	-179	10.3%	12	1,182	15.1%
4	760	19.1%	-8000	9	-143	7.1%	16	490	6.3%
5	788	19.8%	-6000	8	-107	6.3%	20	277	3.5%
6	503	12.6%	-4000	4	-72	3.2%	24	186	2.4%
7	355	8.9%	-2000	1	-36	0.8%	28	133	1.7%
8	74	1.9%	0	4	0	3.2%	32	108	1.4%
TOTAL	3,984		2000	2	36	1.6%	36	57	0.7%
			4000	4	72	3.2%	40	51	0.7%
2-GATE SORTS			6000	8	107	6.3%	44	63	0.8%
DET	SORTS	FREQ%	8000	4	143	3.2%	48	39	0.5%
9	365	9.5%	10000	3	179	2.4%	52	31	0.4%
10	667	17.4%	12000	2	215	1.6%	56	25	0.3%
11	770	20.1%	14000	4	250	3.2%	60	27	0.3%
12	758	19.8%	16000	8	286	6.3%	64	21	0.3%
13	664	17.3%	18000	10	322	7.9%	68	14	0.2%
14	394	10.3%	20000	9	358	7.1%	72	20	0.3%
15	210	5.5%	22000	0	394	0.0%	76	19	0.2%
TOTAL	3,828		24000	0	429	0.0%	80	6	0.1%
			26000	0	465	0.0%	84	10	0.1%
			>28000	0	0	0.0%	>84	223	2.9%
			TOTAL	126			TOTAL	7,812	
EVENT TYPES		HPE	7,520	MPE	26,299	DISE	84,195		

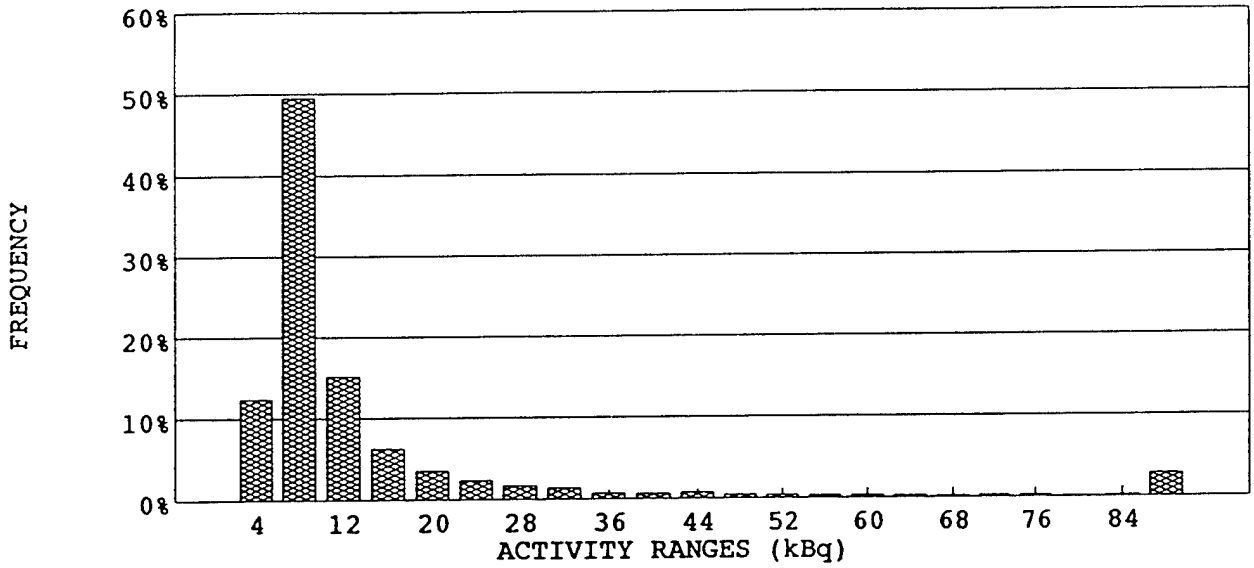
SORTER 1

07-Apr-94

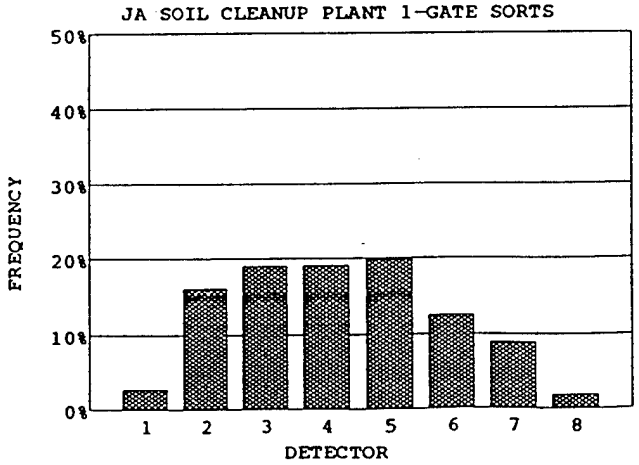
JA CLEAN SOIL SPECIFIC ACTIVITY



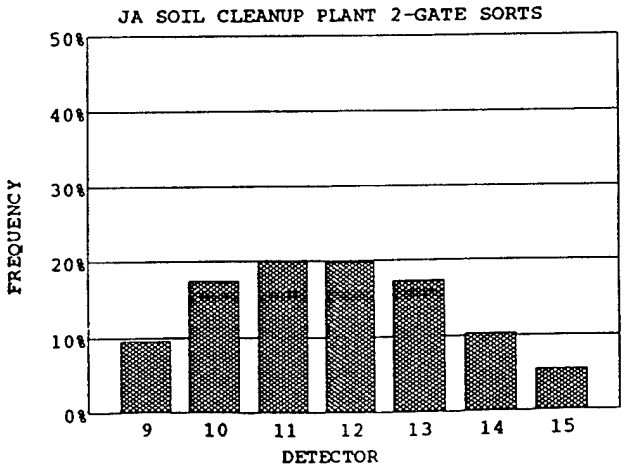
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

07-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	78.9 tons	10.3 tons	89.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	42.6 kg	
VOLUME IN-GROUND	62.5 yd³	8.2 yd³	70.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	11.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	133,606 kBq	126,230 kBq	117 kBq
MAXIMUM/SORT	5,504 kBq	2,351 kBq	20 kBq
MINIMUM/SORT	2 kBq	(27,581)Bq	-17 kBq
SPECIFIC ACTIVITY		1,600 Bq/kg	11 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,596		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1,406		07:06	07:03
NONE (AD=0 & MD=0 & MND>0)			113		07:08	07:07
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			77		07:55	07:52
UNEXPLAINED RECORDS			0		08:39	08:37
0<AD<1kBq & MD>0			0		08:40	09:23
AD=0 & MD>0			1		09:25	09:56
AD<0 & MD >0			10		10:03	10:04
2-SEC COUNT PERIODS				15,960	10:05	10:48
2-SEC RECORDS WITH SORTS			7,482		10:51	11:32
2-SEC RECORDS WITHOUT SORTS			8,478		12:34	12:28
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				9,078	12:35	13:53
NONPROCESSING RECORDS (Test, calibration, etc)				6	13:56	15:12

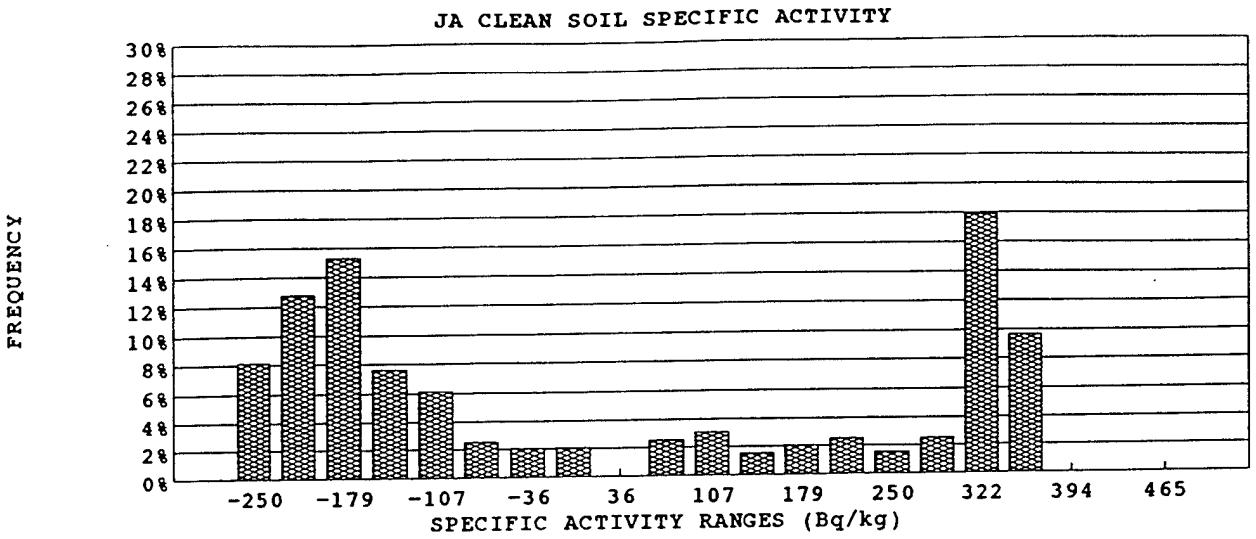
2-SEC SORT DETECTORS					
1 DET	5,166	69.0%	5 DET	27	0.4%
2 DET	1,769	23.6%	6 DET	0	0.0%
3 DET	423	5.7%	7 DET	0	0.0%
4 DET	97	1.3%	8 DET	0	0.0%

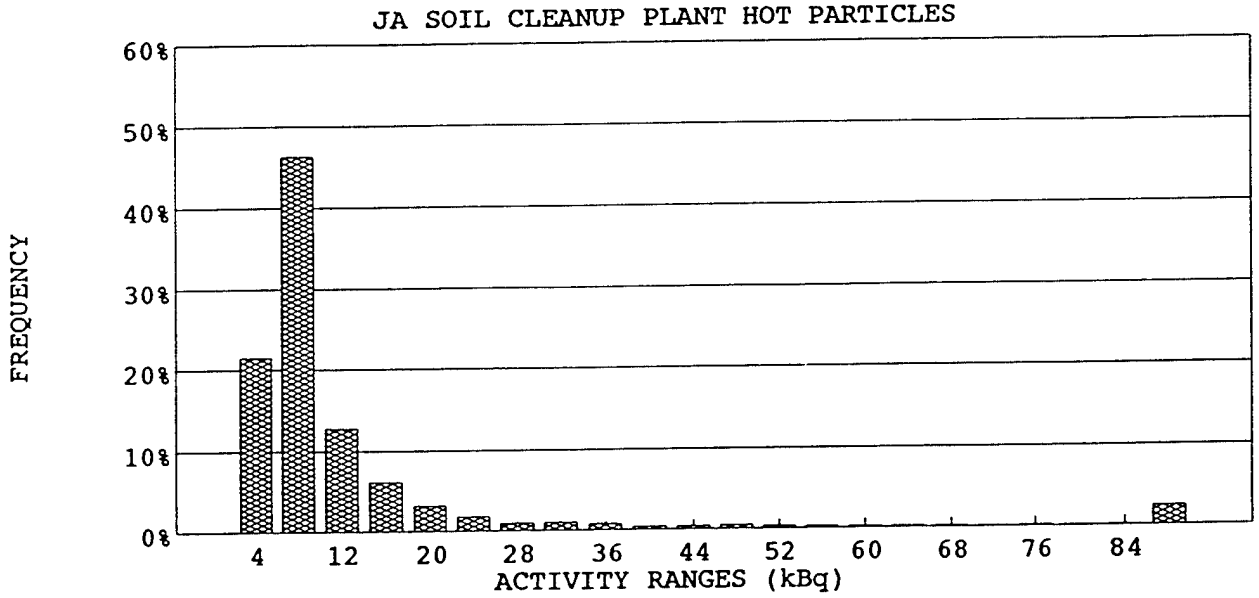
AVERAGE TIME BETWEEN 2-SEC SORTS 6.5 sec

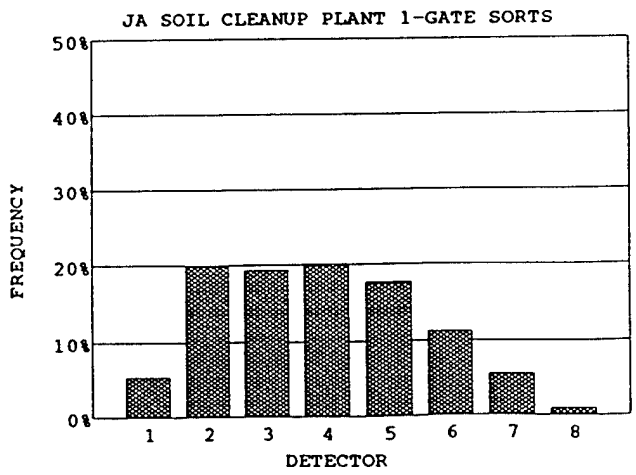
FREQUENCY DISTRIBUTIONS

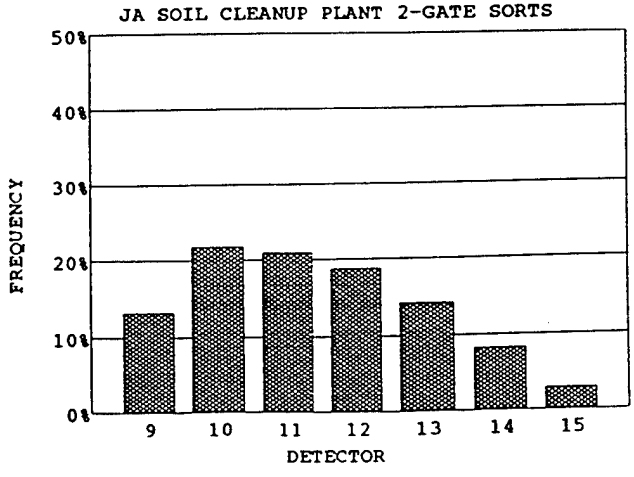
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	201	5.4%	-14000	16	-250	8.2%	4	1,607	21.5%
2	740	19.9%	-12000	25	-215	12.8%	8	3,466	46.3%
3	720	19.3%	-10000	30	-179	15.3%	12	959	12.8%
4	750	20.1%	-8000	15	-143	7.7%	16	458	6.1%
5	660	17.7%	-6000	12	-107	6.1%	20	238	3.2%
6	417	11.2%	-4000	5	-72	2.6%	24	136	1.8%
7	205	5.5%	-2000	4	-36	2.0%	28	73	1.0%
8	33	0.9%	0	4	0	2.0%	32	78	1.0%
TOTAL	3,726		2000	0	36	0.0%	36	59	0.8%
			4000	5	72	2.6%	40	33	0.4%
2-GATE SORTS			6000	6	107	3.1%	44	32	0.4%
DET	SORTS	FREQ%	8000	3	143	1.5%	48	36	0.5%
9	497	13.2%	10000	4	179	2.0%	52	26	0.3%
10	818	21.8%	12000	5	215	2.6%	56	20	0.3%
11	787	21.0%	14000	3	250	1.5%	60	14	0.2%
12	704	18.7%	16000	5	286	2.6%	64	14	0.2%
13	535	14.2%	18000	35	322	17.9%	68	16	0.2%
14	309	8.2%	20000	19	358	9.7%	72	9	0.1%
15	106	2.8%	22000	0	394	0.0%	76	12	0.2%
TOTAL	3,756		24000	0	429	0.0%	80	8	0.1%
			26000	0	465	0.0%	84	10	0.1%
			>28000	0	0	0.0%	>84	178	2.4%
			TOTAL	196			TOTAL	7,482	

EVENT TYPES	HPE	7,211	MPE	24,114	DISE	81,587


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 08–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.7 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:10	06:38	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.6 hr	0.0 hr	0.0 hr	0.8 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:03	16:04	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	9.1 hr	9.0 hr	0.0 hr	0.0 hr	18.0 hr
DOWN–TIME	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.6 hr
SYSTEM PAUSE	0.9 hr	0.5 hr	0.0 hr	0.0 hr	1.4 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					87.3%
PRODUCTIVTY					43.0%

PRODUCTIVITY

Date	08–Apr–94
Contract day (from 6 Sep)	173
Current Contract week	29
Soil production for Day	182 MT
Cumlative Soil Production for Week	727 MT
Total Soil production for contract	
Since 6 Sep 93	37,707 MT
Since 6 Aug 93	39,298 MT
Total Soil production for project	65,585 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	2,862 hr
Excused delay days (plant–days)	72 days
Excused delay months (plant–month)	2.75 months
Percent of contract completed	39.3%
Tons Ahead or Behind Schedule	1,783 MT
Days ahead or behind schedule	6 days

MT = metric tons

SORTER 1

08-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.70 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	42.8 tons	48.3 tons	91.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	33.9 yd³	38.3 yd³	72.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	53.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	67,844 kBq	51,714 kBq	9,961 kBq
MAXIMUM/SORT	2,032 kBq	1,466 kBq	20 kBq
MINIMUM/SORT	2 kBq	(31,923)Bq	-35 kBq
SPECIFIC ACTIVITY		1,209 Bq/kg	206 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,629		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	727		06:10	06:10
NONE (AD=0 & MD=0 & MND>0)	146		07:25	07:22
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	756		15:36	08:22
UNEXPLAINED RECORDS	0		15:37	09:43
0<AD<1kBq & MD>0	0			11:15
AD=0 & MD>0	0			15:11
AD<0 & MD >0	4			15:34
2-SEC COUNT PERIODS		16,290		15:37
2-SEC RECORDS WITH SORTS	4,342			
2-SEC RECORDS WITHOUT SORTS	11,948			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,971		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

1 DET	3,126	72.0%	5 DET	12	0.3%
2 DET	951	21.9%	6 DET	0	0.0%
3 DET	200	4.6%	7 DET	1	0.0%
4 DET	53	1.2%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 11.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	55	2.5%
2	305	13.8%
3	401	18.2%
4	445	20.1%
5	449	20.3%
6	300	13.6%
7	201	9.1%
8	53	2.4%
TOTAL	2,209	

2-GATE SORTS

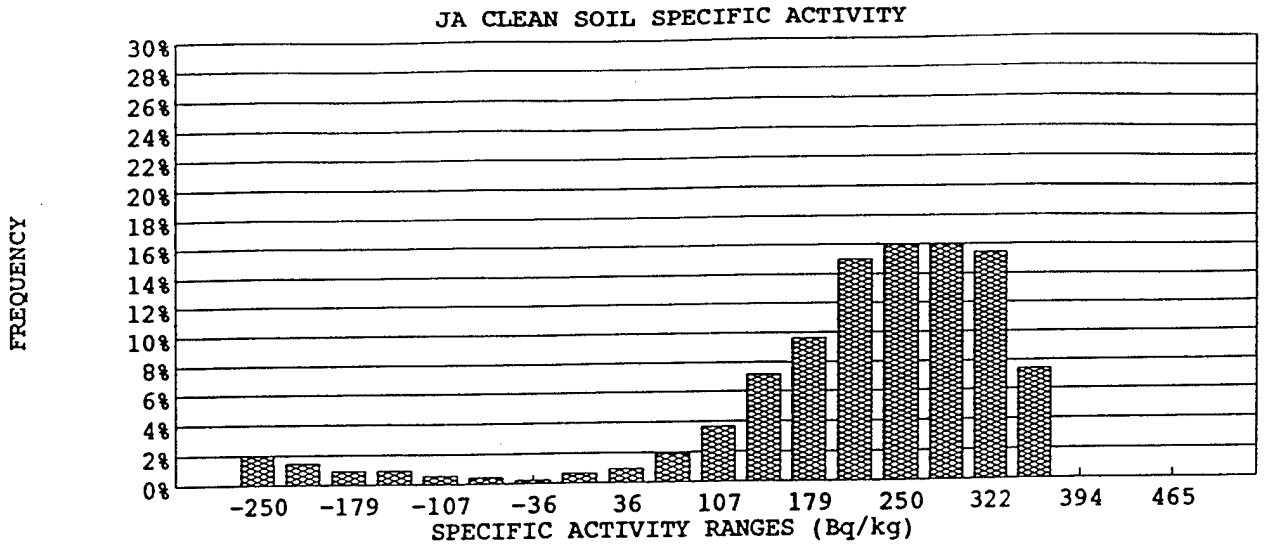
DET	SORTS	FREQ%
9	151	7.1%
10	364	17.1%
11	427	20.0%
12	445	20.9%
13	398	18.7%
14	214	10.0%
15	134	6.3%
TOTAL	2,133	

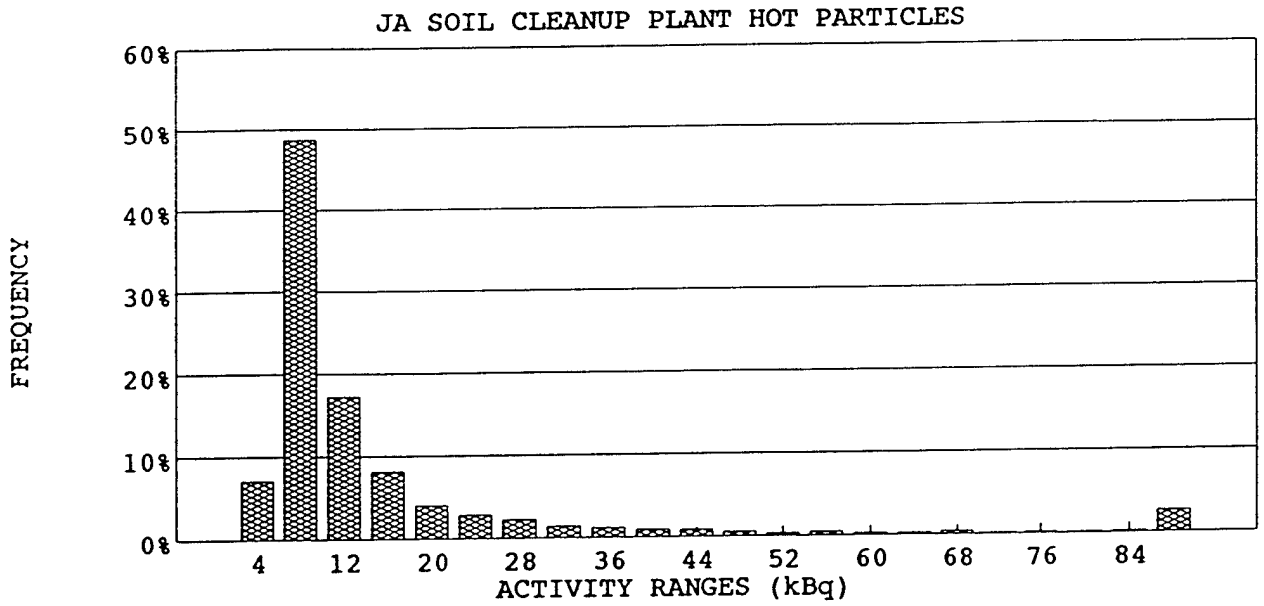
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	18	-250	2.0%	4	309	7.1%
-12000	13	-215	1.4%	8	2,114	48.7%
-10000	8	-179	0.9%	12	747	17.2%
-8000	8	-143	0.9%	16	355	8.2%
-6000	5	-107	0.6%	20	175	4.0%
-4000	4	-72	0.4%	24	123	2.8%
-2000	2	-36	0.2%	28	96	2.2%
0	6	0	0.7%	32	61	1.4%
2000	8	36	0.9%	36	51	1.2%
4000	17	72	1.9%	40	40	0.9%
6000	33	107	3.6%	44	38	0.9%
8000	65	143	7.2%	48	23	0.5%
10000	87	179	9.6%	52	14	0.3%
12000	136	215	15.0%	56	21	0.5%
14000	145	250	16.0%	60	11	0.3%
16000	145	286	16.0%	64	10	0.2%
18000	140	322	15.4%	68	17	0.4%
20000	67	358	7.4%	72	4	0.1%
22000	0	394	0.0%	76	8	0.2%
24000	0	429	0.0%	80	4	0.1%
26000	0	465	0.0%	84	8	0.2%
>28000	0	0	0.0%	>84	113	2.6%
TOTAL	907			TOTAL	4,342	

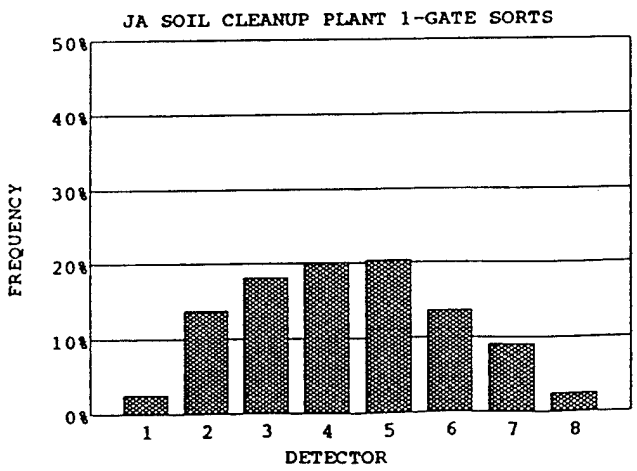
EVENT TYPES						
	HPE	4,259	MPE	4,804	DISE	52,160

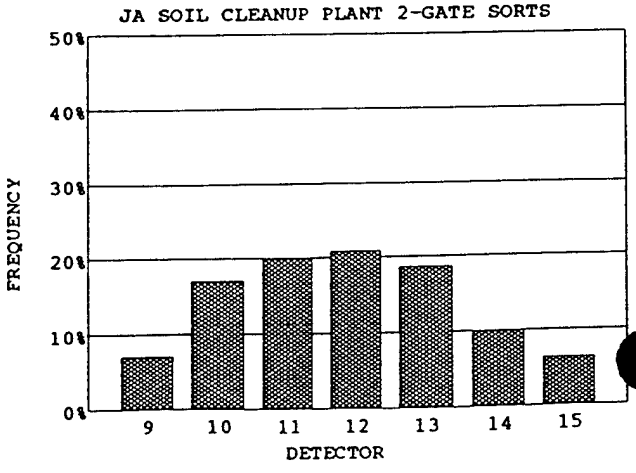
SORTER 1

08-Apr-









SORTER 2

08-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	38.0 tons	52.6 tons	90.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	30.1 yd³	41.7 yd³	71.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	58.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	61,067 kBq	43,848 kBq	12,079 kBq
MAXIMUM/SORT	1,475 kBq	840 kBq	21 kBq
MINIMUM/SORT	2 kBq	(3,392)Bq	-17 kBq
SPECIFIC ACTIVITY		1,155 Bq/kg	230 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,619		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			633		07:25	07:23
NONE (AD=0 & MD=0 & MND>0)			165		15:36	08:22
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			821		15:37	09:43
UNEXPLAINED RECORDS			0			11:15
0<AD<1kBq & MD>0			0			15:06
AD=0 & MD>0			1			15:08
AD<0 & MD >0			2			15:09
2-SEC COUNT PERIODS				16,190		15:10
2-SEC RECORDS WITH SORTS			4,222			15:15
2-SEC RECORDS WITHOUT SORTS			11,968			15:34
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,841		15:37
NONPROCESSING RECORDS (Test, calibration, etc)				2		

2-SEC SORT DETECTORS

1 DET	3,100	73.4%	5 DET	9	0.2%
2 DET	887	21.0%	6 DET	0	0.0%
3 DET	181	4.3%	7 DET	0	0.0%
4 DET	45	1.1%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 11.5 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	122	5.8%
2	386	18.3%
3	408	19.3%
4	421	19.9%
5	384	18.2%
6	251	11.9%
7	122	5.8%
8	21	1.0%
TOTAL	2,115	

2-GATE SORTS

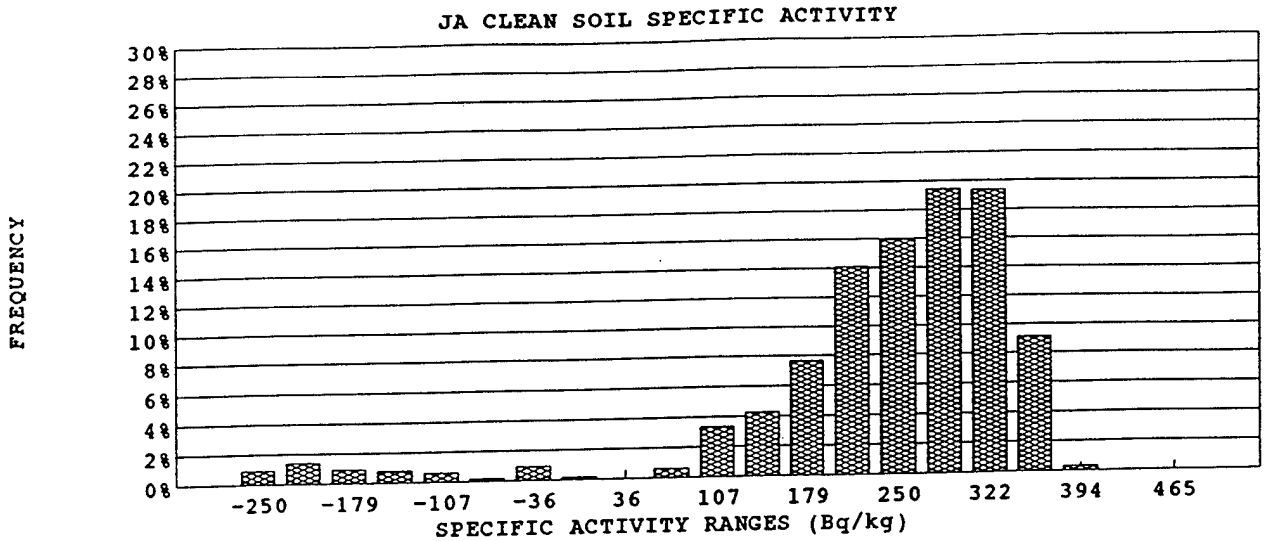
DET	SORTS	FREQ%
9	277	13.1%
10	443	21.0%
11	442	21.0%
12	387	18.4%
13	334	15.9%
14	163	7.7%
15	61	2.9%
TOTAL	2,107	

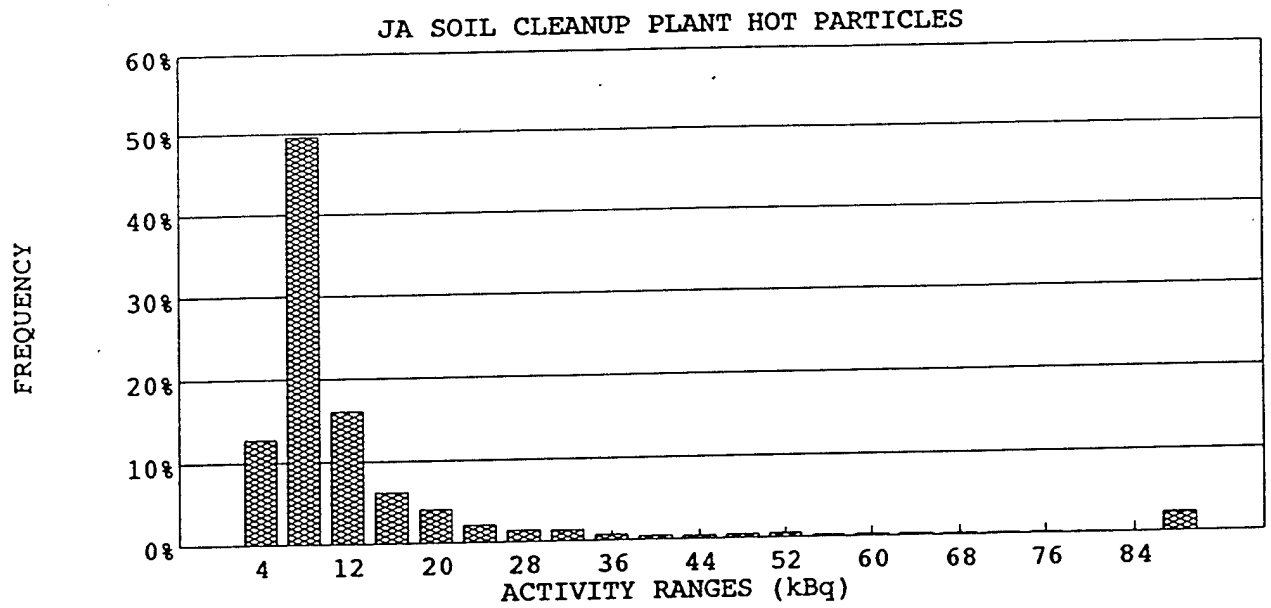
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	9	-250	0.9%	4	537	12.7%
-12000	14	-215	1.4%	8	2,092	49.5%
-10000	9	-179	0.9%	12	676	16.0%
-8000	8	-143	0.8%	16	262	6.2%
-6000	6	-107	0.6%	20	173	4.1%
-4000	2	-72	0.2%	24	91	2.2%
-2000	9	-36	0.9%	28	59	1.4%
0	2	0	0.2%	32	58	1.4%
2000	0	36	0.0%	36	31	0.7%
4000	6	72	0.6%	40	21	0.5%
6000	33	107	3.3%	44	18	0.4%
8000	42	143	4.3%	48	22	0.5%
10000	76	179	7.7%	52	24	0.6%
12000	139	215	14.1%	56	10	0.2%
14000	157	250	15.9%	60	10	0.2%
16000	192	286	19.4%	64	10	0.2%
18000	191	322	19.3%	68	8	0.2%
20000	90	358	9.1%	72	6	0.1%
22000	3	394	0.3%	76	9	0.2%
24000	0	429	0.0%	80	4	0.1%
26000	0	465	0.0%	84	1	0.0%
>28000	0	0	0.0%	>84	100	2.4%
TOTAL	988			TOTAL	4,222	

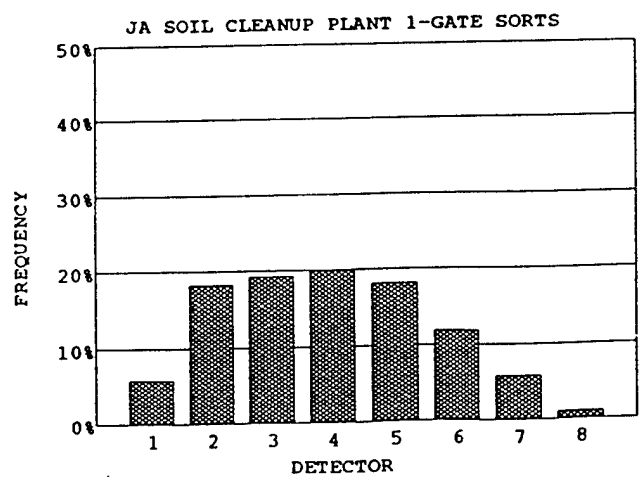
EVENT TYPES	HPE	MPE	DISE
	4,247	4,909	45,162

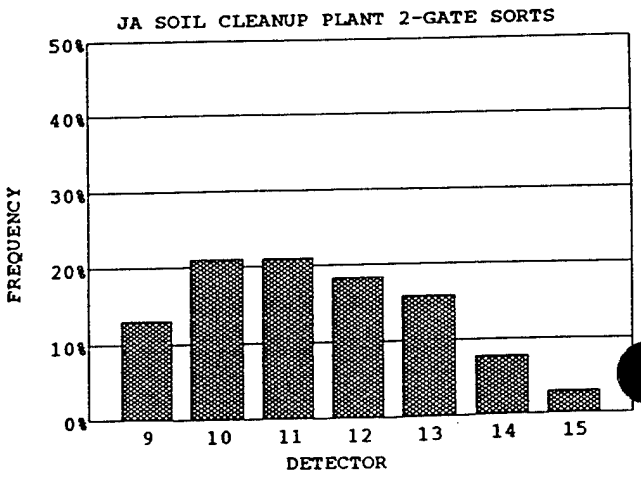
SORTER 2

08-Apr-









WORK HISTORY – JA SOIL CLEANUP PLANT 09–Apr–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	12:15 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	7.1 hr	7.1 hr	0.0 hr	0.0 hr	14.2 hr
SORTER START–UP	05:10	05:10	NA	NA	
START SOIL PROCESSING	05:24	05:23	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	12:15	12:15	NA	NA	
END SOIL PROCESSING	12:02	12:03	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
ACTUAL PROCESS HOURS	6.4 hr	6.4 hr	0.0 hr	0.0 hr	12.8 hr
DOWN–TIME	0.7 hr	0.6 hr	0.0 hr	0.0 hr	1.3 hr
SYSTEM PAUSE	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER NONAVAILABLE TIME	2.9 hr	2.9 hr	10.0 hr	10.0 hr	25.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					90.7%
PRODUCTIVTY					32.1%

PRODUCTIVITY

Date	09–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	174	Excused delays for contract (sorter–hrs)	2,882 hr
Current Contract week	29	Excused delay days (plant–days)	72 days
		Excused delay months (plant–month)	2.77 months
Soil production for Day	129 MT		
Cumlative Soil Production for Week	856 MT	Percent of contract completed	39.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,754 MT
Since 6 Sep 93	37,836 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	39,427 MT		
Total Soil production for project	65,714 MT		

MT = metric tons

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SORTER 1

09-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	32.3 tons	32.2 tons	64.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	25.6 yd³	25.5 yd³	51.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	49.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	63,981 kBq	44,108 kBq	7,015 kBq
MAXIMUM/SORT	2,807 kBq	1,673 kBq	20 kBq
MINIMUM/SORT	3 kBq	(31,034)Bq	-20 kBq
SPECIFIC ACTIVITY		1,364 Bq/kg	218 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,154		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			547		06:11	06:08
NONE (AD=0 & MD=0 & MND>0)			89		08:07	08:03
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			518		09:03	08:19
UNEXPLAINED RECORDS		0			10:40	08:22
0<AD<1kBq & MD>0		0				09:00
AD=0 & MD>0		1				10:36
AD<0 & MD >0		3				
2-SEC COUNT PERIODS				11,540		
2-SEC RECORDS WITH SORTS			4,101			
2-SEC RECORDS WITHOUT SORTS			7,439			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,255		
NONPROCESSING RECORDS (Test, calibration, etc)				4		

2-SEC SORT DETECTORS

1 DET	2,889	70.4%	5 DET	15	0.4%
2 DET	909	22.2%	6 DET	0	0.0%
3 DET	239	5.8%	7 DET	1	0.0%
4 DET	49	1.2%	8 DET	1	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	37	1.8%
2	256	12.2%
3	385	18.3%
4	428	20.3%
5	446	21.2%
6	303	14.4%
7	204	9.7%
8	45	2.1%
TOTAL	2,104	

2-GATE SORTS

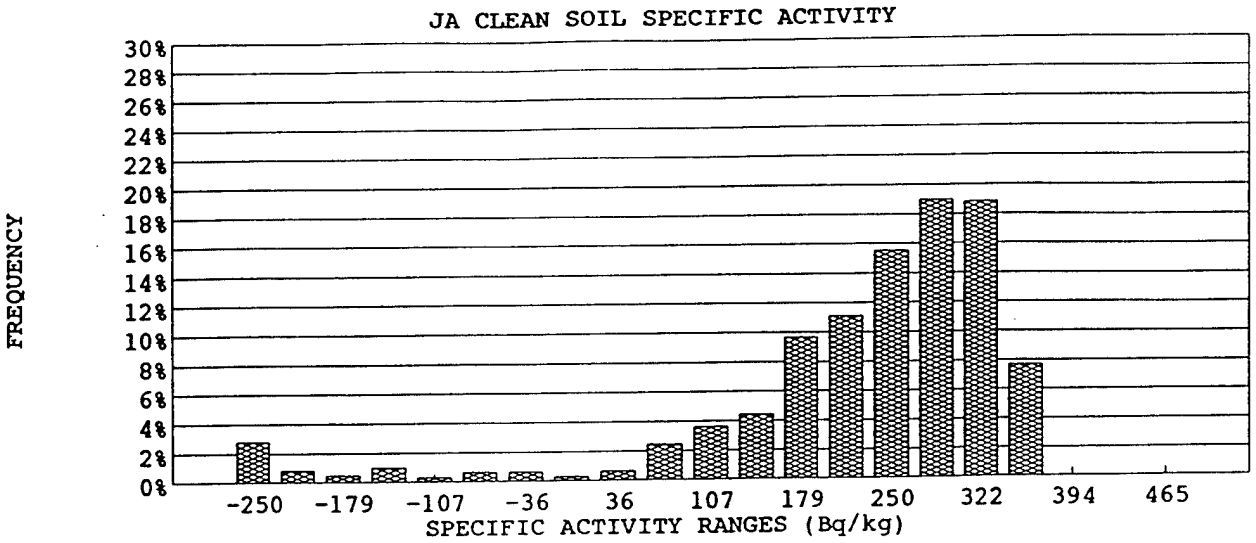
DET	SORTS	FREQ%
9	111	5.6%
10	320	16.0%
11	424	21.2%
12	401	20.1%
13	396	19.8%
14	232	11.6%
15	113	5.7%
TOTAL	1,997	

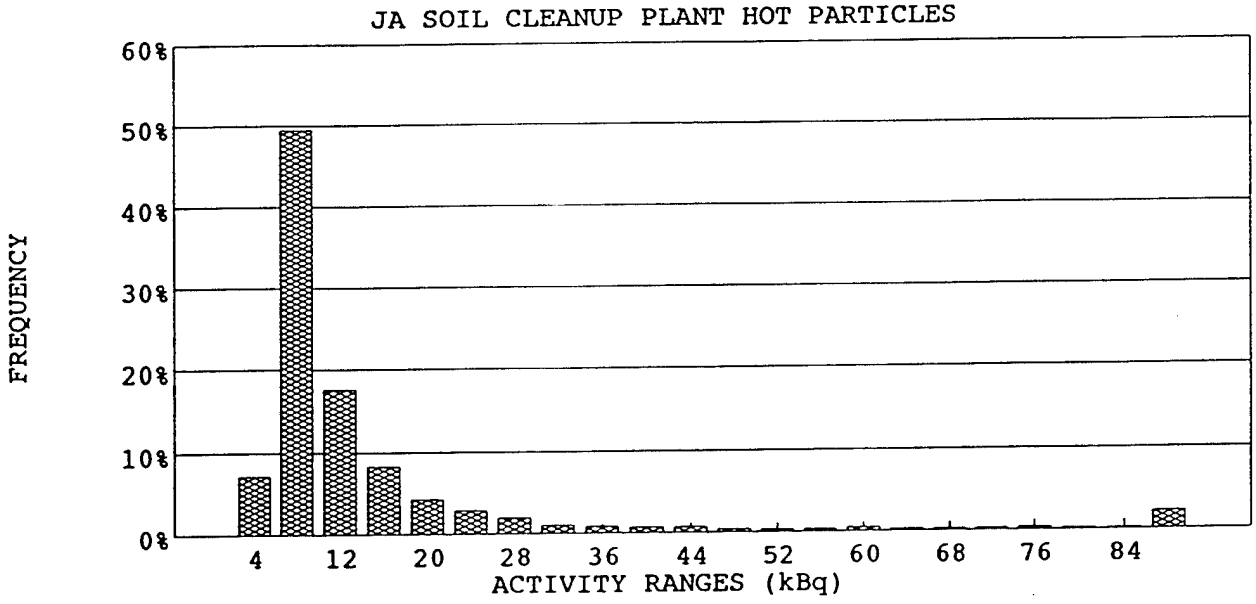
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	17	-250	2.8%	4	293	7.1%
-12000	5	-215	0.8%	8	2,029	49.5%
-10000	3	-179	0.5%	12	722	17.6%
-8000	6	-143	1.0%	16	342	8.3%
-6000	2	-107	0.3%	20	175	4.3%
-4000	4	-72	0.7%	24	119	2.9%
-2000	4	-36	0.7%	28	81	2.0%
0	2	0	0.3%	32	42	1.0%
2000	4	36	0.7%	36	34	0.8%
4000	15	72	2.5%	40	29	0.7%
6000	22	107	3.6%	44	29	0.7%
8000	27	143	4.4%	48	17	0.4%
10000	59	179	9.7%	52	12	0.3%
12000	68	215	11.1%	56	14	0.3%
14000	95	250	15.5%	60	18	0.4%
16000	116	286	19.0%	64	9	0.2%
18000	115	322	18.8%	68	10	0.2%
20000	47	358	7.7%	72	11	0.3%
22000	0	394	0.0%	76	13	0.3%
24000	0	429	0.0%	80	5	0.1%
26000	0	465	0.0%	84	8	0.2%
>28000	0	0	0.0%	>84	89	2.2%
TOTAL	611			TOTAL	4,101	

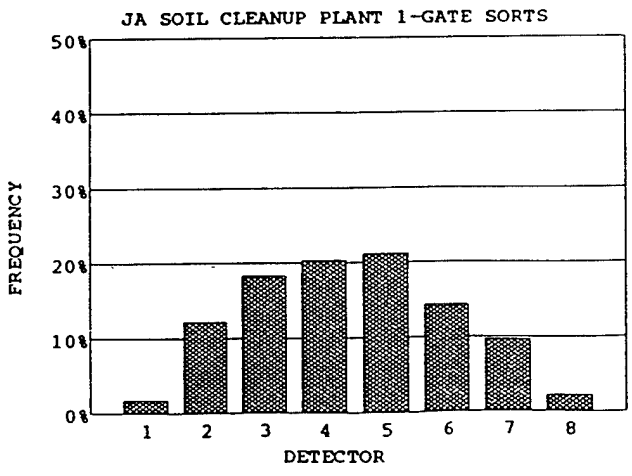
EVENT TYPES	HPE	MPE	DISE
	3,908	4935	37443

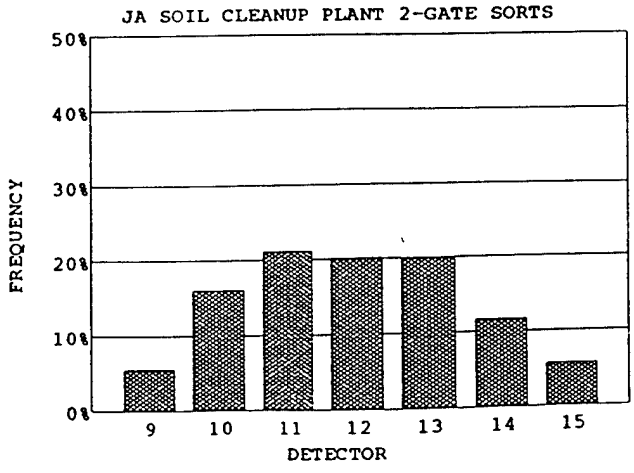
SORTER 1

09--Apr--94









SORTER 2

09-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	25.7 tons	39.0 tons	64.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	20.4 yd³	30.9 yd³	51.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	60.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	54,150 kBq	35,964 kBq	8,985 kBq
MAXIMUM/SORT	1,564 kBq	1,252 kBq	20 kBq
MINIMUM/SORT	2 kBq	(27,853)Bq	-19 kBq
SPECIFIC ACTIVITY		1,398 Bq/kg	230 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,158		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			421		06:11	06:08
NONE (AD=0 & MD=0 & MND>0)			85		06:12	06:12
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			652		08:07	08:03
UNEXPLAINED RECORDS			0		09:03	08:19
0<AD<1kBq & MD>0			0		10:40	09:00
AD=0 & MD>0			1			10:36
AD<0 & MD >0			4			
2-SEC COUNT PERIODS				11,580		
2-SEC RECORDS WITH SORTS			3,715			
2-SEC RECORDS WITHOUT SORTS			7,865			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				4,873		
NONPROCESSING RECORDS (Test, calibration, etc)				2		

2-SEC SORT DETECTORS

1 DET	2,633	70.9%	5 DET	2	0.1%
2 DET	860	23.1%	6 DET	0	0.0%
3 DET	183	4.9%	7 DET	0	0.0%
4 DET	37	1.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

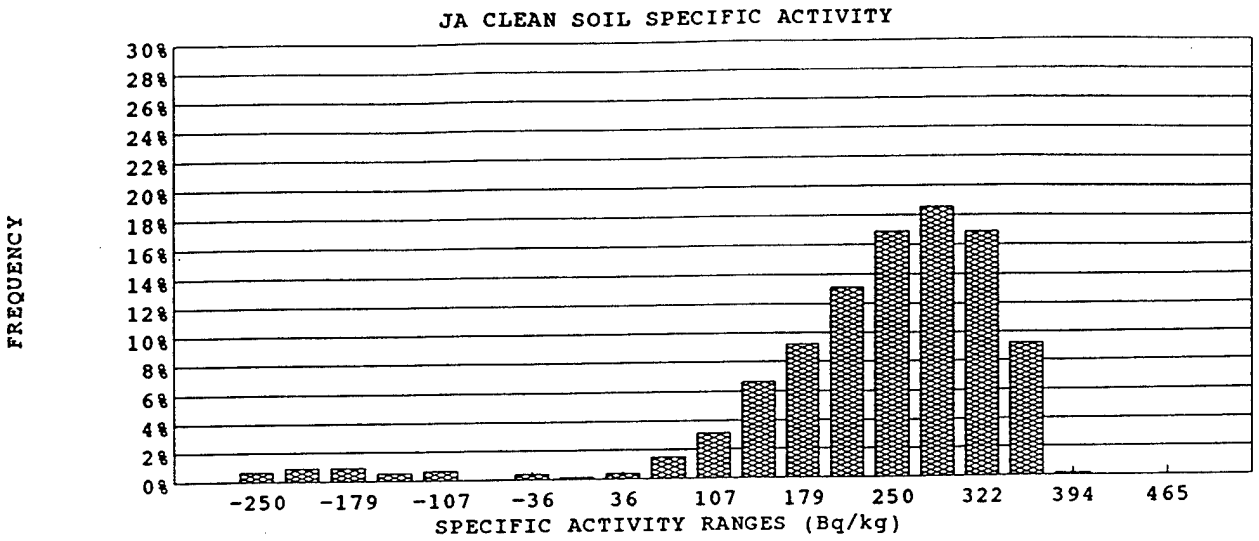
DET	SORTS	FREQ%
1	92	4.9%
2	363	19.3%
3	399	21.2%
4	380	20.2%
5	329	17.5%
6	219	11.6%
7	87	4.6%
8	12	0.6%
TOTAL	1,881	

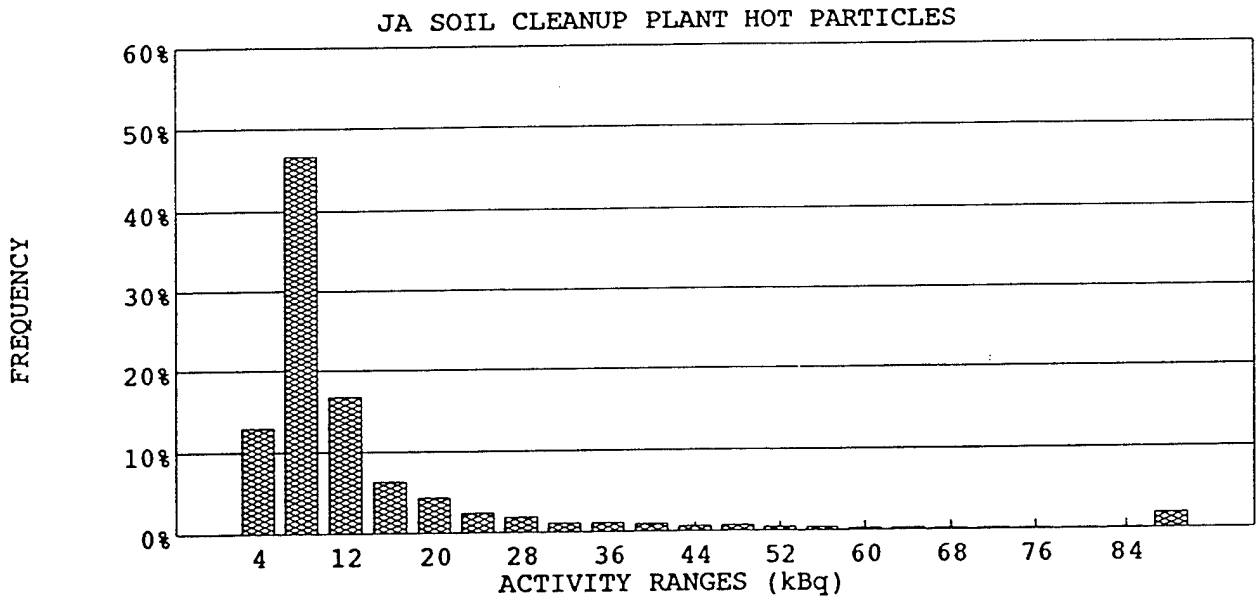
2-GATE SORTS

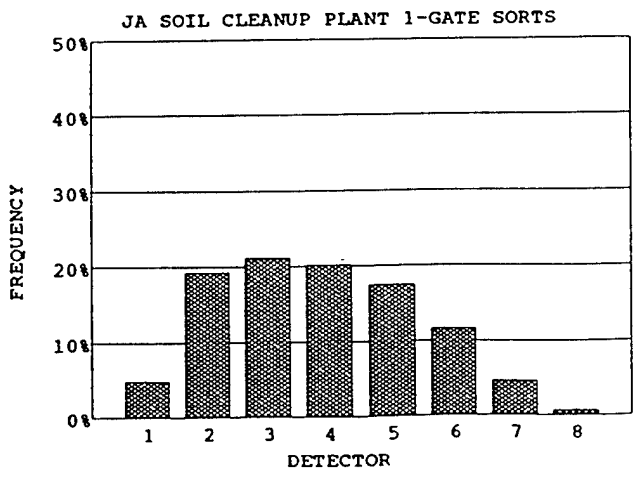
DET	SORTS	FREQ%
9	228	12.4%
10	405	22.1%
11	390	21.3%
12	360	19.6%
13	267	14.6%
14	147	8.0%
15	37	2.0%
TOTAL	1,834	

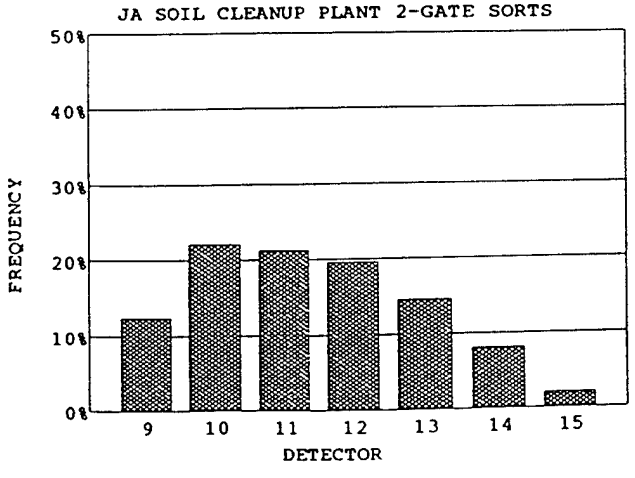
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	5	-250	0.7%	4	482	13.0%
-12000	7	-215	0.9%	8	1,733	46.6%
-10000	7	-179	0.9%	12	621	16.7%
-8000	4	-143	0.5%	16	237	6.4%
-6000	5	-107	0.7%	20	162	4.4%
-4000	0	-72	0.0%	24	90	2.4%
-2000	3	-36	0.4%	28	71	1.9%
0	1	0	0.1%	32	42	1.1%
2000	3	36	0.4%	36	41	1.1%
4000	11	72	1.5%	40	34	0.9%
6000	23	107	3.1%	44	23	0.6%
8000	49	143	6.6%	48	27	0.7%
10000	68	179	9.2%	52	18	0.5%
12000	97	215	13.1%	56	15	0.4%
14000	125	250	16.9%	60	10	0.3%
16000	137	286	18.5%	64	11	0.3%
18000	125	322	16.9%	68	6	0.2%
20000	68	358	9.2%	72	8	0.2%
22000	1	394	0.1%	76	5	0.1%
24000	0	429	0.0%	80	3	0.1%
26000	0	465	0.0%	84	5	0.1%
>28000	0	0	0.0%	>84	71	1.9%
TOTAL	739			TOTAL	3,715	

EVENT TYPES HPE 3,610 MPE 4330 DISE 28880


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 11–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	12:30 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.3 hr	9.3 hr	0.0 hr	0.0 hr	18.7 hr
SORTER START–UP	06:30	06:30	NA	NA	
START SOIL PROCESSING	06:46	06:46	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:13	16:14	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
ACTUAL PROCESS HOURS	7.5 hr	5.7 hr	0.0 hr	0.0 hr	13.3 hr
DOWN–TIME	1.8 hr	3.6 hr	0.0 hr	0.0 hr	5.4 hr
SYSTEM PAUSE	2.0 hr	3.8 hr	0.0 hr	0.0 hr	5.8 hr
SORTER NONAVAILABLE TIME	0.7 hr	0.7 hr	10.0 hr	10.0 hr	21.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					71.2%
PRODUCTIVTY					33.2%

PRODUCTIVITY

Date	11–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	175	Excused delays for contract (sorter–hrs)	2,902 hr
Current Contract week	30	Excused delay days (plant–days)	73 days
		Excused delay months (plant–month)	2.79 months
Soil production for Day	134 MT		
Cumlative Soil Production for Week	134 MT	Percent of contract completed	39.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,729 MT
Since 6 Sep 93	37,970 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	39,561 MT		
Total Soil production for project	65,848 MT		

MT = metric tons

File Report1 Printed on 14-Apr-94 at 01:40:14 PM

SORTER 1

11-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	47.3 tons	28.7 tons	75.9 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	37.5 yd³	22.7 yd³	60.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	37.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	84,291 kBq	57,514 kBq	5,407 kBq
MAXIMUM/SORT	5,999 kBq	3,731 kBq	20 kBq
MINIMUM/SORT	2 kBq	(12,003)Bq	-19 kBq
SPECIFIC ACTIVITY		1,217 Bq/kg	189 Bq/kg

SORTS

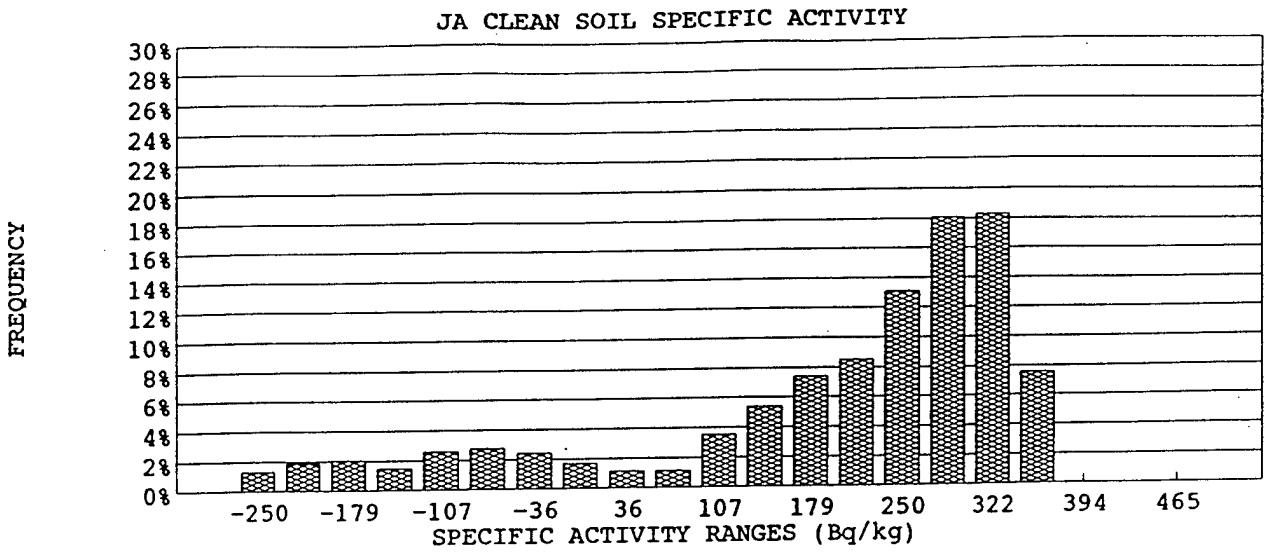
20-SEC PROCESS PERIODS					1,358			UNEXP TIME	PAUSE TIME
ALL 80 ELEMENTS SORT (MD>0&MND=0)			819						
NONE (AD=0 & MD=0 & MND>0)			129					07:11	07:10
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			410					16:13	08:24
UNEXPLAINED RECORDS			0						08:31
0<AD<1kBq & MD>0			0						08:35
AD=0 & MD>0			0						08:37
AD<0 & MD >0			2						08:38
2-SEC COUNT PERIODS					13,580				08:39
2-SEC RECORDS WITH SORTS			4,340						08:41
2-SEC RECORDS WITHOUT SORTS			9,240						10:49
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					5,698				12:34
NONPROCESSING RECORDS (Test, calibration, etc)					3				12:59
2-SEC SORT DETECTORS									14:26
1 DET	3,124	72.0%		5 DET	9	0.2%			15:39
2 DET	971	22.4%		6 DET	0	0.0%			16:06
3 DET	197	4.5%		7 DET	0	0.0%			
4 DET	39	0.9%		8 DET	0	0.0%			
AVERAGE TIME BETWEEN 2-SEC SORTS			8.7 sec						

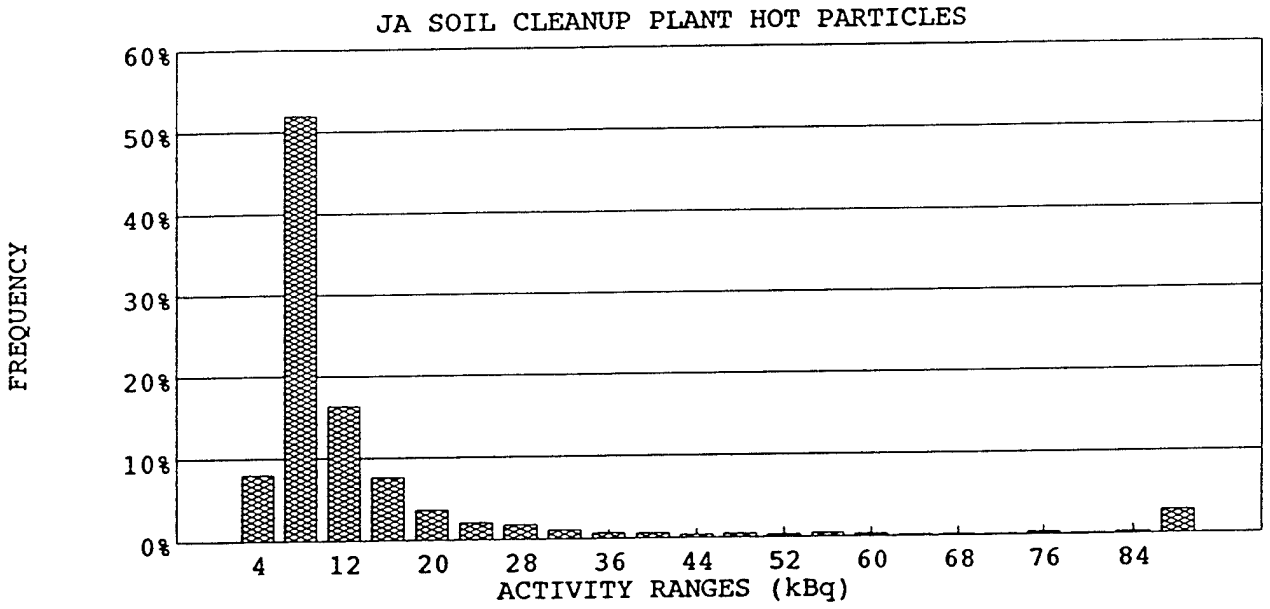
FREQUENCY DISTRIBUTIONS

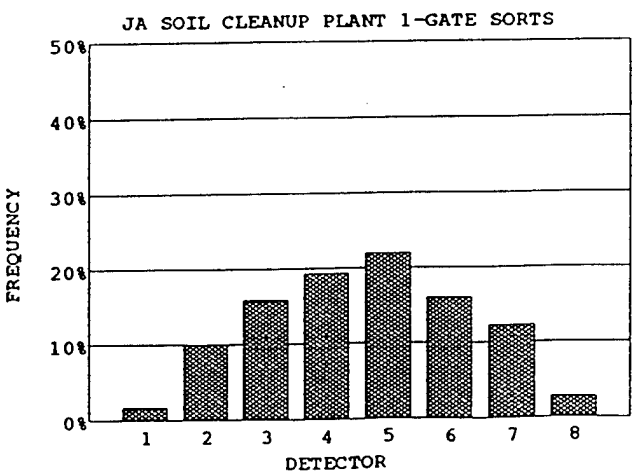
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	38	1.7%	-14000	7	-250	1.3%	4	351	8.1%
2	222	10.0%	-12000	10	-215	1.8%	8	2,256	52.0%
3	354	15.9%	-10000	11	-179	2.0%	12	708	16.3%
4	430	19.3%	-8000	8	-143	1.5%	16	336	7.7%
5	489	22.0%	-6000	14	-107	2.6%	20	162	3.7%
6	358	16.1%	-4000	15	-72	2.8%	24	91	2.1%
7	273	12.3%	-2000	13	-36	2.4%	28	76	1.8%
8	62	2.8%	0	9	0	1.7%	32	46	1.1%
TOTAL	2,226		2000	6	36	1.1%	36	29	0.7%
			4000	6	72	1.1%	40	28	0.6%
2-GATE DET	SORTS	FREQ%	6000	19	107	3.5%	44	17	0.4%
			8000	29	143	5.4%	48	20	0.5%
9	100	4.7%	10000	40	179	7.4%	52	13	0.3%
10	298	14.1%	12000	46	215	8.5%	56	19	0.4%
11	392	18.5%	14000	71	250	13.1%	60	15	0.3%
12	433	20.5%	16000	98	286	18.1%	64	9	0.2%
13	444	21.0%	18000	99	322	18.3%	68	7	0.2%
14	299	14.1%	20000	41	358	7.6%	72	5	0.1%
15	148	7.0%	22000	0	394	0.0%	76	15	0.3%
TOTAL	2,114		24000	0	429	0.0%	80	2	0.0%
			26000	0	465	0.0%	84	12	0.3%
			>28000	0	0	0.0%	>84	123	2.8%
			TOTAL	542			TOTAL	4,340	
EVENT TYPES		HPE	4,155	MPE	5,477	DISE	57,986		

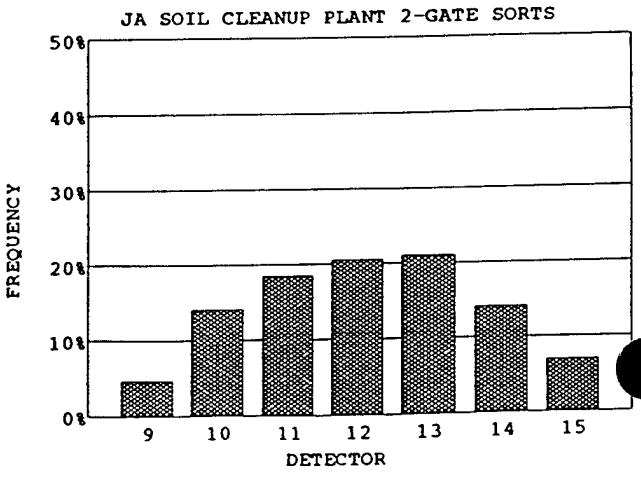
SORTER 1

11-Apr-94









SORTER 2

11-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	36.3 tons	21.5 tons	57.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	40.5 kg	
VOLUME IN-GROUND	28.8 yd³	17.1 yd³	45.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	37.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	53,278 kBq	40,119 kBq	4,985 kBq
MAXIMUM/SORT	1,982 kBq	1,643 kBq	20 kBq
MINIMUM/SORT	2 kBq	(19,233)Bq	-15 kBq
SPECIFIC ACTIVITY		1,106 Bq/kg	231 Bq/kg

SORTS

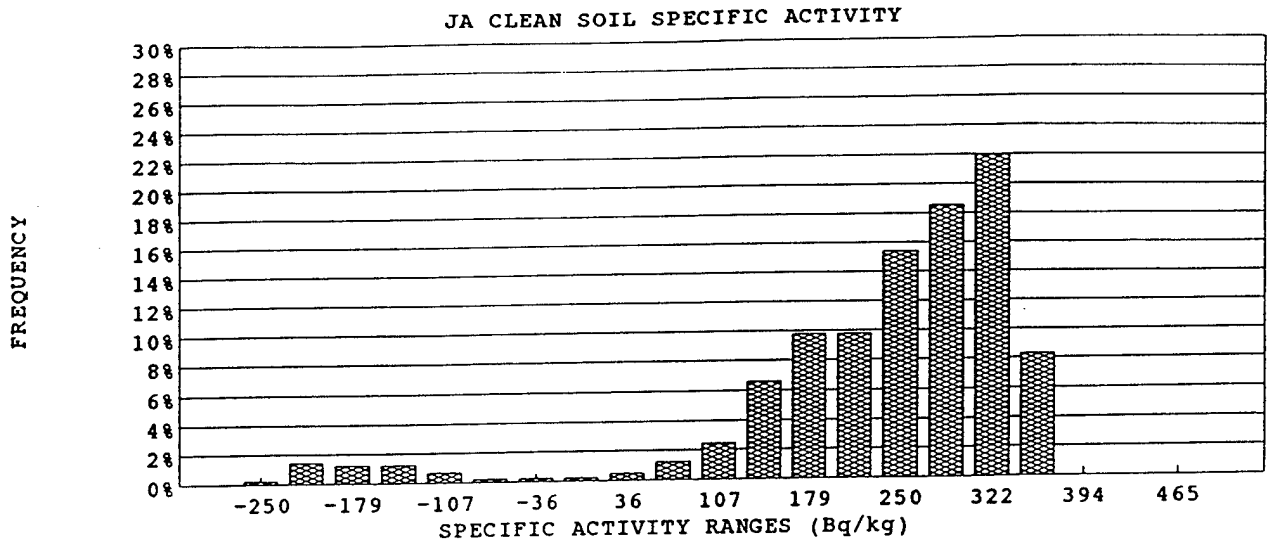
20-SEC PROCESS PERIODS					1,034		
ALL 80 ELEMENTS SORT (MD>0&MND=0)				625			
NONE (AD=0 & MD=0 & MND>0)				61			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)				348			
UNEXPLAINED RECORDS				0			
0<AD<1kBq & MD>0				0			
AD=0 & MD>0				4			
AD<0 & MD >0				2			
2-SEC COUNT PERIODS					10,340		
2-SEC RECORDS WITH SORTS				3,485			
2-SEC RECORDS WITHOUT SORTS				6,855			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					4,519		
NONPROCESSING RECORDS (Test, calibration, etc)					1		
2-SEC SORT DETECTORS							
1 DET	2,540	72.9%	5 DET		7	0.2%	
2 DET	730	20.9%	6 DET		0	0.0%	
3 DET	181	5.2%	7 DET		0	0.0%	
4 DET	27	0.8%	8 DET		0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			8.1 sec				

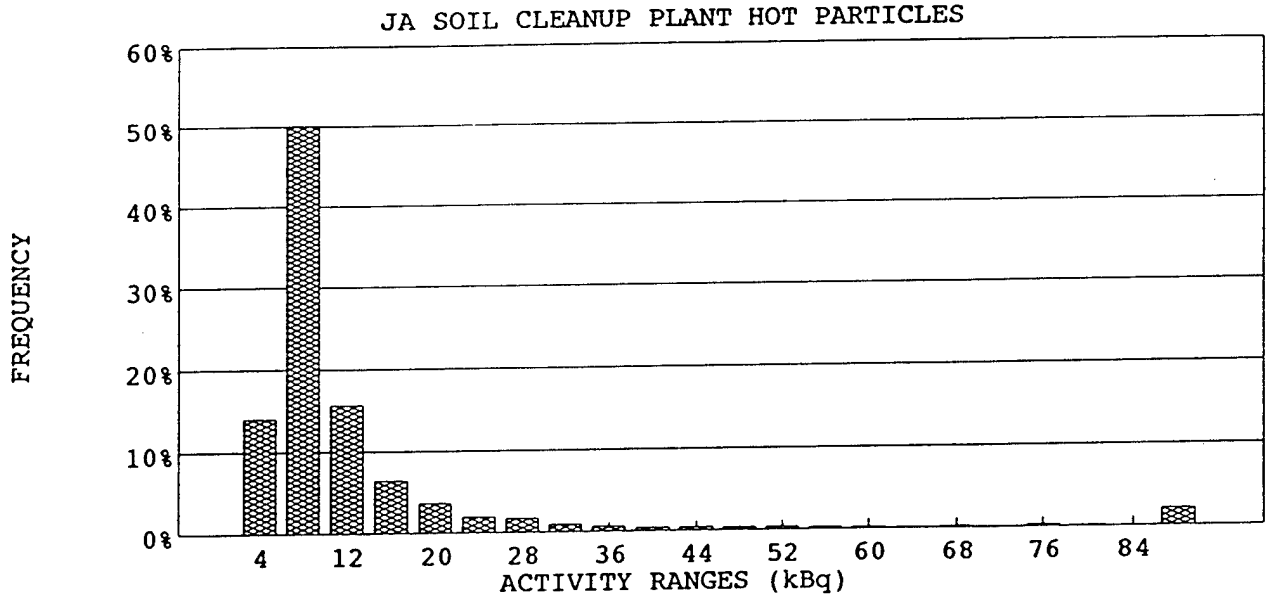
	PAUSE
UNEXP	06:53
TIME	06:54
	08:36 06:58
	08:49 06:59
	09:02 08:13
	09:03 08:31
	09:06 08:36
	16:13 08:58
	09:02
	09:03
	09:04
	09:07
	09:15
	09:29
	10:49
	12:34
	12:59
	14:26
	15:40
	16:07

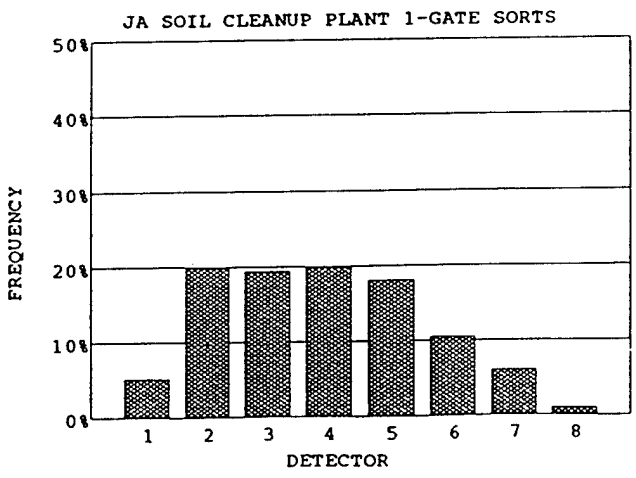
FREQUENCY DISTRIBUTIONS

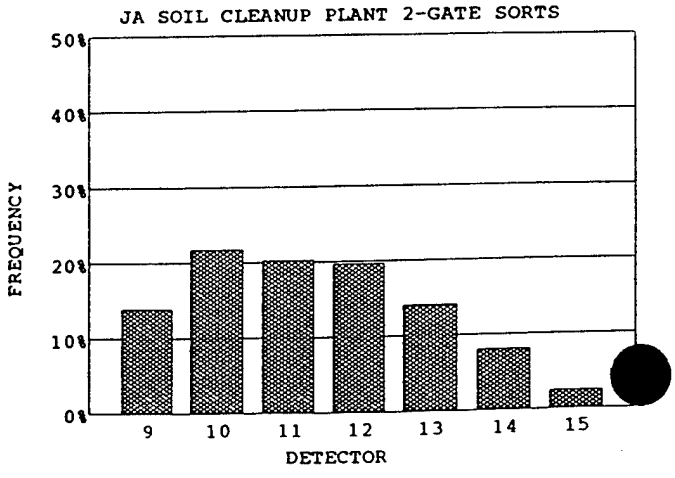
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	90	5.2%	-14000	1	-250	0.2%	4	490	14.1%
2	344	19.8%	-12000	6	-215	1.5%	8	1,746	50.1%
3	337	19.4%	-10000	5	-179	1.2%	12	546	15.7%
4	346	20.0%	-8000	5	-143	1.2%	16	225	6.5%
5	314	18.1%	-6000	3	-107	0.7%	20	127	3.6%
6	181	10.4%	-4000	1	-72	0.2%	24	69	2.0%
7	104	6.0%	-2000	1	-36	0.2%	28	59	1.7%
8	17	1.0%	0	1	0	0.2%	32	33	0.9%
TOTAL	1,733		2000	2	36	0.5%	36	23	0.7%
			4000	5	72	1.2%	40	14	0.4%
2-GATE SORTS			6000	10	107	2.4%	44	15	0.4%
DET	SORTS	FREQ%	8000	27	143	6.6%	48	12	0.3%
9	243	13.9%	10000	40	179	9.8%	52	11	0.3%
10	381	21.7%	12000	40	215	9.8%	56	8	0.2%
11	355	20.3%	14000	63	250	15.4%	60	6	0.2%
12	344	19.6%	16000	76	286	18.5%	64	4	0.1%
13	246	14.0%	18000	90	322	22.0%	68	7	0.2%
14	141	8.0%	20000	34	358	8.3%	72	2	0.1%
15	42	2.4%	22000	0	394	0.0%	76	8	0.2%
TOTAL	1,752		24000	0	429	0.0%	80	4	0.1%
			26000	0	465	0.0%	84	1	0.0%
			>28000	0	0	0.0%	>84	75	2.2%
			TOTAL	410			TOTAL	3,485	

EVENT TYPES HPE 3,453 MPE 4,489 DISE 43,985


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 12–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	6.3 hr	6.3 hr	0.0 hr	0.0 hr	12.7 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:22	06:22	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER SHUT–DOWN	13:00	13:00	NA	NA	
END SOIL PROCESSING	12:38	12:37	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	4.9 hr	4.8 hr	0.0 hr	0.0 hr	9.7 hr
DOWN–TIME	1.5 hr	1.5 hr	0.0 hr	0.0 hr	3.0 hr
SYSTEM PAUSE	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.7 hr
SORTER NONAVAILABLE TIME	3.7 hr	3.7 hr	10.0 hr	10.0 hr	27.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					76.6%
PRODUCTIVTY					24.3%

PRODUCTIVITY

Date	12–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	176	Excused delays for contract (sorter–hrs)	2,922 hr
Current Contract week	30	Excused delay days (plant–days)	73 days
		Excused delay months (plant–month)	2.81 months
Soil production for Day	98 MT		
Cumlative Soil Production for Week	231 MT	Percent of contract completed	39.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,668 MT
Since 6 Sep 93	38,068 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	39,659 MT		
Total Soil production for project	65,945 MT		

MT = metric tons

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SORTER 1

12-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	43.5 tons	5.4 tons	48.9 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	31.4 kg	
VOLUME IN-GROUND	34.5 yd³	4.3 yd³	38.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	11.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	51,426 kBq	44,384 kBq	998 kBq
MAXIMUM/SORT	1,875 kBq	1,360 kBq	18 kBq
MINIMUM/SORT	2 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,021 Bq/kg	185 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			874		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		770		None	07:16
NONE (AD=0 & MD=0 & MND>0)		20			09:42
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		84			10:48
UNEXPLAINED RECORDS	0				11:51
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			8,740		
2-SEC RECORDS WITH SORTS		3,059			
2-SEC RECORDS WITHOUT SORTS		5,681			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,933		
NONPROCESSING RECORDS (Test, calibration, etc)			19		

2-SEC SORT DETECTORS

1 DET	2,163	70.7%	5 DET	10	0.3%
2 DET	707	23.1%	6 DET	0	0.0%
3 DET	149	4.9%	7 DET	0	0.0%
4 DET	30	1.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	19	1.2%
2	174	11.1%
3	255	16.3%
4	291	18.6%
5	368	23.6%
6	223	14.3%
7	188	12.0%
8	44	2.8%
TOTAL	1,562	

2-GATE SORTS

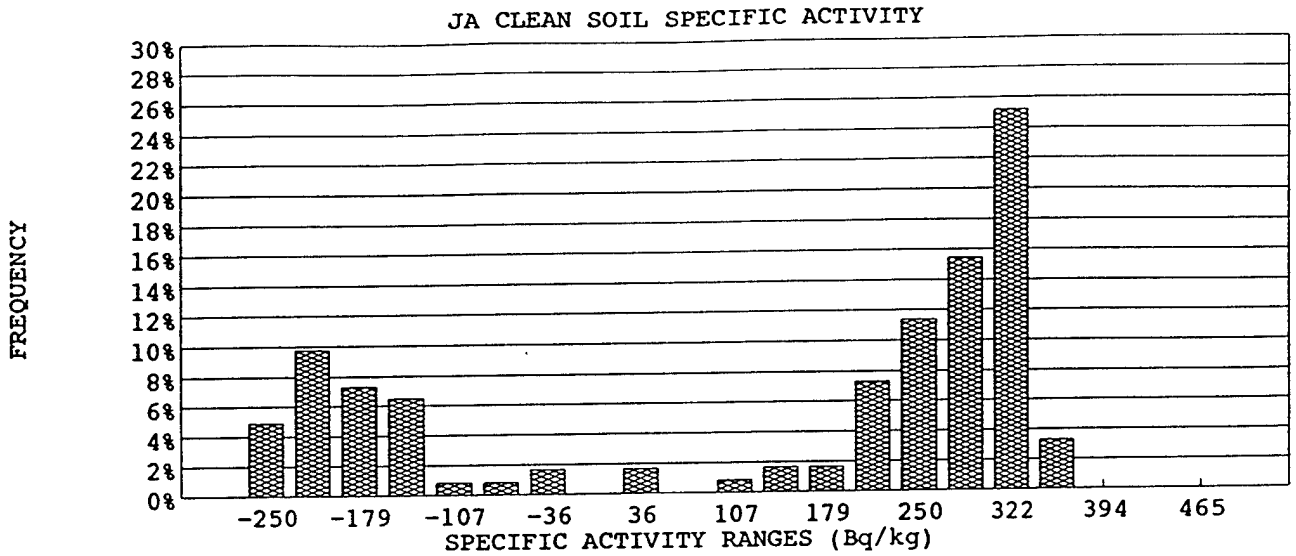
DET	SORTS	FREQ%
9	80	5.3%
10	198	13.2%
11	283	18.9%
12	312	20.8%
13	308	20.6%
14	199	13.3%
15	117	7.8%
TOTAL	1,497	

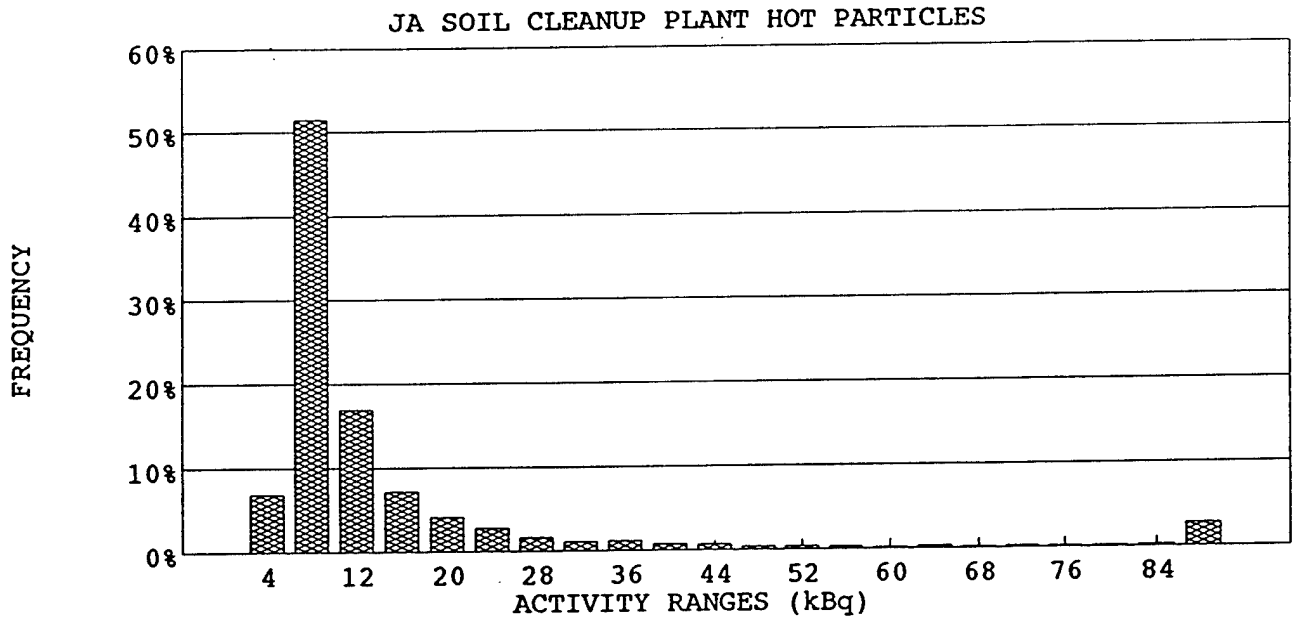
ACT_ND (Bq)	NUM (#)
-14000	6
-12000	12
-10000	9
-8000	8
-6000	1
-4000	1
-2000	2
0	0
2000	2
4000	0
6000	1
8000	2
10000	2
12000	9
14000	14
16000	19
18000	31
20000	4
22000	0
24000	0
26000	0
>28000	0
TOTAL	123

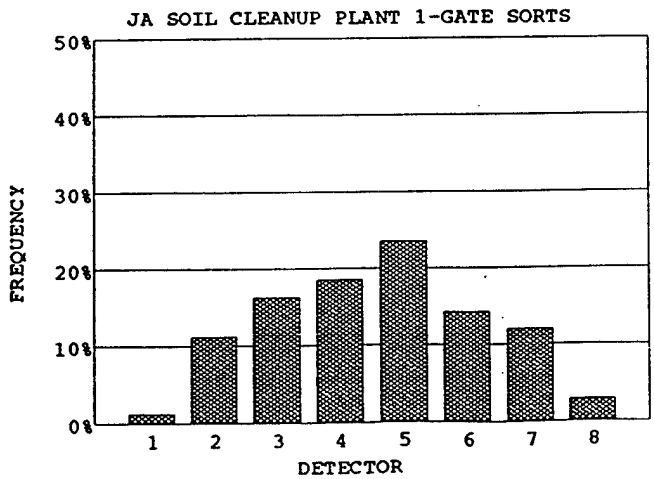
SPEC_A (Bq/kg)	FREQ%
-250	4.9%
-215	9.8%
-179	7.3%
-143	6.5%
-107	0.8%
-72	0.8%
-36	1.6%
0	0.0%
36	1.6%
72	0.0%
107	0.8%
143	1.6%
179	1.6%
215	7.3%
250	11.4%
286	15.4%
322	25.2%
358	3.3%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

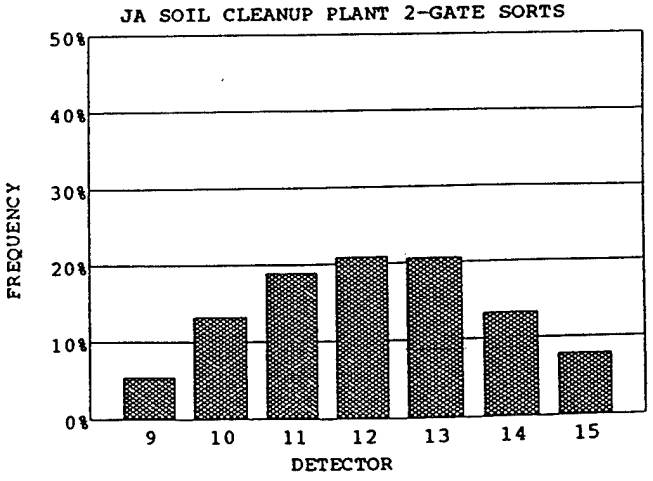
ACT_P (kBq)	NUM (#)	FREQ%
4	209	6.8%
8	1,574	51.5%
12	516	16.9%
16	219	7.2%
20	126	4.1%
24	85	2.8%
28	50	1.6%
32	34	1.1%
36	36	1.2%
40	25	0.8%
44	21	0.7%
48	12	0.4%
52	13	0.4%
56	9	0.3%
60	6	0.2%
64	9	0.3%
68	5	0.2%
72	7	0.2%
76	4	0.1%
80	6	0.2%
84	8	0.3%
>84	85	2.8%
TOTAL	3,059	

EVENT TYPES	HPE	MPE	DISE
	2,975	4,113	55,107


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

12-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.80 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	38.3 tons	10.5 tons	48.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	36.3 kg	
VOLUME IN-GROUND	30.3 yd³	8.3 yd³	38.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	21.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	46,248 kBq	36,941 kBq	2,814 kBq
MAXIMUM/SORT	3,934 kBq	1,994 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		965 Bq/kg	269 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			872		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		667		None	07:16
NONE (AD=0 & MD=0 & MND>0)		13			09:42
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		192			10:48
UNEXPLAINED RECORDS	0				11:51
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			8,720		
2-SEC RECORDS WITH SORTS		3,041			
2-SEC RECORDS WITHOUT SORTS		5,679			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,913		
NONPROCESSING RECORDS (Test, calibration, etc)			21		

2-SEC SORT DETECTORS

1 DET	2,202	72.4%	5 DET	10	0.3%
2 DET	661	21.7%	6 DET	0	0.0%
3 DET	134	4.4%	7 DET	0	0.0%
4 DET	34	1.1%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 7.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	82	5.3%
2	308	20.1%
3	285	18.6%
4	324	21.1%
5	254	16.6%
6	171	11.2%
7	94	6.1%
8	15	1.0%
TOTAL	1,533	

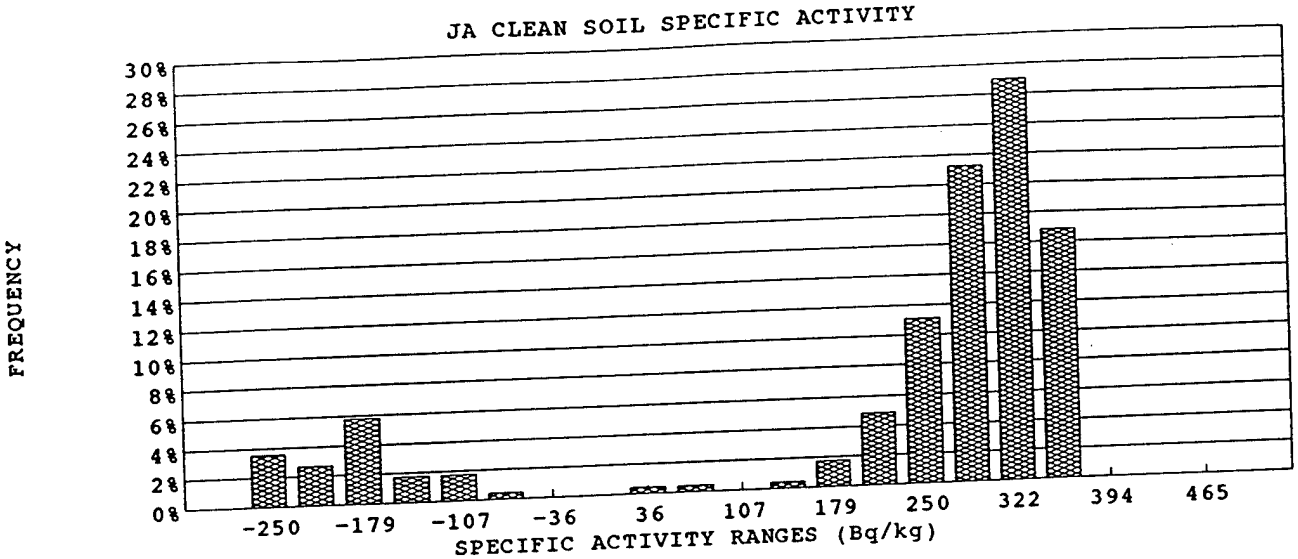
2-GATE SORTS

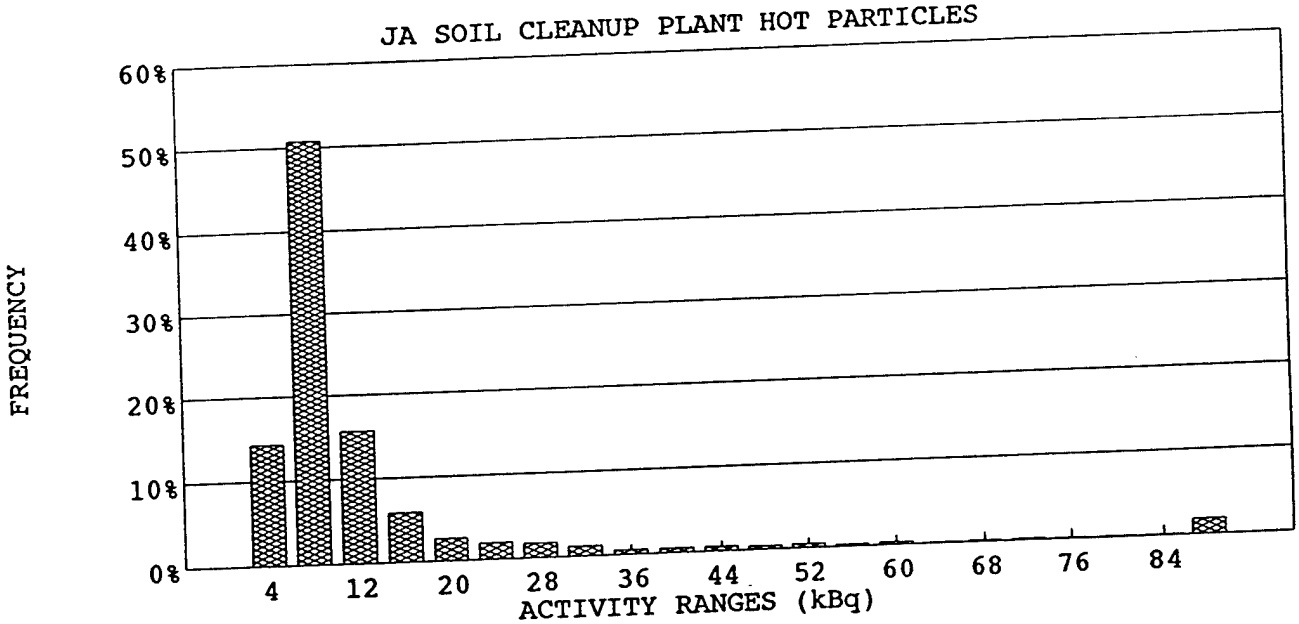
DET	SORTS	FREQ%
9	209	13.9%
10	308	20.4%
11	339	22.5%
12	268	17.8%
13	223	14.8%
14	127	8.4%
15	34	2.3%
TOTAL	1,508	

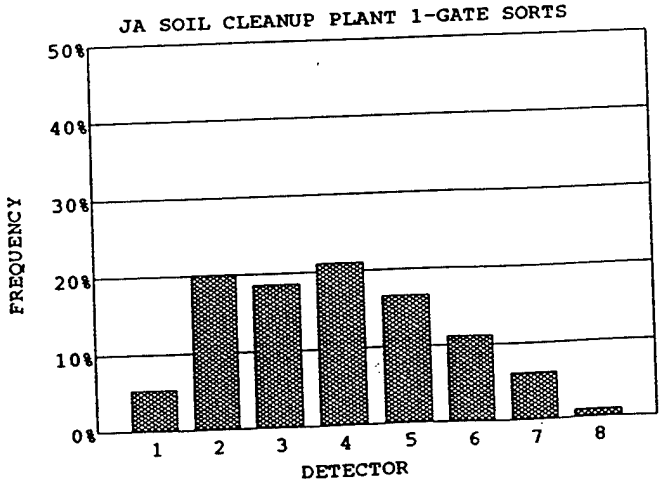
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	8	-250	3.5%	4	437	14.4%
-12000	6	-215	2.7%	8	1,545	50.8%
-10000	13	-179	5.8%	12	475	15.6%
-8000	4	-143	1.8%	16	179	5.9%
-6000	4	-107	1.8%	20	80	2.6%
-4000	1	-72	0.4%	24	59	1.9%
-2000	0	-36	0.0%	28	52	1.7%
0	0	0	0.0%	32	36	1.2%
2000	1	36	0.4%	36	18	0.6%
4000	1	72	0.4%	40	18	0.6%
6000	0	107	0.0%	44	18	0.6%
8000	1	143	0.4%	48	12	0.4%
10000	4	179	1.8%	52	14	0.5%
12000	11	215	4.9%	56	8	0.3%
14000	25	250	11.1%	60	11	0.4%
16000	48	286	21.2%	64	2	0.1%
18000	61	322	27.0%	68	5	0.2%
20000	38	358	16.8%	72	6	0.2%
22000	0	394	0.0%	76	4	0.1%
24000	0	429	0.0%	80	4	0.1%
26000	0	465	0.0%	84	4	0.1%
>28000	0	0	0.0%	>84	54	1.8%
TOTAL	226			TOTAL	3,041	

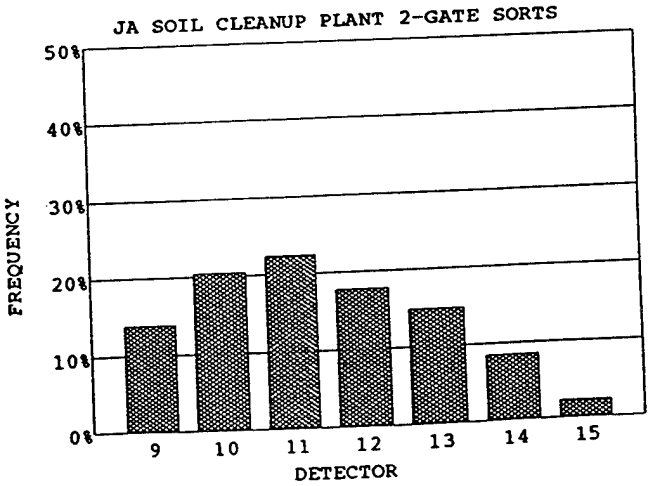
EVENT TYPES HPE 3,023 MPE 3,806 DISE 47,933

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 13-Apr-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START-UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:42	06:43	NA	NA	
TIME REQUIRED TO START-UP	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.4 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	16:00	16:00	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	7.8 hr	7.8 hr	0.0 hr	0.0 hr	15.5 hr
DOWN-TIME	2.5 hr	2.5 hr	0.0 hr	0.0 hr	5.0 hr
SYSTEM PAUSE	1.5 hr	1.6 hr	0.0 hr	0.0 hr	3.1 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	1.4 hr	1.4 hr	10.0 hr	10.0 hr	22.8 hr
PLANT PERFORMANCE					75.7%
PRODUCTIVTY					37.0%

PRODUCTIVITY

Date	13-Apr-94	Excused Delays for day (sorter-hrs)	22.8 hr
Contract day (from 6 Sep)	177	Excused delays for contract (sorter-hrs)	2,945 hr
Current Contract week	30	Excused delay days (plant-days)	74 days
		Excused delay months (plant-month)	2.83 months
Soil production for Day	156 MT		
Cumlative Soil Production for Week	388 MT	Percent of contract completed	39.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,689 MT
Since 6 Sep 93	38,224 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	39,815 MT		
Total Soil production for project	66,102 MT		

MT = metric tons

SORTER 1

13-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.1 tons	69.1 tons	78.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	7.2 yd³	54.8 yd³	62.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	88.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	13,250 kBq	11,002 kBq	10,968 kBq
MAXIMUM/SORT	186 kBq	191 kBq	19 kBq
MINIMUM/SORT	2 kBq	(3,795)Bq	-11 kBq
SPECIFIC ACTIVITY		1,213 Bq/kg	159 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,398		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			136		07:34	11:17
NONE (AD=0 & MD=0 & MND>0)			370		09:44	11:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			892		11:36	11:45
UNEXPLAINED RECORDS			0			12:57
0<AD<1kBq & MD>0			2			
AD=0 & MD>0			0			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				13,980		
2-SEC RECORDS WITH SORTS			1,180			
2-SEC RECORDS WITHOUT SORTS			12,800			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,578		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	899	76.2%	5 DET	2	0.2%	
2 DET	238	20.2%	6 DET	0	0.0%	
3 DET	35	3.0%	7 DET	0	0.0%	
4 DET	6	0.5%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			31.1 sec			

FREQUENCY DISTRIBUTIONS

1-GATE DET	SORTS	FREQ%
1	14	2.3%
2	66	11.1%
3	95	15.9%
4	104	17.4%
5	138	23.2%
6	96	16.1%
7	71	11.9%
8	12	2.0%
TOTAL	596	

2-GATE DET	SORTS	FREQ%
9	35	6.0%
10	88	15.1%
11	101	17.3%
12	125	21.4%
13	115	19.7%
14	75	12.8%
15	45	7.7%
TOTAL	584	

ACT_ND (Bq)	NUM (#)
-14000	0
-12000	1
-10000	1
-8000	1
-6000	6
-4000	1
-2000	3
0	11
2000	36
4000	99
6000	175
8000	225
10000	222
12000	213
14000	128
16000	91
18000	41
20000	10
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,264

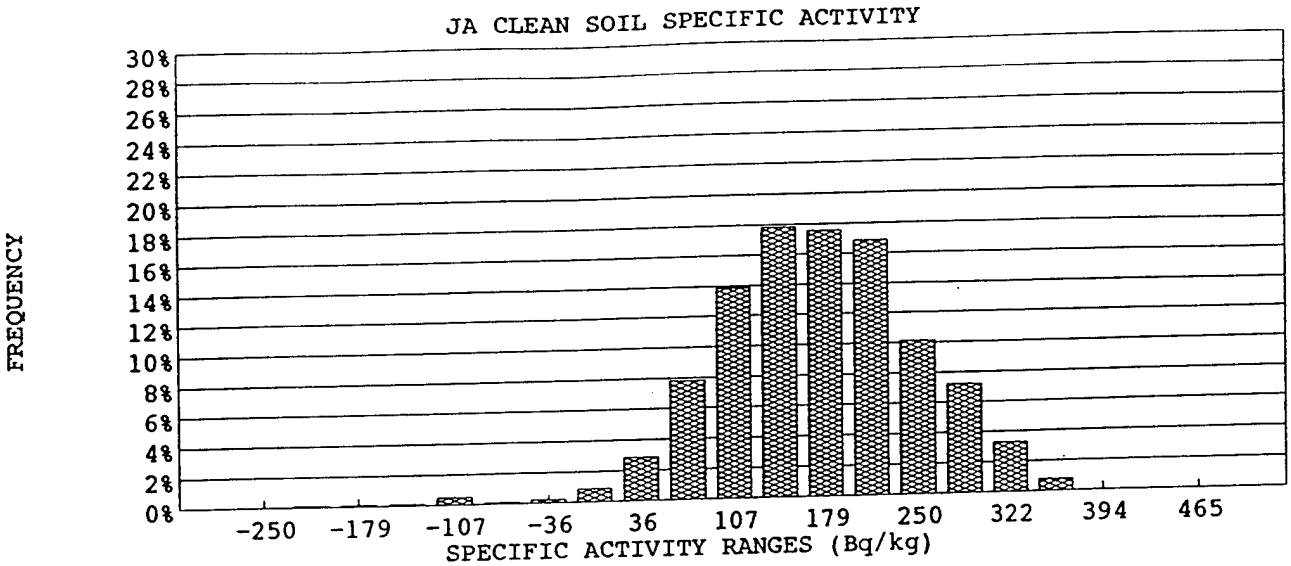
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.1%
-179	0.1%
-143	0.1%
-107	0.5%
-72	0.1%
-36	0.2%
0	0.9%
36	2.8%
72	7.8%
107	13.8%
143	17.8%
179	17.6%
215	16.9%
250	10.1%
286	7.2%
322	3.2%
358	0.8%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

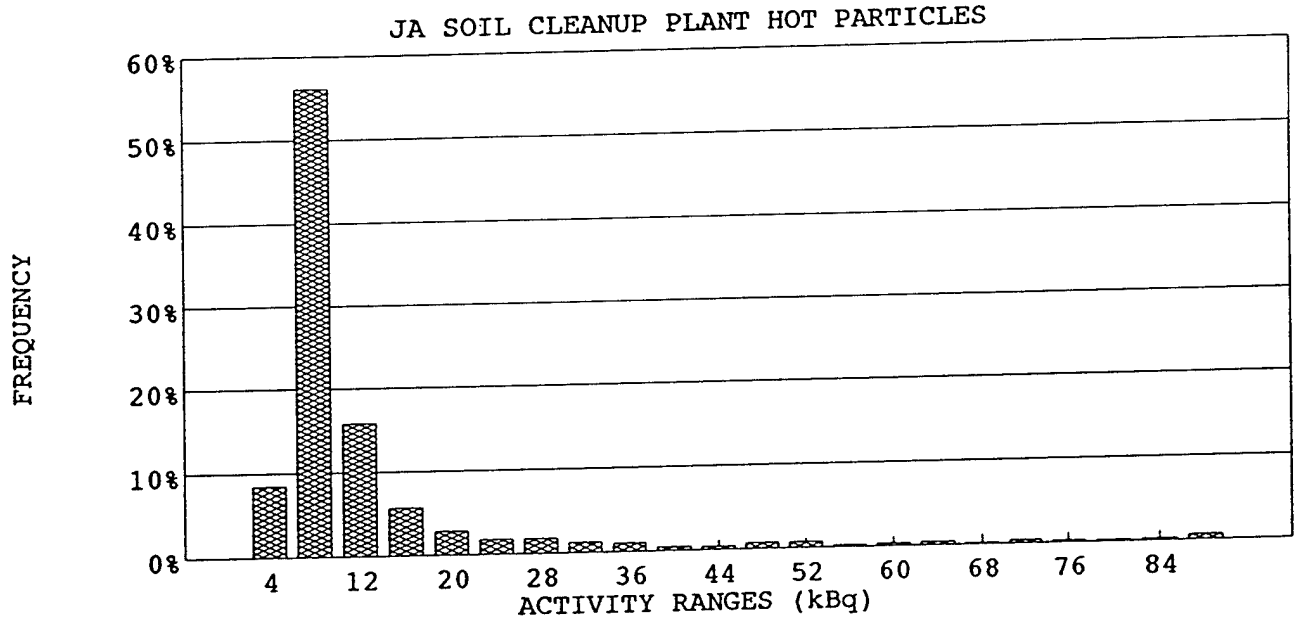
ACT_P (kBq)	NUM (#)	FREQ%
4	100	8.5%
8	662	56.1%
12	187	15.8%
16	67	5.7%
20	34	2.9%
24	21	1.8%
28	21	1.8%
32	15	1.3%
36	12	1.0%
40	6	0.5%
44	5	0.4%
48	8	0.7%
52	8	0.7%
56	3	0.3%
60	4	0.3%
64	5	0.4%
68	2	0.2%
72	5	0.4%
76	3	0.3%
80	2	0.2%
84	3	0.3%
>84	7	0.6%
TOTAL	1,180	

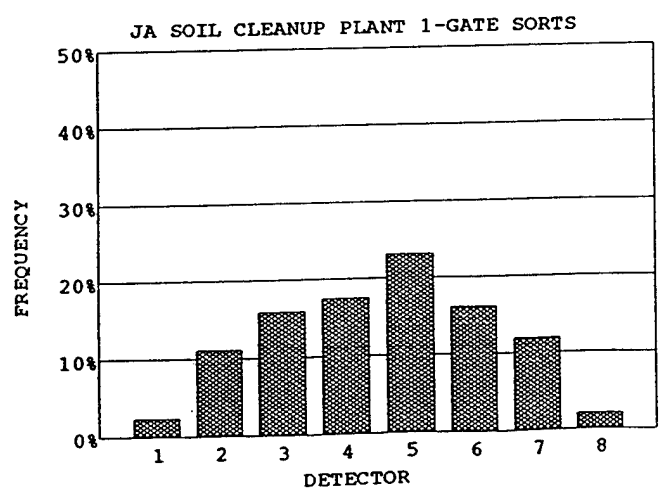
EVENT TYPES HPE 1,242 MPE 1,793 DISE 9,940

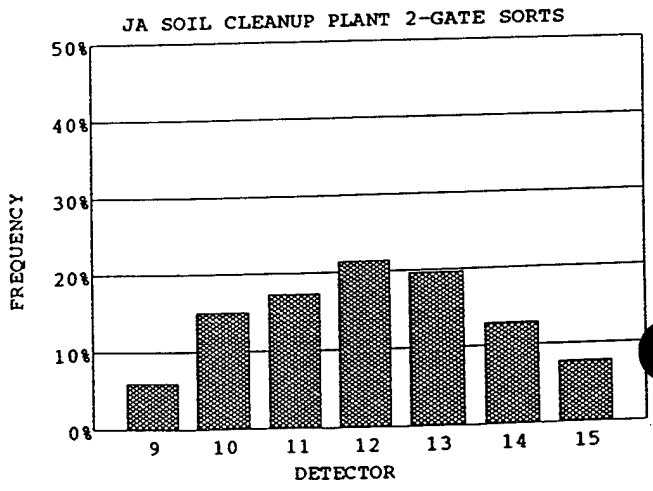
SORTER 1

13-Apr-94









SORTER 2

13-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	5.3 tons	72.8 tons	78.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	4.2 yd³	57.7 yd³	61.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	12,344 kBq	7,712 kBq	13,572 kBq
MAXIMUM/SORT	353 kBq	258 kBq	22 kBq
MINIMUM/SORT	3 kBq	(4,939)Bq	−8 kBq
SPECIFIC ACTIVITY		1,460 Bq/kg	186 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,397		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	73		07:03	11:16
NONE (AD=0 & MD=0 & MND>0)	594		11:36	11:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	730			11:45
UNEXPLAINED RECORDS	0			12:57
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		13,970		
2-SEC RECORDS WITH SORTS	1,199			
2-SEC RECORDS WITHOUT SORTS	12,771			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,596		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

1 DET	940	78.4%	5 DET	2	0.2%
2 DET	220	18.3%	6 DET	0	0.0%
3 DET	32	2.7%	7 DET	0	0.0%
4 DET	5	0.4%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 29.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	28	4.8%
2	157	26.7%
3	121	20.5%
4	108	18.3%
5	89	15.1%
6	54	9.2%
7	25	4.2%
8	7	1.2%
TOTAL	589	

2-GATE SORTS

DET	SORTS	FREQ%
9	83	13.6%
10	168	27.5%
11	124	20.3%
12	105	17.2%
13	79	13.0%
14	31	5.1%
15	20	3.3%
TOTAL	610	

ACT_ND (Bq)	NUM (#)
−14000	1
−12000	0
−10000	1
−8000	0
−6000	2
−4000	1
−2000	0
0	12
2000	16
4000	64
6000	117
8000	216
10000	243
12000	216
14000	172
16000	112
18000	69
20000	47
22000	33
24000	4
26000	0
>28000	0
TOTAL	1,326

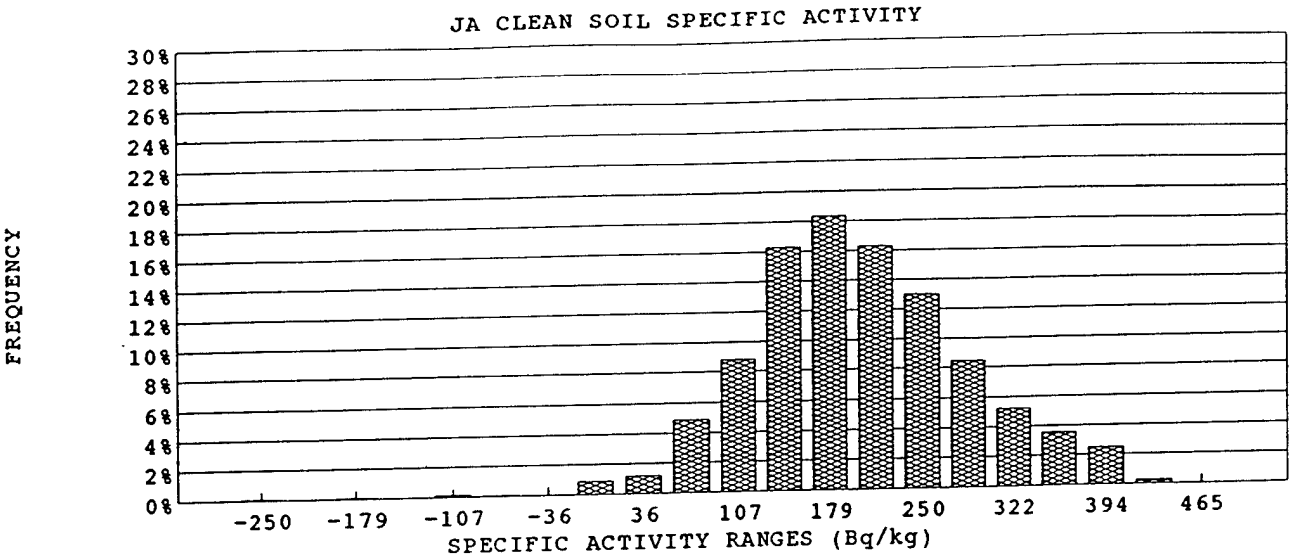
SPEC_A (Bq/kg)	FREQ%
−250	0.1%
−215	0.0%
−179	0.1%
−143	0.0%
−107	0.2%
−72	0.1%
−36	0.0%
0	0.9%
36	1.2%
72	4.8%
107	8.8%
143	16.3%
179	18.3%
215	16.3%
250	13.0%
286	8.4%
322	5.2%
358	3.5%
394	2.5%
429	0.3%
465	0.0%
0	0.0%

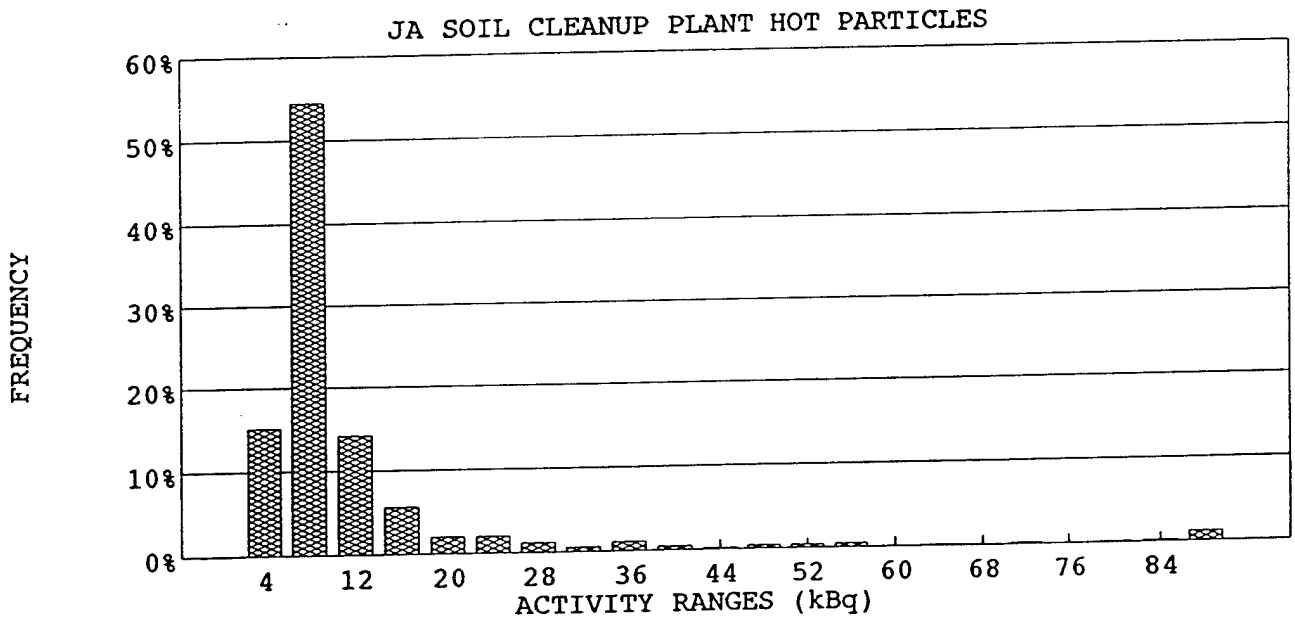
ACT_P (kBq)	NUM (#)	FREQ%
4	181	15.1%
8	654	54.5%
12	170	14.2%
16	68	5.7%
20	24	2.0%
24	24	2.0%
28	14	1.2%
32	7	0.6%
36	13	1.1%
40	6	0.5%
44	2	0.2%
48	5	0.4%
52	5	0.4%
56	6	0.5%
60	0	0.0%
64	1	0.1%
68	0	0.0%
72	2	0.2%
76	0	0.0%
80	1	0.1%
84	2	0.2%
>84	14	1.2%
TOTAL	1,199	

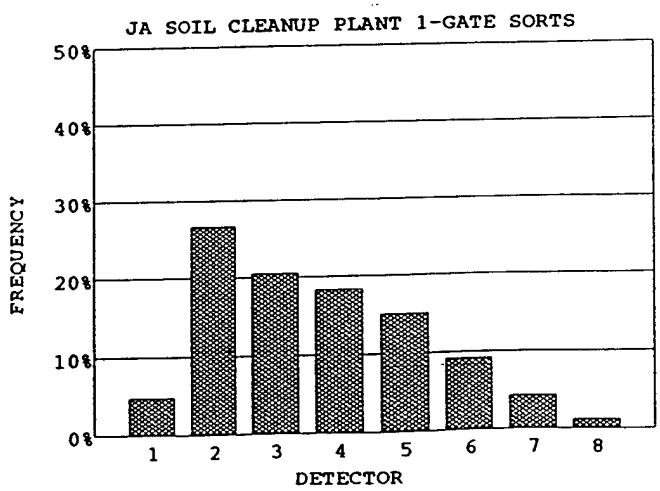
EVENT TYPES HPE 1,321 MPE 805 DISE 5,429

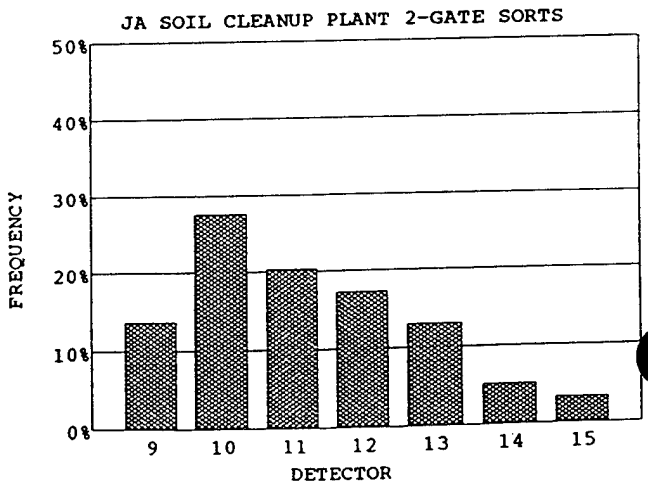
SORTER 2

13-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 14–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	3.0 hr	3.0 hr	0.0 hr	0.0 hr	6.0 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:17	06:16	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT–DOWN	09:00	09:00	NA	NA	
END SOIL PROCESSING	08:45	08:45	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	2.4 hr	2.4 hr	0.0 hr	0.0 hr	4.8 hr
DOWN–TIME	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.2 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	7.0 hr	7.0 hr	10.0 hr	10.0 hr	34.0 hr
AUTHORIZED DELAY TIME	7.0 hr	7.0 hr	10.0 hr	10.0 hr	34.0 hr
PLANT PERFORMANCE					79.4%
PRODUCTIVTY					11.9%

PRODUCTIVITY

Date	14–Apr–94
Contract day (from 6 Sep)	178
Current Contract week	30
Soil production for Day	48 MT
Cumlative Soil Production for Week	436 MT
Total Soil production for contract	
Since 6 Sep 93	38,272 MT
Since 6 Aug 93	39,863 MT
Total Soil production for project	66,150 MT

MT = metric tons

Excused Delays for day (sorter–hrs)	34 hr
Excused delays for contract (sorter–hrs)	2,979 hr
Excused delay days (plant–days)	74 days
Excused delay months (plant–month)	2.86 months
Percent of contract completed	39.9%
Tons Ahead or Behind Schedule	1,689 MT
Days ahead or behind schedule	5 days

File Report1 Printed on 15-Apr-94 at 12:42:08 PM

SORTER 1

14-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.70 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	22.1 tons	1.7 tons	23.8 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	17.5 yd³	1.4 yd³	18.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	7.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	56,553 kBq	33,847 kBq	411 kBq
MAXIMUM/SORT	11,339 kBq	7,795 kBq	18 kBq
MINIMUM/SORT	2 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,533 Bq/kg	238 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			426		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		392		None	07:14
NONE (AD=0 & MD=0 & MND>0)		1			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		33			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			4,260		
2-SEC RECORDS WITH SORTS		1,929			
2-SEC RECORDS WITHOUT SORTS		2,331			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,355		
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	1,370	71.0%	5 DET	2	0.1%
2 DET	436	22.6%	6 DET	0	0.0%
3 DET	102	5.3%	7 DET	0	0.0%
4 DET	19	1.0%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 6.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	22	2.2%
2	116	11.7%
3	178	18.0%
4	182	18.4%
5	194	19.6%
6	146	14.7%
7	123	12.4%
8	30	3.0%
TOTAL	991	

2-GATE SORTS

DET	SORTS	FREQ%
9	58	6.2%
10	134	14.3%
11	188	20.0%
12	173	18.4%
13	200	21.3%
14	121	12.9%
15	64	6.8%
TOTAL	938	

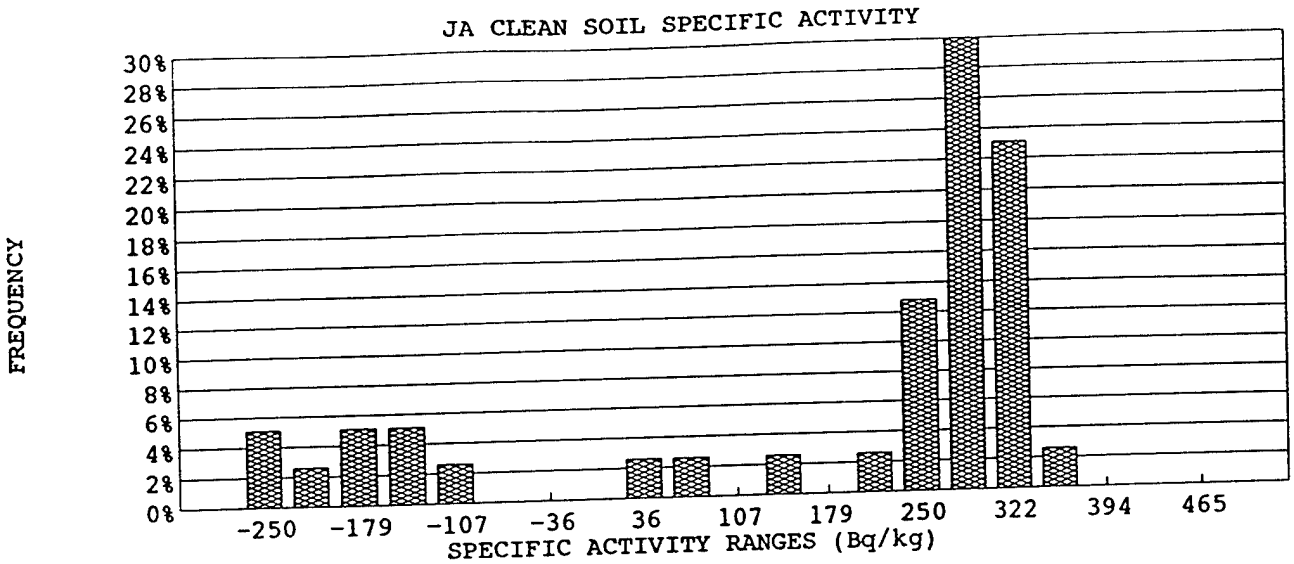
ACT_ND (Bq)	NUM (#)
-14000	2
-12000	1
-10000	2
-8000	2
-6000	1
-4000	0
-2000	0
0	0
2000	1
4000	1
6000	0
8000	1
10000	0
12000	1
14000	5
16000	12
18000	9
20000	1
22000	0
24000	0
26000	0
>28000	0
TOTAL	39

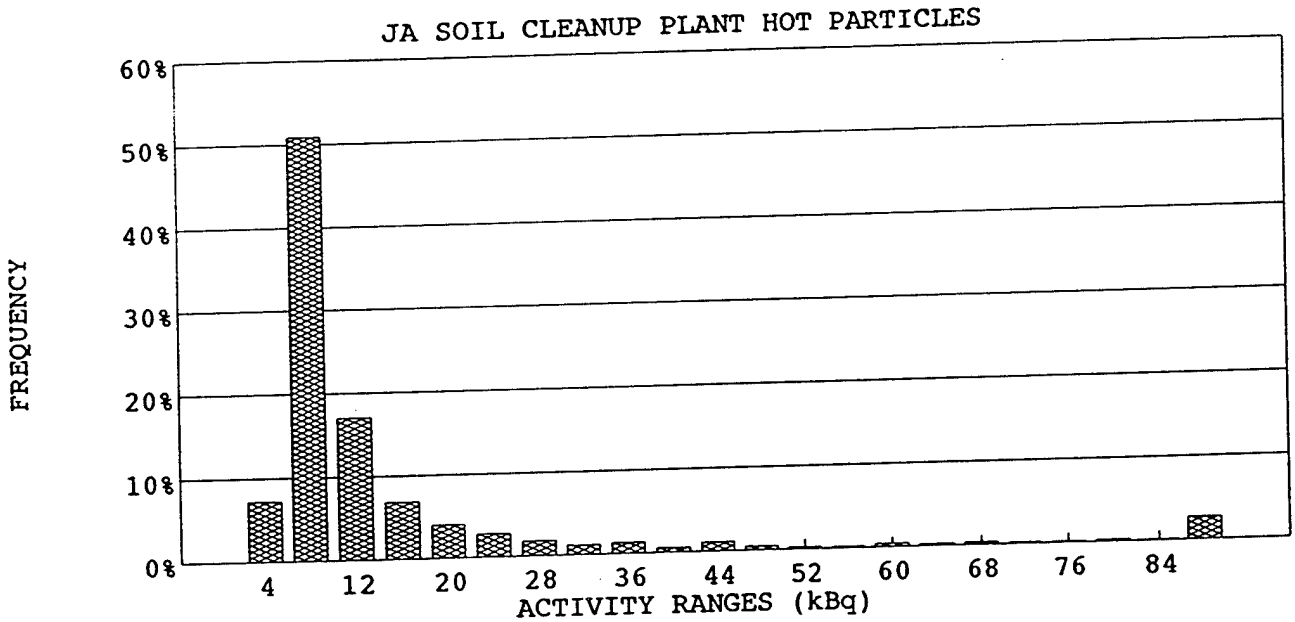
SPEC_A (Bq/kg)	FREQ%
-250	5.1%
-215	2.6%
-179	5.1%
-143	5.1%
-107	2.6%
-72	0.0%
-36	0.0%
0	0.0%
36	2.6%
72	2.6%
107	0.0%
143	2.6%
179	0.0%
215	2.6%
250	12.8%
286	30.8%
322	23.1%
358	2.6%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

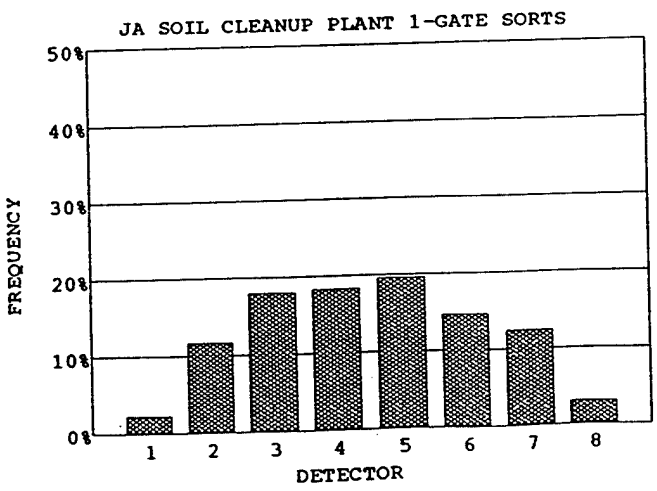
ACT_P (kBq)	NUM (#)	FREQ%
4	140	7.3%
8	982	50.9%
12	328	17.0%
16	132	6.8%
20	77	4.0%
24	54	2.8%
28	34	1.8%
32	23	1.2%
36	26	1.3%
40	11	0.6%
44	21	1.1%
48	9	0.5%
52	5	0.3%
56	3	0.2%
60	7	0.4%
64	5	0.3%
68	6	0.3%
72	4	0.2%
76	3	0.2%
80	5	0.3%
84	2	0.1%
>84	52	2.7%
TOTAL	1,929	

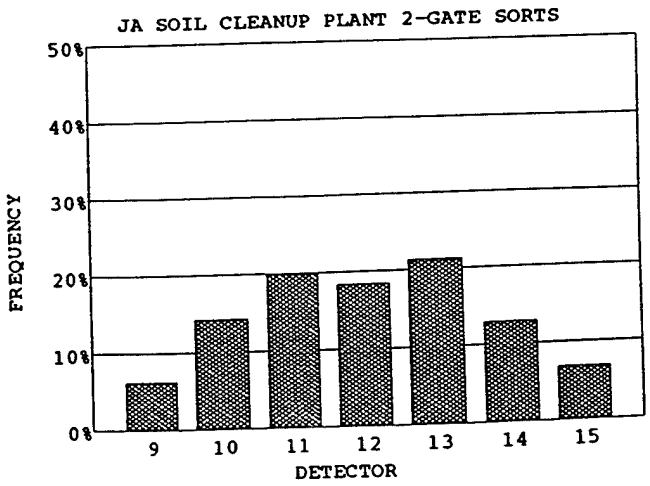
EVENT TYPES HPE 1,825 MPE 2,657 DISE 27,124

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

14-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.82 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	15.4 tons	8.7 tons	24.1 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	12.2 yd³	6.9 yd³	19.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	36.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	28,995 kBq	19,147 kBq	2,685 kBq
MAXIMUM/SORT	1,064 kBq	612 kBq	23 kBq
MINIMUM/SORT	2 kBq	0 Bq	-17 kBq
SPECIFIC ACTIVITY		1,246 Bq/kg	308 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			431		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		262		None	07:14
NONE (AD=0 & MD=0 & MND>0)		13			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		156			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			4,310		
2-SEC RECORDS WITH SORTS		1,739			
2-SEC RECORDS WITHOUT SORTS		2,571			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,170		
NONPROCESSING RECORDS (Test, calibration, etc)			1		

2-SEC SORT DETECTORS

1 DET	1,266	72.8%	5 DET	2	0.1%
2 DET	365	21.0%	6 DET	0	0.0%
3 DET	91	5.2%	7 DET	0	0.0%
4 DET	15	0.9%	8 DET	0	0.0%

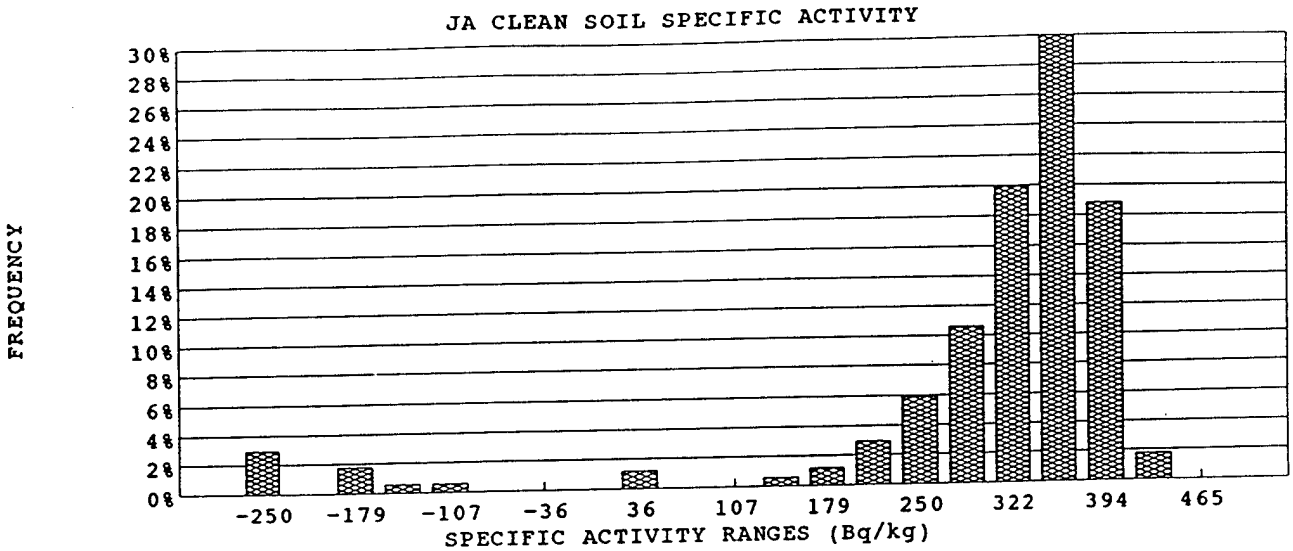
AVERAGE TIME BETWEEN 2-SEC SORTS 6.8 sec

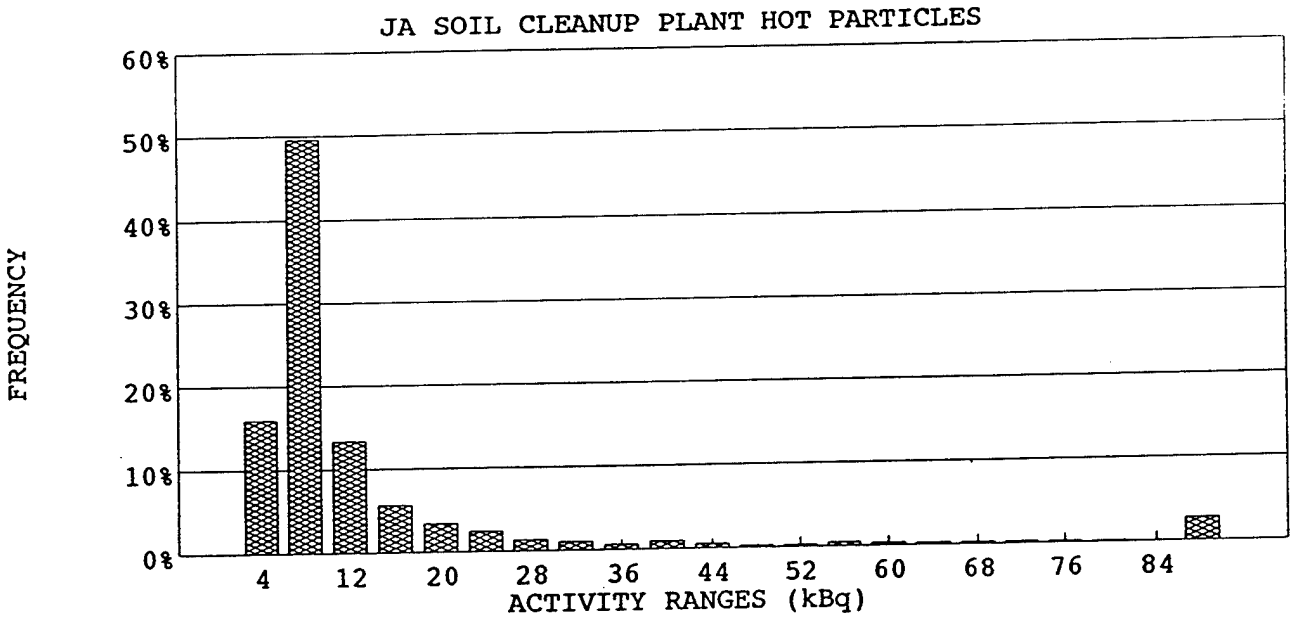
FREQUENCY DISTRIBUTIONS

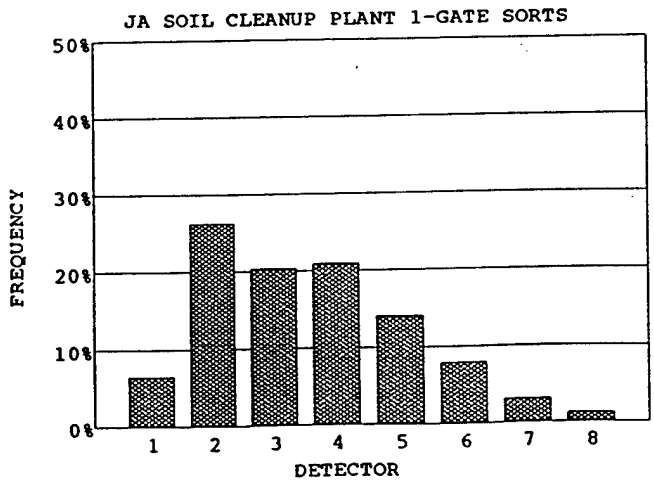
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	55	6.4%	-14000	5	-250	2.9%	4	276	15.9%
2	224	26.2%	-12000	0	-215	0.0%	8	862	49.6%
3	174	20.4%	-10000	3	-179	1.8%	12	232	13.3%
4	179	20.9%	-8000	1	-143	0.6%	16	98	5.6%
5	120	14.0%	-6000	1	-107	0.6%	20	59	3.4%
6	67	7.8%	-4000	0	-72	0.0%	24	42	2.4%
7	26	3.0%	-2000	0	-36	0.0%	28	24	1.4%
8	10	1.2%	0	0	0	0.0%	32	18	1.0%
TOTAL	855		2000	2	36	1.2%	36	11	0.6%
			4000	0	72	0.0%	40	16	0.9%
2-GATE SORTS			6000	0	107	0.0%	44	10	0.6%
DET	SORTS	FREQ%	8000	1	143	0.6%	48	5	0.3%
9	139	15.7%	10000	2	179	1.2%	52	5	0.3%
10	225	25.5%	12000	5	215	2.9%	56	8	0.5%
11	190	21.5%	14000	10	250	5.9%	60	6	0.3%
12	172	19.5%	16000	18	286	10.6%	64	4	0.2%
13	95	10.7%	18000	34	322	20.0%	68	5	0.3%
14	46	5.2%	20000	53	358	31.2%	72	4	0.2%
15	17	1.9%	22000	32	394	18.8%	76	3	0.2%
TOTAL	884		24000	3	429	1.8%	80	2	0.1%
			26000	0	465	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	48	2.8%
			TOTAL	170			TOTAL	1,739	

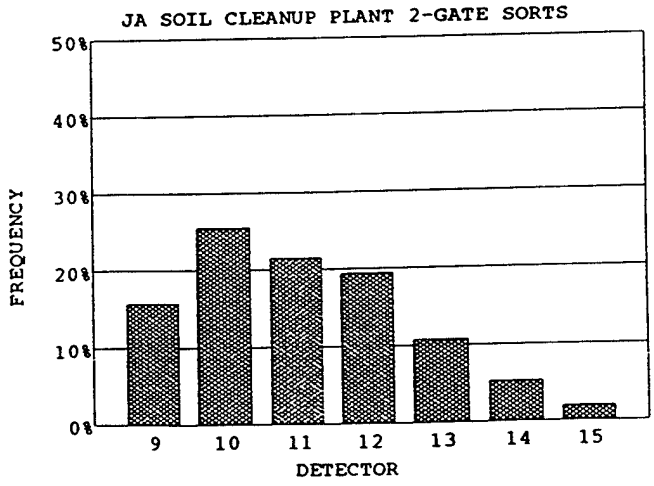
EVENT TYPES HPE 1,716 MPE 1,379 DISE 18,899

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 15-Apr-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:30 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	4.3 hr	4.3 hr	0.0 hr	0.0 hr	8.7 hr
SORTER START-UP	12:00	12:00	NA	NA	
START SOIL PROCESSING	12:23	12:23	NA	NA	
TIME REQUIRED TO START-UP	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
SORTER SHUT-DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:06	16:06	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	3.3 hr	3.2 hr	0.0 hr	0.0 hr	6.4 hr
DOWN-TIME	1.1 hr	1.2 hr	0.0 hr	0.0 hr	2.2 hr
SYSTEM PAUSE	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.8 hr
SORTER NONAVAILABLE TIME	5.7 hr	5.7 hr	10.0 hr	10.0 hr	31.3 hr
AUTHORIZED DELAY TIME	5.5 hr	5.5 hr	10.0 hr	10.0 hr	31.0 hr
PLANT PERFORMANCE					74.2%
PRODUCTIVTY					16.1%

PRODUCTIVITY

Date	15-Apr-94
Contract day (from 6 Sep)	179
Current Contract week	30
Soil production for Day	65 MT
Cumlative Soil Production for Week	500 MT
Total Soil production for contract	
Since 6 Sep 93	38,337 MT
Since 6 Aug 93	39,928 MT
Total Soil production for project	66,214 MT

Excused Delays for day (sorter-hrs)	31 hr
Excused delays for contract (sorter-hrs)	3,010 hr
Excused delay days (plant-days)	75 days
Excused delay months (plant-month)	2.89 months
Percent of contract completed	39.9%
Tons Ahead or Behind Schedule	1,682 MT
Days ahead or behind schedule	5 days

MT = metric tons

SORTER 1

15-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.72 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	27.5 tons	5.2 tons	32.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	21.8 yd³	4.1 yd³	25.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	15.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	33,382 kBq	28,850 kBq	390 kBq
MAXIMUM/SORT	2,233 kBq	1,376 kBq	19 kBq
MINIMUM/SORT	3 kBq	(16,578)Bq	-20 kBq
SPECIFIC ACTIVITY		1,049 Bq/kg	75 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		585		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	486		14:55	13:50
NONE (AD=0 & MD=0 & MND>0)	37			14:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	62			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		5,850		
2-SEC RECORDS WITH SORTS	2,153			
2-SEC RECORDS WITHOUT SORTS	3,697			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,738		
NONPROCESSING RECORDS (Test, calibration, etc)		20		

2-SEC SORT DETECTORS

1 DET	1,587	73.7%	5 DET	2	0.1%
2 DET	458	21.3%	6 DET	0	0.0%
3 DET	94	4.4%	7 DET	0	0.0%
4 DET	12	0.6%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 7.4 sec

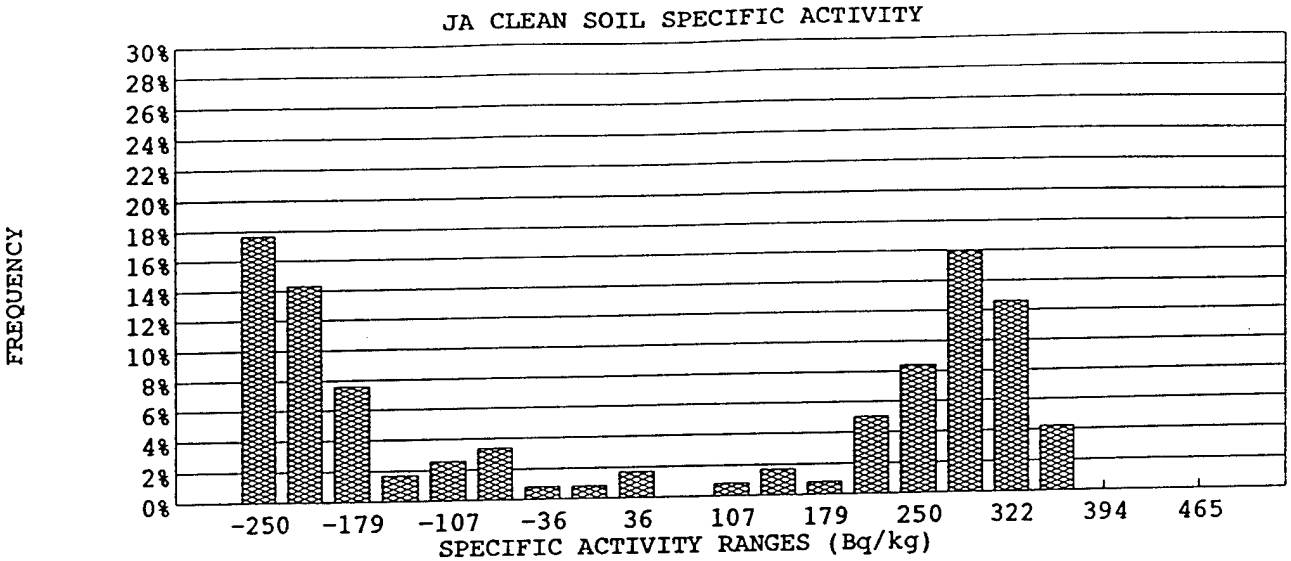
FREQUENCY DISTRIBUTIONS

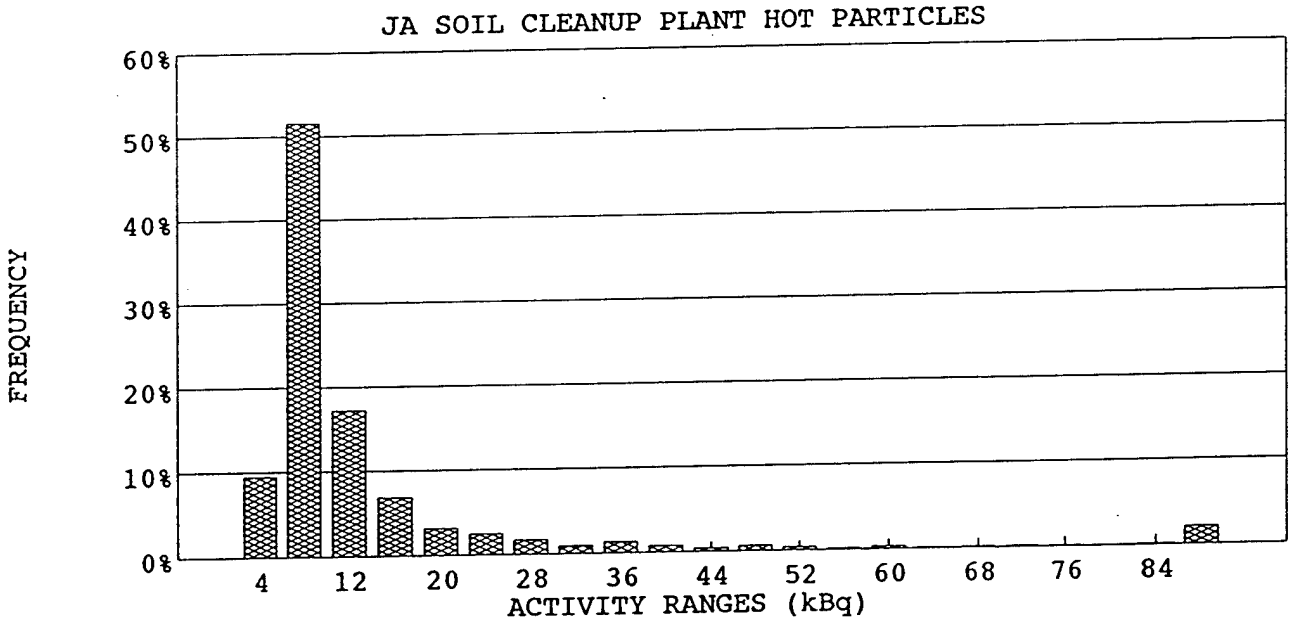
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	10	0.9%	-14000	21	-250	17.6%	4	204	9.5%
2	110	10.0%	-12000	17	-215	14.3%	8	1,110	51.6%
3	168	15.2%	-10000	9	-179	7.6%	12	370	17.2%
4	203	18.4%	-8000	2	-143	1.7%	16	148	6.9%
5	239	21.6%	-6000	3	-107	2.5%	20	69	3.2%
6	205	18.6%	-4000	4	-72	3.4%	24	53	2.5%
7	140	12.7%	-2000	1	-36	0.8%	28	37	1.7%
8	29	2.6%	0	1	0	0.8%	32	20	0.9%
TOTAL	1,104		2000	2	36	1.7%	36	28	1.3%
			4000	0	72	0.0%	40	16	0.7%
2-GATE DET	SORTS	FREQ%	6000	1	107	0.8%	44	8	0.4%
9	58	5.5%	8000	2	143	1.7%	48	13	0.6%
10	131	12.5%	10000	1	179	0.8%	52	8	0.4%
11	202	19.3%	12000	6	215	5.0%	56	4	0.2%
12	221	21.1%	14000	10	250	8.4%	60	7	0.3%
13	230	21.9%	16000	19	286	16.0%	64	2	0.1%
14	132	12.6%	18000	15	322	12.6%	68	4	0.2%
15	75	7.1%	20000	5	358	4.2%	72	4	0.2%
TOTAL	1,049		22000	0	394	0.0%	76	1	0.0%
			24000	0	429	0.0%	80	0	0.0%
			26000	0	465	0.0%	84	2	0.1%
			>28000	0	0	0.0%	>84	45	2.1%
			TOTAL	119			TOTAL	2,153	

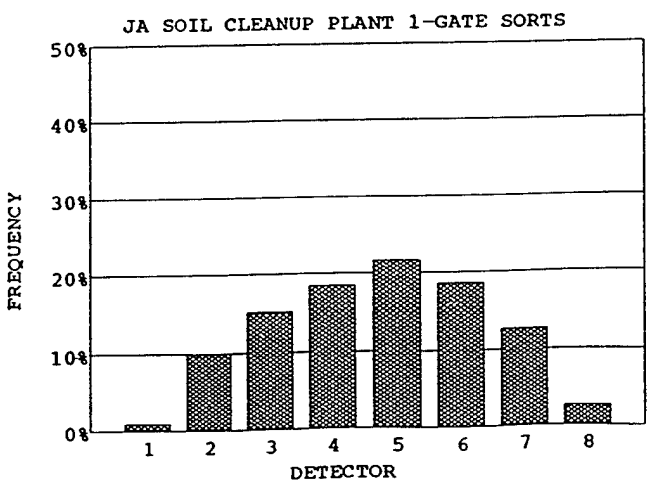
EVENT TYPES	HPE	2,090	MPE	3,048	DISE	34,219

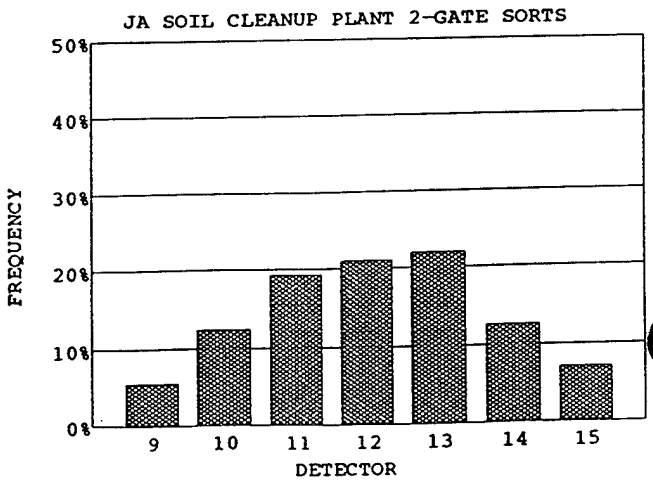
SORTER 1

15-Apr-94









SORTER 2

15-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.82 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	19.6 tons	12.5 tons	32.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	15.5 yd³	9.9 yd³	25.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	39.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	26,799 kBq	20,407 kBq	3,849 kBq
MAXIMUM/SORT	1,001 kBq	781 kBq	23 kBq
MINIMUM/SORT	2 kBq	(7,141)Bq	-15 kBq
SPECIFIC ACTIVITY		1,044 Bq/kg	308 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			573		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		334		14:55	13:50
NONE (AD=0 & MD=0 & MND>0)		20			14:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		219			15:44
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			5,730		
2-SEC RECORDS WITH SORTS		1,901			
2-SEC RECORDS WITHOUT SORTS		3,829			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,474		
NONPROCESSING RECORDS (Test, calibration, etc)			19		

2-SEC SORT DETECTORS

1 DET	1,406	74.0%	5 DET	2	0.1%
2 DET	413	21.7%	6 DET	0	0.0%
3 DET	67	3.5%	7 DET	0	0.0%
4 DET	13	0.7%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	48	5.1%
2	224	23.7%
3	210	22.2%
4	196	20.8%
5	142	15.0%
6	86	9.1%
7	30	3.2%
8	8	0.8%
TOTAL	944	

2-GATE SORTS

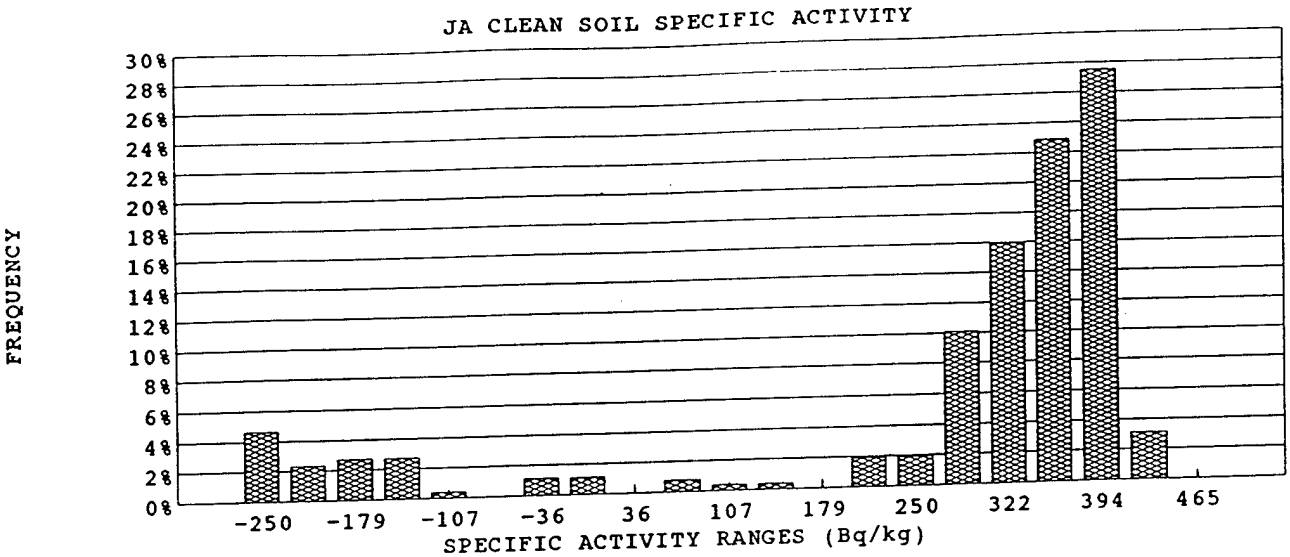
DET	SORTS	FREQ%
9	142	14.8%
10	251	26.2%
11	214	22.4%
12	181	18.9%
13	102	10.7%
14	54	5.6%
15	13	1.4%
TOTAL	957	

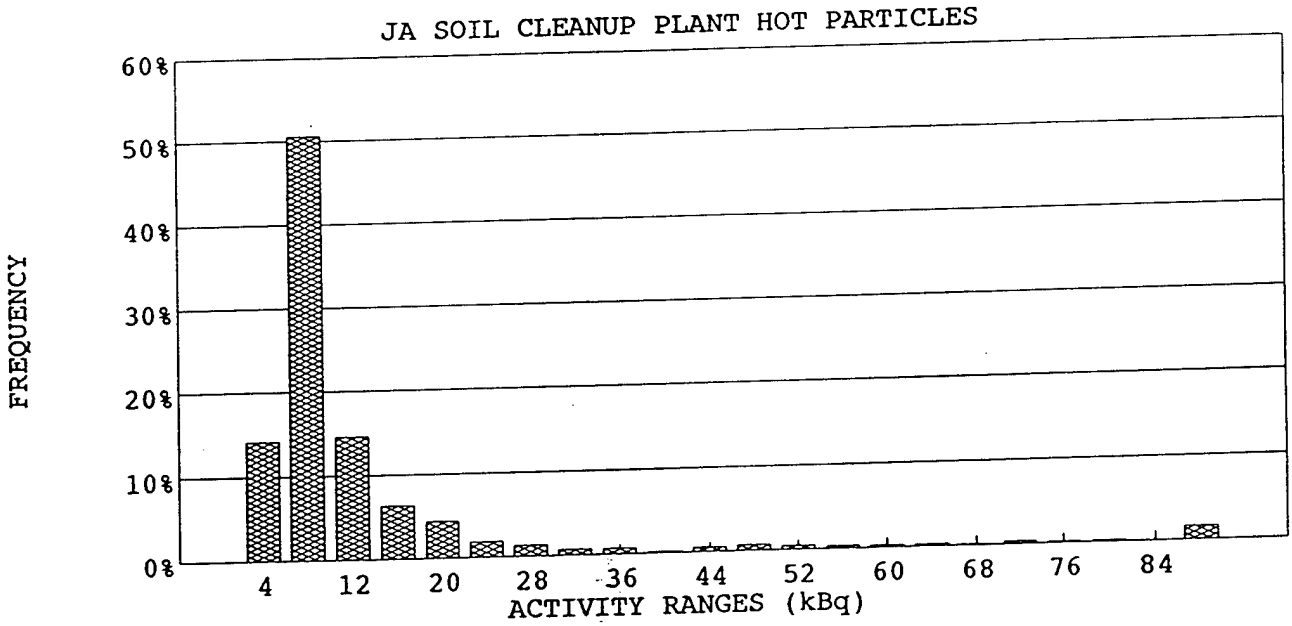
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	12	-250	4.7%	4	269	14.2%
-12000	6	-215	2.3%	8	961	50.6%
-10000	7	-179	2.7%	12	277	14.6%
-8000	7	-143	2.7%	16	121	6.4%
-6000	1	-107	0.4%	20	84	4.4%
-4000	0	-72	0.0%	24	35	1.8%
-2000	3	-36	1.2%	28	25	1.3%
0	3	0	1.2%	32	14	0.7%
2000	0	36	0.0%	36	13	0.7%
4000	2	72	0.8%	40	3	0.2%
6000	1	107	0.4%	44	11	0.6%
8000	1	143	0.4%	48	14	0.7%
10000	0	179	0.0%	52	9	0.5%
12000	5	215	1.9%	56	7	0.4%
14000	5	250	1.9%	60	5	0.3%
16000	26	286	10.1%	64	5	0.3%
18000	41	322	15.9%	68	2	0.1%
20000	59	358	22.9%	72	7	0.4%
22000	71	394	27.5%	76	3	0.2%
24000	8	429	3.1%	80	4	0.2%
26000	0	465	0.0%	84	1	0.1%
>28000	0	0	0.0%	>84	31	1.6%
TOTAL	258			TOTAL	1,901	

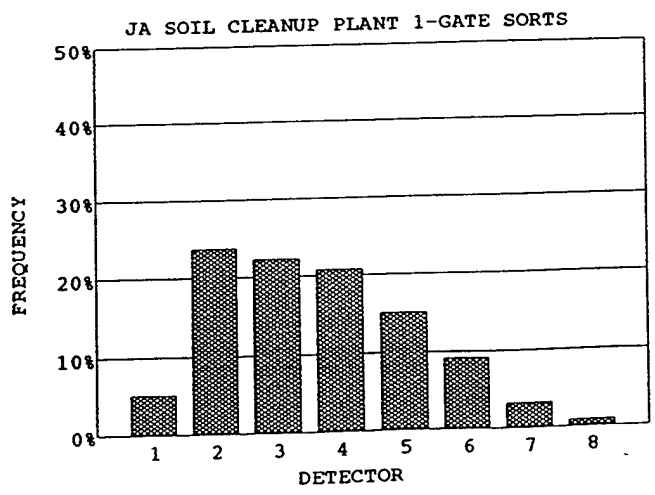
EVENT TYPES HPE 1,884 MPE 1,446 DISE 24,647

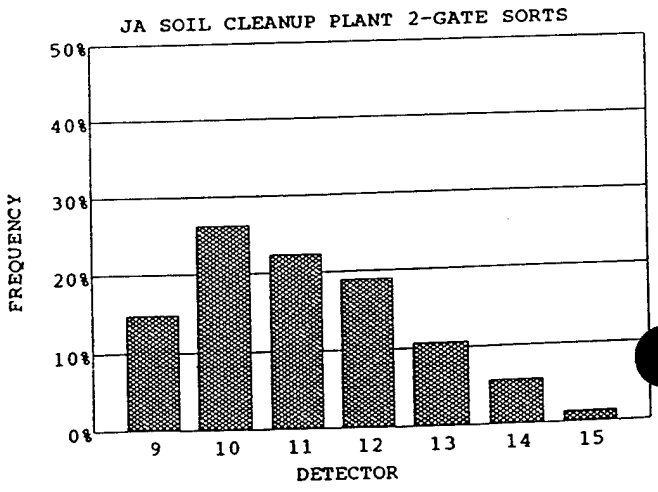
SORTER 2

15-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 16-Apr-94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	8.4 hr	8.4 hr	0.0 hr	0.0 hr	16.8 hr
SORTER START-UP	05:20	05:20	NA	NA	
START SOIL PROCESSING	05:36	05:35	NA	NA	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT-DOWN	13:45	13:45	NA	NA	
END SOIL PROCESSING	13:34	13:35	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.3 hr
ACTUAL PROCESS HOURS	7.4 hr	7.4 hr	0.0 hr	0.0 hr	14.9 hr
DOWN-TIME	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.0 hr
SYSTEM PAUSE	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
SORTER NONAVAILABLE TIME	2.1 hr	2.1 hr	10.0 hr	10.0 hr	24.2 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.3%
PRODUCTIVTY					35.4%

PRODUCTIVITY

Date	16-Apr-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	180	Excused delays for contract (sorter-hrs)	3,030 hr
Current Contract week	30	Excused delay days (plant-days)	76 days
		Excused delay months (plant-month)	2.91 months
Soil production for Day	150 MT		
Cumlative Soil Production for Week	650 MT	Percent of contract completed	40.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,674 MT
Since 6 Sep 93	38,486 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	40,077 MT		
Total Soil production for project	66,364 MT		

MT = metric tons

File Report1 Printed on 18-Apr-94 at 09:28:21 AM

SORTER 1

16-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.69 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	63.4 tons	11.3 tons	74.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	42.6 kg	
VOLUME IN-GROUND	50.3 yd³	9.0 yd³	59.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	15.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	96,780 kBq	78,842 kBq	613 kBq
MAXIMUM/SORT	3,944 kBq	2,333 kBq	20 kBq
MINIMUM/SORT	2 kBq	(29,092)Bq	-20 kBq
SPECIFIC ACTIVITY		1,243 Bq/kg	54 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,337		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1,130		06:21	06:11
NONE (AD=0 & MD=0 & MND>0)			100			07:24
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			107			08:55
UNEXPLAINED RECORDS			0			09:37
0<AD<1kBq & MD>0			0			10:25
AD=0 & MD>0			0			13:31
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				13,370		
2-SEC RECORDS WITH SORTS			4,166			
2-SEC RECORDS WITHOUT SORTS			9,204			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,503		
NONPROCESSING RECORDS (Test, calibration, etc)				14		
2-SEC SORT DETECTORS						
1 DET	2,948	70.8%	5 DET	20	0.5%	
2 DET	931	22.3%	6 DET	0	0.0%	
3 DET	212	5.1%	7 DET	2	0.0%	
4 DET	55	1.3%	8 DET	0	0.0%	
AVERAGE TIME BETWEEN 2-SEC SORTS			9.1 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	51	2.4%
2	296	13.8%
3	367	17.2%
4	360	16.8%
5	422	19.7%
6	290	13.6%
7	287	13.4%
8	65	3.0%
TOTAL	2,138	

2-GATE SORTS DET	SORTS	FREQ%
9	144	7.1%
10	333	16.4%
11	345	17.0%
12	404	19.9%
13	388	19.1%
14	261	12.9%
15	153	7.5%
TOTAL	2,028	

ACT_ND (Bq)	NUM (#)
-14000	26
-12000	20
-10000	19
-8000	20
-6000	5
-4000	6
-2000	2
0	3
2000	4
4000	2
6000	2
8000	6
10000	7
12000	18
14000	20
16000	23
18000	29
20000	9
22000	0
24000	0
26000	0
>28000	0
TOTAL	221

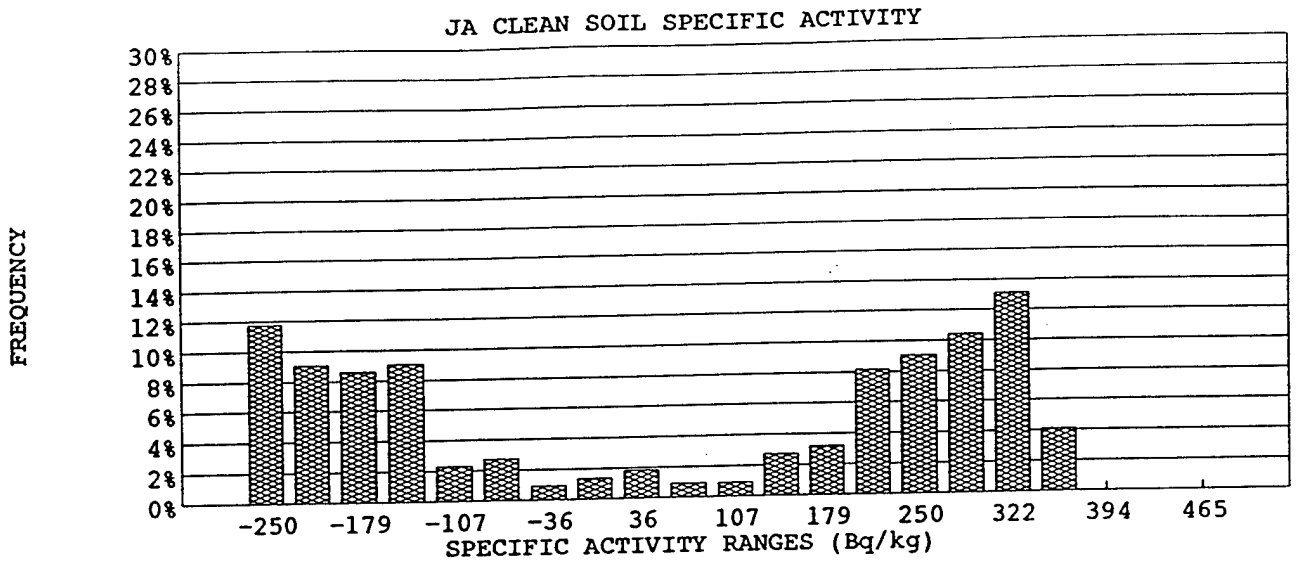
SPEC_A (Bq/kg)	FREQ%
-250	11.8%
-215	9.0%
-179	8.6%
-143	9.0%
-107	2.3%
-72	2.7%
-36	0.9%
0	1.4%
36	1.8%
72	0.9%
107	0.9%
143	2.7%
179	3.2%
215	8.1%
250	9.0%
286	10.4%
322	13.1%
358	4.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

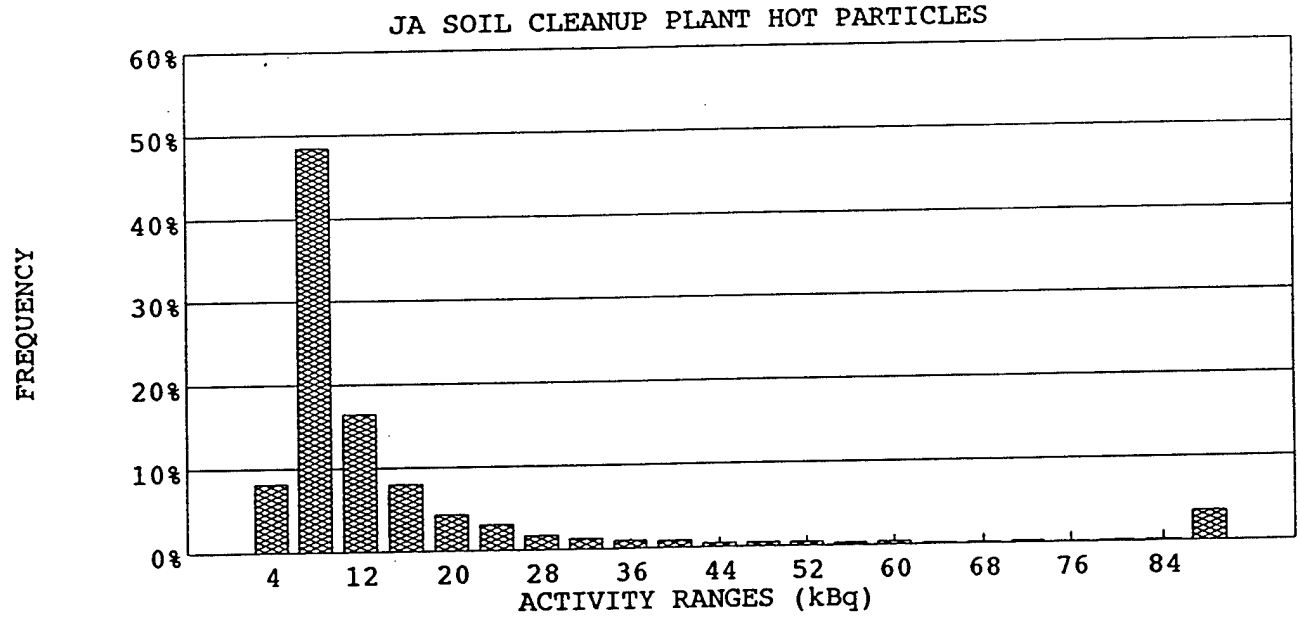
ACT_P (kBq)	NUM (#)	FREQ%
4	339	8.1%
8	2,019	48.5%
12	684	16.4%
16	335	8.0%
20	180	4.3%
24	129	3.1%
28	71	1.7%
32	53	1.3%
36	40	1.0%
40	36	0.9%
44	20	0.5%
48	21	0.5%
52	21	0.5%
56	12	0.3%
60	15	0.4%
64	8	0.2%
68	8	0.2%
72	9	0.2%
76	3	0.1%
80	8	0.2%
84	8	0.2%
>84	147	3.5%
TOTAL	4,166	

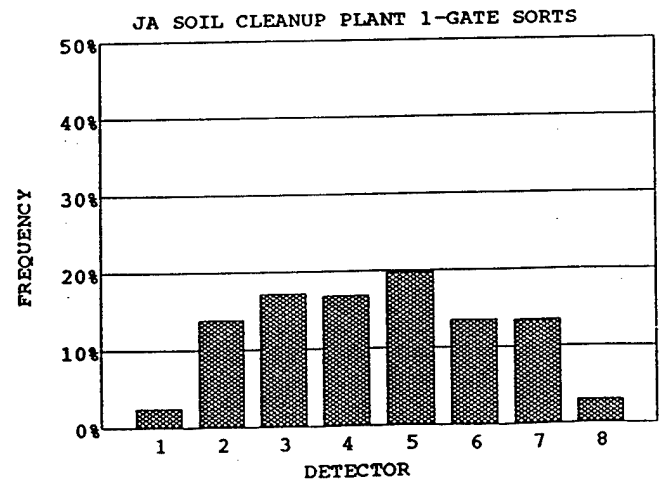
EVENT TYPES	HPE	MPE	DISE
	3,972	8,840	77,985

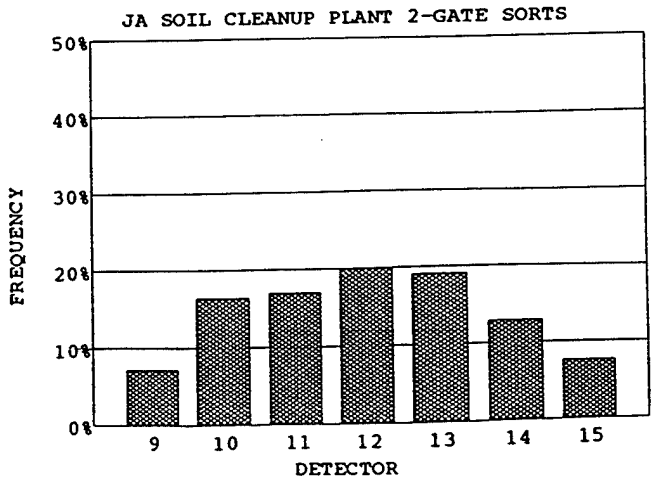
SORTER 1

16-Apr-94









SORTER 2

16-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	54.4 tons	20.4 tons	74.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.9 kg	
VOLUME IN-GROUND	43.1 yd³	16.1 yd³	59.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	27.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	111,884 kBq	72,323 kBq	4,023 kBq
MAXIMUM/SORT	5,393 kBq	3,066 kBq	23 kBq
MINIMUM/SORT	2 kBq	(17,090)Bq	-16 kBq
SPECIFIC ACTIVITY		1,329 Bq/kg	197 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,338		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		960		06:21	06:11
NONE (AD=0 & MD=0 & MND>0)		130			07:24
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		248			08:55
UNEXPLAINED RECORDS	0				09:37
0<AD<1kBq & MD>0	0				10:25
AD=0 & MD>0	0				13:31
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			13,380		
2-SEC RECORDS WITH SORTS		4,044			
2-SEC RECORDS WITHOUT SORTS		9,336			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,382		
NONPROCESSING RECORDS (Test, calibration, etc)			13		

2-SEC SORT DETECTORS

1 DET	2,863	70.8%	5 DET	26	0.6%
2 DET	899	22.2%	6 DET	0	0.0%
3 DET	207	5.1%	7 DET	2	0.0%
4 DET	49	1.2%	8 DET	1	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 9.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	105	5.2%
2	405	19.9%
3	401	19.7%
4	372	18.3%
5	381	18.7%
6	233	11.4%
7	117	5.7%
8	23	1.1%
TOTAL	2,037	

2-GATE SORTS

DET	SORTS	FREQ%
9	248	12.4%
10	419	20.9%
11	388	19.3%
12	400	19.9%
13	331	16.5%
14	163	8.1%
15	58	2.9%
TOTAL	2,007	

ACT_ND (Bq)	NUM (#)
-14000	8
-12000	23
-10000	37
-8000	20
-6000	12
-4000	3
-2000	1
0	1
2000	3
4000	0
6000	4
8000	3
10000	9
12000	13
14000	14
16000	28
18000	49
20000	81
22000	74
24000	8
26000	0
>28000	0
TOTAL	391

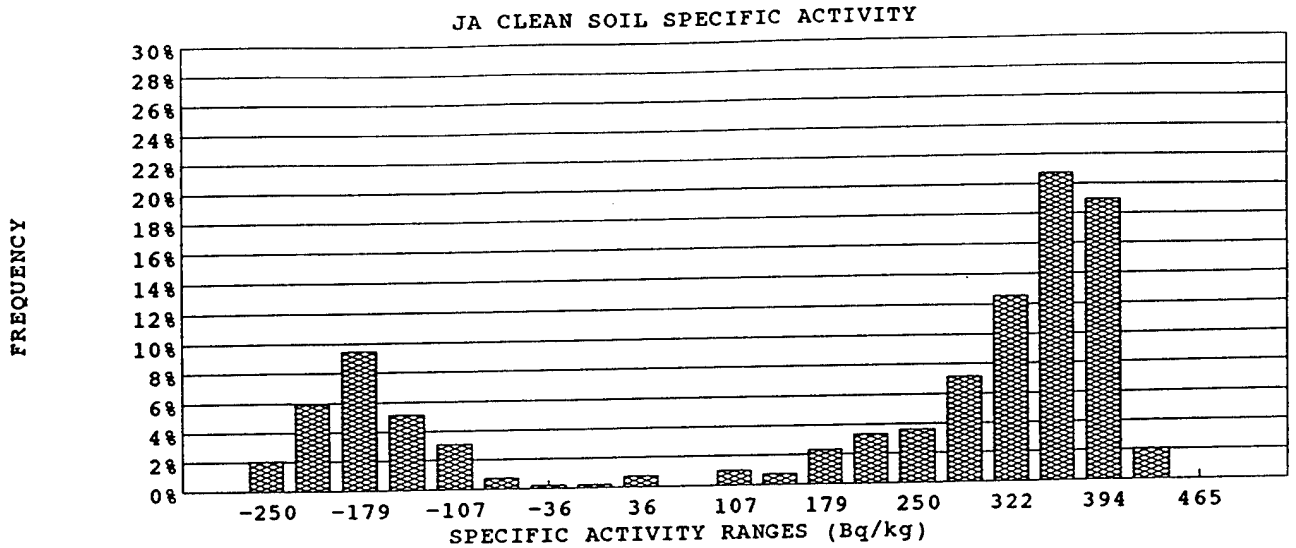
SPEC_A (Bq/kg)	FREQ%
-250	2.0%
-215	5.9%
-179	9.5%
-143	5.1%
-107	3.1%
-72	0.8%
-36	0.3%
0	0.3%
36	0.8%
72	0.0%
107	1.0%
143	0.8%
179	2.3%
215	3.3%
250	3.6%
286	7.2%
322	12.5%
358	20.7%
394	18.9%
429	2.0%
465	0.0%
0	0.0%

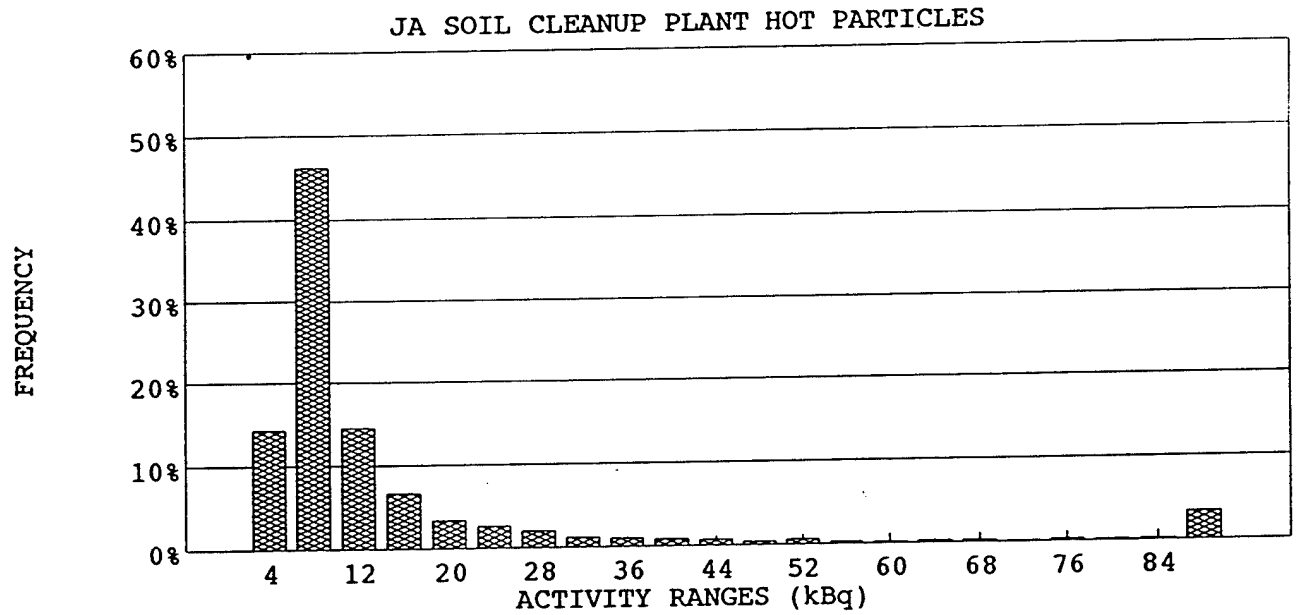
ACT_P (kBq)	NUM (#)	FREQ%
4	578	14.3%
8	1,870	46.2%
12	587	14.5%
16	271	6.7%
20	140	3.5%
24	108	2.7%
28	83	2.1%
32	49	1.2%
36	40	1.0%
40	35	0.9%
44	29	0.7%
48	17	0.4%
52	27	0.7%
56	10	0.2%
60	9	0.2%
64	11	0.3%
68	10	0.2%
72	5	0.1%
76	10	0.2%
80	8	0.2%
84	9	0.2%
>84	138	3.4%
TOTAL	4,044	

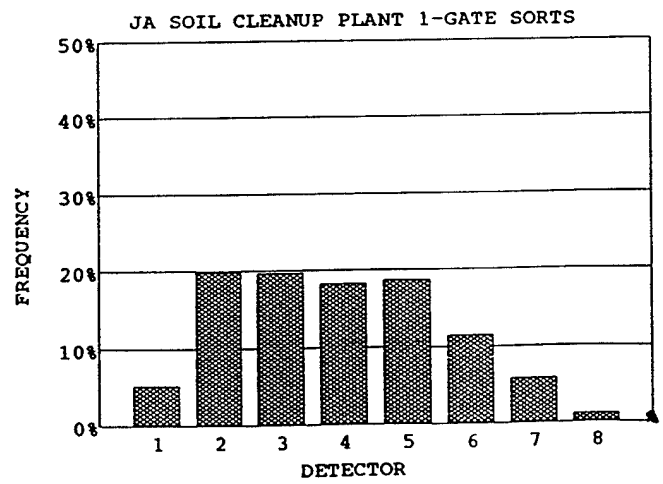
EVENT TYPES HPE 3,885 MPE 4,323 DISE 69,677

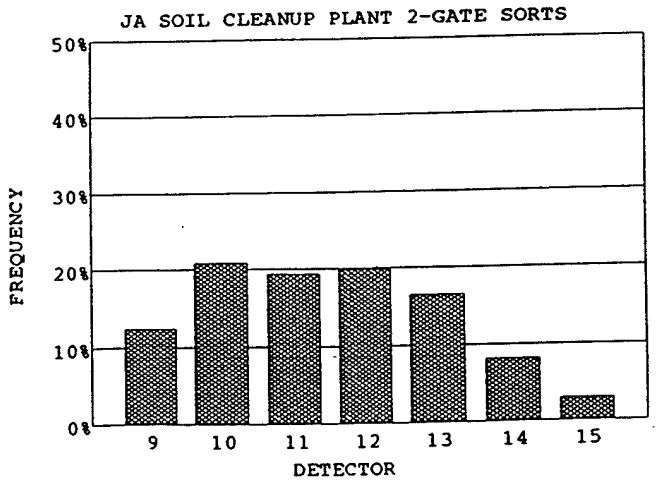
SORTER 2

16-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 18–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.7 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	06:18	06:36	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.6 hr	0.0 hr	0.0 hr	0.9 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:01	16:03	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	9.4 hr	9.2 hr	0.0 hr	0.0 hr	18.6 hr
DOWN–TIME	0.9 hr	1.2 hr	0.0 hr	0.0 hr	2.1 hr
SYSTEM PAUSE	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					90.0%
PRODUCTIVTY					44.3%

PRODUCTIVITY

Date	18–Apr–94
Contract day (from 6 Sep)	181
Current Contract week	31
Soil production for Day	187 MT
Cumlative Soil Production for Week	187 MT
Total Soil production for contract	
Since 6 Sep 93	38,673 MT
Since 6 Aug 93	40,264 MT
Total Soil production for project	66,551 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	3,050 hr
Excused delay days (plant–days)	76 days
Excused delay months (plant–month)	2.93 months
Percent of contract completed	40.3%
Tons Ahead or Behind Schedule	1,702 MT
Days ahead or behind schedule	5 days

MT = metric tons

SORTER 1

18-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.68 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	48.3 tons	46.5 tons	94.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	38.3 yd³	36.9 yd³	75.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	49.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	98,755 kBq	70,169 kBq	11,299 kBq
MAXIMUM/SORT	10,509 kBq	5,935 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,452 Bq/kg	243 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,697		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	828		06:18	11:36
NONE (AD=0 & MD=0 & MND>0)	74		08:47	12:53
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	795			14:16
UNEXPLAINED RECORDS	0			15:27
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,970		
2-SEC RECORDS WITH SORTS	4,036			
2-SEC RECORDS WITHOUT SORTS	12,934			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,733		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

1 DET	2,942	72.9%	5 DET	11	0.3%
2 DET	848	21.0%	6 DET	0	0.0%
3 DET	190	4.7%	7 DET	0	0.0%
4 DET	45	1.1%	8 DET	0	0.0%

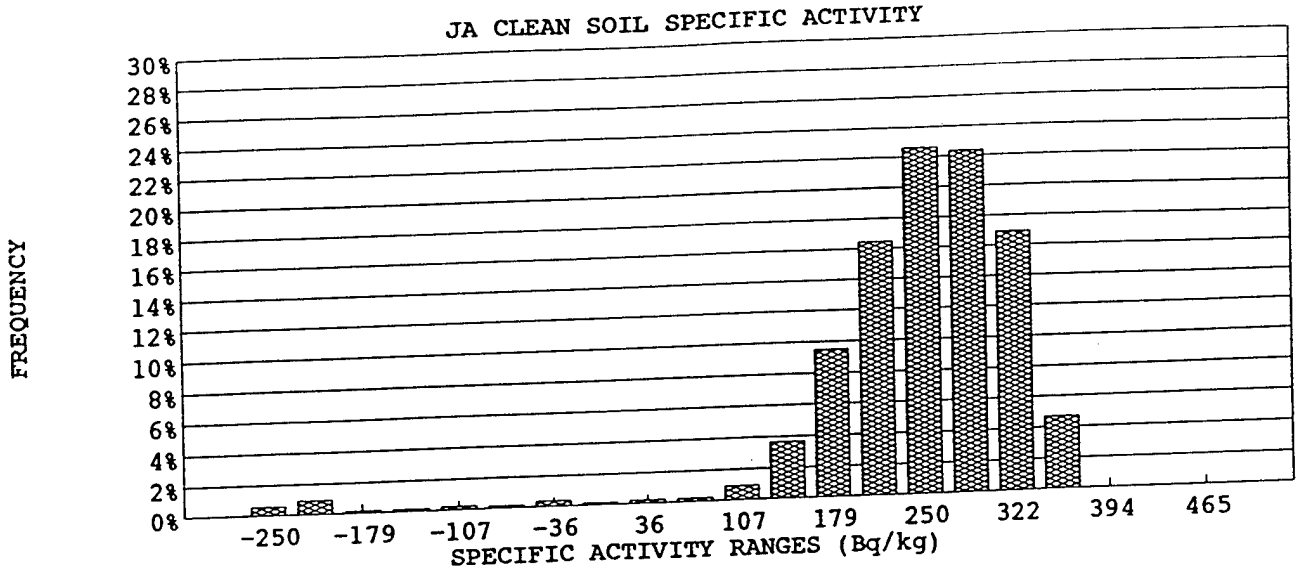
AVERAGE TIME BETWEEN 2-SEC SORTS 11.5 sec

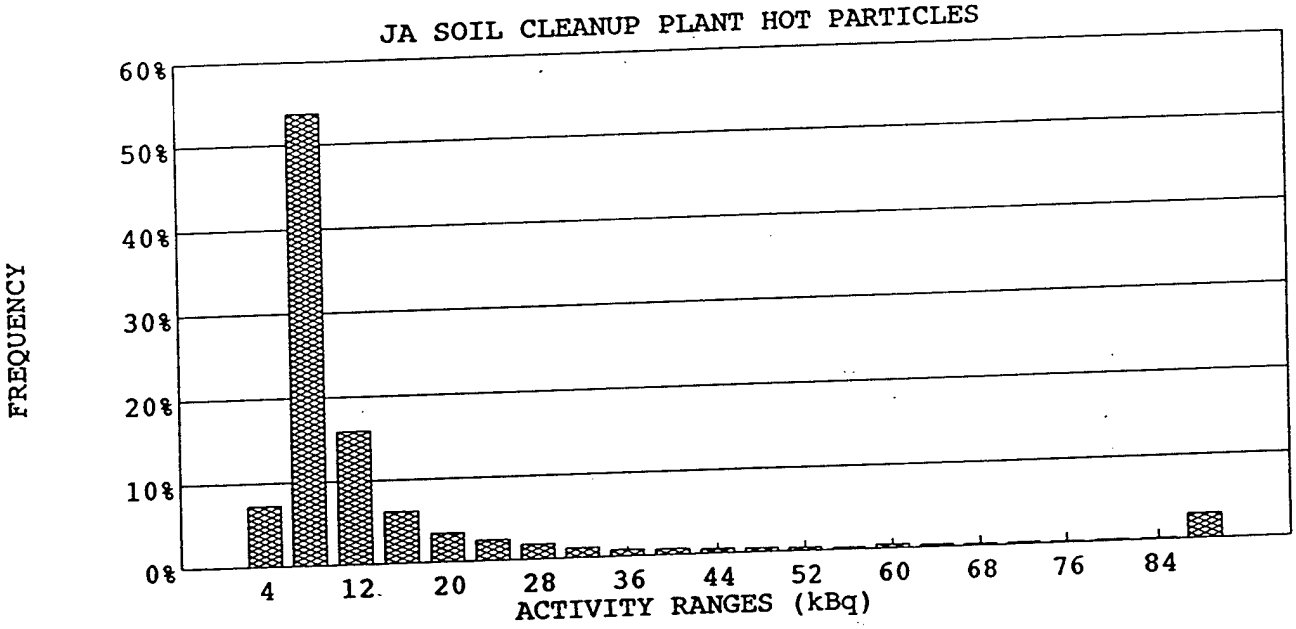
FREQUENCY DISTRIBUTIONS

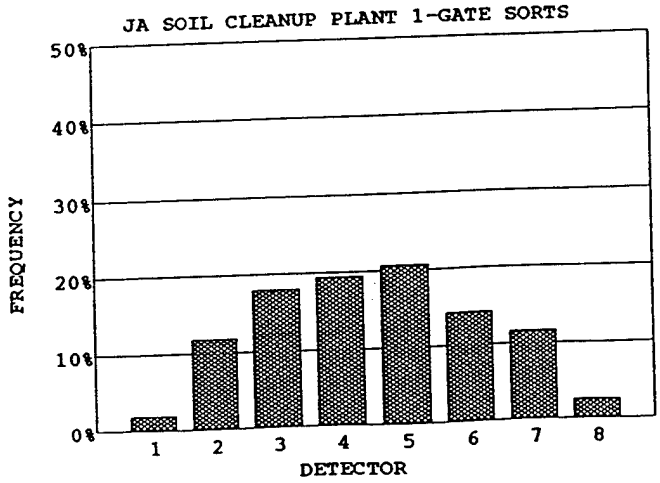
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	37	1.8%	-14000	5	-250	0.6%	4	297	7.4%
2	241	11.7%	-12000	8	-215	0.9%	8	2,168	53.7%
3	370	18.0%	-10000	1	-179	0.1%	12	641	15.9%
4	398	19.4%	-8000	1	-143	0.1%	16	253	6.3%
5	424	20.7%	-6000	2	-107	0.2%	20	140	3.5%
6	293	14.3%	-4000	1	-72	0.1%	24	101	2.5%
7	238	11.6%	-2000	3	-36	0.3%	28	72	1.8%
8	51	2.5%	0	1	0	0.1%	32	47	1.2%
TOTAL	2,052		2000	2	36	0.2%	36	30	0.7%
			4000	2	72	0.2%	40	27	0.7%
2-GATE SORTS			6000	8	107	0.9%	44	23	0.6%
DET	SORTS	FREQ%	8000	32	143	3.7%	48	18	0.4%
9	104	5.2%	10000	83	179	9.5%	52	17	0.4%
10	301	15.2%	12000	144	215	16.4%	56	10	0.2%
11	373	18.8%	14000	198	250	22.6%	60	20	0.5%
12	431	21.7%	16000	196	286	22.4%	64	12	0.3%
13	392	19.8%	18000	148	322	16.9%	68	9	0.2%
14	255	12.9%	20000	41	358	4.7%	72	11	0.3%
15	128	6.5%	22000	0	394	0.0%	76	7	0.2%
TOTAL	1,984		24000	0	429	0.0%	80	5	0.1%
			26000	0	465	0.0%	84	6	0.1%
			>28000	0	0	0.0%	>84	122	3.0%
			TOTAL	876			TOTAL	4,036	

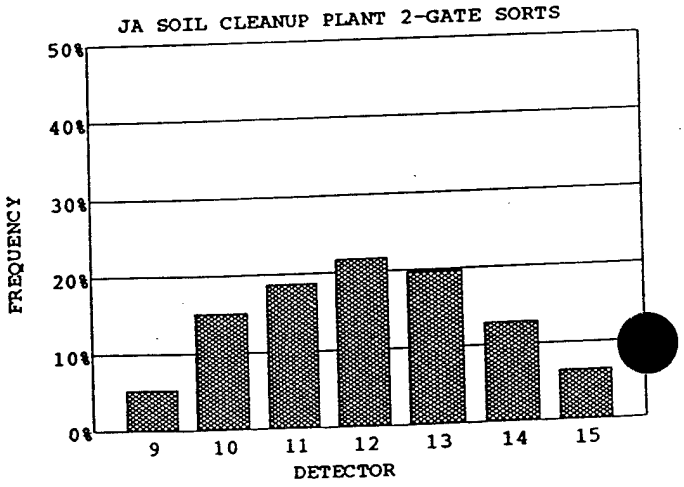
EVENT TYPES HPE 4,026 MPE 8,239 DISE 56,891

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

18-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.78 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	44.2 tons	48.1 tons	92.2 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	42.6 kg	
VOLUME IN-GROUND	35.0 yd³	38.1 yd³	73.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	52.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	60,733 kBq	51,688 kBq	13,010 kBq
MAXIMUM/SORT	2,022 kBq	1,567 kBq	23 kBq
MINIMUM/SORT	2 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		1,170 Bq/kg	271 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,650		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	763		None	11:36
NONE (AD=0 & MD=0 & MND>0)	180			12:55
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	707			14:16
UNEXPLAINED RECORDS	0			15:27
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,500		
2-SEC RECORDS WITH SORTS	3,639			
2-SEC RECORDS WITHOUT SORTS	12,861			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,289		
NONPROCESSING RECORDS (Test, calibration, etc)		9		

2-SEC SORT DETECTORS

1 DET	2,734	75.1%	5 DET	3	0.1%
2 DET	731	20.1%	6 DET	0	0.0%
3 DET	140	3.8%	7 DET	0	0.0%
4 DET	31	0.9%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 12.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

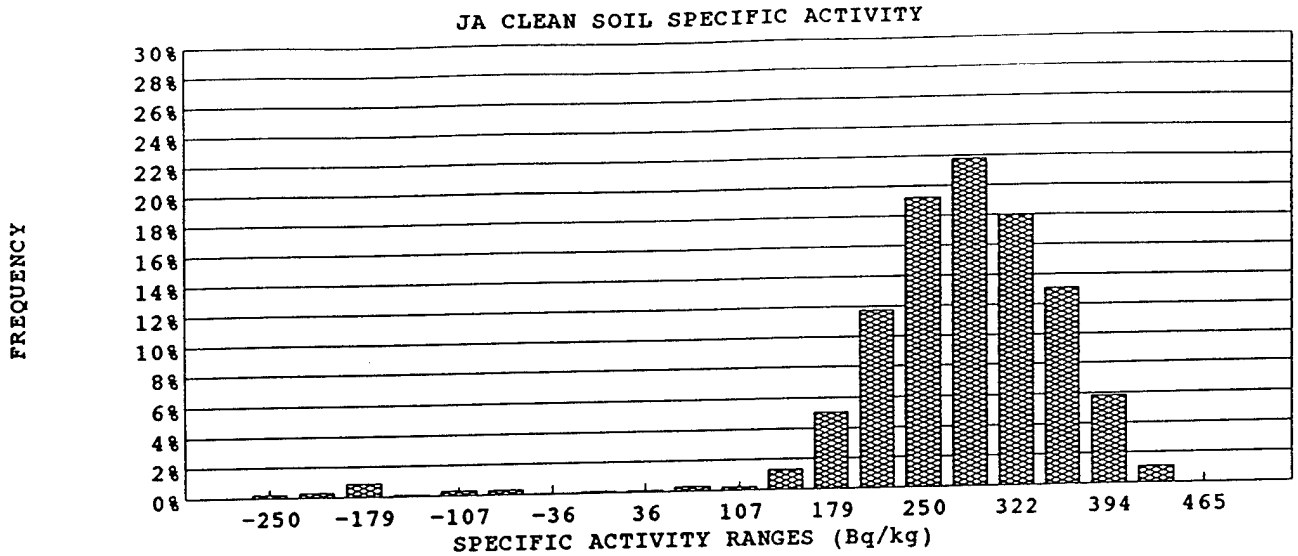
DET	SORTS	FREQ%
1	94	5.1%
2	380	20.8%
3	337	18.4%
4	350	19.1%
5	331	18.1%
6	206	11.3%
7	102	5.6%
8	29	1.6%
TOTAL	1,829	

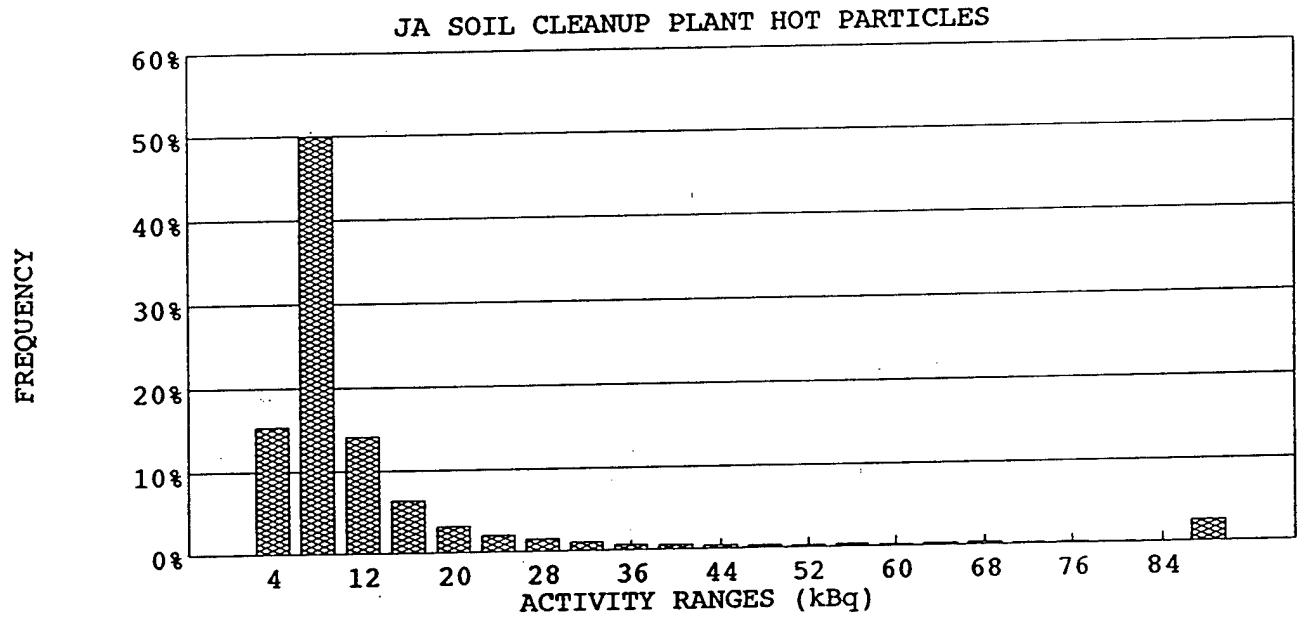
2-GATE SORTS

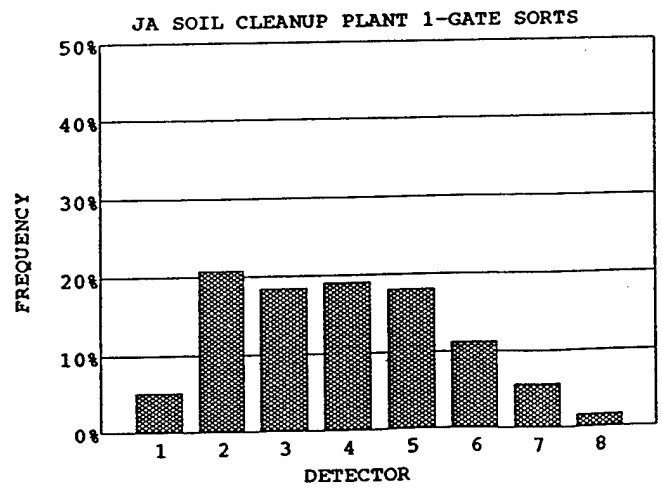
DET	SORTS	FREQ%
9	228	12.6%
10	389	21.5%
11	359	19.8%
12	350	19.3%
13	289	16.0%
14	136	7.5%
15	59	3.3%
TOTAL	1,810	

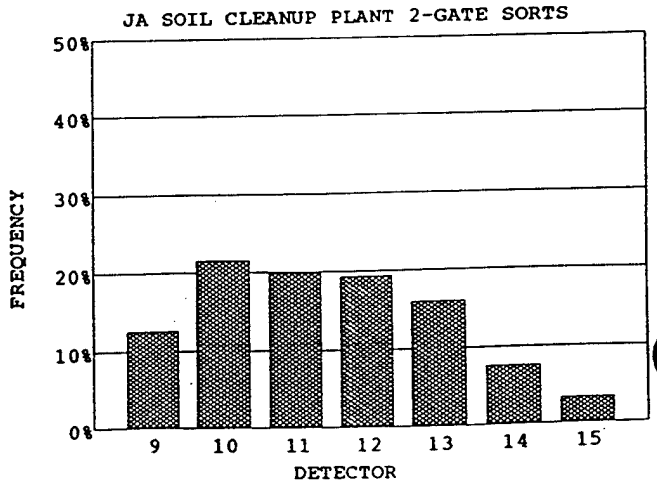
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-250	0.2%	4	559	15.4%
-12000	3	-215	0.3%	8	1,817	49.9%
-10000	8	-179	0.9%	12	513	14.1%
-8000	1	-143	0.1%	16	232	6.4%
-6000	3	-107	0.3%	20	115	3.2%
-4000	3	-72	0.3%	24	75	2.1%
-2000	0	-36	0.0%	28	53	1.5%
0	1	0	0.1%	32	37	1.0%
2000	1	36	0.1%	36	24	0.7%
4000	3	72	0.3%	40	22	0.6%
6000	2	107	0.2%	44	14	0.4%
8000	12	143	1.3%	48	12	0.3%
10000	45	179	5.0%	52	10	0.3%
12000	105	215	11.7%	56	13	0.4%
14000	172	250	19.2%	60	8	0.2%
16000	195	286	21.8%	64	10	0.3%
18000	161	322	18.0%	68	13	0.4%
20000	117	358	13.1%	72	7	0.2%
22000	52	394	5.8%	76	6	0.2%
24000	10	429	1.1%	80	4	0.1%
26000	0	465	0.0%	84	2	0.1%
>28000	0	0	0.0%	>84	93	2.6%
TOTAL	896			TOTAL	3,639	

EVENT TYPES HPE 3,715 MPE 4,001 DISE 55,508


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 19–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:26	06:25	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:05	16:04	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	9.1 hr	9.1 hr	0.0 hr	0.0 hr	18.2 hr
DOWN–TIME	1.1 hr	1.2 hr	0.0 hr	0.0 hr	2.3 hr
SYSTEM PAUSE	0.5 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.7%
PRODUCTIVTY					43.3%

PRODUCTIVITY

Date	19–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	182	Excused delays for contract (sorter–hrs)	3,070 hr
Current Contract week	31	Excused delay days (plant–days)	77 days
		Excused delay months (plant–month)	2.95 months
Soil production for Day	183 MT		
Cumlative Soil Production for Week	370 MT	Percent of contract completed	40.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,727 MT
Since 6 Sep 93	38,856 MT	Days ahead or behind schedule	5 days
Since 6 Aug 93	40,447 MT		
Total Soil production for project	66,734 MT		

MT = metric tons

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SORTER 1

19-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	86.7 tons	5.1 tons	91.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	68.7 yd³	4.0 yd³	72.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	5.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	252,017 kBq	162,482 kBq	(607)kBq
MAXIMUM/SORT	8,531 kBq	5,622 kBq	17 kBq
MINIMUM/SORT	2 kBq	(6,746)Bq	-20 kBq
SPECIFIC ACTIVITY		1,875 Bq/kg	(120)Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,641		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1,549		08:39	07:37
NONE (AD=0 & MD=0 & MND>0)	73		12:31	08:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	19			09:57
UNEXPLAINED RECORDS	0			10:41
0<AD<1kBq & MD>0	0			11:15
AD=0 & MD>0	0			12:26
AD<0 & MD >0	2			14:23
2-SEC COUNT PERIODS		16,410		
2-SEC RECORDS WITH SORTS	8,366			
2-SEC RECORDS WITHOUT SORTS	8,044			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		10,007		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

1 DET	5,637	67.4%	5 DET	55	0.7%
2 DET	2,035	24.3%	6 DET	0	0.0%
3 DET	502	6.0%	7 DET	4	0.0%
4 DET	137	1.6%	8 DET	1	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 5.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	101	2.4%
2	545	12.8%
3	788	18.4%
4	811	19.0%
5	884	20.7%
6	600	14.0%
7	445	10.4%
8	98	2.3%
TOTAL	4,272	

2-GATE SORTS

DET	SORTS	FREQ%
9	283	6.9%
10	650	15.9%
11	782	19.1%
12	875	21.4%
13	773	18.9%
14	465	11.4%
15	266	6.5%
TOTAL	4,094	

ACT_ND (Bq)	NUM (#)
-14000	18
-12000	19
-10000	13
-8000	18
-6000	5
-4000	5
-2000	2
0	1
2000	2
4000	4
6000	2
8000	0
10000	3
12000	2
14000	1
16000	4
18000	3
20000	0
22000	0
24000	0
26000	0
>28000	0
TOTAL	102

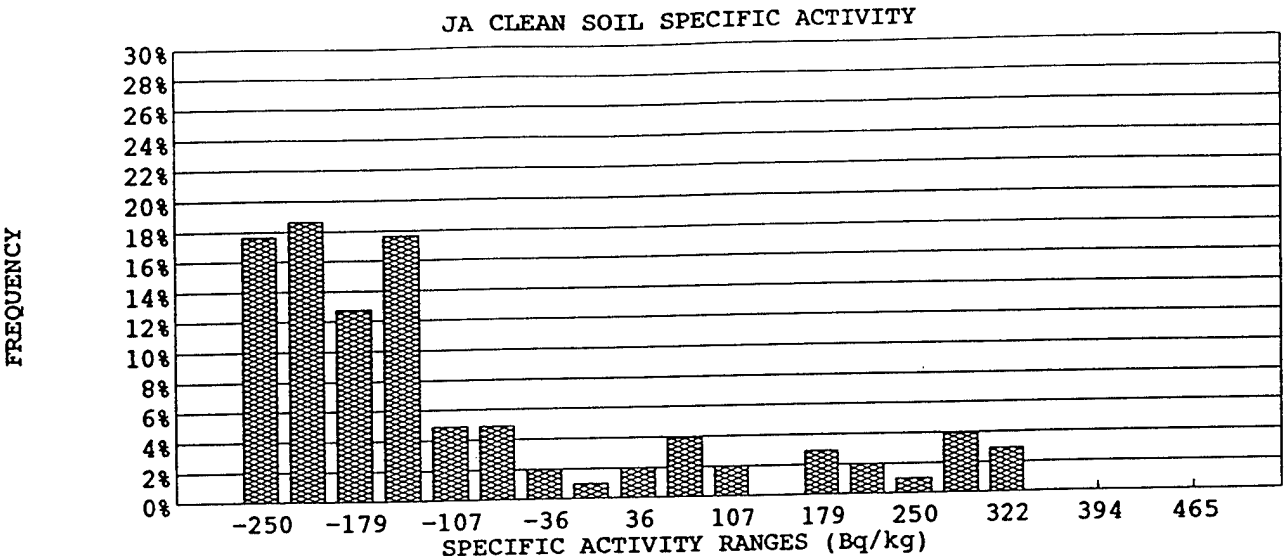
SPEC_A (Bq/kg)	FREQ%
-250	17.6%
-215	18.6%
-179	12.7%
-143	17.6%
-107	4.9%
-72	4.9%
-36	2.0%
0	1.0%
36	2.0%
72	3.9%
107	2.0%
143	0.0%
179	2.9%
215	2.0%
250	1.0%
286	3.9%
322	2.9%
358	0.0%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

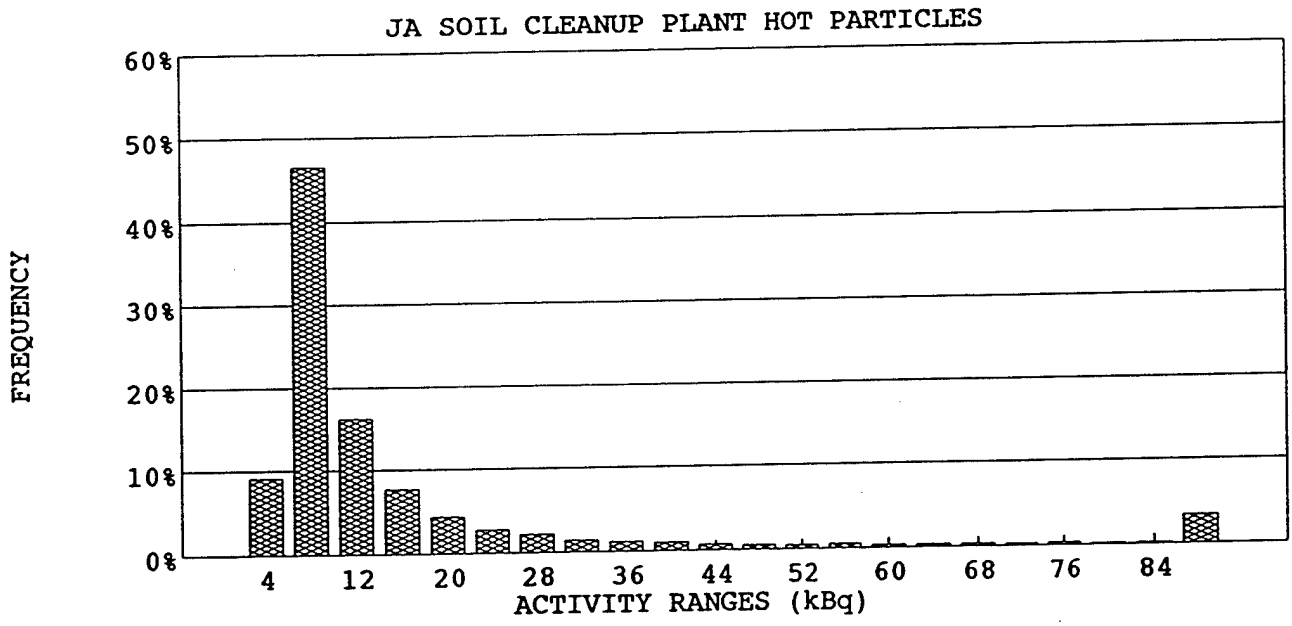
ACT_P (kBq)	NUM (#)	FREQ%
4	759	9.1%
8	3,898	46.6%
12	1,358	16.2%
16	644	7.7%
20	366	4.4%
24	233	2.8%
28	181	2.2%
32	119	1.4%
36	95	1.1%
40	84	1.0%
44	59	0.7%
48	45	0.5%
52	39	0.5%
56	46	0.5%
60	28	0.3%
64	28	0.3%
68	28	0.3%
72	23	0.3%
76	27	0.3%
80	12	0.1%
84	12	0.1%
>84	282	3.4%
TOTAL	8,366	

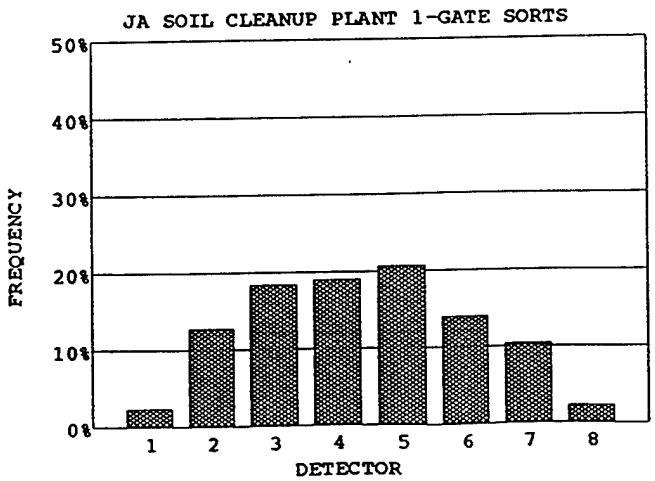
EVENT TYPES HPE 7,690 MPE 18,666 DISE 97,665

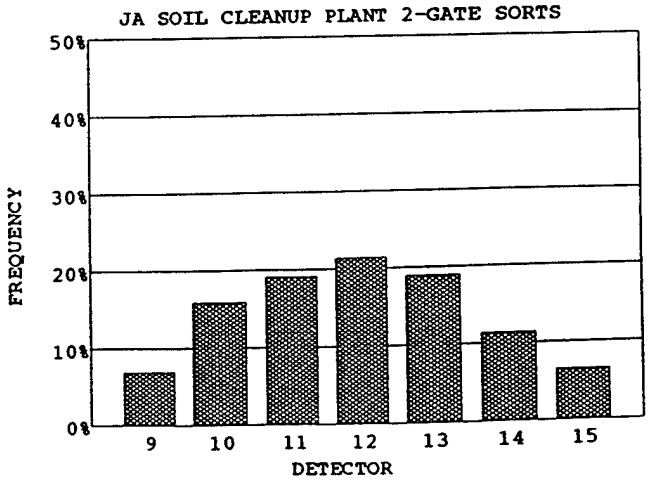
SORTER 1

19-Apr-94









SORTER 2

19-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.10 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	80.2 tons	11.0 tons	91.2 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	63.6 yd³	8.7 yd³	72.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	12.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	182,148 kBq	128,986 kBq	1,300 kBq
MAXIMUM/SORT	9,465 kBq	7,370 kBq	21 kBq
MINIMUM/SORT	2 kBq	(6,338)Bq	-19 kBq
SPECIFIC ACTIVITY		1,608 Bq/kg	118 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,632		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1,423		08:39	07:33
NONE (AD=0 & MD=0 & MND>0)		75		12:31	07:37
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		134			08:36
UNEXPLAINED RECORDS		0			09:57
0<AD<1kBq & MD>0		0			10:41
AD=0 & MD>0		0			11:15
AD<0 & MD >0		1			12:26
2-SEC COUNT PERIODS			16,320		14:23
2-SEC RECORDS WITH SORTS		8,139			
2-SEC RECORDS WITHOUT SORTS		8,181			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			9,771		
NONPROCESSING RECORDS (Test, calibration, etc)			9		

2-SEC SORT DETECTORS

1 DET	5,522	67.8%	5 DET	28	0.3%
2 DET	1,998	24.5%	6 DET	0	0.0%
3 DET	493	6.1%	7 DET	2	0.0%
4 DET	98	1.2%	8 DET	0	0.0%

AVERAGE TIME BETWEEN 2-SEC SORTS 5.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	209	5.1%
2	738	18.0%
3	777	19.0%
4	838	20.5%
5	736	18.0%
6	531	13.0%
7	220	5.4%
8	40	1.0%
TOTAL	4,089	

2-GATE SORTS

DET	SORTS	FREQ%
9	500	12.3%
10	811	20.0%
11	844	20.8%
12	817	20.2%
13	645	15.9%
14	331	8.2%
15	102	2.5%
TOTAL	4,050	

ACT_ND (Bq)	NUM (#)
-14000	4
-12000	6
-10000	17
-8000	22
-6000	15
-4000	10
-2000	3
0	3
2000	4
4000	2
6000	4
8000	4
10000	13
12000	21
14000	19
16000	21
18000	21
20000	16
22000	13
24000	0
26000	0
>28000	0
TOTAL	218

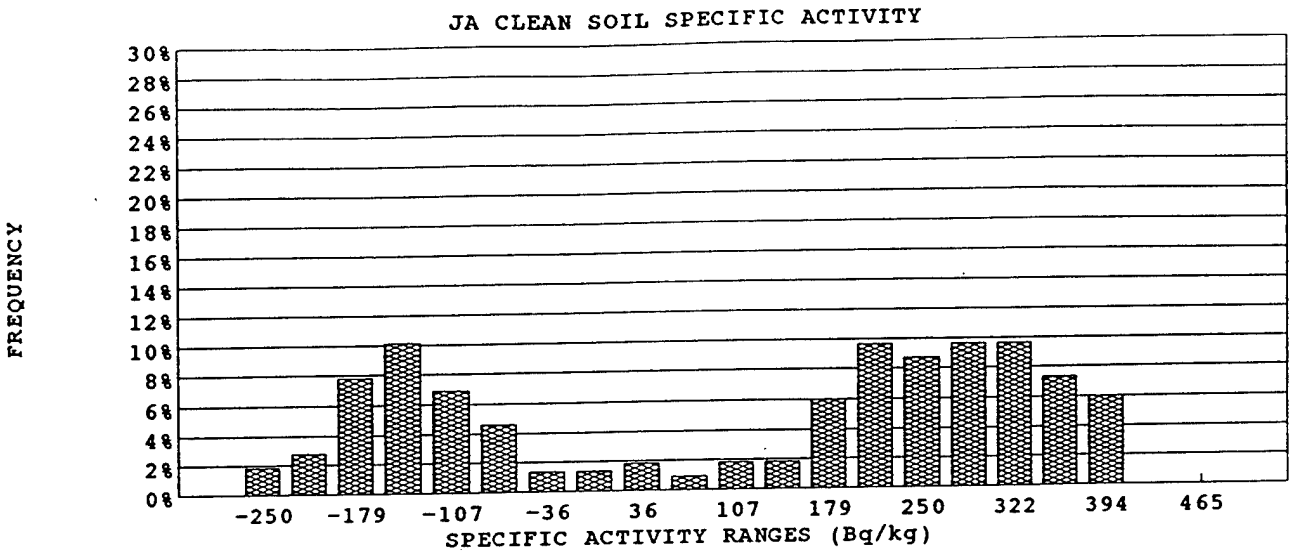
SPEC_A (Bq/kg)	FREQ%
-250	1.8%
-215	2.8%
-179	7.8%
-143	10.1%
-107	6.9%
-72	4.6%
-36	1.4%
0	1.4%
36	1.8%
72	0.9%
107	1.8%
143	1.8%
179	6.0%
215	9.6%
250	8.7%
286	9.6%
322	9.6%
358	7.3%
394	6.0%
429	0.0%
465	0.0%
0	0.0%

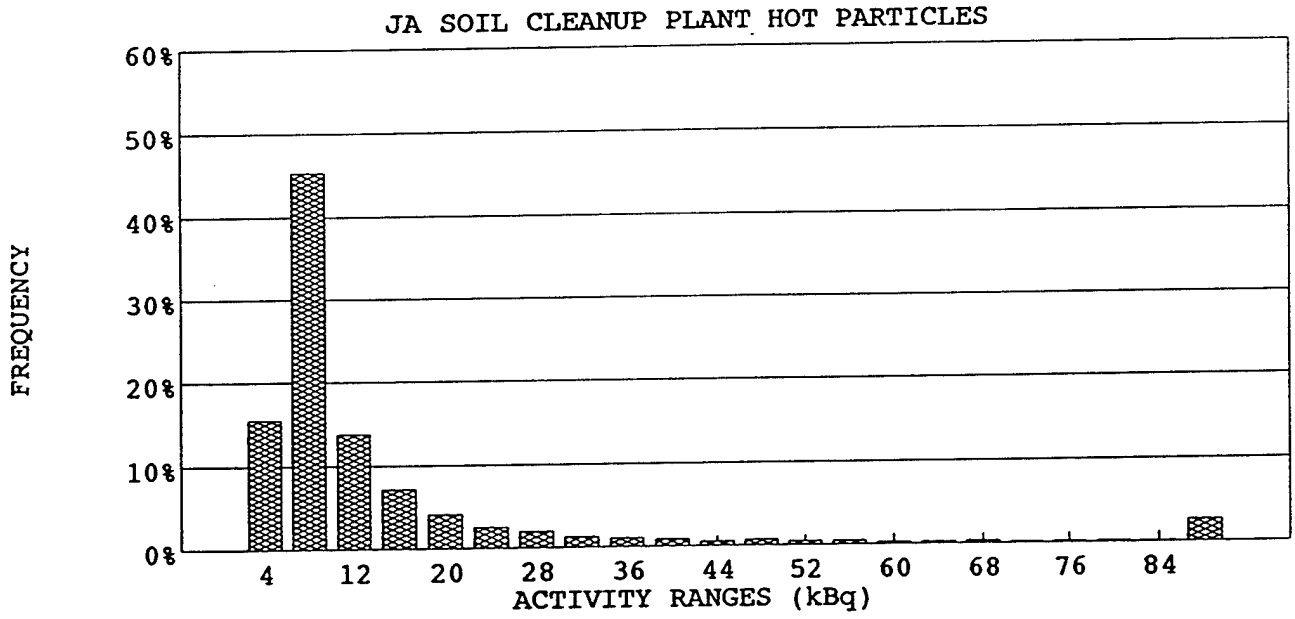
ACT_P (kBq)	NUM (#)	FREQ%
4	1,265	15.5%
8	3,685	45.3%
12	1,124	13.8%
16	589	7.2%
20	335	4.1%
24	206	2.5%
28	161	2.0%
32	102	1.3%
36	85	1.0%
40	69	0.8%
44	44	0.5%
48	60	0.7%
52	37	0.5%
56	38	0.5%
60	24	0.3%
64	23	0.3%
68	29	0.4%
72	14	0.2%
76	14	0.2%
80	13	0.2%
84	9	0.1%
>84	213	2.6%
TOTAL	8,139	

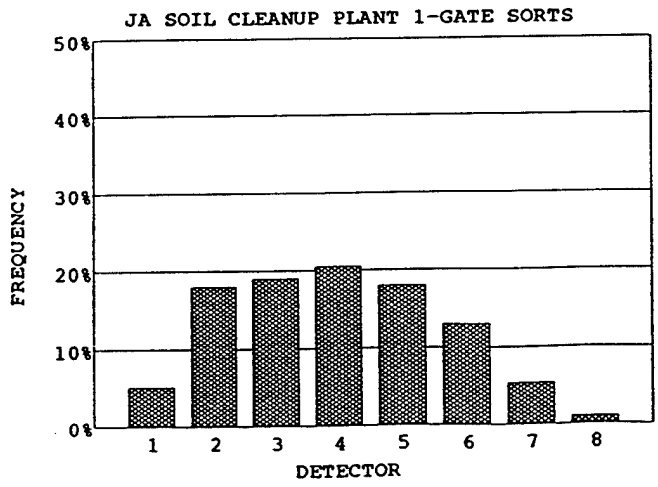
EVENT TYPES HPE 7,525 MPE 9,502 DISE 97,796

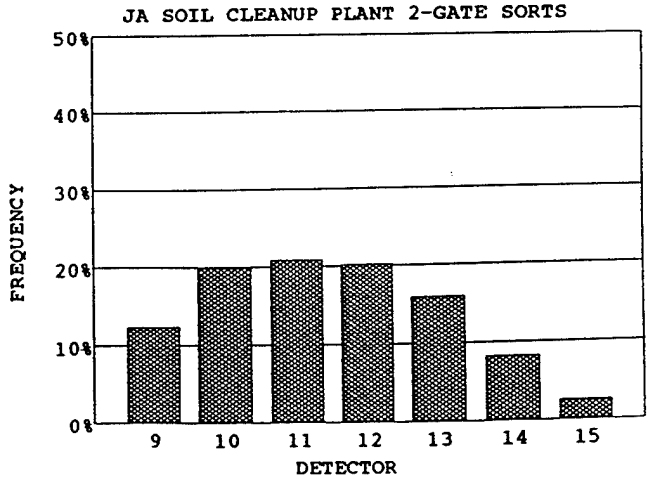
SORTER 2

19-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 20–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.3 hr	10.3 hr	0.0 hr	0.0 hr	20.5 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:28	06:28	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT–DOWN	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:08	16:06	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	9.3 hr	9.3 hr	0.0 hr	0.0 hr	18.6 hr
DOWN–TIME	1.0 hr	0.9 hr	0.0 hr	0.0 hr	1.9 hr
SYSTEM PAUSE	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					90.8%
PRODUCTIVTY					44.3%

PRODUCTIVITY

Date	20–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	183	Excused delays for contract (sorter–hrs)	3,090 hr
Current Contract week	31	Excused delay days (plant–days)	77 days
		Excused delay months (plant–month)	2.97 months
Soil production for Day	187 MT		
Cumlative Soil Production for Week	557 MT	Percent of contract completed	40.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,756 MT
Since 6 Sep 93	39,043 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	40,634 MT		
Total Soil production for project	66,921 MT		

MT = metric tons

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SORTER 1

20-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	85.2 tons	8.2 tons	93.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	67.6 yd³	6.5 yd³	74.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	8.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	103,998 kBq	90,729 kBq	1,652 kBq
MAXIMUM/SORT	3,394 kBq	2,027 kBq	20 kBq
MINIMUM/SORT	2 kBq	(18,669)Bq	-17 kBq
SPECIFIC ACTIVITY		1,064 Bq/kg	201 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,672		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1,519		12:25	07:29
NONE (AD=0 & MD=0 & MND>0)		34			07:34
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		119			09:34
UNEXPLAINED RECORDS	0				12:21
0<AD<1kBq & MD>0	0				15:28
AD=0 & MD>0	0				15:31
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			16,720		
2-SEC RECORDS WITH SORTS		4,333			
2-SEC RECORDS WITHOUT SORTS		12,387			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			6,005		
NONPROCESSING RECORDS (Test, calibration, etc)			17		

2-SEC SORT DETECTORS

1 DET	2,928	67.57%	5 DET	19	0.44%
2 DET	1,075	24.81%	6 DET	0	0.00%
3 DET	261	6.02%	7 DET	1	0.02%
4 DET	50	1.15%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 11.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	47	2.1%
2	268	12.1%
3	396	17.9%
4	425	19.2%
5	482	21.8%
6	316	14.3%
7	240	10.8%
8	42	1.9%
TOTAL	2,216	

2-GATE SORTS

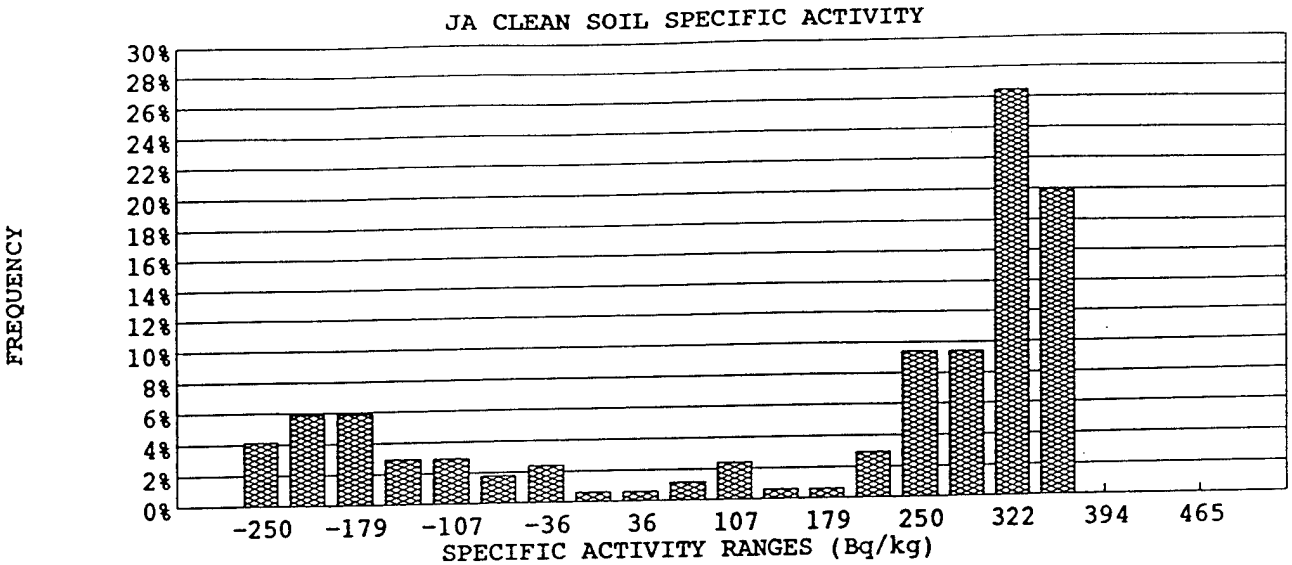
DET	SORTS	FREQ%
9	139	6.6%
10	342	16.2%
11	406	19.2%
12	437	20.6%
13	420	19.8%
14	247	11.7%
15	126	6.0%
TOTAL	2,117	

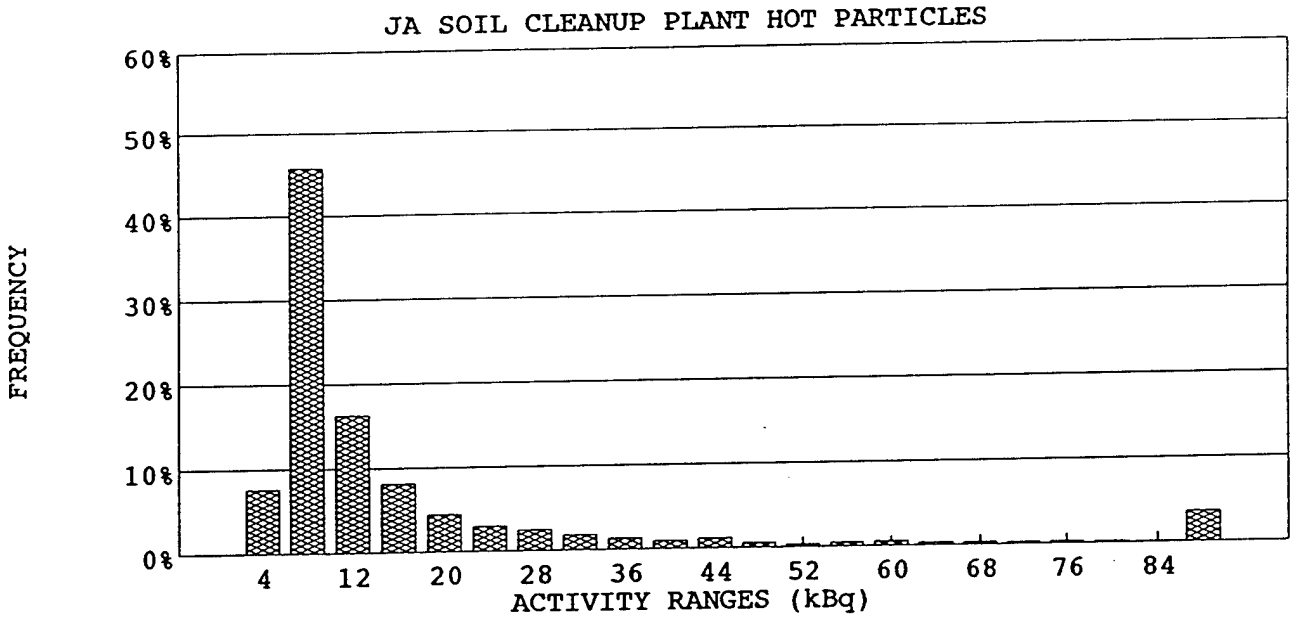
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	7	-250	4.1%	4	332	7.7%
-12000	10	-215	5.9%	8	1,983	45.8%
-10000	10	-179	5.9%	12	704	16.2%
-8000	5	-143	2.9%	16	353	8.1%
-6000	5	-107	2.9%	20	195	4.5%
-4000	3	-72	1.8%	24	132	3.0%
-2000	4	-36	2.4%	28	108	2.5%
0	1	0	0.6%	32	77	1.8%
2000	1	36	0.6%	36	56	1.3%
4000	2	72	1.2%	40	41	0.9%
6000	4	107	2.4%	44	52	1.2%
8000	1	143	0.6%	48	23	0.5%
10000	1	179	0.6%	52	15	0.3%
12000	5	215	2.9%	56	20	0.5%
14000	16	250	9.4%	60	24	0.6%
16000	16	286	9.4%	64	14	0.3%
18000	45	322	26.5%	68	15	0.3%
20000	34	358	20.0%	72	12	0.3%
22000	0	394	0.0%	76	11	0.3%
24000	0	429	0.0%	80	6	0.1%
26000	0	465	0.0%	84	4	0.1%
>28000	0	0	0.0%	>84	156	3.6%
TOTAL	170			TOTAL	4,333	

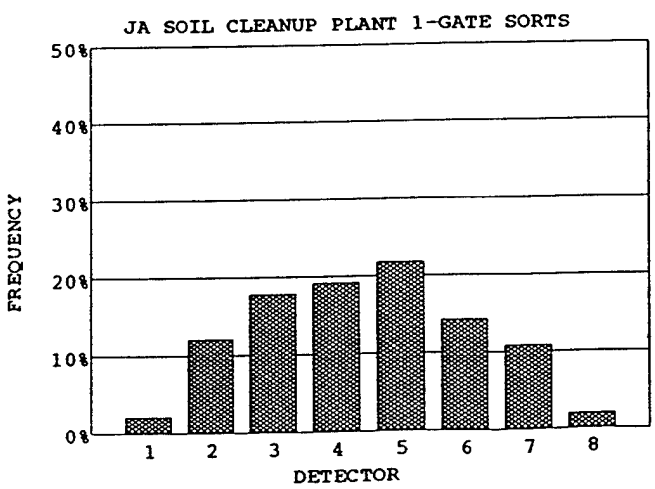
EVENT TYPES	HPE	MPE	DISE
	4,068	9,119	108,793

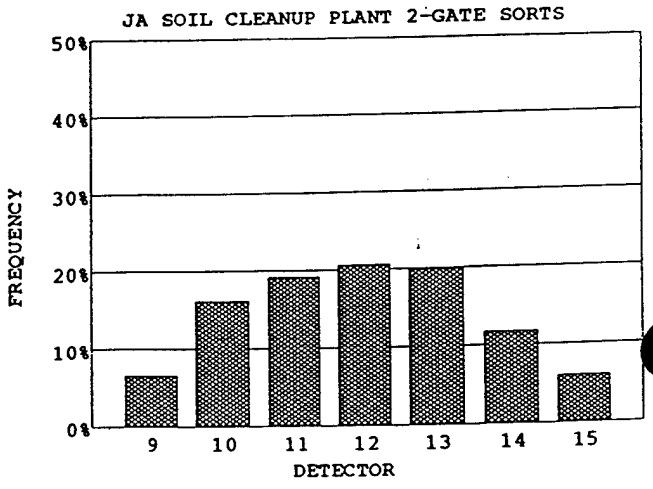
SORTER 1

20-Apr-94









SORTER 2

20-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	75.4 tons	18.4 tons	93.8 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	59.8 yd³	14.6 yd³	74.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	19.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	88,127 kBq	78,202 kBq	5,817 kBq
MAXIMUM/SORT	3,569 kBq	2,084 kBq	23 kBq
MINIMUM/SORT	2 kBq	(6,238)Bq	-18 kBq
SPECIFIC ACTIVITY		1,037 Bq/kg	316 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,678		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1,339		12:25	07:29
NONE (AD=0 & MD=0 & MND>0)			87		13:07	07:34
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			252			09:34
UNEXPLAINED RECORDS			0			12:21
0<AD<1kBq & MD>0			1			15:31
AD=0 & MD>0			0			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				16,780		
2-SEC RECORDS WITH SORTS			4,622			
2-SEC RECORDS WITHOUT SORTS			12,158			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				6,300		
NONPROCESSING RECORDS (Test, calibration, etc)				14		
2-SEC SORT DETECTORS						
1 DET	3,228	69.84%	5 DET	10	0.22%	
2 DET	1,095	23.69%	6 DET	0	0.00%	
3 DET	242	5.24%	7 DET	0	0.00%	
4 DET	47	1.02%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			10.4 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	121	5.3%
2	398	17.3%
3	482	20.9%
4	465	20.2%
5	412	17.9%
6	295	12.8%
7	105	4.6%
8	24	1.0%
TOTAL	2,302	

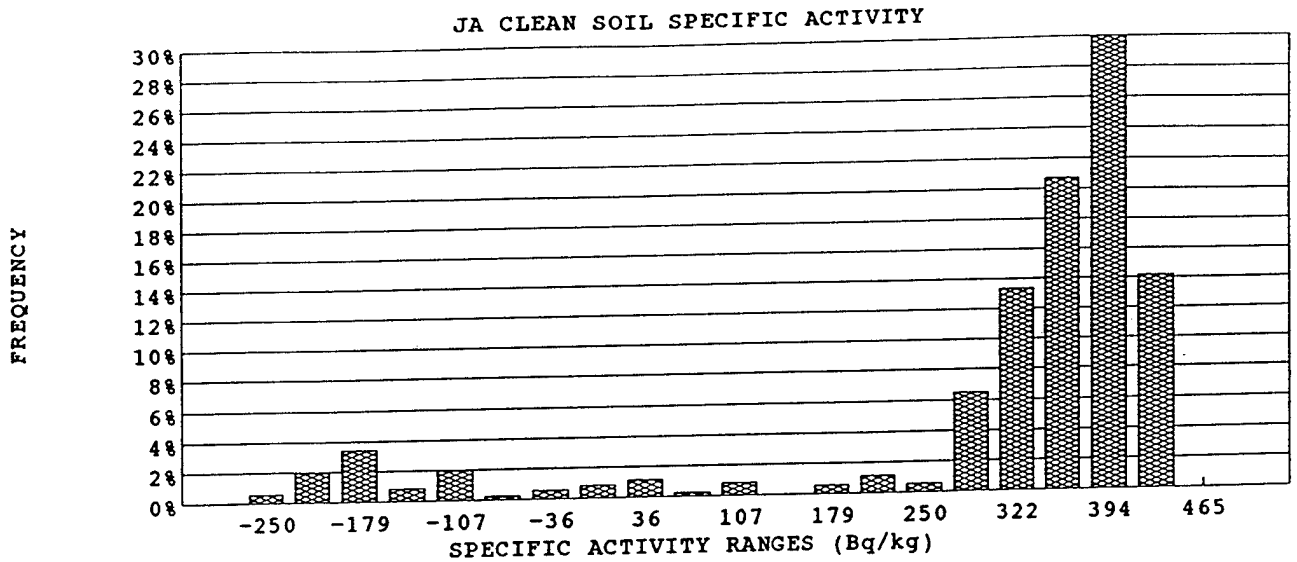
2-GATE SORTS DET	SORTS	FREQ%
9	275	11.9%
10	466	20.1%
11	532	22.9%
12	417	18.0%
13	396	17.1%
14	191	8.2%
15	43	1.9%
TOTAL	2,320	

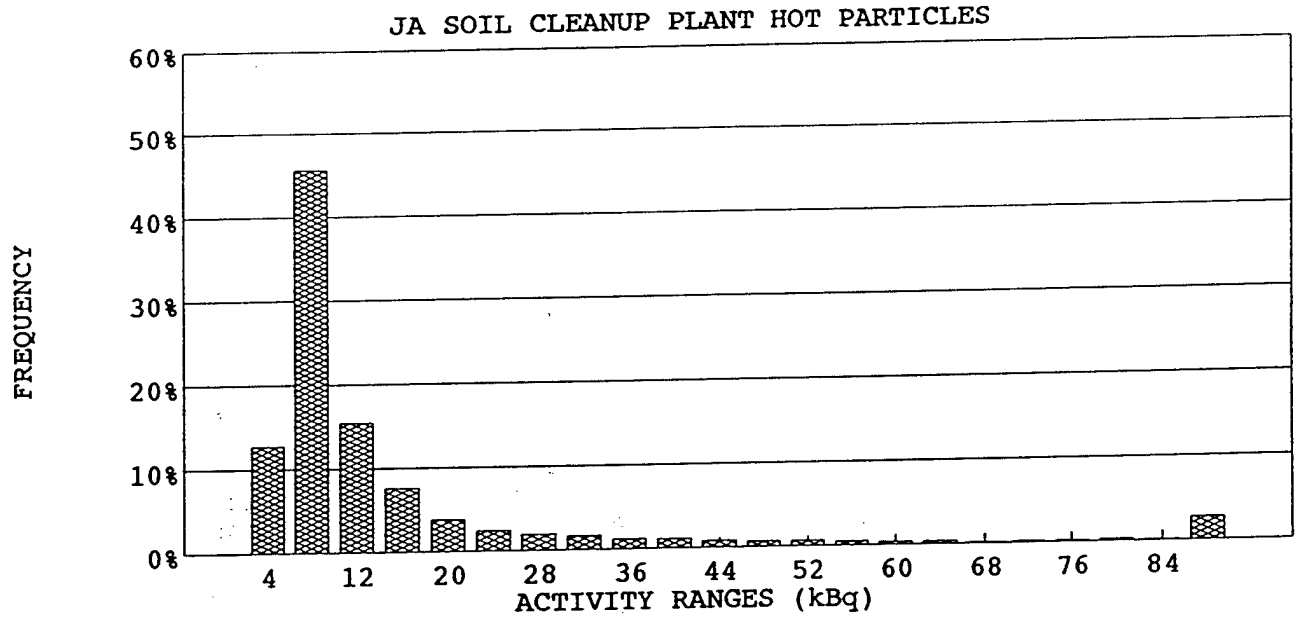
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-250	0.6%	4	587	12.7%
-12000	7	-215	2.0%	8	2,108	45.6%
-10000	12	-179	3.4%	12	712	15.4%
-8000	3	-143	0.8%	16	350	7.6%
-6000	7	-107	2.0%	20	175	3.8%
-4000	1	-72	0.3%	24	111	2.4%
-2000	2	-36	0.6%	28	85	1.8%
0	3	0	0.8%	32	75	1.6%
2000	4	36	1.1%	36	55	1.2%
4000	1	72	0.3%	40	51	1.1%
6000	3	107	0.8%	44	37	0.8%
8000	0	143	0.0%	48	30	0.6%
10000	2	179	0.6%	52	29	0.6%
12000	4	215	1.1%	56	24	0.5%
14000	2	250	0.6%	60	14	0.3%
16000	23	286	6.5%	64	14	0.3%
18000	47	322	13.3%	68	6	0.1%
20000	73	358	20.7%	72	8	0.2%
22000	107	394	30.3%	76	9	0.2%
24000	50	429	14.2%	80	11	0.2%
26000	0	465	0.0%	84	6	0.1%
>28000	0	0	0.0%	>84	125	2.7%
TOTAL	353			TOTAL	4,622	

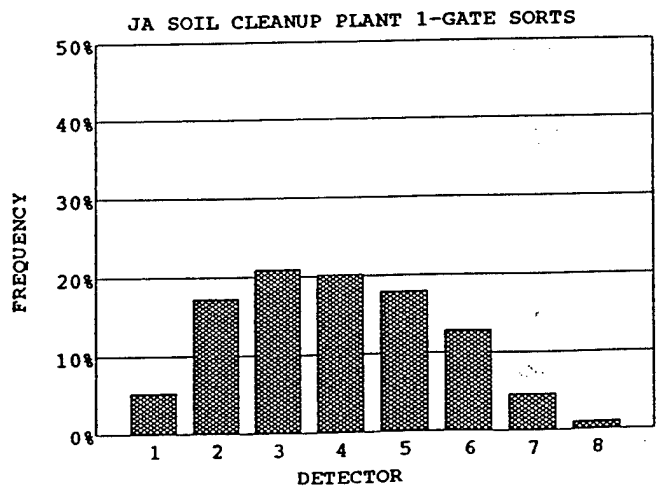
EVENT TYPES HPE 4,356 MPE 4,801 DISE 98,743

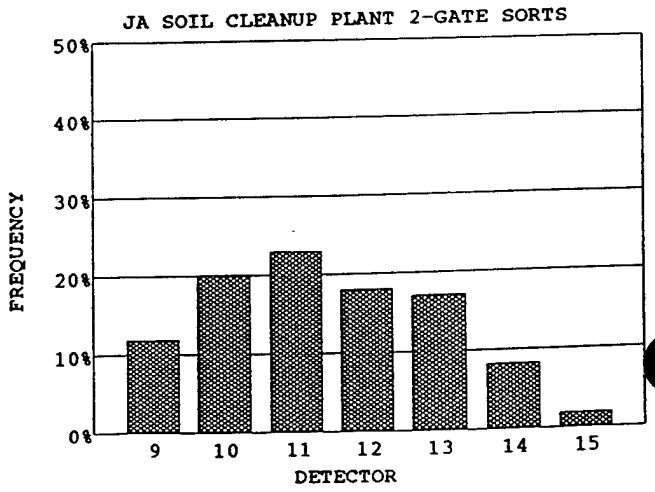
SORTER 2

20-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 21–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.0 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.5 hr	10.5 hr	10.5 hr	10.5 hr	42.0 hr
SORTER AVAILABLE HOURS	10.1 hr	10.1 hr	0.0 hr	0.0 hr	20.2 hr
SORTER START–UP	06:15	06:15	NA	NA	
START SOIL PROCESSING	06:33	06:33	NA	NA	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:07	16:05	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	9.4 hr	9.3 hr	0.0 hr	0.0 hr	18.7 hr
DOWN–TIME	0.7 hr	0.8 hr	0.0 hr	0.0 hr	1.4 hr
SYSTEM PAUSE	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER NONAVAILABLE TIME	0.4 hr	0.4 hr	10.0 hr	10.0 hr	20.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					92.8%
PRODUCTIVTY					44.6%

PRODUCTIVITY

Date	21–Apr–94
Contract day (from 6 Sep)	184
Current Contract week	31
Soil production for Day	188 MT
Cumlative Soil Production for Week	746 MT
Total Soil production for contract	
Since 6 Sep 93	39,232 MT
Since 6 Aug 93	40,823 MT
Total Soil production for project	67,110 MT

Excused Delays for day (sorter–hrs)	20 hr
Excused delays for contract (sorter–hrs)	3,110 hr
Excused delay days (plant–days)	78 days
Excused delay months (plant–month)	2.99 months
Percent of contract completed	40.8%
Tons Ahead or Behind Schedule	1,786 MT
Days ahead or behind schedule	6 days

MT = metric tons

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SORTER 1

21-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	45.9 tons	48.5 tons	94.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	36.4 yd³	38.5 yd³	74.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	51.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	61,798 kBq	48,337 kBq	12,665 kBq
MAXIMUM/SORT	1,616 kBq	1,143 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,052 Bq/kg	261 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,690		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	787		None	13:36
NONE (AD=0 & MD=0 & MND>0)	116			15:17
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	787			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,900		
2-SEC RECORDS WITH SORTS	3,439			
2-SEC RECORDS WITHOUT SORTS	13,461			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,129		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	2,506	72.87%	5 DET	7	0.20%
2 DET	745	21.66%	6 DET	0	0.00%
3 DET	155	4.51%	7 DET	0	0.00%
4 DET	26	0.76%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 13.5 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	61	3.5%
2	272	15.4%
3	293	16.6%
4	286	16.2%
5	301	17.1%
6	231	13.1%
7	259	14.7%
8	62	3.5%
TOTAL	1,765	

2-GATE SORTS

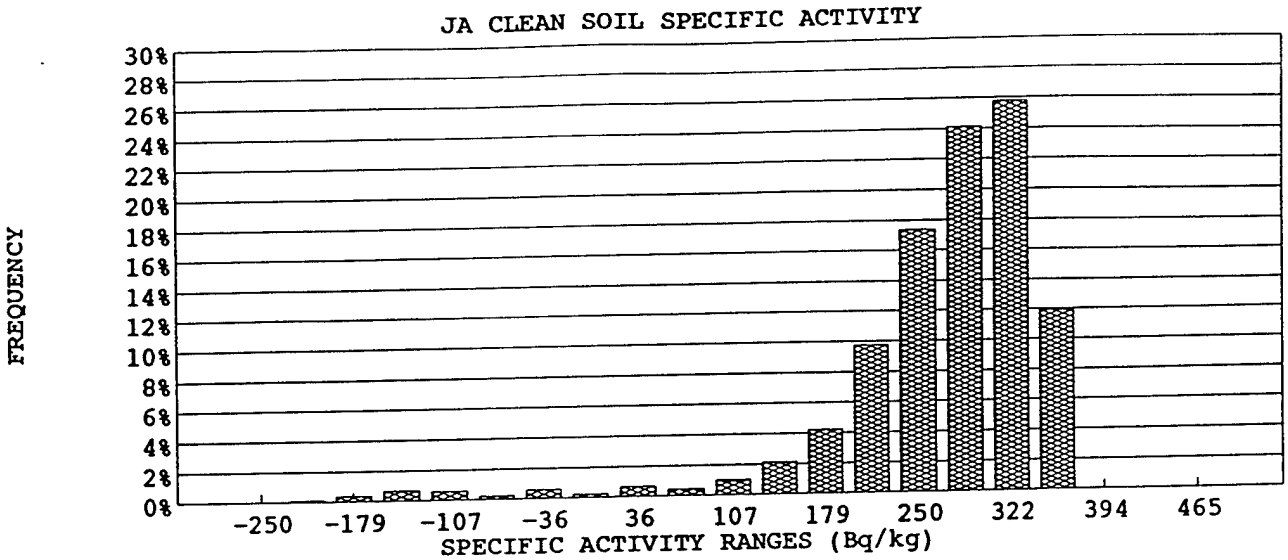
DET	SORTS	FREQ%
9	164	9.8%
10	275	16.4%
11	278	16.6%
12	299	17.9%
13	274	16.4%
14	192	11.5%
15	192	11.5%
TOTAL	1,674	

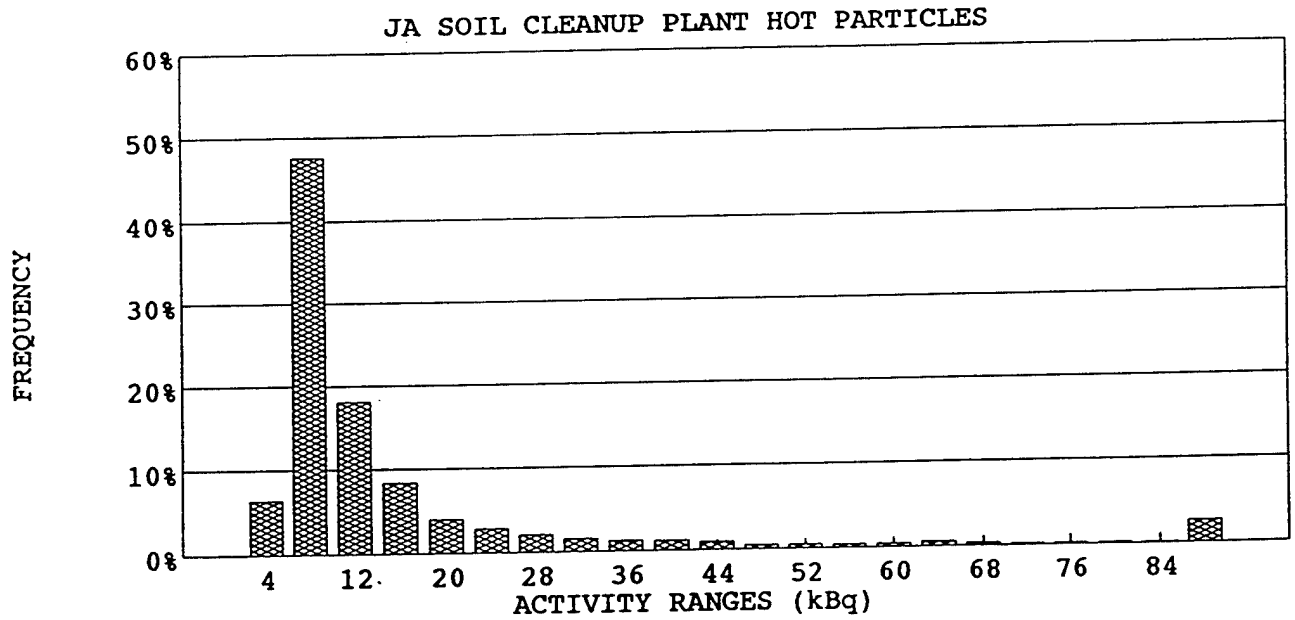
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	220	6.4%
-12000	1	-215	0.1%	8	1,637	47.6%
-10000	3	-179	0.3%	12	621	18.1%
-8000	6	-143	0.7%	16	290	8.4%
-6000	5	-107	0.6%	20	139	4.0%
-4000	2	-72	0.2%	24	97	2.8%
-2000	5	-36	0.6%	28	71	2.1%
0	2	0	0.2%	32	54	1.6%
2000	6	36	0.7%	36	43	1.3%
4000	4	72	0.4%	40	39	1.1%
6000	9	107	1.0%	44	32	0.9%
8000	19	143	2.1%	48	16	0.5%
10000	38	179	4.2%	52	15	0.4%
12000	88	215	9.7%	56	14	0.4%
14000	157	250	17.4%	60	14	0.4%
16000	218	286	24.1%	64	18	0.5%
18000	233	322	25.8%	68	10	0.3%
20000	108	358	11.9%	72	7	0.2%
22000	0	394	0.0%	76	5	0.1%
24000	0	429	0.0%	80	5	0.1%
26000	0	465	0.0%	84	2	0.1%
>28000	0	0	0.0%	>84	90	2.6%
TOTAL	904			TOTAL	3,439	

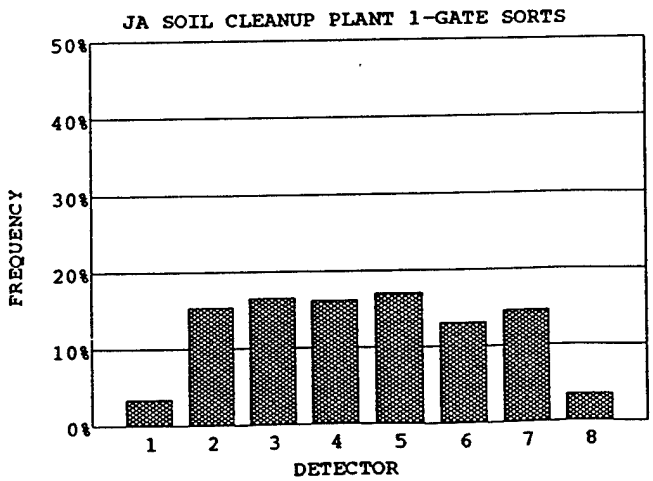
EVENT TYPES	HPE	3,383	MPE	4,500	DISE	57,872

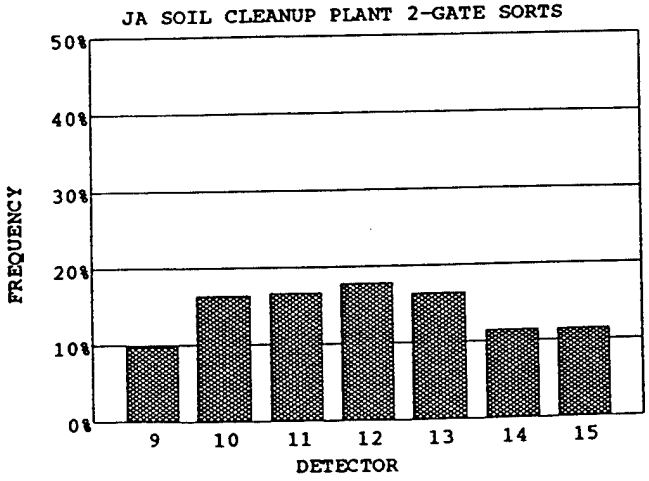
SORTER 1

21-Apr-94









SORTER 2

21-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	30.9 tons	63.0 tons	93.9 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	24.5 yd³	50.0 yd³	74.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	67.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	60,648 kBq	38,431 kBq	19,113 kBq
MAXIMUM/SORT	1,379 kBq	783 kBq	23 kBq
MINIMUM/SORT	2 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,245 Bq/kg	303 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,680		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	517		10:47	13:36
NONE (AD=0 & MD=0 & MND>0)	263		15:14	15:17
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	900			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,800		
2-SEC RECORDS WITH SORTS	3,373			
2-SEC RECORDS WITHOUT SORTS	13,427			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,053		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

1 DET	2,396	71.03%	5 DET	10	0.30%
2 DET	759	22.50%	6 DET	0	0.00%
3 DET	176	5.22%	7 DET	0	0.00%
4 DET	32	0.95%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 14.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

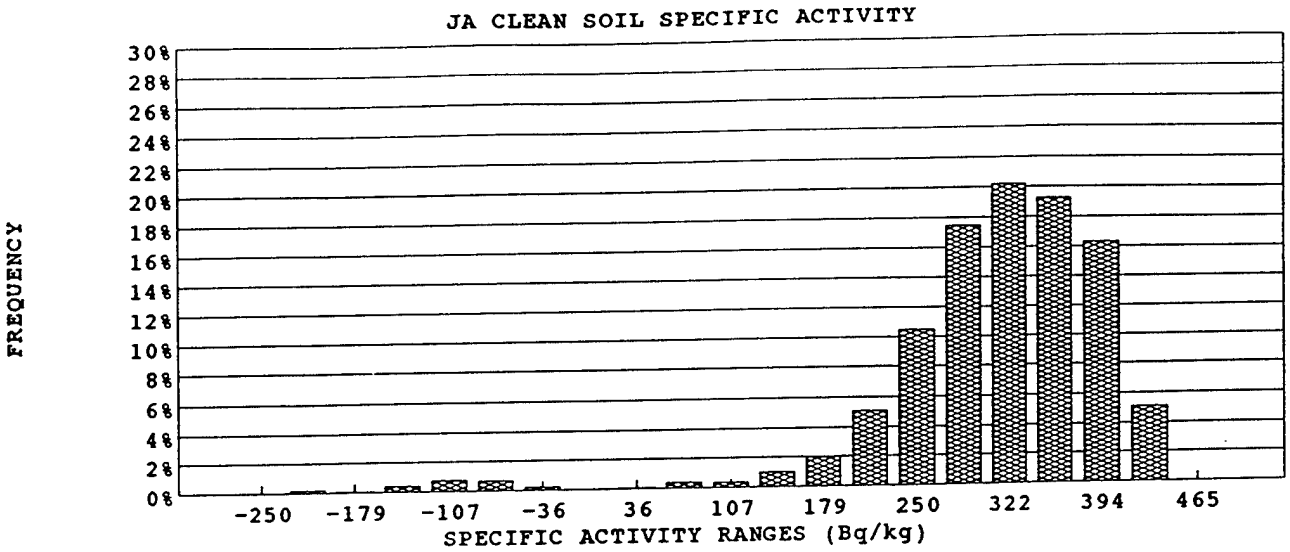
DET	SORTS	FREQ%
1	104	6.1%
2	306	18.0%
3	320	18.8%
4	308	18.1%
5	311	18.3%
6	219	12.9%
7	113	6.6%
8	22	1.3%
TOTAL	1,703	

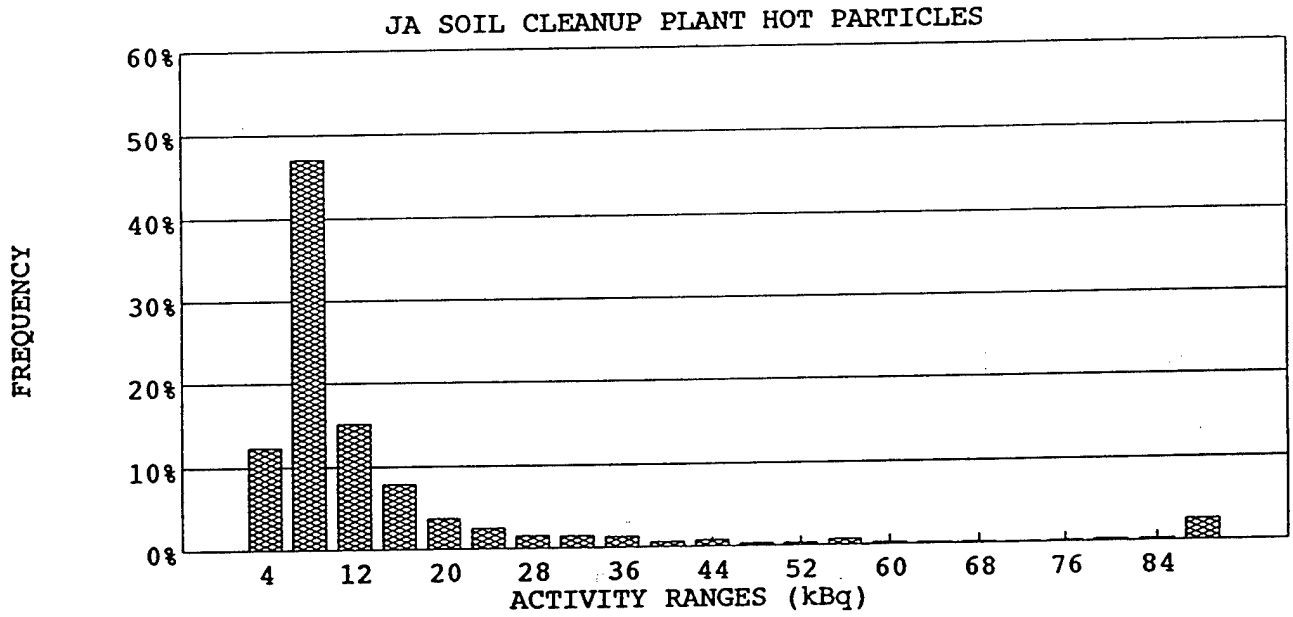
2-GATE SORTS

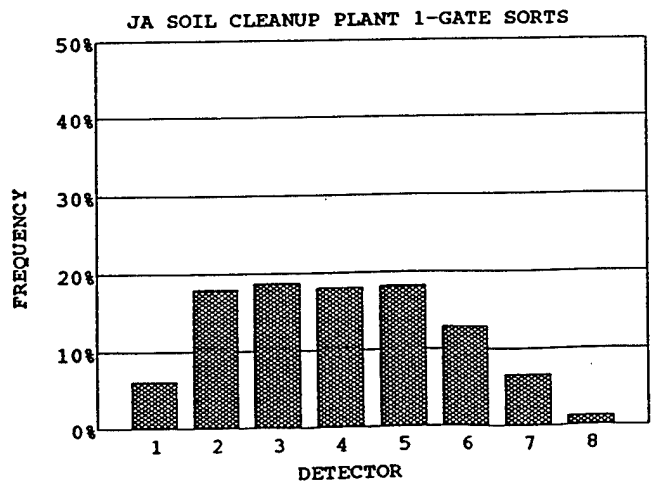
DET	SORTS	FREQ%
9	216	12.9%
10	318	19.0%
11	332	19.9%
12	343	20.5%
13	268	16.0%
14	142	8.5%
15	51	3.1%
TOTAL	1,670	

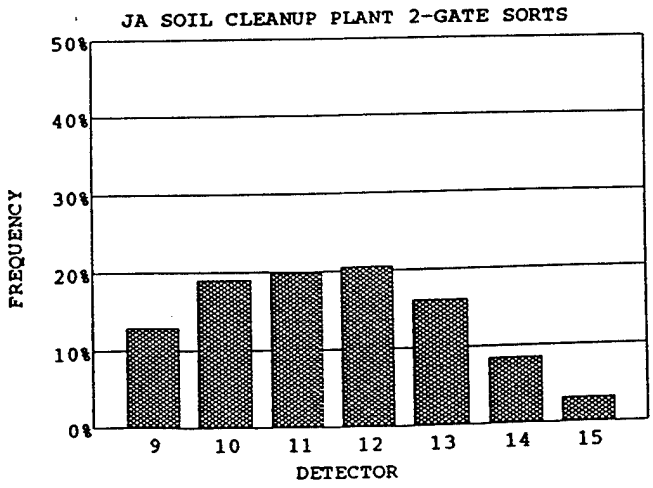
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	416	12.3%
-12000	2	-215	0.2%	8	1,589	47.1%
-10000	1	-179	0.1%	12	510	15.1%
-8000	5	-143	0.4%	16	268	7.9%
-6000	9	-107	0.8%	20	127	3.8%
-4000	8	-72	0.7%	24	84	2.5%
-2000	3	-36	0.3%	28	53	1.6%
0	0	0	0.0%	32	51	1.5%
2000	1	36	0.1%	36	45	1.3%
4000	5	72	0.4%	40	22	0.7%
6000	4	107	0.3%	44	26	0.8%
8000	12	143	1.0%	48	12	0.4%
10000	23	179	2.0%	52	12	0.4%
12000	59	215	5.1%	56	23	0.7%
14000	122	250	10.4%	60	9	0.3%
16000	204	286	17.5%	64	5	0.1%
18000	236	322	20.2%	68	6	0.2%
20000	225	358	19.3%	72	4	0.1%
22000	190	394	16.3%	76	6	0.2%
24000	59	429	5.1%	80	8	0.2%
26000	0	465	0.0%	84	10	0.3%
>28000	0	0	0.0%	>84	87	2.6%
TOTAL	1,168			TOTAL	3,373	

EVENT TYPES HPE 3,331 MPE 2,170 DISE 38,667


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 22–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.6 hr	9.6 hr	0.0 hr	0.0 hr	19.2 hr
SORTER START–UP	06:15	06:15	NA	NA	
START SOIL PROCESSING	06:36	06:36	NA	NA	
TIME REQUIRED TO START–UP	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.7 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:05	16:04	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	8.2 hr	8.1 hr	0.0 hr	0.0 hr	16.3 hr
DOWN–TIME	1.4 hr	1.4 hr	0.0 hr	0.0 hr	2.8 hr
SYSTEM PAUSE	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.4 hr
SORTER NONAVAILABLE TIME	0.4 hr	0.4 hr	10.0 hr	10.0 hr	20.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					85.2%
PRODUCTIVTY					40.8%

PRODUCTIVITY

Date	22–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	185	Excused delays for contract (sorter–hrs)	3,130 hr
Current Contract week	31	Excused delay days (plant–days)	78 days
		Excused delay months (plant–month)	3.01 months
Soil production for Day	164 MT		
Cumlative Soil Production for Week	910 MT	Percent of contract completed	41.0%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,792 MT
Since 6 Sep 93	39,396 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	40,987 MT		
Total Soil production for project	67,274 MT		

MT = metric tons

File Report1 Printed on 23-Apr-94 at 09:22:25 AM

SORTER 1

22-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	61.4 tons	20.9 tons	82.3 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	48.7 yd³	16.6 yd³	65.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	25.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	93,266 kBq	75,608 kBq	5,195 kBq
MAXIMUM/SORT	2,509 kBq	1,671 kBq	19 kBq
MINIMUM/SORT	2 kBq	(8,083)Bq	-19 kBq
SPECIFIC ACTIVITY		1,231 Bq/kg	249 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,472		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1,079		11:46	10:08
NONE (AD=0 & MD=0 & MND>0)		48			10:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		345			12:30
UNEXPLAINED RECORDS	0				15:09
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			14,720		
2-SEC RECORDS WITH SORTS		4,635			
2-SEC RECORDS WITHOUT SORTS		10,085			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			6,107		
NONPROCESSING RECORDS (Test, calibration, etc)			26		

2-SEC SORT DETECTORS

1 DET	3,257	70.27%	5 DET	18	0.39%
2 DET	1,053	22.72%	6 DET	0	0.00%
3 DET	256	5.52%	7 DET	3	0.06%
4 DET	51	1.10%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 9.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	116	4.9%
2	357	15.0%
3	412	17.3%
4	407	17.1%
5	487	20.5%
6	311	13.1%
7	230	9.7%
8	59	2.5%
TOTAL	2,379	

2-GATE SORTS

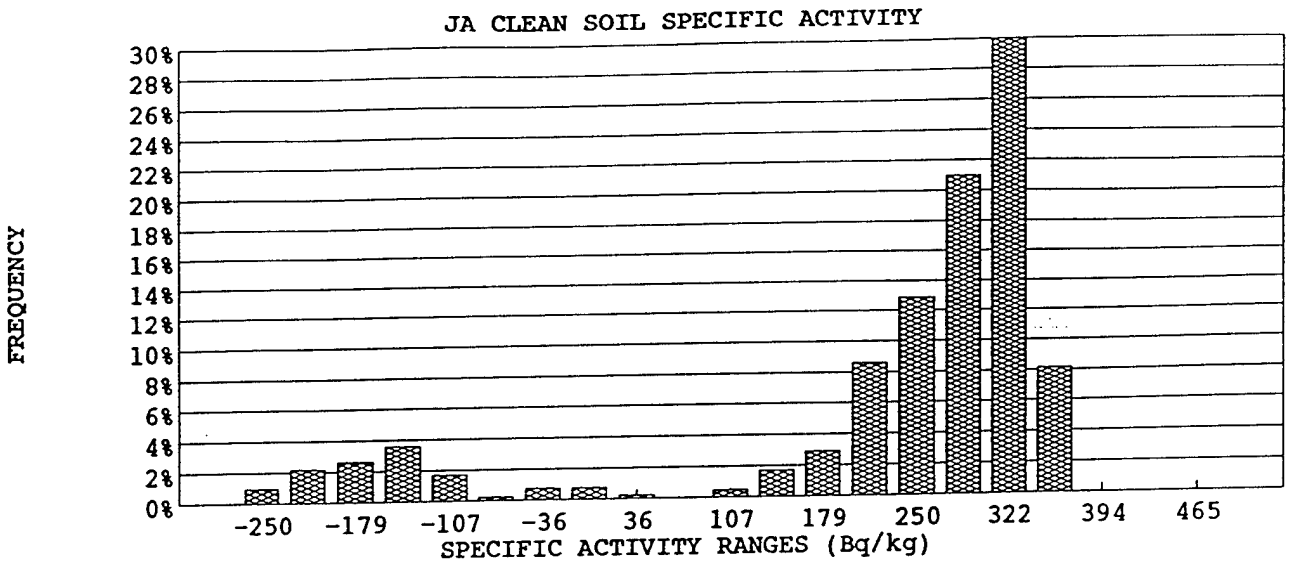
DET	SORTS	FREQ%
9	227	10.1%
10	391	17.3%
11	434	19.2%
12	421	18.7%
13	421	18.7%
14	225	10.0%
15	137	6.1%
TOTAL	2,256	

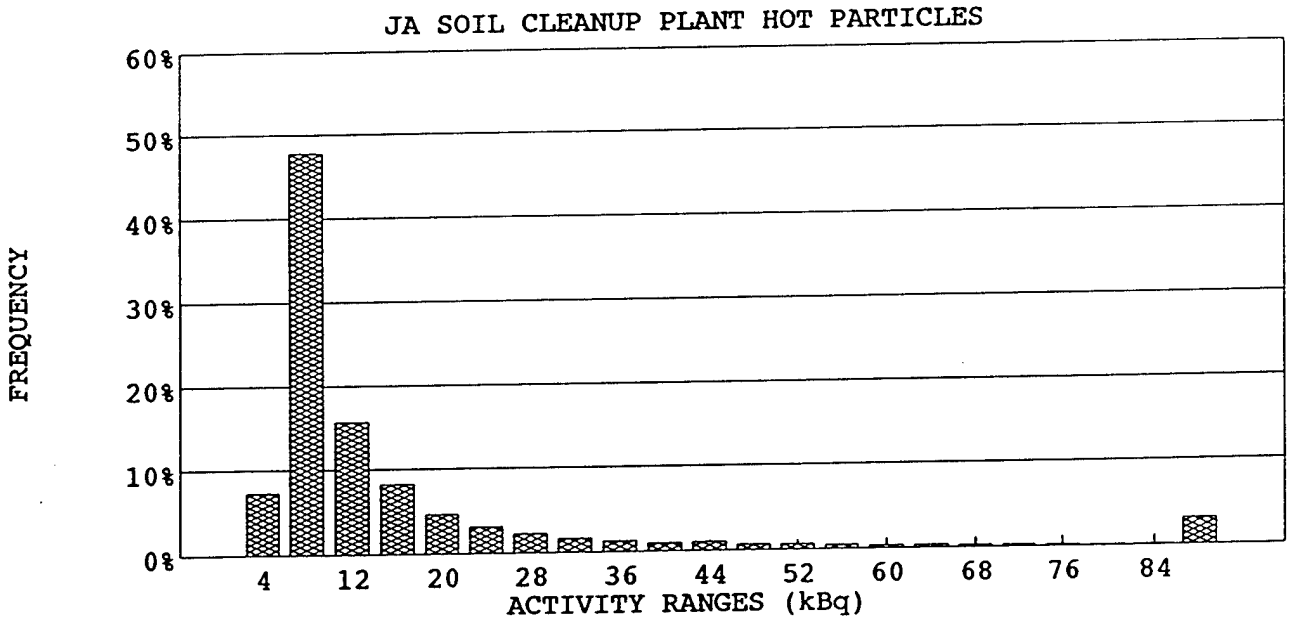
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	4	-250	1.0%	4	340	7.3%
-12000	9	-215	2.1%	8	2,214	47.8%
-10000	11	-179	2.6%	12	727	15.7%
-8000	15	-143	3.6%	16	382	8.2%
-6000	7	-107	1.7%	20	213	4.6%
-4000	1	-72	0.2%	24	143	3.1%
-2000	3	-36	0.7%	28	102	2.2%
0	3	0	0.7%	32	75	1.6%
2000	1	36	0.2%	36	58	1.3%
4000	0	72	0.0%	40	42	0.9%
6000	2	107	0.5%	44	47	1.0%
8000	7	143	1.7%	48	30	0.6%
10000	12	179	2.9%	52	28	0.6%
12000	36	215	8.6%	56	21	0.5%
14000	54	250	12.9%	60	16	0.3%
16000	88	286	21.0%	64	15	0.3%
18000	132	322	31.5%	68	12	0.3%
20000	34	358	8.1%	72	12	0.3%
22000	0	394	0.0%	76	8	0.2%
24000	0	429	0.0%	80	5	0.1%
26000	0	465	0.0%	84	3	0.1%
>28000	0	0	0.0%	>84	142	3.1%
TOTAL	419			TOTAL	4,635	

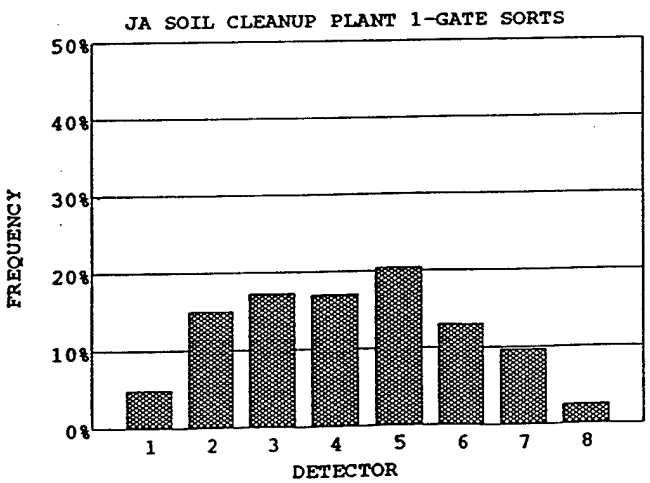
EVENT TYPES HPE 4,397 MPE 8,568 DISE 74,899

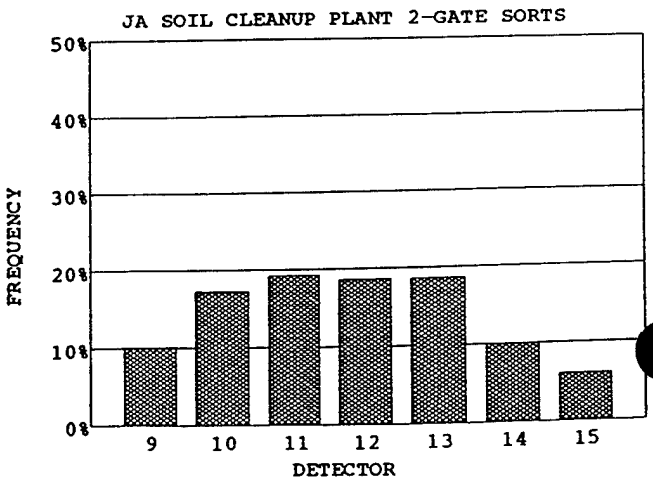
SORTER 1

22-Apr-94









SORTER 2

22-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	53.9 tons	28.1 tons	82.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	42.7 yd³	22.3 yd³	65.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	34.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	56,353 kBq	53,254 kBq	8,915 kBq
MAXIMUM/SORT	740 kBq	544 kBq	23 kBq
MINIMUM/SORT	2 kBq	(7,082)Bq	-13 kBq
SPECIFIC ACTIVITY		989 Bq/kg	317 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,466		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		947		11:46	10:09
NONE (AD=0 & MD=0 & MND>0)		129			10:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		390			12:29
UNEXPLAINED RECORDS	0				15:09
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			14,660		
2-SEC RECORDS WITH SORTS		4,110			
2-SEC RECORDS WITHOUT SORTS		10,550			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,576		
NONPROCESSING RECORDS (Test, calibration, etc)			26		

2-SEC SORT DETECTORS

1 DET	2,929	71.27%	5 DET	11	0.27%
2 DET	921	22.41%	6 DET	0	0.00%
3 DET	209	5.09%	7 DET	0	0.00%
4 DET	40	0.97%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	111	5.5%
2	431	21.3%
3	429	21.2%
4	387	19.1%
5	341	16.8%
6	173	8.5%
7	121	6.0%
8	32	1.6%
TOTAL	2,025	

2-GATE SORTS

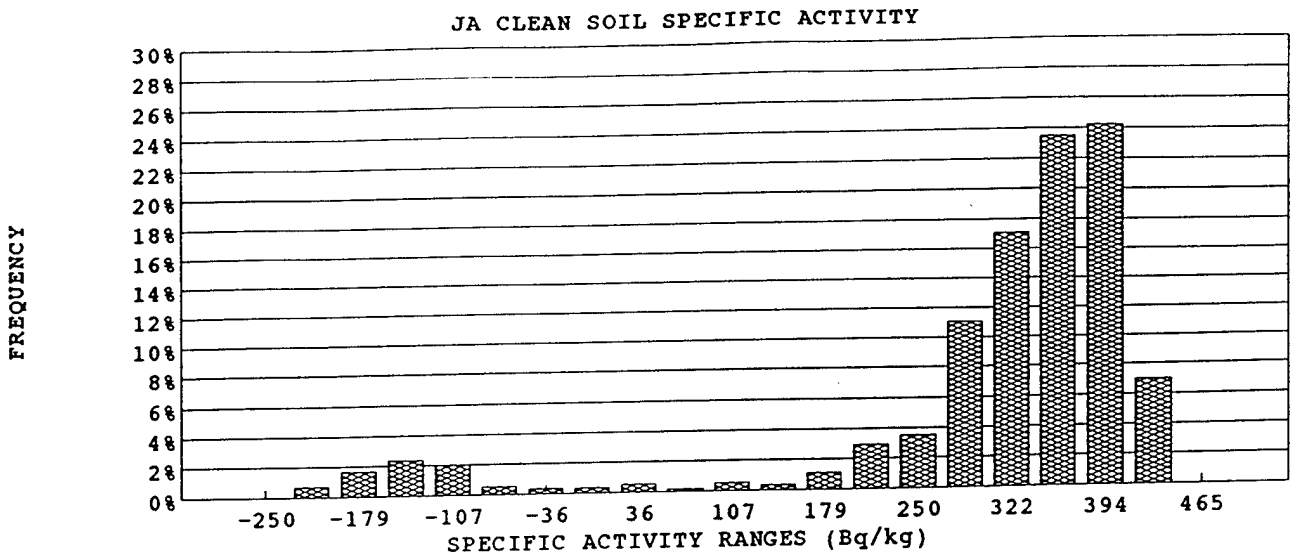
DET	SORTS	FREQ%
9	289	13.9%
10	477	22.9%
11	436	20.9%
12	413	19.8%
13	272	13.0%
14	122	5.9%
15	76	3.6%
TOTAL	2,085	

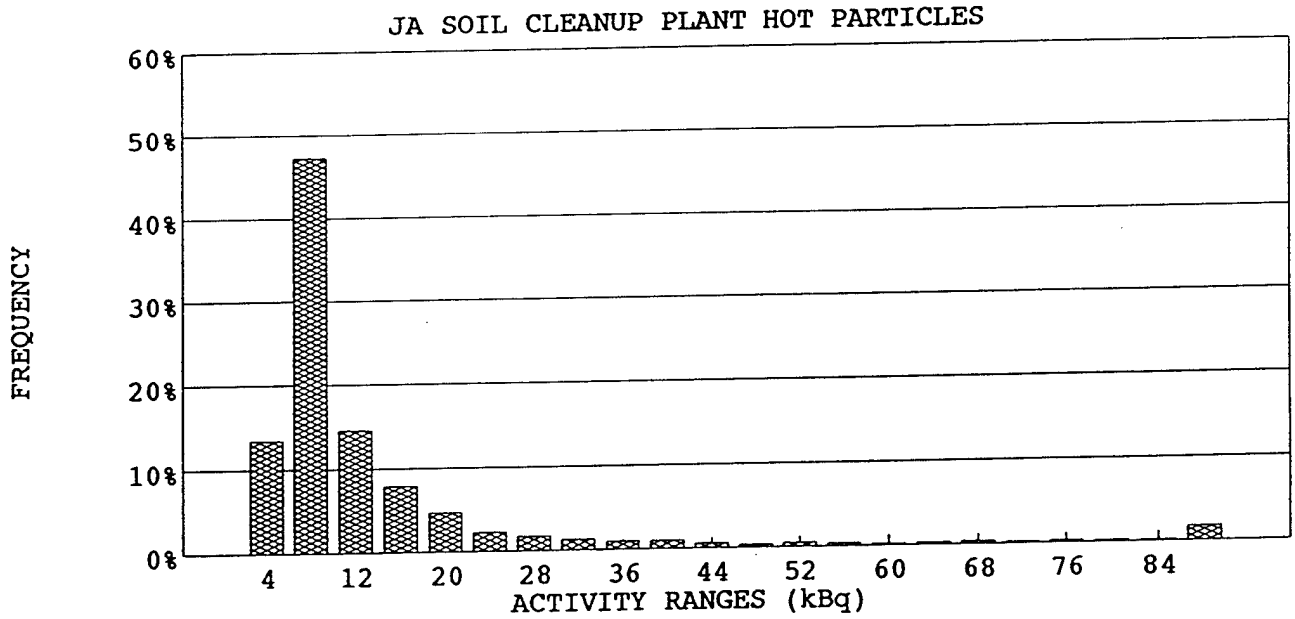
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-250	0.0%	4	551	13.4%
-12000	4	-215	0.7%	8	1,942	47.3%
-10000	9	-179	1.7%	12	599	14.6%
-8000	13	-143	2.4%	16	326	7.9%
-6000	11	-107	2.0%	20	191	4.6%
-4000	3	-72	0.6%	24	93	2.3%
-2000	2	-36	0.4%	28	70	1.7%
0	2	0	0.4%	32	51	1.2%
2000	3	36	0.6%	36	40	1.0%
4000	1	72	0.2%	40	38	0.9%
6000	3	107	0.6%	44	24	0.6%
8000	2	143	0.4%	48	13	0.3%
10000	6	179	1.1%	52	19	0.5%
12000	16	215	2.9%	56	15	0.4%
14000	19	250	3.5%	60	7	0.2%
16000	60	286	11.0%	64	11	0.3%
18000	93	322	17.1%	68	15	0.4%
20000	128	358	23.5%	72	8	0.2%
22000	132	394	24.2%	76	12	0.3%
24000	38	429	7.0%	80	6	0.1%
26000	0	465	0.0%	84	7	0.2%
>28000	0	0	0.0%	>84	72	1.8%
TOTAL	545			TOTAL	4,110	

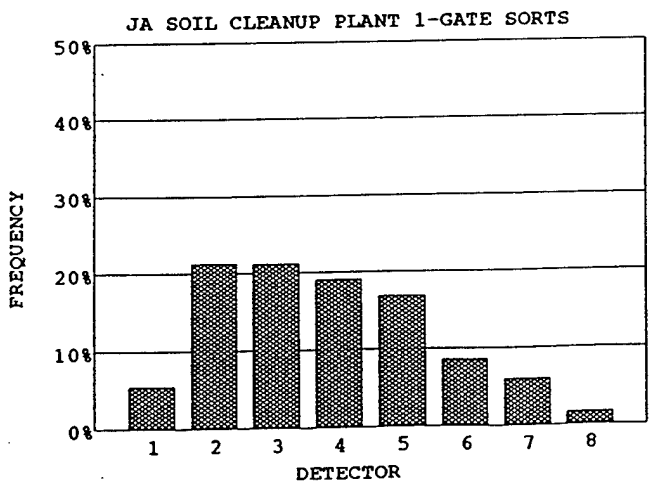
EVENT TYPES	HPE	4,019	MPE	3,345	DISE	69,722

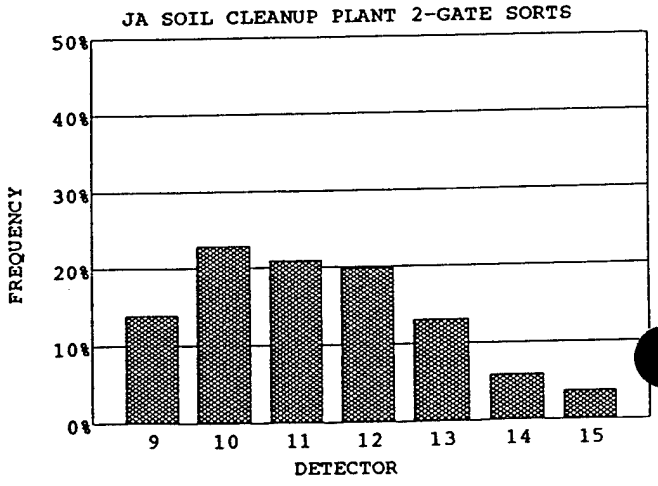
SORTER 2

22-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 23-Apr-94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	12:30 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	7.3 hr	7.3 hr	0.0 hr	0.0 hr	14.7 hr
SORTER START-UP	05:05	05:05	NA	NA	
START SOIL PROCESSING	05:26	05:27	NA	NA	
TIME REQUIRED TO START-UP	0.4 hr	0.4 hr	0.0 hr	0.0 hr	0.7 hr
SORTER SHUT-DOWN	12:25	12:25	NA	NA	
END SOIL PROCESSING	12:07	12:08	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	4.5 hr	4.5 hr	0.0 hr	0.0 hr	9.1 hr
DOWN-TIME	2.8 hr	2.8 hr	0.0 hr	0.0 hr	5.6 hr
SYSTEM PAUSE	2.2 hr	2.2 hr	0.0 hr	0.0 hr	4.3 hr
SORTER NONAVAILABLE TIME	2.7 hr	2.7 hr	10.0 hr	10.0 hr	25.3 hr
AUTHORIZED DELAY TIME	2.0 hr	2.0 hr	10.0 hr	10.0 hr	24.0 hr
PLANT PERFORMANCE					61.8%
PRODUCTIVTY					22.7%

PRODUCTIVITY

Date	23-Apr-94
Contract day (from 6 Sep)	186
Current Contract week	31
Soil production for Day	91 MT
Cumlative Soil Production for Week	1,001 MT
Total Soil production for contract	
Since 6 Sep 93	39,487 MT
Since 6 Aug 93	41,078 MT
Total Soil production for project	67,365 MT

MT = metric tons

Excused Delays for day (sorter-hrs)	24 hr
Excused delays for contract (sorter-hrs)	3,154 hr
Excused delay days (plant-days)	79 days
Excused delay months (plant-month)	3.03 months
Percent of contract completed	41.1%
Tons Ahead or Behind Schedule	1,756 MT
Days ahead or behind schedule	6 days

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SORTER 1

23-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.65 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	29.8 tons	15.9 tons	45.6 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	23.6 yd³	12.6 yd³	36.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	34.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	40,250 kBq	35,100 kBq	3,801 kBq
MAXIMUM/SORT	1,104 kBq	671 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-17 kBq
SPECIFIC ACTIVITY		1,179 Bq/kg	240 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			816		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		522		None	07:07
NONE (AD=0 & MD=0 & MND>0)		51			10:34
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		243			11:45
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			8,160		
2-SEC RECORDS WITH SORTS		2,295			
2-SEC RECORDS WITHOUT SORTS		5,865			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,111		
NONPROCESSING RECORDS (Test, calibration, etc)			4		

2-SEC SORT DETECTORS

1 DET	1,587	69.15%	5 DET	11	0.48%
2 DET	539	23.49%	6 DET	0	0.00%
3 DET	130	5.66%	7 DET	1	0.04%
4 DET	28	1.22%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	35	3.0%
2	193	16.5%
3	223	19.1%
4	177	15.1%
5	213	18.2%
6	155	13.3%
7	145	12.4%
8	28	2.4%
TOTAL	1,169	

2-GATE SORTS

DET	SORTS	FREQ%
9	103	9.1%
10	207	18.4%
11	211	18.7%
12	203	18.0%
13	181	16.1%
14	139	12.3%
15	82	7.3%
TOTAL	1,126	

ACT_ND (Bq)	NUM (#)
-14000	2
-12000	3
-10000	2
-8000	8
-6000	5
-4000	2
-2000	1
0	1
2000	1
4000	0
6000	1
8000	9
10000	8
12000	34
14000	59
16000	63
18000	62
20000	37
22000	0
24000	0
26000	0
>28000	0
TOTAL	298

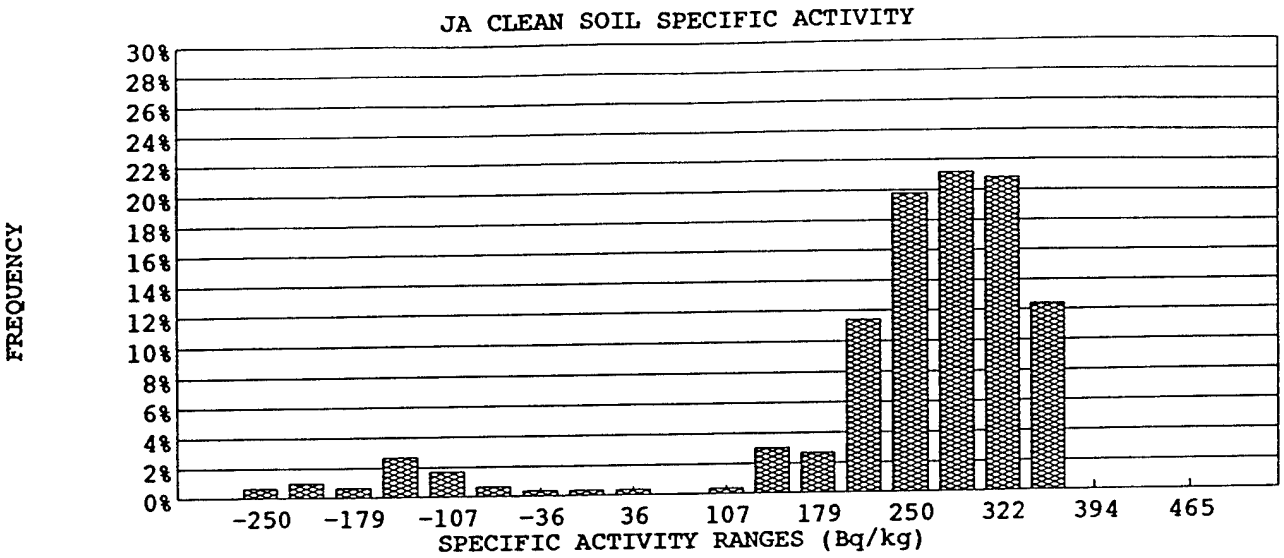
SPEC_A (Bq/kg)	FREQ%
-250	0.7%
-215	1.0%
-179	0.7%
-143	2.7%
-107	1.7%
-72	0.7%
-36	0.3%
0	0.3%
36	0.3%
72	0.0%
107	0.3%
143	3.0%
179	2.7%
215	11.4%
250	19.8%
286	21.1%
322	20.8%
358	12.4%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

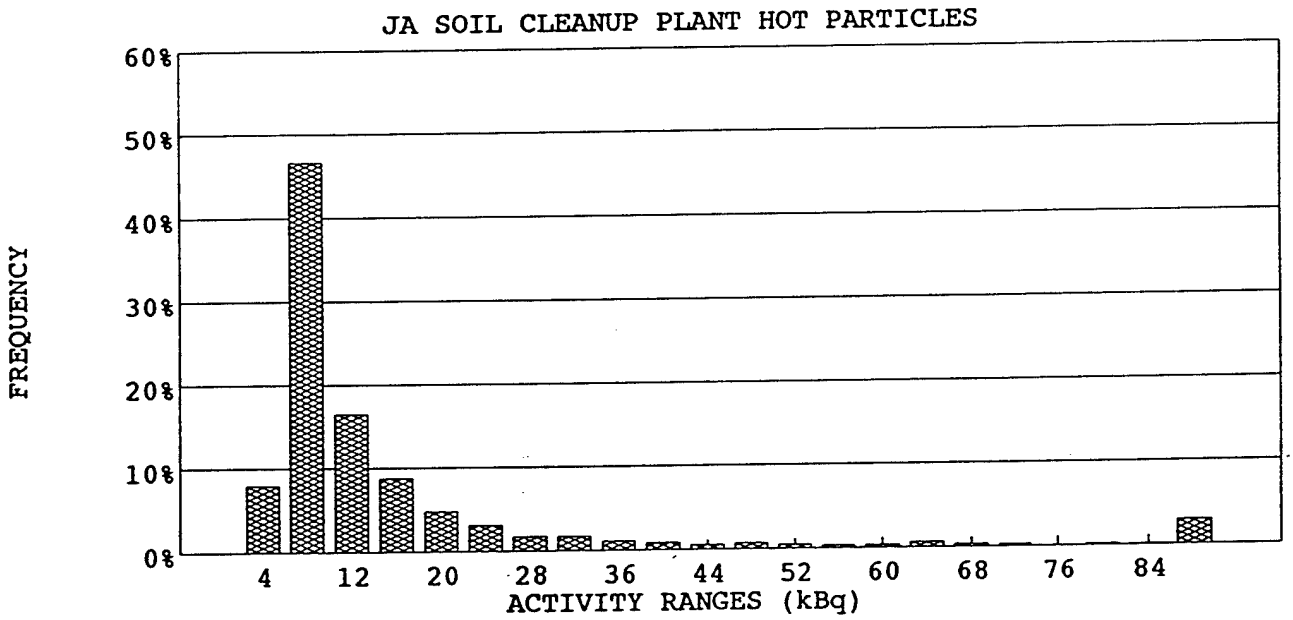
ACT_P (kBq)	NUM (#)	FREQ%
4	182	7.9%
8	1,071	46.7%
12	379	16.5%
16	202	8.8%
20	110	4.8%
24	72	3.1%
28	40	1.7%
32	40	1.7%
36	25	1.1%
40	20	0.9%
44	12	0.5%
48	16	0.7%
52	10	0.4%
56	8	0.3%
60	8	0.3%
64	14	0.6%
68	7	0.3%
72	5	0.2%
76	1	0.0%
80	3	0.1%
84	2	0.1%
>84	68	3.0%
TOTAL	2,295	

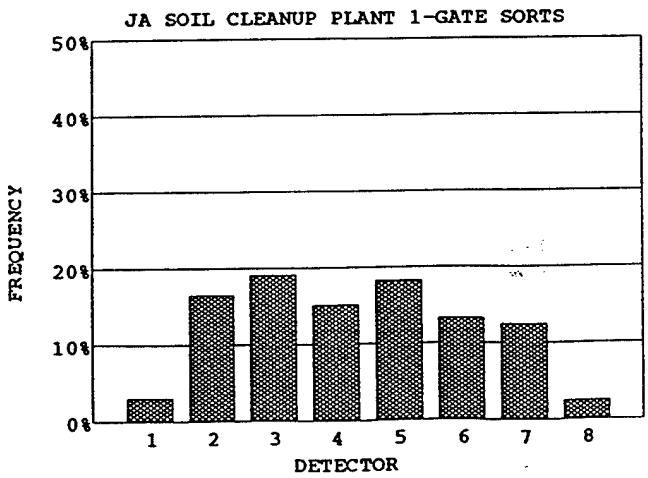
EVENT TYPES HPE 2,201 MPE 3,919 DISE 36,474

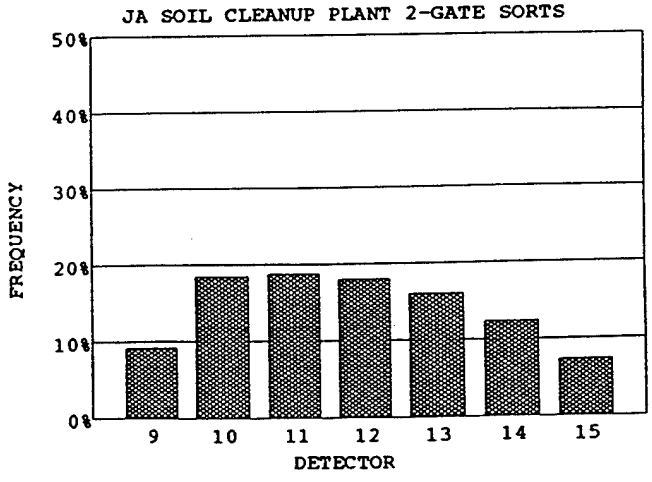
SORTER 1

23-Apr-94









SORTER 2

23-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	21.8 tons	23.8 tons	45.6 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.8 kg	
VOLUME IN-GROUND	17.3 yd³	18.9 yd³	36.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	52.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	62,756 kBq	34,923 kBq	6,402 kBq
MAXIMUM/SORT	12,305 kBq	7,989 kBq	23 kBq
MINIMUM/SORT	2 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		1,602 Bq/kg	269 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				816		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			380		None	07:07
NONE (AD=0 & MD=0 & MND>0)			156			10:35
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			280			11:45
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				8,160		
2-SEC RECORDS WITH SORTS			2,057			
2-SEC RECORDS WITHOUT SORTS			6,103			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,873		
NONPROCESSING RECORDS (Test, calibration, etc)				4		
2-SEC SORT DETECTORS						
1 DET	1,474	71.66%	5 DET	11	0.53%	
2 DET	460	22.36%	6 DET	0	0.00%	
3 DET	96	4.67%	7 DET	1	0.05%	
4 DET	16	0.78%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			11.1 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	50	5.0%
2	181	18.1%
3	198	19.8%
4	190	19.0%
5	162	16.2%
6	123	12.3%
7	81	8.1%
8	14	1.4%
TOTAL	999	

2-GATE SORTS DET	SORTS	FREQ%
9	118	11.2%
10	208	19.7%
11	201	19.0%
12	209	19.8%
13	162	15.3%
14	120	11.3%
15	40	3.8%
TOTAL	1,058	

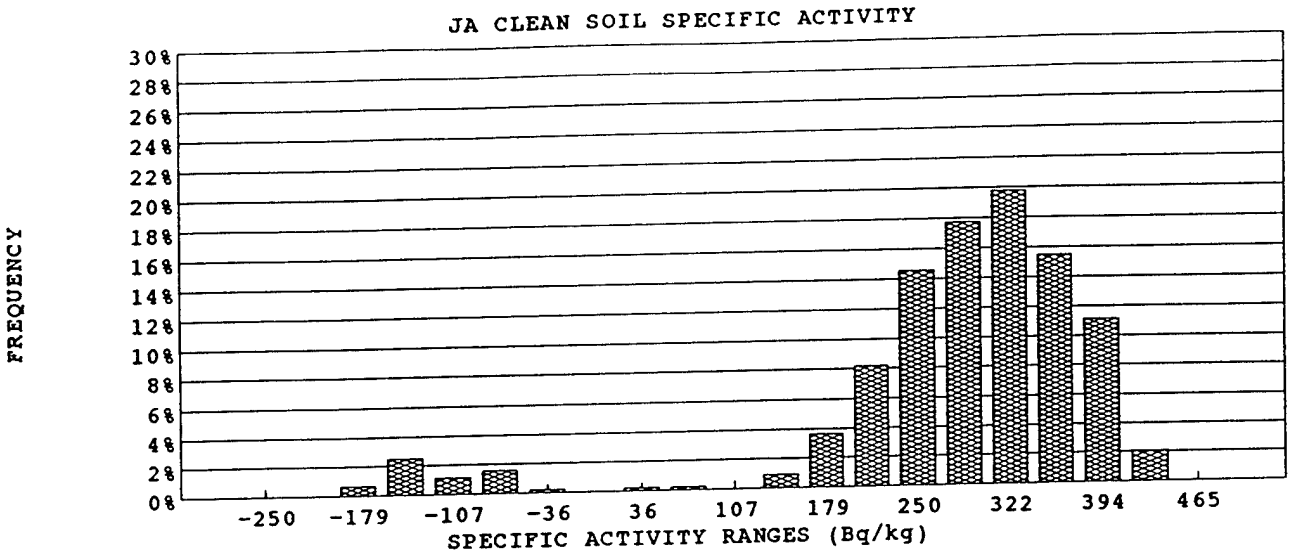
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	3
-8000	11
-6000	5
-4000	7
-2000	1
0	0
2000	1
4000	1
6000	0
8000	4
10000	16
12000	36
14000	64
16000	78
18000	87
20000	68
22000	49
24000	9
26000	0
>28000	0
TOTAL	440

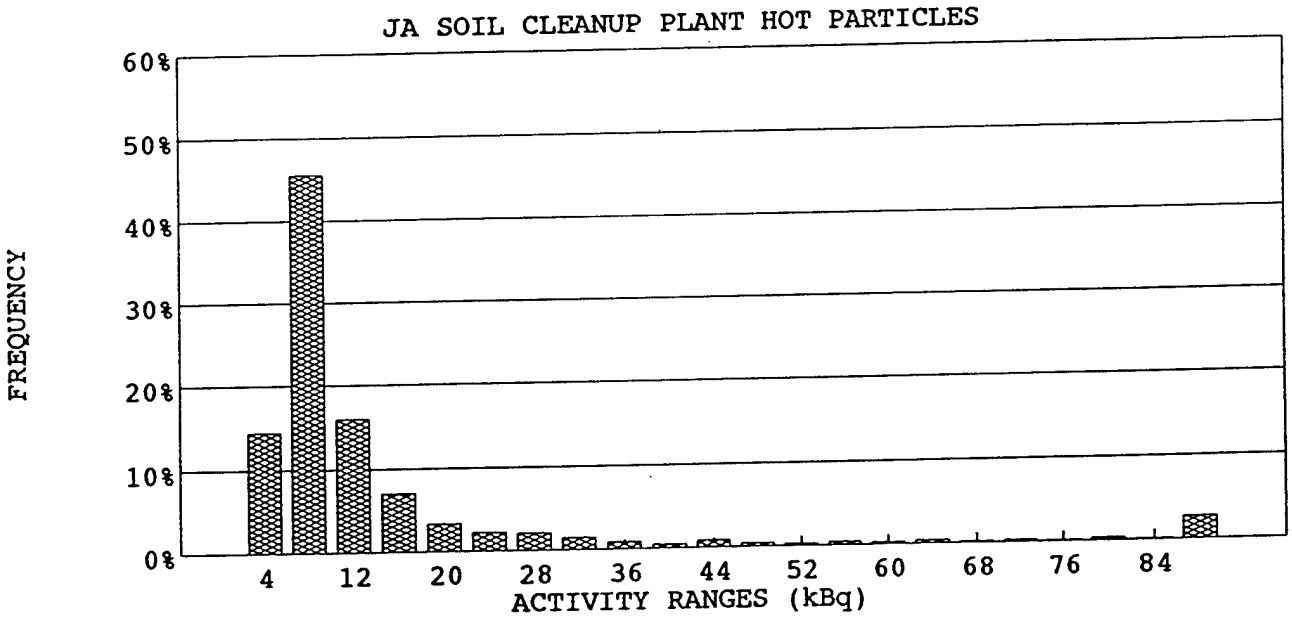
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.7%
-143	2.5%
-107	1.1%
-72	1.6%
-36	0.2%
0	0.0%
36	0.2%
72	0.2%
107	0.0%
143	0.9%
179	3.6%
215	8.2%
250	14.5%
286	17.7%
322	19.8%
358	15.5%
394	11.1%
429	2.0%
465	0.0%
0	0.0%

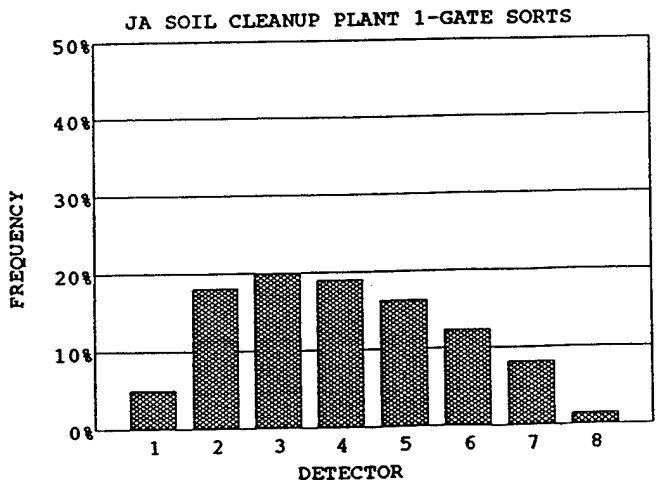
ACT_P (kBq)	NUM (#)	FREQ%
4	296	14.4%
8	937	45.6%
12	328	15.9%
16	146	7.1%
20	69	3.4%
24	47	2.3%
28	44	2.1%
32	31	1.5%
36	18	0.9%
40	10	0.5%
44	18	0.9%
48	8	0.4%
52	6	0.3%
56	9	0.4%
60	5	0.2%
64	9	0.4%
68	3	0.1%
72	5	0.2%
76	2	0.1%
80	7	0.3%
84	2	0.1%
>84	57	2.8%
TOTAL	2,057	

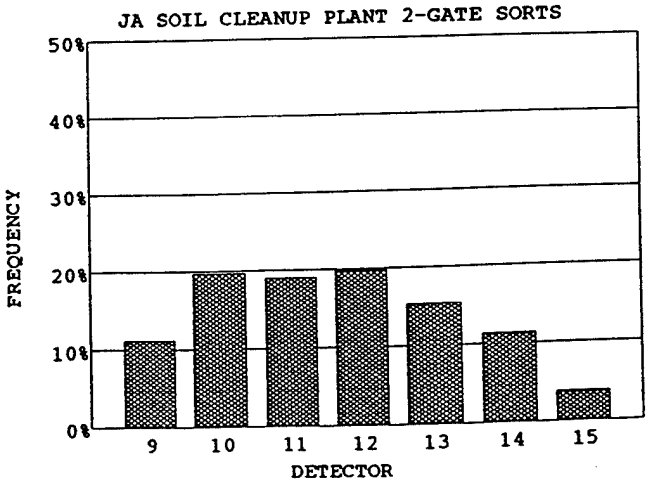
EVENT TYPES	HPE	MPE	DISE
	2,006	1,689	27,493

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 25–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	18:00 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	11.5 hr	11.5 hr	11.5 hr	11.5 hr	46.0 hr
SORTER AVAILABLE HOURS	3.5 hr	3.5 hr	0.0 hr	0.0 hr	7.0 hr
SORTER START–UP	06:30	06:30	NA	NA	
START SOIL PROCESSING	06:42	06:42	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER SHUT–DOWN	17:45	17:45	NA	NA	
END SOIL PROCESSING	17:24	17:24	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.7 hr
ACTUAL PROCESS HOURS	3.0 hr	3.0 hr	0.0 hr	0.0 hr	6.0 hr
DOWN–TIME	0.5 hr	0.5 hr	0.0 hr	0.0 hr	1.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	8.0 hr	8.0 hr	10.0 hr	10.0 hr	36.0 hr
AUTHORIZED DELAY TIME	7.0 hr	7.0 hr	10.0 hr	10.0 hr	34.0 hr
PLANT PERFORMANCE					86.0%
PRODUCTIVTY					13.1%

PRODUCTIVITY

Date	25–Apr–94
Contract day (from 6 Sep)	187
Current Contract week	32
Soil production for Day	61 MT
Cumlative Soil Production for Week	61 MT
Total Soil production for contract	
Since 6 Sep 93	39,548 MT
Since 6 Aug 93	41,139 MT
Total Soil production for project	67,426 MT

Excused Delays for day (sorter–hrs)	34 hr
Excused delays for contract (sorter–hrs)	3,188 hr
Excused delay days (plant–days)	80 days
Excused delay months (plant–month)	3.07 months
Percent of contract completed	41.1%
Tons Ahead or Behind Schedule	1,770 MT
Days ahead or behind schedule	6 days

MT = metric tons

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SORTER 1

25-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	29.0 tons	1.1 tons	30.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	23.0 yd³	0.9 yd³	23.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	3.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	51,823 kBq	48,070 kBq	156 kBq
MAXIMUM/SORT	1,364 kBq	886 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		1,658 Bq/kg	137 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		539		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	518			
NONE (AD=0 & MD=0 & MND>0)	11		16:39	07:40
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	10			08:39
UNEXPLAINED RECORDS	0			09:11
0<AD<1kBq & MD>0	0			16:57
AD=0 & MD>0	1			16:59
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		5,390		
2-SEC RECORDS WITH SORTS	3,085			
2-SEC RECORDS WITHOUT SORTS	2,305			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,624		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

1 DET	2,054	66.58%	5 DET	16	0.52%
2 DET	784	25.41%	6 DET	0	0.00%
3 DET	189	6.13%	7 DET	0	0.00%
4 DET	42	1.36%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 5.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE DET	SORTS	FREQ%
1	32	2.0%
2	187	11.7%
3	268	16.8%
4	271	16.9%
5	339	21.2%
6	256	16.0%
7	199	12.4%
8	47	2.9%
TOTAL	1,599	

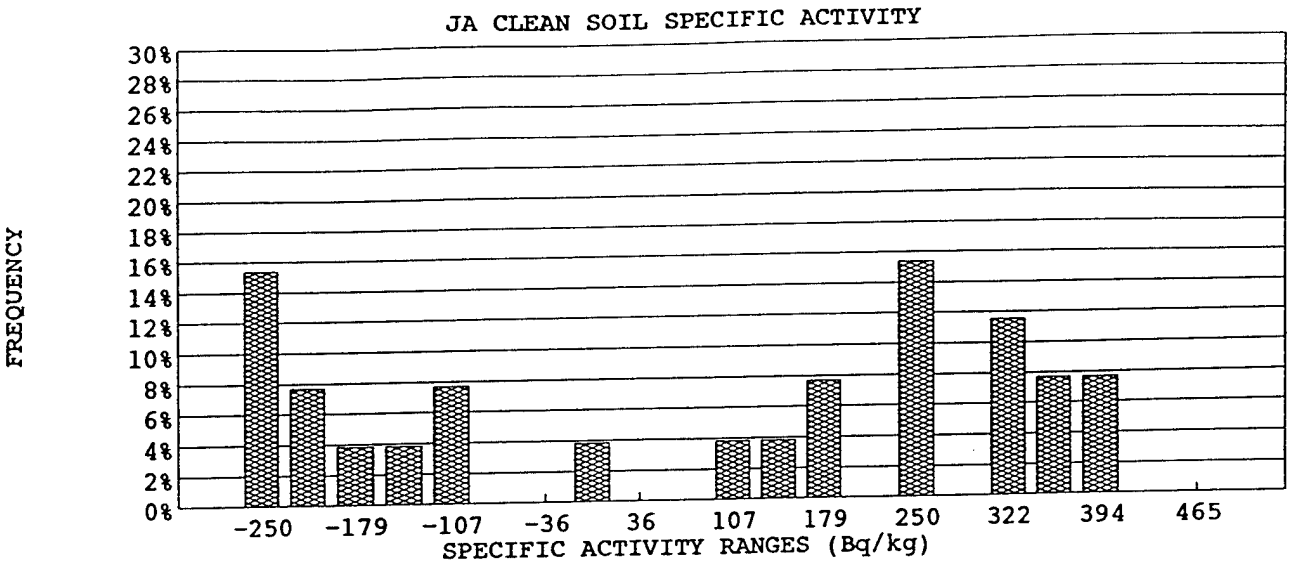
2-GATE DET	SORTS	FREQ%
9	93	6.3%
10	204	13.7%
11	280	18.8%
12	287	19.3%
13	307	20.7%
14	207	13.9%
15	108	7.3%
TOTAL	1,486	

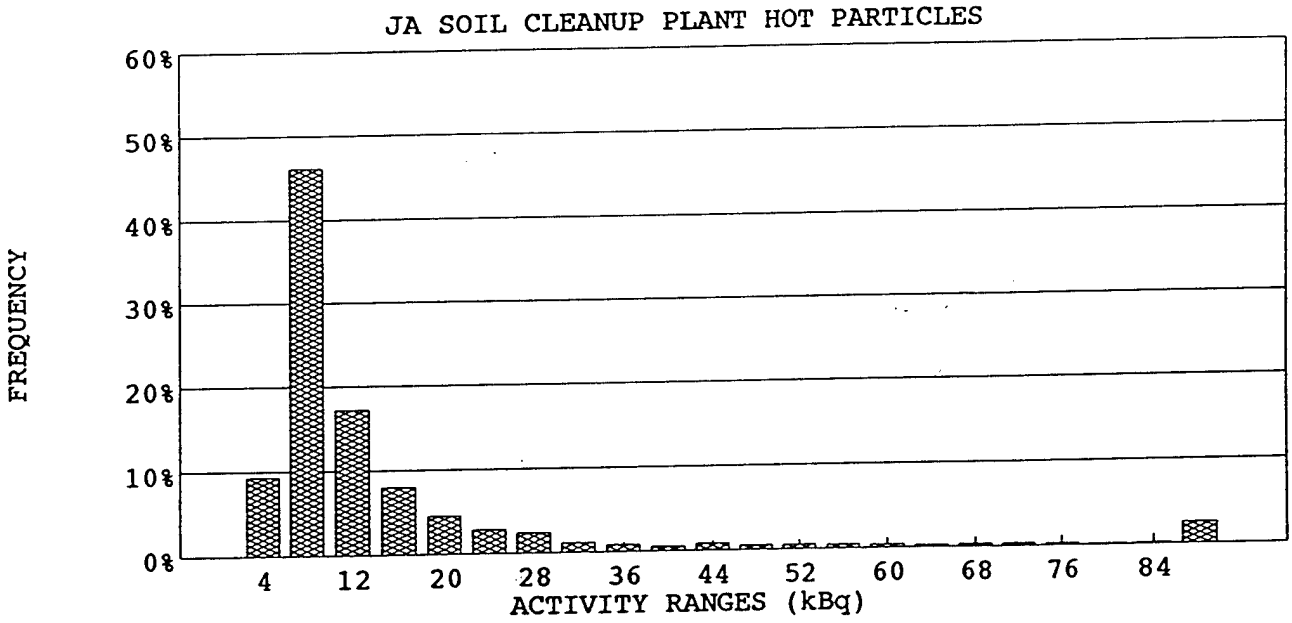
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	4	-250	15.4%	4	289	9.4%
-12000	2	-215	7.7%	8	1,424	46.2%
-10000	1	-179	3.8%	12	531	17.2%
-8000	1	-143	3.8%	16	247	8.0%
-6000	2	-107	7.7%	20	141	4.6%
-4000	0	-72	0.0%	24	87	2.8%
-2000	0	-36	0.0%	28	74	2.4%
0	1	0	3.8%	32	37	1.2%
2000	0	36	0.0%	36	27	0.9%
4000	0	72	0.0%	40	18	0.6%
6000	1	107	3.8%	44	27	0.9%
8000	1	143	3.8%	48	18	0.6%
10000	2	179	7.7%	52	17	0.6%
12000	0	215	0.0%	56	14	0.5%
14000	4	250	15.4%	60	13	0.4%
16000	0	286	0.0%	64	7	0.2%
18000	3	322	11.5%	68	10	0.3%
20000	2	358	7.7%	72	9	0.3%
22000	2	394	7.7%	76	7	0.2%
24000	0	429	0.0%	80	3	0.1%
26000	0	465	0.0%	84	5	0.2%
>28000	0	0	0.0%	>84	80	2.6%
TOTAL	26			TOTAL	3,085	

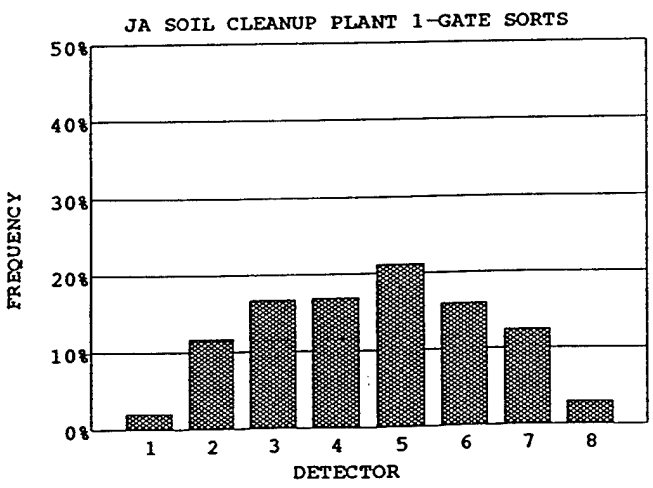
EVENT TYPES HPE 2,784 MPE 6,492 DISE 32,227

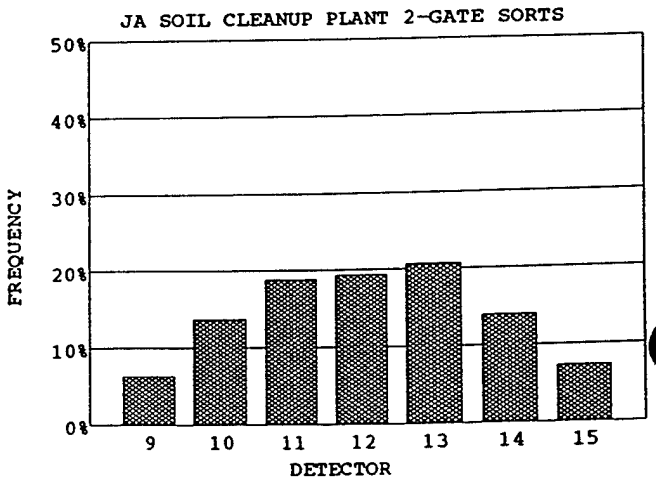
SORTER 1

25-Apr-94









SORTER 2

25-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	28.3 tons	2.2 tons	30.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	22.4 yd³	1.7 yd³	24.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	7.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	63,452 kBq	42,358 kBq	214 kBq
MAXIMUM/SORT	6,521 kBq	4,853 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,498 Bq/kg	97 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				545		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			504		16:39	07:40
NONE (AD=0 & MD=0 & MND>0)			14			08:39
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			27			09:11
UNEXPLAINED RECORDS		0				16:57
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		1				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				5,450		
2-SEC RECORDS WITH SORTS			2,610			
2-SEC RECORDS WITHOUT SORTS			2,840			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,155		
NONPROCESSING RECORDS (Test, calibration, etc)				4		

2-SEC SORT DETECTORS

1 DET	1,746	66.90%	5 DET	17	0.65%
2 DET	650	24.90%	6 DET	0	0.00%
3 DET	162	6.21%	7 DET	1	0.04%
4 DET	35	1.34%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 6.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	75	5.8%
2	270	20.9%
3	238	18.4%
4	257	19.9%
5	217	16.8%
6	148	11.5%
7	69	5.3%
8	17	1.3%
TOTAL	1,291	

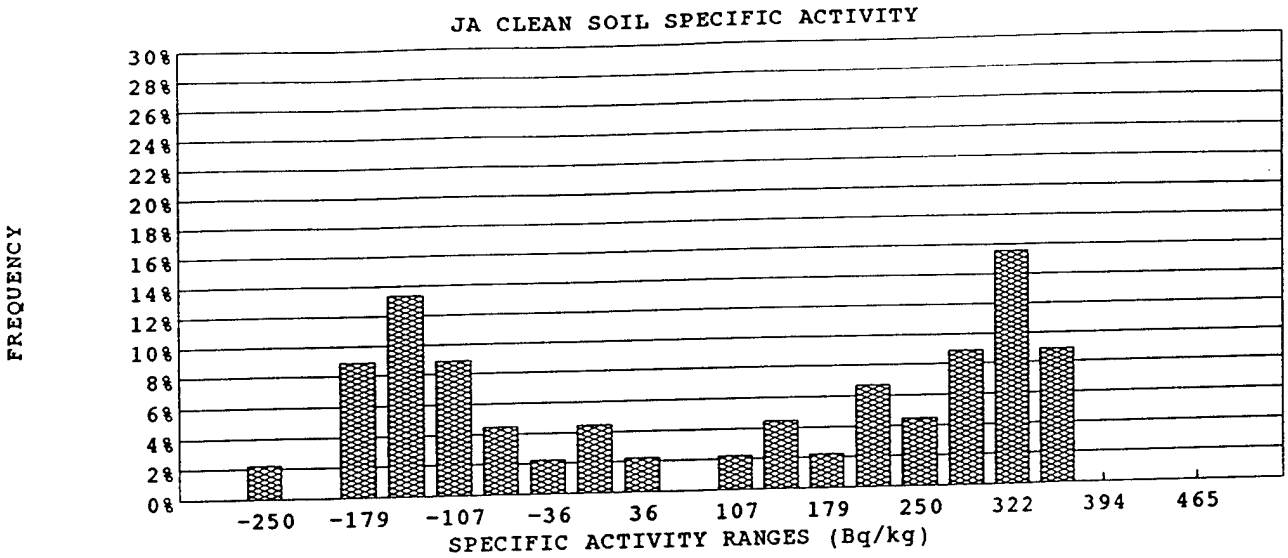
2-GATE SORTS

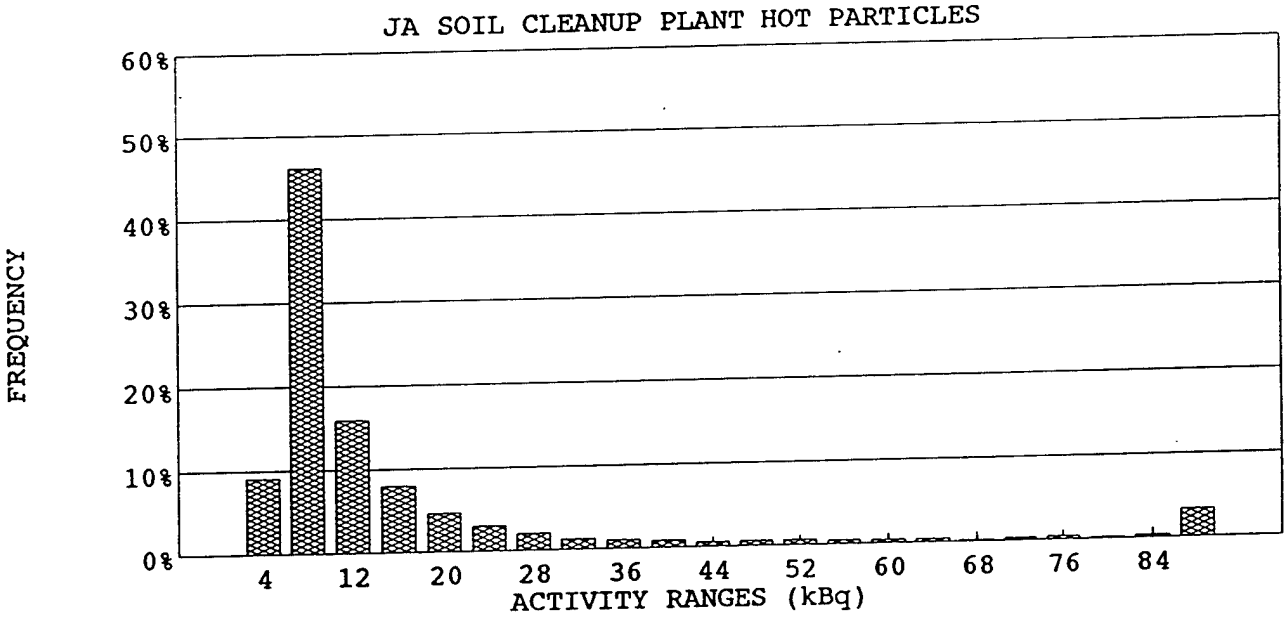
DET	SORTS	FREQ%
9	178	13.5%
10	272	20.6%
11	260	19.7%
12	273	20.7%
13	189	14.3%
14	112	8.5%
15	35	2.7%
TOTAL	1,319	

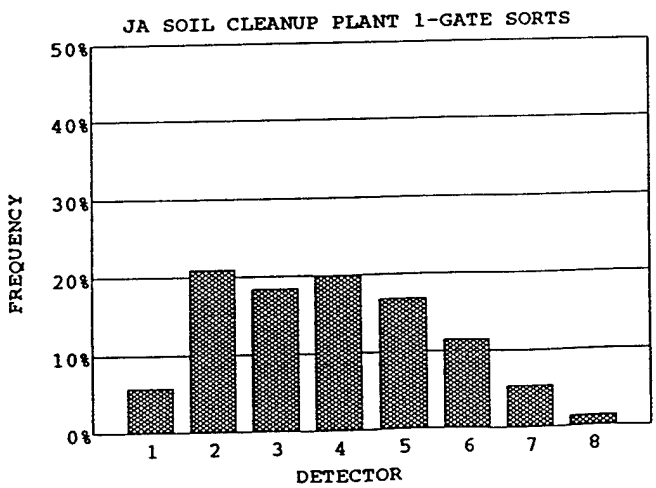
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	2.2%	4	238	9.1%
-12000	0	-215	0.0%	8	1,205	46.2%
-10000	4	-179	8.9%	12	415	15.9%
-8000	6	-143	13.3%	16	209	8.0%
-6000	4	-107	8.9%	20	121	4.6%
-4000	2	-72	4.4%	24	80	3.1%
-2000	1	-36	2.2%	28	53	2.0%
0	2	0	4.4%	32	33	1.3%
2000	1	36	2.2%	36	28	1.1%
4000	0	72	0.0%	40	22	0.8%
6000	1	107	2.2%	44	14	0.5%
8000	2	143	4.4%	48	16	0.6%
10000	1	179	2.2%	52	16	0.6%
12000	3	215	6.7%	56	12	0.5%
14000	2	250	4.4%	60	11	0.4%
16000	4	286	8.9%	64	11	0.4%
18000	7	322	15.6%	68	5	0.2%
20000	4	358	8.9%	72	9	0.3%
22000	0	394	0.0%	76	10	0.4%
24000	0	429	0.0%	80	5	0.2%
26000	0	465	0.0%	84	9	0.3%
>28000	0	0	0.0%	>84	88	3.4%
TOTAL	45			TOTAL	2,610	

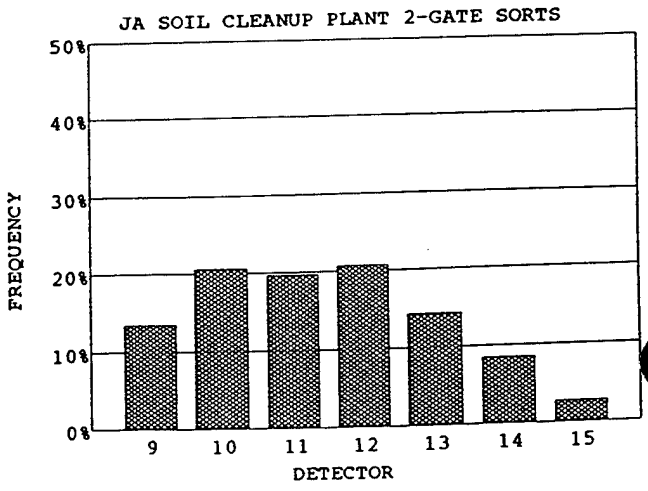
EVENT TYPES HPE 2,463 MPE 4,726 DISE 33,269

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 26–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.8 hr	9.8 hr	0.0 hr	0.0 hr	19.5 hr
SORTER START–UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:23	06:23	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER SHUT–DOWN	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:10	16:07	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
ACTUAL PROCESS HOURS	8.6 hr	8.5 hr	0.0 hr	0.0 hr	17.1 hr
DOWN–TIME	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.4 hr
SYSTEM PAUSE	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.4 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					87.6%
PRODUCTIVTY					42.7%

PRODUCTIVITY

Date	26–Apr–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	188	Excused delays for contract (sorter–hrs)	3,208 hr
Current Contract week	32	Excused delay days (plant–days)	80 days
		Excused delay months (plant–month)	3.08 months
Soil production for Day	172 MT		
Cumlative Soil Production for Week	233 MT	Percent of contract completed	41.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,783 MT
Since 6 Sep 93	39,720 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	41,311 MT		
Total Soil production for project	67,598 MT		

MT = metric tons

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SORTER 1

26-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	40.9 tons	45.4 tons	86.3 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	34.2 kg	
VOLUME IN-GROUND	32.4 yd³	36.0 yd³	68.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	52.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	67,453 kBq	61,510 kBq	2,861 kBq
MAXIMUM/SORT	1,379 kBq	1,025 kBq	19 kBq
MINIMUM/SORT	2 kBq	(9,292)Bq	-16 kBq
SPECIFIC ACTIVITY		1,505 Bq/kg	63 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,544		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		720		11:48	07:28
NONE (AD=0 & MD=0 & MND>0)		493			10:00
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		331			10:52
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			15,440		
2-SEC RECORDS WITH SORTS		4,050			
2-SEC RECORDS WITHOUT SORTS		11,390			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,594		
NONPROCESSING RECORDS (Test, calibration, etc)			11		

2-SEC SORT DETECTORS

1 DET	2,761	68.17%	5 DET	8	0.20%
2 DET	992	24.49%	6 DET	0	0.00%
3 DET	235	5.80%	7 DET	0	0.00%
4 DET	54	1.33%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 11.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	45	2.2%
2	223	10.8%
3	391	19.0%
4	411	19.9%
5	449	21.8%
6	288	14.0%
7	209	10.1%
8	47	2.3%
TOTAL	2,063	

2-GATE SORTS

DET	SORTS	FREQ%
9	112	5.6%
10	266	13.4%
11	420	21.1%
12	456	22.9%
13	394	19.8%
14	224	11.3%
15	115	5.8%
TOTAL	1,987	

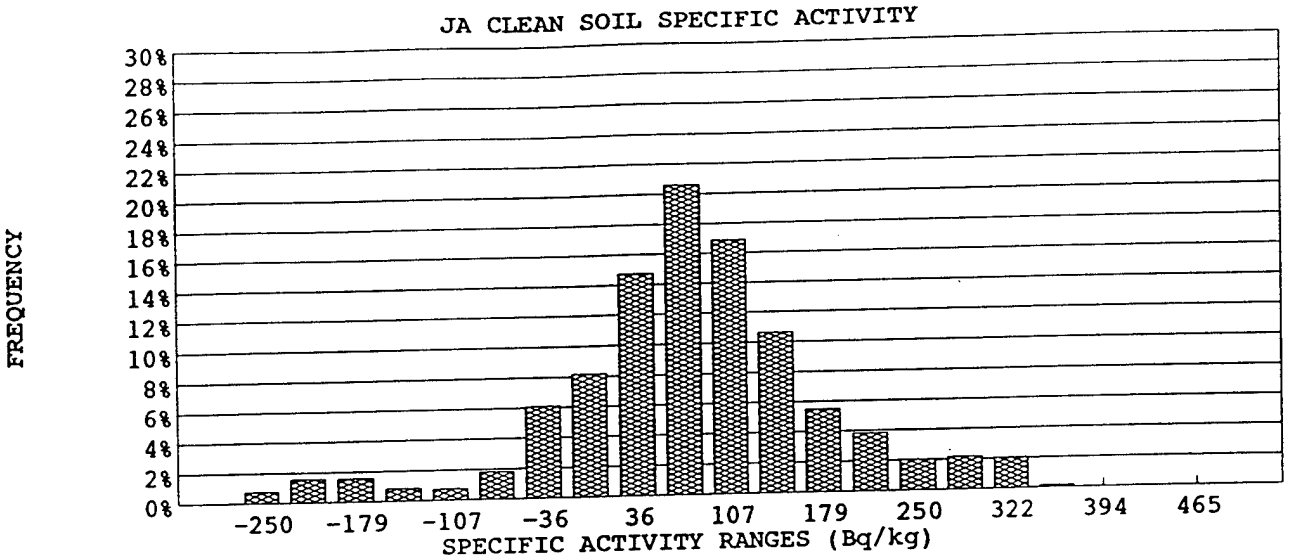
ACT_ND (Bq)	NUM (#)
-14000	6
-12000	13
-10000	13
-8000	7
-6000	6
-4000	15
-2000	51
0	68
2000	123
4000	172
6000	141
8000	89
10000	46
12000	32
14000	17
16000	18
18000	17
20000	1
22000	0
24000	0
26000	0
>28000	0
TOTAL	835

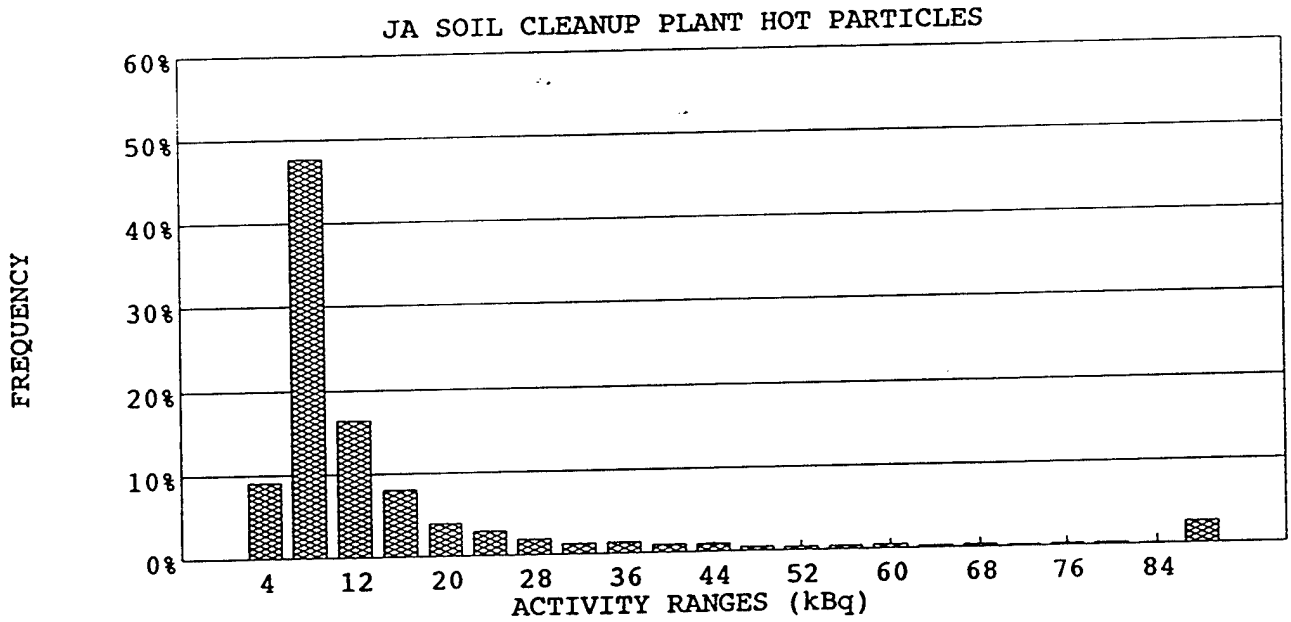
SPEC_A (Bq/kg)	FREQ%
-250	0.7%
-215	1.6%
-179	1.6%
-143	0.8%
-107	0.7%
-72	1.8%
-36	6.1%
0	8.1%
36	14.7%
72	20.6%
107	16.9%
143	10.7%
179	5.5%
215	3.8%
250	2.0%
286	2.2%
322	2.0%
358	0.1%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

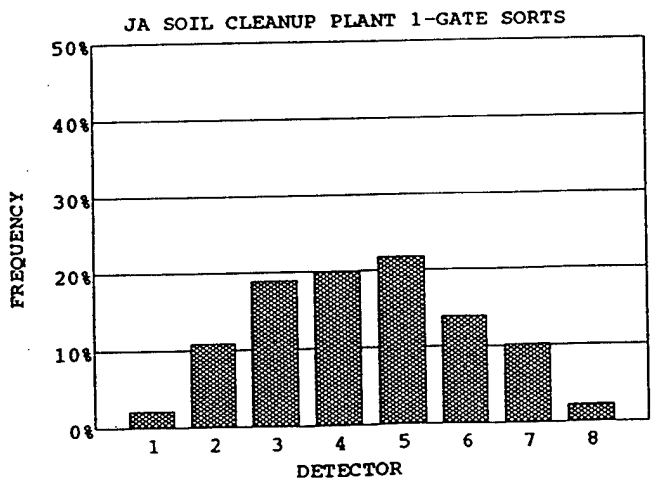
ACT_P (kBq)	NUM (#)	FREQ%
4	369	9.1%
8	1,932	47.7%
12	664	16.4%
16	328	8.1%
20	158	3.9%
24	119	2.9%
28	74	1.8%
32	49	1.2%
36	54	1.3%
40	37	0.9%
44	38	0.9%
48	19	0.5%
52	16	0.4%
56	17	0.4%
60	20	0.5%
64	10	0.2%
68	12	0.3%
72	6	0.1%
76	9	0.2%
80	10	0.2%
84	3	0.1%
>84	106	2.6%
TOTAL	4,050	

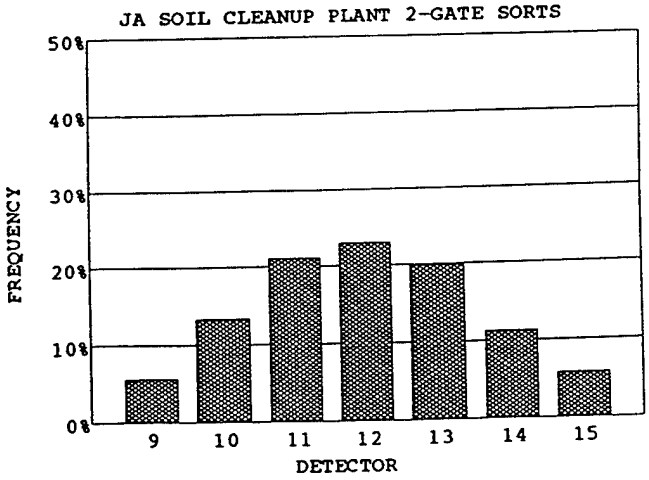
EVENT TYPES HPE 3,761 MPE 11,991 DISE 42,731

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

26-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	40.0 tons	45.6 tons	85.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	31.7 yd³	36.1 yd³	67.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	53.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	75,569 kBq	52,606 kBq	3,662 kBq
MAXIMUM/SORT	3,425 kBq	1,748 kBq	20 kBq
MINIMUM/SORT	2 kBq	(2,454)Bq	-14 kBq
SPECIFIC ACTIVITY		1,314 Bq/kg	80 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,531		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	710		11:48	07:28
NONE (AD=0 & MD=0 & MND>0)	644			10:00
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	177			10:52
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		15,310		
2-SEC RECORDS WITH SORTS	3,735			
2-SEC RECORDS WITHOUT SORTS	11,575			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,266		
NONPROCESSING RECORDS (Test, calibration, etc)		14		

2-SEC SORT DETECTORS

1 DET	2,532	67.79%	5 DET	9	0.24%
2 DET	925	24.77%	6 DET	0	0.00%
3 DET	223	5.97%	7 DET	0	0.00%
4 DET	46	1.23%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 12.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	96	5.1%
2	376	19.8%
3	370	19.5%
4	377	19.9%
5	319	16.8%
6	219	11.6%
7	111	5.9%
8	27	1.4%
TOTAL	1,895	

2-GATE SORTS

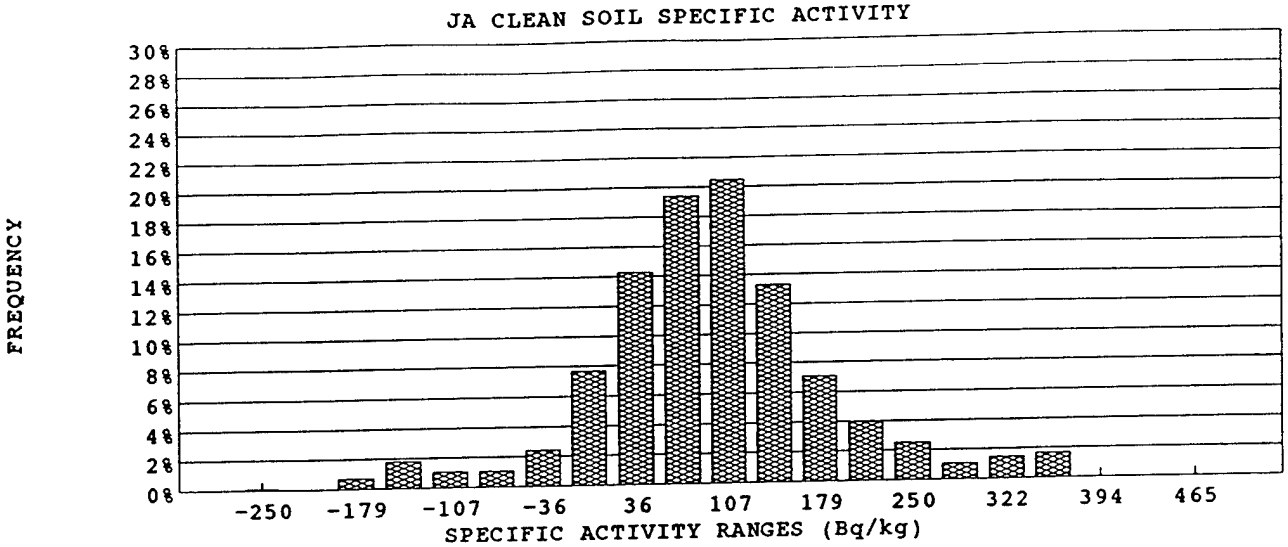
DET	SORTS	FREQ%
9	225	12.2%
10	378	20.5%
11	399	21.7%
12	373	20.3%
13	274	14.9%
14	135	7.3%
15	56	3.0%
TOTAL	1,840	

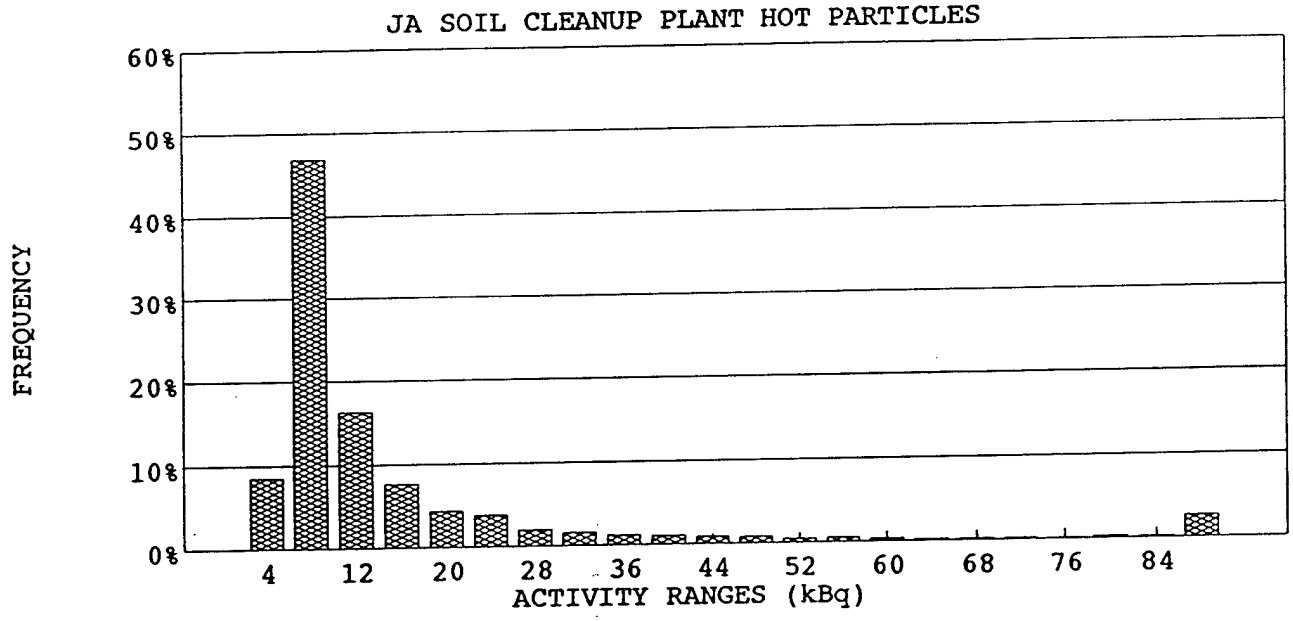
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	318	8.5%
-12000	0	-215	0.0%	8	1,750	46.9%
-10000	6	-179	0.7%	12	608	16.3%
-8000	15	-143	1.8%	16	286	7.7%
-6000	9	-107	1.1%	20	164	4.4%
-4000	9	-72	1.1%	24	144	3.9%
-2000	20	-36	2.4%	28	74	2.0%
0	64	0	7.7%	32	58	1.6%
2000	119	36	14.3%	36	45	1.2%
4000	162	72	19.4%	40	37	1.0%
6000	171	107	20.5%	44	32	0.9%
8000	111	143	13.3%	48	29	0.8%
10000	59	179	7.1%	52	17	0.5%
12000	33	215	4.0%	56	20	0.5%
14000	21	250	2.5%	60	12	0.3%
16000	9	286	1.1%	64	8	0.2%
18000	12	322	1.4%	68	8	0.2%
20000	14	358	1.7%	72	6	0.2%
22000	0	394	0.0%	76	4	0.1%
24000	0	429	0.0%	80	9	0.2%
26000	0	465	0.0%	84	7	0.2%
>28000	0	0	0.0%	>84	99	2.7%
TOTAL	835			TOTAL	3,735	

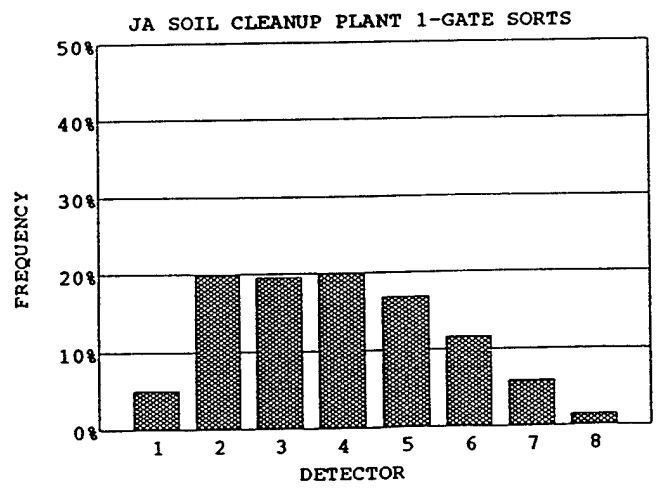
EVENT TYPES HPE 3,474 MPE 6,185 DISE 47,627

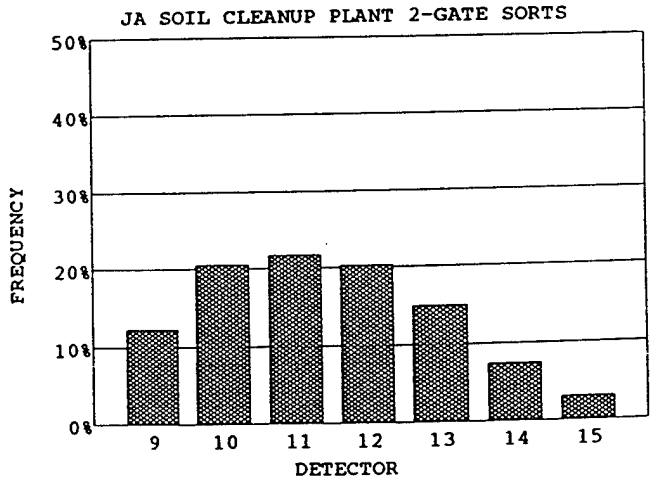
SORTER 2

26-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 27-Apr-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.5 hr	9.5 hr	0.0 hr	0.0 hr	19.0 hr
SORTER START-UP	06:15	06:15	NA	NA	
START SOIL PROCESSING	06:30	06:30	NA	NA	
TIME REQUIRED TO START-UP	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT-DOWN	16:15	16:15	NA	NA	
END SOIL PROCESSING	15:57	15:56	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	8.3 hr	8.2 hr	0.0 hr	0.0 hr	16.5 hr
DOWN-TIME	1.2 hr	1.3 hr	0.0 hr	0.0 hr	2.5 hr
SYSTEM PAUSE	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.4 hr
SORTER NONAVAILABLE TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					86.8%
PRODUCTIVTY					41.2%

PRODUCTIVITY

Date	27-Apr-94	Excused Delays for day (sorter-hrs)	20 hr
Contract day (from 6 Sep)	189	Excused delays for contract (sorter-hrs)	3,228 hr
Current Contract week	32	Excused delay days (plant-days)	81 days
		Excused delay months (plant-month)	3.10 months
Soil production for Day	166 MT		
Cumlative Soil Production for Week	398 MT	Percent of contract completed	41.5%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,791 MT
Since 6 Sep 93	39,886 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	41,477 MT		
Total Soil production for project	67,764 MT		

MT = metric tons

SORTER 1

27-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	31.2 tons	52.1 tons	83.3 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	39.1 kg	
VOLUME IN-GROUND	24.8 yd³	41.3 yd³	66.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	62.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	73,318 kBq	50,377 kBq	6,007 kBq
MAXIMUM/SORT	5,100 kBq	5,482 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		1,612 Bq/kg	115 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,491		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	530			
NONE (AD=0 & MD=0 & MND>0)	350		None	09:43
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	611			10:53
UNEXPLAINED RECORDS	0			13:33
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,910		
2-SEC RECORDS WITH SORTS	2,975			
2-SEC RECORDS WITHOUT SORTS	11,935			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,466		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

1 DET	2,008	67.50%	5 DET	24	0.81%
2 DET	704	23.66%	6 DET	0	0.00%
3 DET	187	6.29%	7 DET	2	0.07%
4 DET	52	1.75%	8 DET	0	0.00%

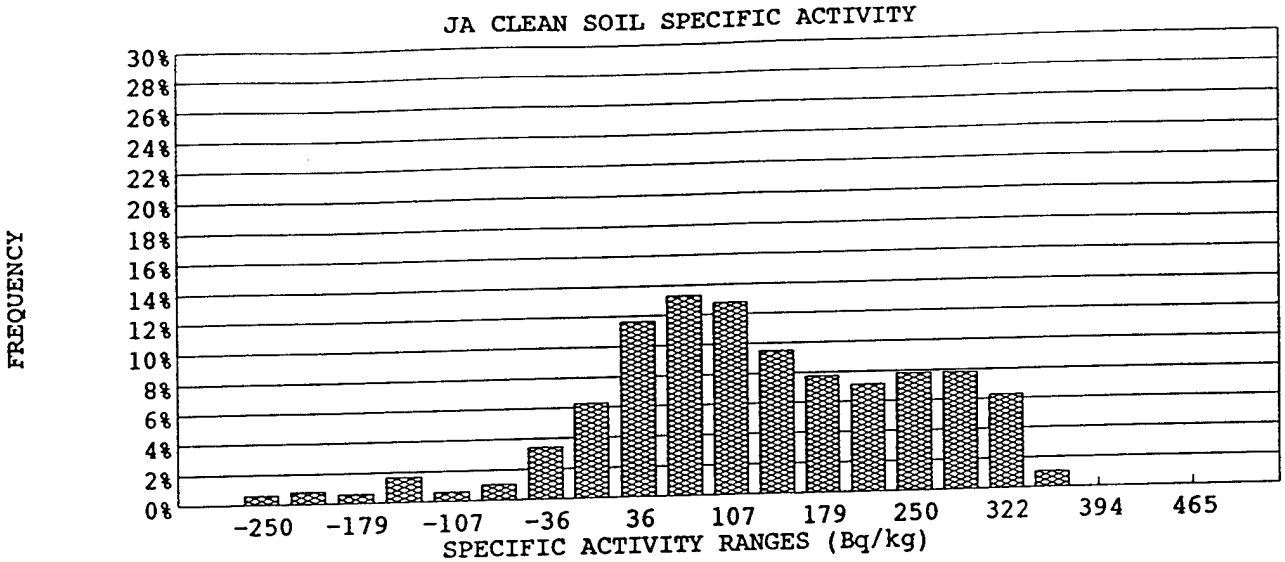
AVERAGE TIME BETWEEN 2-SEC SORTS 14.9 sec

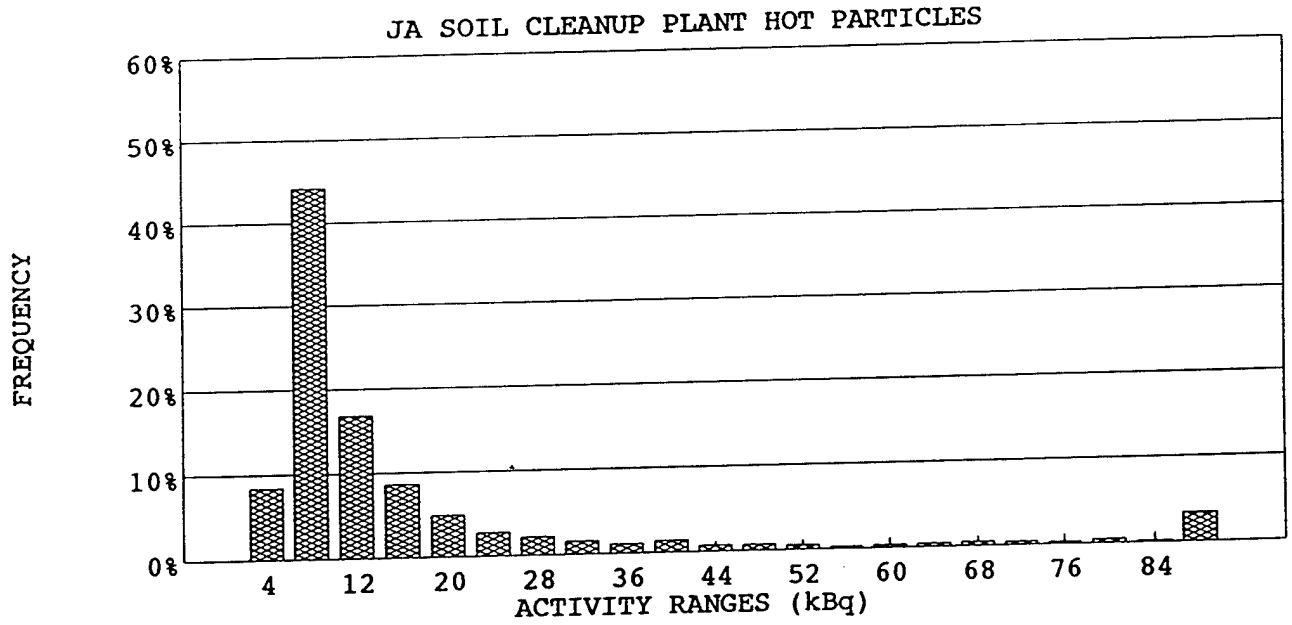
FREQUENCY DISTRIBUTIONS

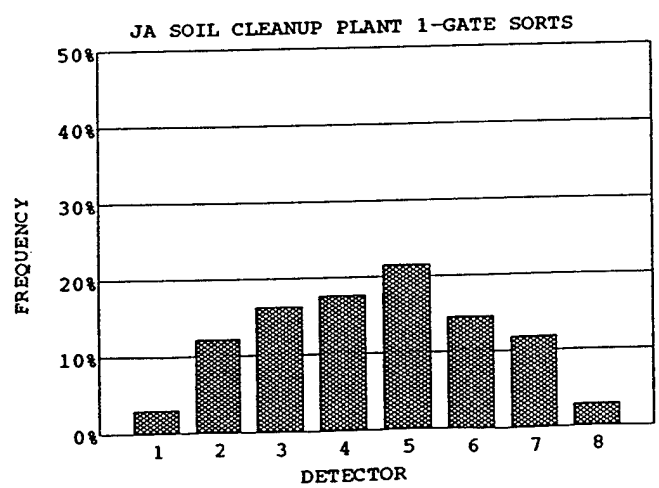
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	46	3.0%	-14000	6	-250	0.6%	4	251	8.4%
2	185	12.2%	-12000	8	-215	0.8%	8	1,315	44.2%
3	248	16.3%	-10000	6	-179	0.6%	12	501	16.8%
4	269	17.7%	-8000	16	-143	1.6%	16	257	8.6%
5	327	21.5%	-6000	6	-107	0.6%	20	147	4.9%
6	222	14.6%	-4000	10	-72	1.0%	24	82	2.8%
7	181	11.9%	-2000	33	-36	3.4%	28	65	2.2%
8	43	2.8%	0	61	0	6.3%	32	45	1.5%
TOTAL	1,521		2000	113	36	11.6%	36	32	1.1%
			4000	129	72	13.3%	40	41	1.4%
2-GATE DET	SORTS	FREQ%	6000	124	107	12.8%	44	20	0.7%
			8000	92	143	9.5%	48	20	0.7%
9	102	7.0%	10000	75	179	7.7%	52	16	0.5%
10	212	14.6%	12000	69	215	7.1%	56	7	0.2%
11	261	18.0%	14000	76	250	7.8%	60	10	0.3%
12	317	21.8%	16000	76	286	7.8%	64	12	0.4%
13	298	20.5%	18000	61	322	6.3%	68	13	0.4%
14	162	11.1%	20000	10	358	1.0%	72	11	0.4%
15	102	7.0%	22000	0	394	0.0%	76	7	0.2%
TOTAL	1,454		24000	0	429	0.0%	80	15	0.5%
			26000	0	465	0.0%	84	6	0.2%
			>28000	0	0	0.0%	>84	102	3.4%
			TOTAL	971			TOTAL	2,975	

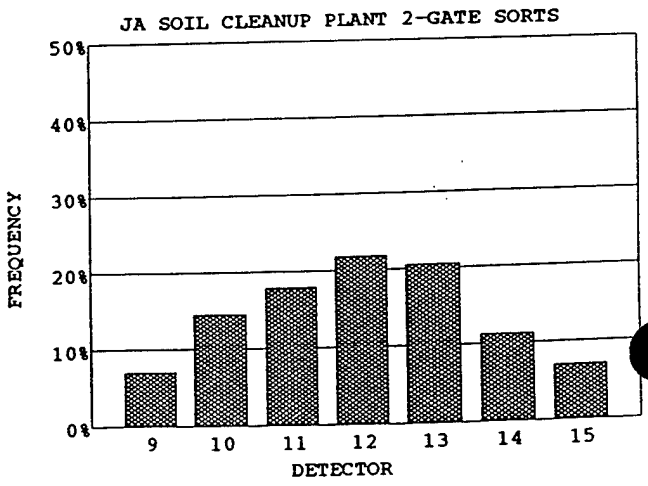
EVENT TYPES HPE 2,766 MPE 7,346 DISE 34,600

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250 -179 -107 -36 36 107 179 250 322 394 465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1 2 3 4 5 6 7 8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9 10 11 12 13 14 15
DETECTOR

SORTER 2

27-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	31.5 tons	51.1 tons	82.6 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	25.0 yd³	40.5 yd³	65.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	61.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	93,381 kBq	53,850 kBq	6,691 kBq
MAXIMUM/SORT	13,332 kBq	10,202 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,708 Bq/kg	131 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,478		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			546		12:44	09:43
NONE (AD=0 & MD=0 & MND>0)			456			10:53
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			476			13:33
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			1			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				14,780		
2-SEC RECORDS WITH SORTS			2,855			
2-SEC RECORDS WITHOUT SORTS			11,925			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				4,333		
NONPROCESSING RECORDS (Test, calibration, etc)				23		
2-SEC SORT DETECTORS						
1 DET	1,951	68.34%	5 DET	8	0.28%	
2 DET	698	24.45%	6 DET	0	0.00%	
3 DET	161	5.64%	7 DET	0	0.00%	
4 DET	37	1.30%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			15.2 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	75	5.3%
2	260	18.3%
3	267	18.8%
4	293	20.6%
5	259	18.2%
6	159	11.2%
7	85	6.0%
8	24	1.7%
TOTAL	1,422	

2-GATE SORTS DET	SORTS	FREQ%
9	171	11.9%
10	279	19.5%
11	298	20.8%
12	298	20.8%
13	218	15.2%
14	112	7.8%
15	57	4.0%
TOTAL	1,433	

ACT_ND (Bq)	NUM (#)
-14000	3
-12000	6
-10000	11
-8000	10
-6000	12
-4000	13
-2000	24
0	52
2000	87
4000	105
6000	112
8000	103
10000	106
12000	75
14000	71
16000	67
18000	73
20000	25
22000	0
24000	0
26000	0
>28000	0
TOTAL	955

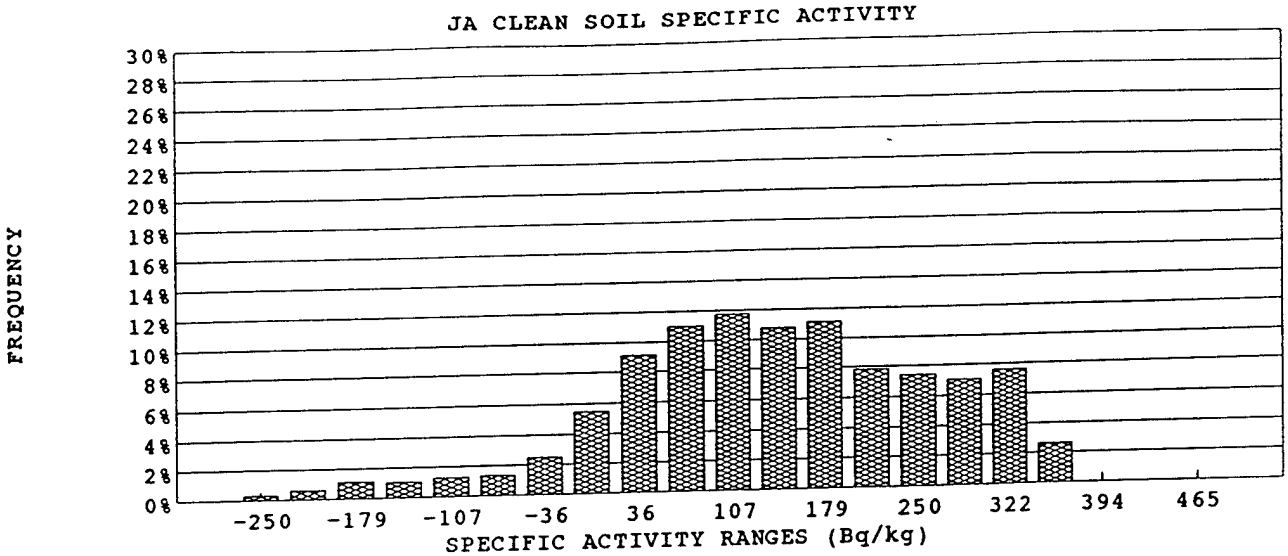
SPEC_A (Bq/kg)	FREQ%
-250	0.3%
-215	0.6%
-179	1.2%
-143	1.0%
-107	1.3%
-72	1.4%
-36	2.5%
0	5.4%
36	9.1%
72	11.0%
107	11.7%
143	10.8%
179	11.1%
215	7.9%
250	7.4%
286	7.0%
322	7.6%
358	2.6%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

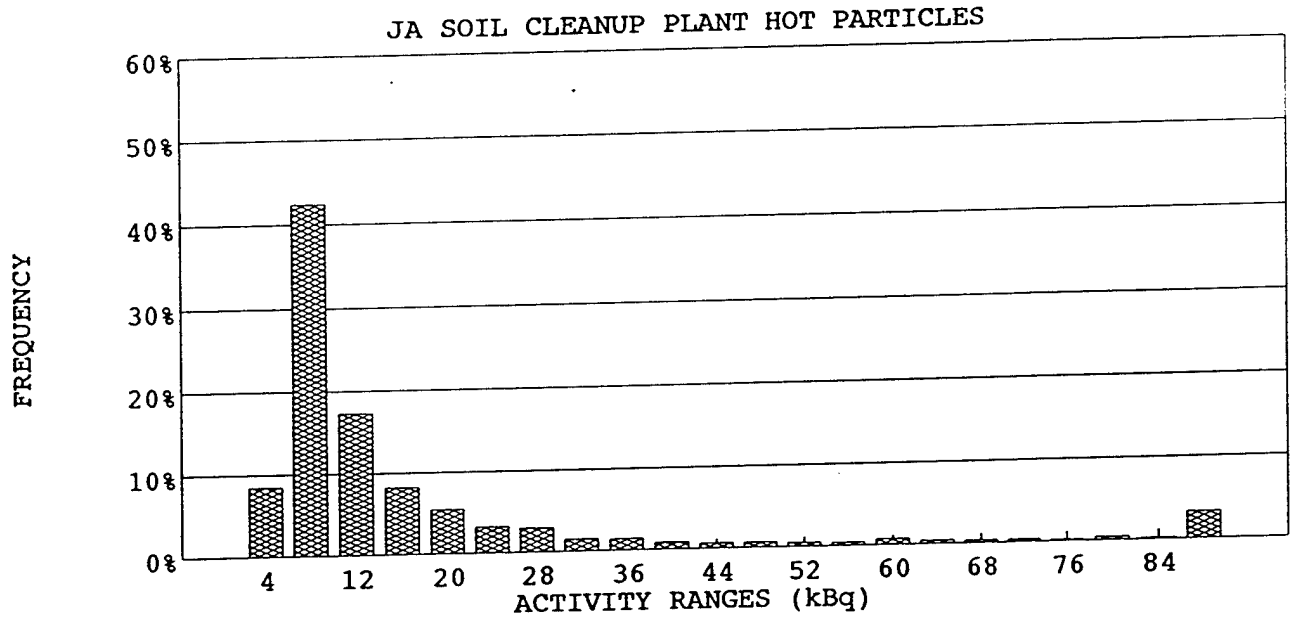
ACT_P (kBq)	NUM (#)	FREQ%
4	242	8.5%
8	1,210	42.4%
12	494	17.3%
16	235	8.2%
20	156	5.5%
24	92	3.2%
28	85	3.0%
32	43	1.5%
36	41	1.4%
40	26	0.9%
44	19	0.7%
48	19	0.7%
52	13	0.5%
56	12	0.4%
60	20	0.7%
64	11	0.4%
68	10	0.4%
72	10	0.4%
76	6	0.2%
80	12	0.4%
84	6	0.2%
>84	93	3.3%
TOTAL	2,855	

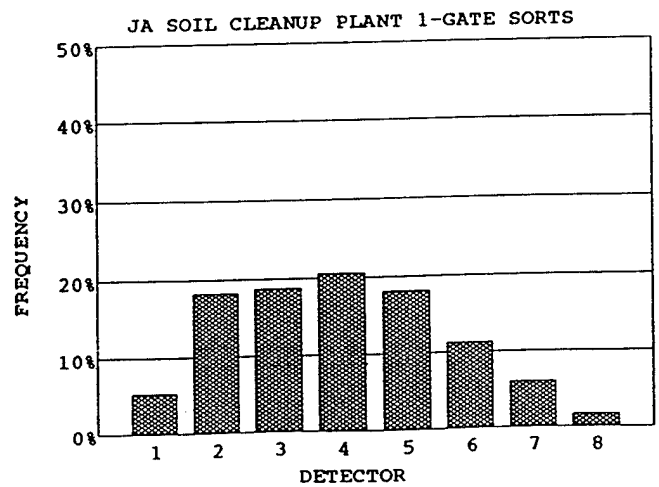
EVENT TYPES	HPE	2,670	MPE	4,745	DISE	37,691

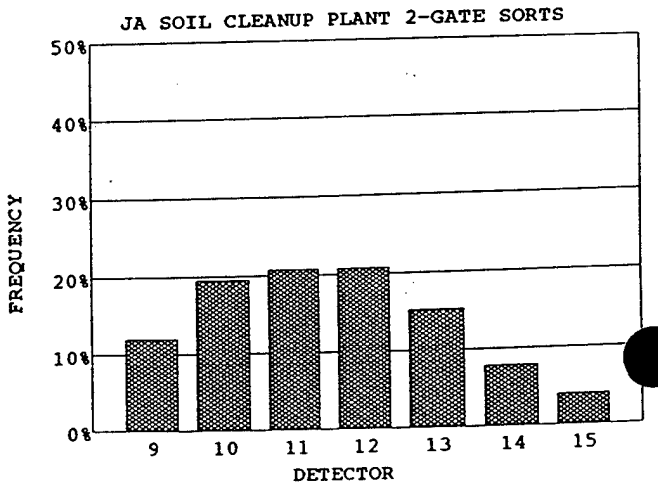
SORTER 2

27-Apr-94









WORK HISTORY – JA SOIL CLEANUP PLANT 28-Apr-94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.7 hr	9.7 hr	0.0 hr	0.0 hr	19.3 hr
SORTER START-UP	06:10	06:10	NA	NA	
START SOIL PROCESSING	06:24	06:24	NA	NA	
TIME REQUIRED TO START-UP	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT-DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:02	16:02	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
ACTUAL PROCESS HOURS	8.4 hr	8.4 hr	0.0 hr	0.0 hr	16.8 hr
DOWN-TIME	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.5 hr
SYSTEM PAUSE	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.5 hr
SORTER NONAVAILABLE TIME	0.3 hr	0.3 hr	10.0 hr	10.0 hr	20.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					86.9%
PRODUCTIVTY					42.0%

PRODUCTIVITY

Date	28-Apr-94
Contract day (from 6 Sep)	190
Current Contract week	32
Soil production for Day	169 MT
Cumlative Soil Production for Week	568 MT
Total Soil production for contract	
Since 6 Sep 93	40,055 MT
Since 6 Aug 93	41,646 MT
Total Soil production for project	67,933 MT

Excused Delays for day (sorter-hrs)	20 hr
Excused delays for contract (sorter-hrs)	3,248 hr
Excused delay days (plant-days)	81 days
Excused delay months (plant-month)	3.12 months
Percent of contract completed	41.6%
Tons Ahead or Behind Schedule	1,802 MT
Days ahead or behind schedule	6 days

MT = metric tons

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SORTER 1

28-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	17.0 tons	67.5 tons	84.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	27.9 kg	
VOLUME IN-GROUND	13.5 yd³	53.5 yd³	67.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	79.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	48,397 kBq	29,498 kBq	7,666 kBq
MAXIMUM/SORT	3,599 kBq	2,713 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		1,734 Bq/kg	114 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,512		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		266		None	10:52
NONE (AD=0 & MD=0 & MND>0)		475			15:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		771			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	0				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			15,120		
2-SEC RECORDS WITH SORTS		1,767			
2-SEC RECORDS WITHOUT SORTS		13,353			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,279		
NONPROCESSING RECORDS (Test, calibration, etc)			2		

2-SEC SORT DETECTORS

1 DET	1,241	70.23%	5 DET	8	0.45%
2 DET	416	23.54%	6 DET	0	0.00%
3 DET	89	5.04%	7 DET	1	0.06%
4 DET	13	0.74%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 24.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	29	3.2%
2	111	12.3%
3	135	15.0%
4	162	18.0%
5	193	21.4%
6	139	15.4%
7	100	11.1%
8	32	3.6%
TOTAL	901	

2-GATE SORTS

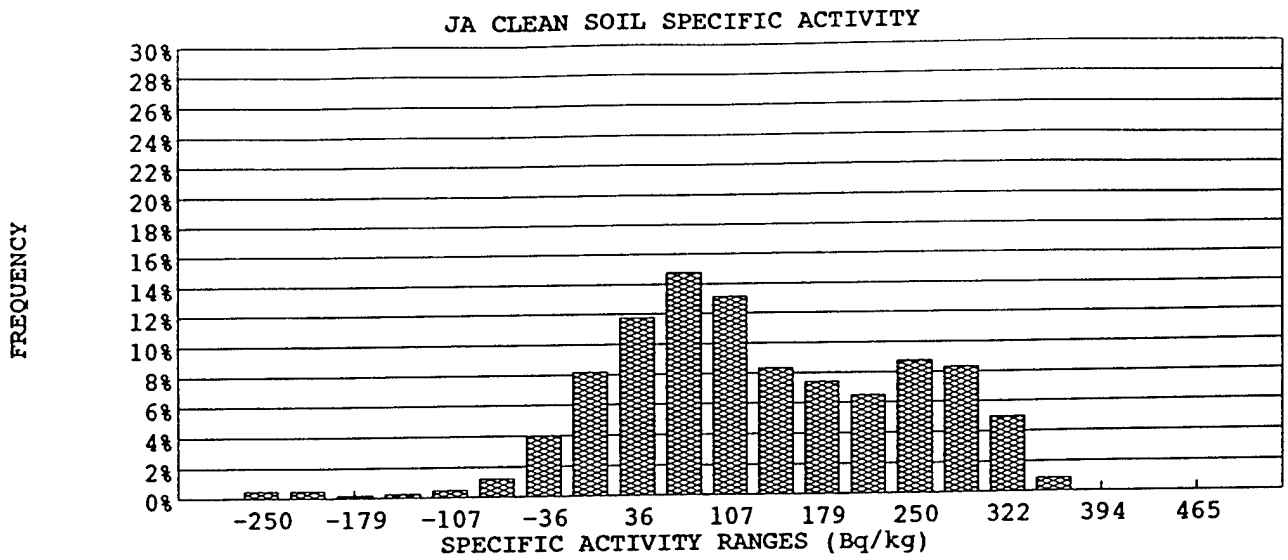
DET	SORTS	FREQ%
9	65	7.5%
10	128	14.8%
11	147	17.0%
12	184	21.2%
13	169	19.5%
14	114	13.2%
15	59	6.8%
TOTAL	866	

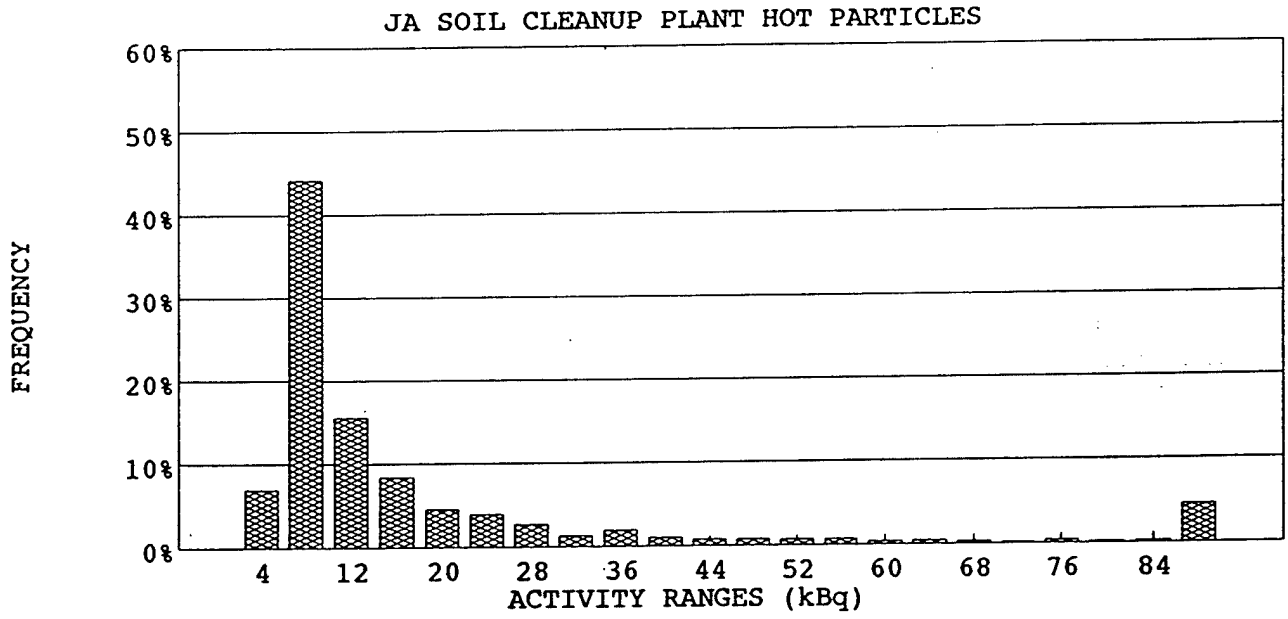
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	6	-250	0.5%	4	122	6.9%
-12000	6	-215	0.5%	8	781	44.2%
-10000	2	-179	0.2%	12	274	15.5%
-8000	3	-143	0.2%	16	149	8.4%
-6000	6	-107	0.5%	20	80	4.5%
-4000	15	-72	1.2%	24	69	3.9%
-2000	50	-36	4.0%	28	48	2.7%
0	102	0	8.2%	32	24	1.4%
2000	147	36	11.8%	36	34	1.9%
4000	184	72	14.7%	40	18	1.0%
6000	164	107	13.1%	44	13	0.7%
8000	104	143	8.3%	48	13	0.7%
10000	92	179	7.4%	52	12	0.7%
12000	81	215	6.5%	56	12	0.7%
14000	109	250	8.7%	60	7	0.4%
16000	104	286	8.3%	64	8	0.5%
18000	62	322	5.0%	68	5	0.3%
20000	11	358	0.9%	72	3	0.2%
22000	0	394	0.0%	76	7	0.4%
24000	0	429	0.0%	80	3	0.2%
26000	0	465	0.0%	84	4	0.2%
>28000	0	0	0.0%	>84	81	4.6%
TOTAL	1,248			TOTAL	1,767	

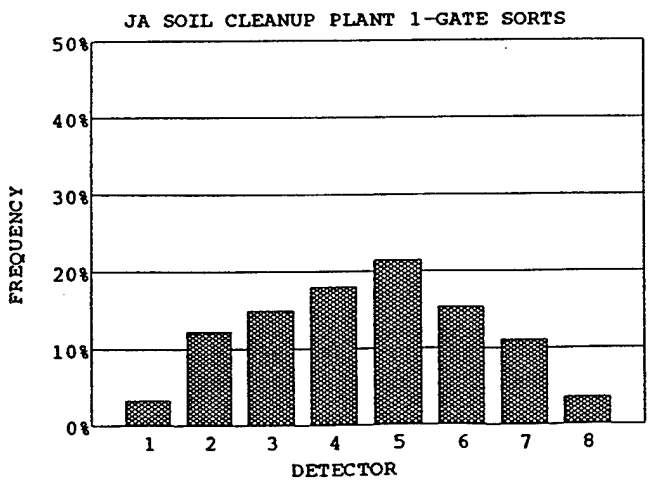
EVENT TYPES HPE 1,704 MPE 4,032 DISE 18,603

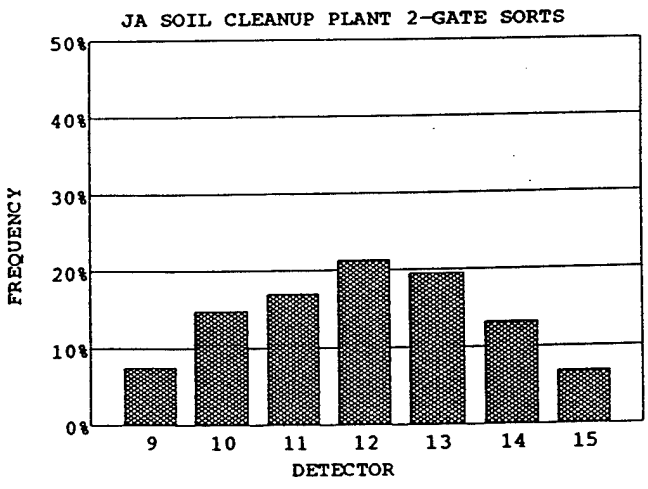
SORTER 1

28-Apr-94









SORTER 2

28-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.77 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	25.1 tons	59.4 tons	84.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	19.9 yd³	47.1 yd³	67.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	70.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	28,459 kBq	24,579 kBq	6,687 kBq
MAXIMUM/SORT	1,415 kBq	1,041 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		979 Bq/kg	113 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,512		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			433		None	10:52
NONE (AD=0 & MD=0 & MND>0)			620			15:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			459			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				15,120		
2-SEC RECORDS WITH SORTS			1,595			
2-SEC RECORDS WITHOUT SORTS			13,525			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,107		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	1,176	73.73%	5 DET	3	0.19%	
2 DET	335	21.00%	6 DET	0	0.00%	
3 DET	67	4.20%	7 DET	0	0.00%	
4 DET	14	0.88%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS		25.7 sec				

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	36	4.5%
2	136	17.0%
3	140	17.5%
4	155	19.4%
5	138	17.3%
6	115	14.4%
7	56	7.0%
8	22	2.8%
TOTAL	798	

2-GATE SORTS

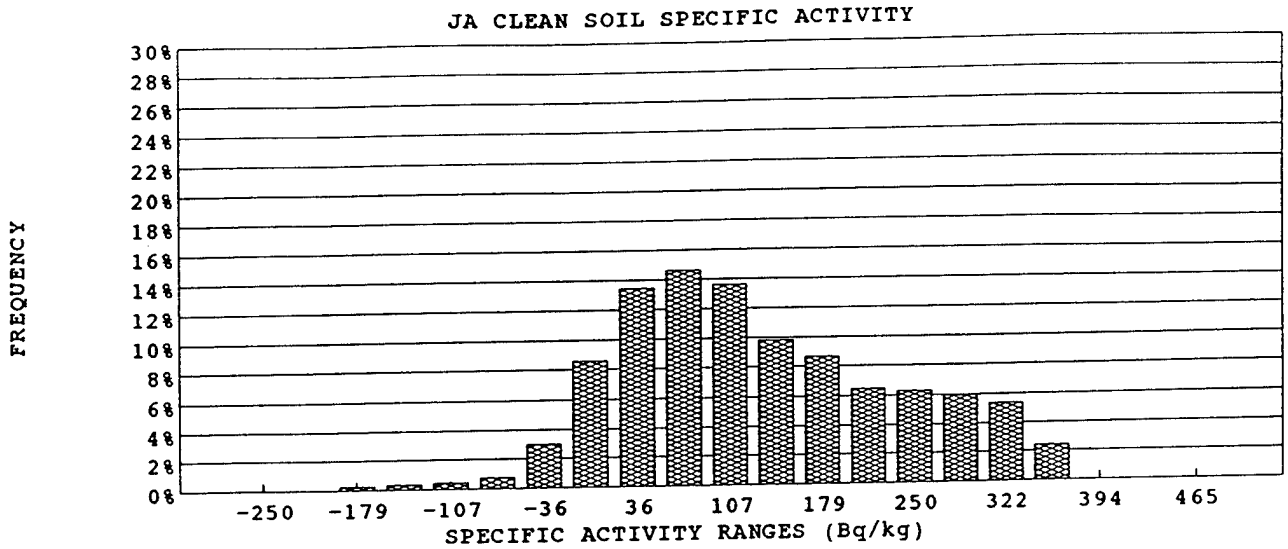
DET	SORTS	FREQ%
9	93	11.7%
10	155	19.4%
11	164	20.6%
12	151	18.9%
13	122	15.3%
14	75	9.4%
15	37	4.6%
TOTAL	797	

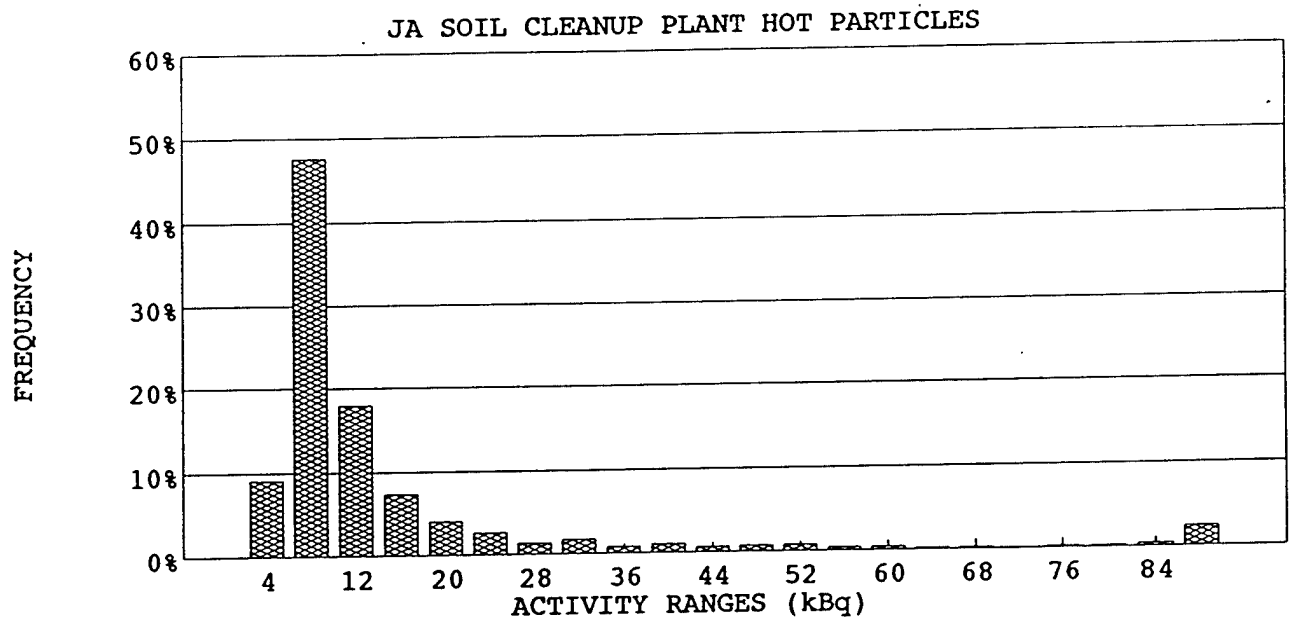
ACT_ND (Bq)	NUM (#)
-14000	0
-12000	0
-10000	3
-8000	4
-6000	5
-4000	8
-2000	32
0	93
2000	145
4000	158
6000	147
8000	106
10000	94
12000	70
14000	68
16000	64
18000	58
20000	26
22000	0
24000	0
26000	0
>28000	0
TOTAL	1,081

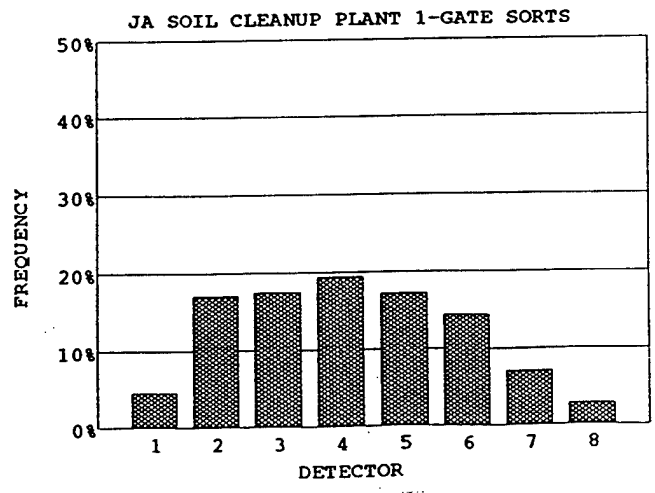
SPEC_A (Bq/kg)	FREQ%
-250	0.0%
-215	0.0%
-179	0.3%
-143	0.4%
-107	0.5%
-72	0.7%
-36	3.0%
0	8.6%
36	13.4%
72	14.6%
107	13.6%
143	9.8%
179	8.7%
215	6.5%
250	6.3%
286	5.9%
322	5.4%
358	2.4%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

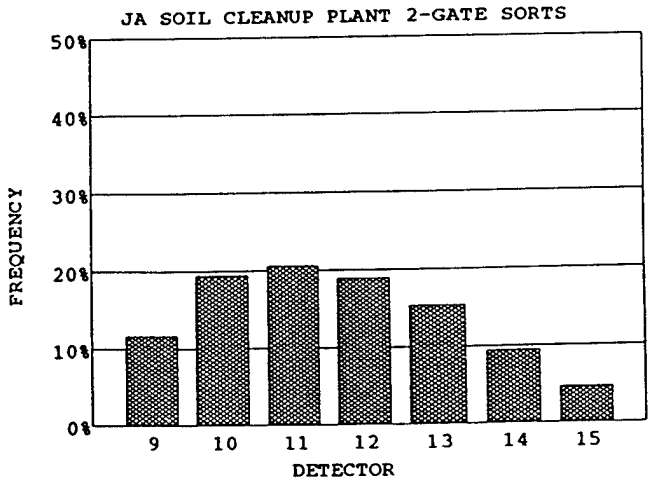
ACT_P (kBq)	NUM (#)	FREQ%
4	145	9.1%
8	759	47.6%
12	286	17.9%
16	117	7.3%
20	64	4.0%
24	42	2.6%
28	21	1.3%
32	27	1.7%
36	13	0.8%
40	16	1.0%
44	10	0.6%
48	11	0.7%
52	13	0.8%
56	7	0.4%
60	6	0.4%
64	3	0.2%
68	3	0.2%
72	1	0.1%
76	3	0.2%
80	3	0.2%
84	6	0.4%
>84	39	2.4%
TOTAL	1,595	

EVENT TYPES HPE 1,606 MPE 2,471 DISE 31,833


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 29–Apr–94

WORK DAY START	06:00 AM	WORK DAY END	16:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	9.8 hr	9.8 hr	9.8 hr	9.8 hr	39.0 hr
SORTER START–UP	06:10	06:10	06:10	06:10	
START SOIL PROCESSING	06:26	06:26	06:34	06:33	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.4 hr	0.4 hr	1.4 hr
SORTER SHUT–DOWN	16:25	16:25	16:25	16:25	
END SOIL PROCESSING	16:07	16:08	16:12	16:07	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.3 hr	0.2 hr	0.3 hr	1.1 hr
ACTUAL PROCESS HOURS	8.2 hr	8.2 hr	7.9 hr	8.6 hr	32.9 hr
DOWN–TIME	1.5 hr	1.5 hr	1.9 hr	1.2 hr	6.1 hr
SYSTEM PAUSE	1.5 hr	1.5 hr	1.4 hr	1.0 hr	5.4 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	0.2 hr	0.2 hr	1.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					84.3%
PRODUCTIVTY					82.2%

PRODUCTIVITY

Date	29–Apr–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	191	Excused delays for contract (sorter–hrs)	3,248 hr
Current Contract week	32	Excused delay days (plant–days)	81 days
		Excused delay months (plant–month)	3.12 months
Soil production for Day	331 MT		
Cumlative Soil Production for Week	898 MT	Percent of contract completed	41.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,813 MT
Since 6 Sep 93	40,383 MT	Days ahead or behind schedule	6 days
Since 6 Aug 93	41,974 MT		
Total Soil production for project	68,261 MT		

MT = metric tons

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SORTER 1

29-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	59.2 tons	23.6 tons	82.8 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	41.2 kg	
VOLUME IN-GROUND	47.0 yd³	18.7 yd³	65.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	28.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	134,030 kBq	94,941 kBq	5,768 kBq
MAXIMUM/SORT	13,574 kBq	13,116 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		1,603 Bq/kg	244 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,482		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1,024		None	07:55
NONE (AD=0 & MD=0 & MND>0)	23			09:18
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	435			10:49
UNEXPLAINED RECORDS	0			13:27
0<AD<1kBq & MD>0	0			15:21
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,820		
2-SEC RECORDS WITH SORTS	5,004			
2-SEC RECORDS WITHOUT SORTS	9,816			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		6,486		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

1 DET	3,437	68.69%	5 DET	18	0.36%
2 DET	1,200	23.98%	6 DET	0	0.00%
3 DET	295	5.90%	7 DET	1	0.02%
4 DET	54	1.08%	8 DET	1	0.02%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.6 sec

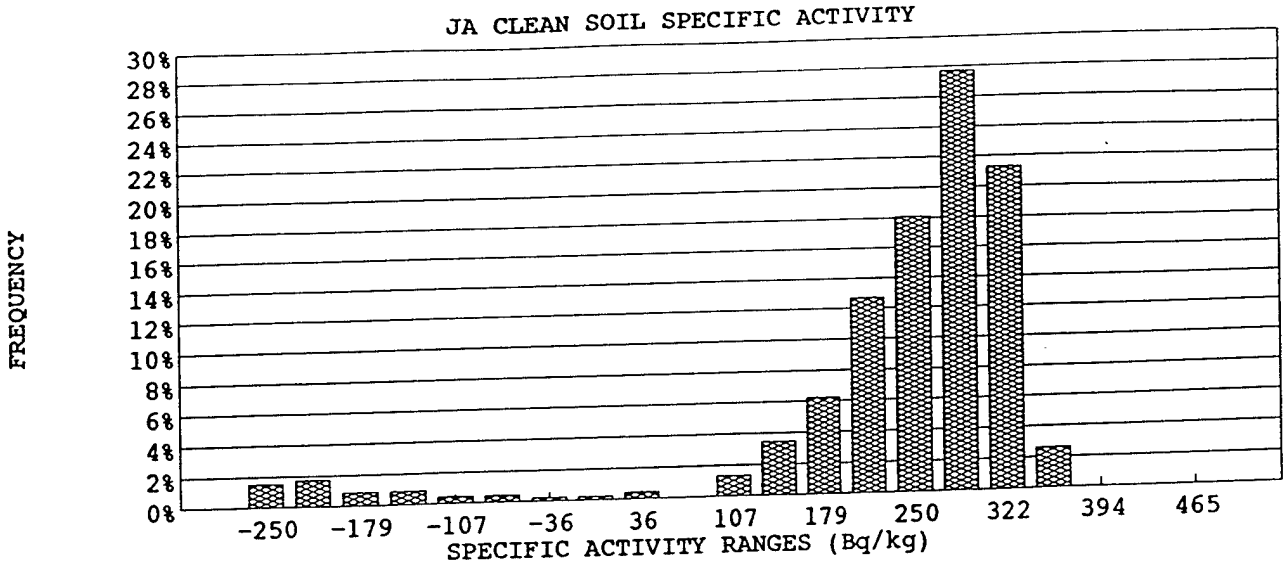
FREQUENCY DISTRIBUTIONS

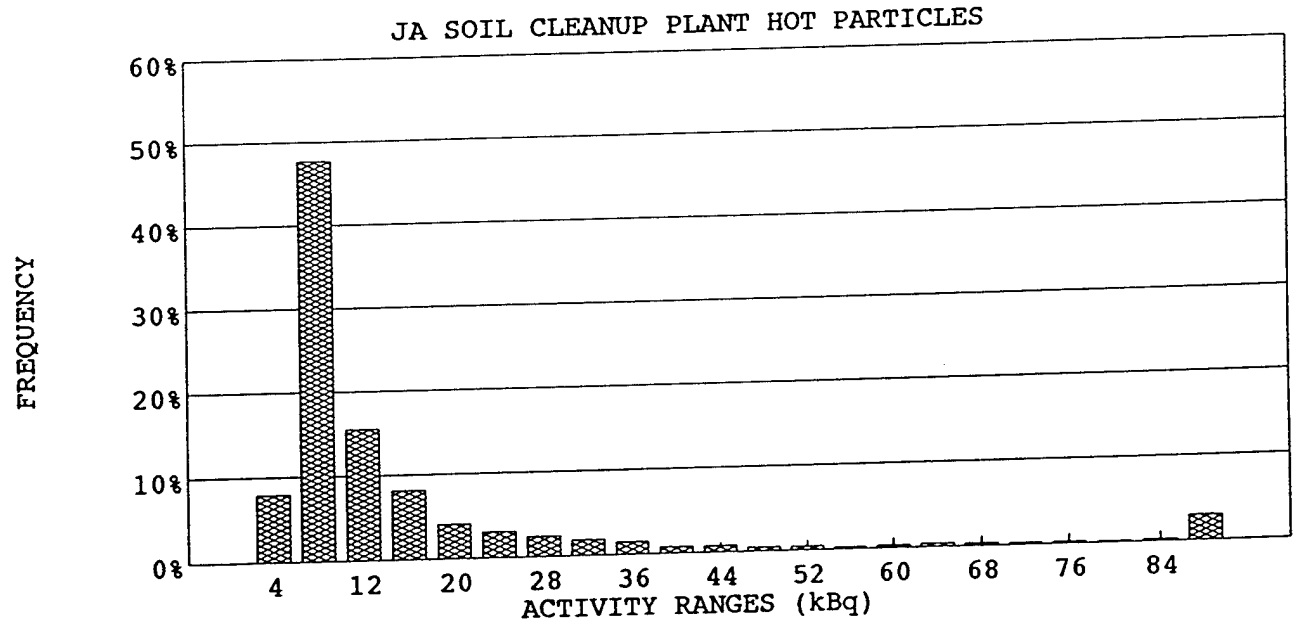
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	79	3.1%	-14000	7	-250	1.5%	4	398	8.0%
2	364	14.2%	-12000	8	-215	1.7%	8	2,390	47.8%
3	465	18.2%	-10000	4	-179	0.9%	12	774	15.5%
4	468	18.3%	-8000	4	-143	0.9%	16	409	8.2%
5	532	20.8%	-6000	2	-107	0.4%	20	206	4.1%
6	373	14.6%	-4000	2	-72	0.4%	24	154	3.1%
7	226	8.8%	-2000	1	-36	0.2%	28	119	2.4%
8	52	2.0%	0	1	0	0.2%	32	92	1.8%
TOTAL	2,559		2000	2	36	0.4%	36	74	1.5%
			4000	0	72	0.0%	40	40	0.8%
2-GATE DET	SORTS	FREQ%	6000	6	107	1.3%	44	40	0.8%
9	192	7.9%	8000	16	143	3.4%	48	22	0.4%
10	403	16.5%	10000	29	179	6.2%	52	24	0.5%
11	470	19.2%	12000	59	215	12.7%	56	13	0.3%
12	487	19.9%	14000	84	250	18.1%	60	17	0.3%
13	479	19.6%	16000	129	286	27.7%	64	19	0.4%
14	286	11.7%	18000	99	322	21.3%	68	15	0.3%
15	128	5.2%	20000	12	358	2.6%	72	14	0.3%
TOTAL	2,445		22000	0	394	0.0%	76	14	0.3%
			24000	0	429	0.0%	80	8	0.2%
			26000	0	465	0.0%	84	11	0.2%
			>28000	0	0	0.0%	>84	151	3.0%
			TOTAL	465			TOTAL	5,004	

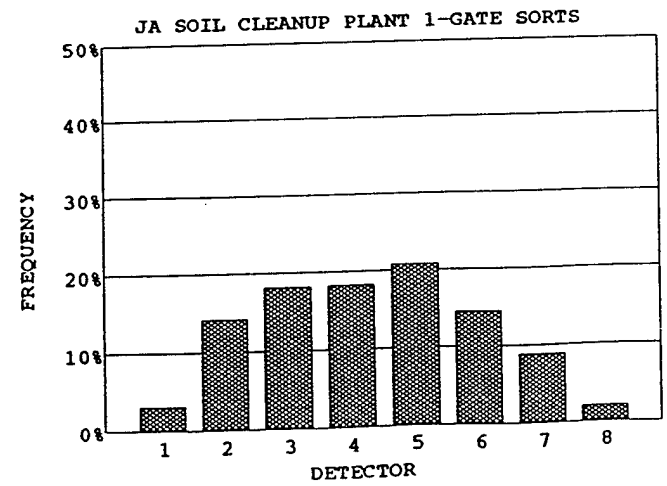
EVENT TYPES HPE 4,745 MPE 14,532 DISE 65,490

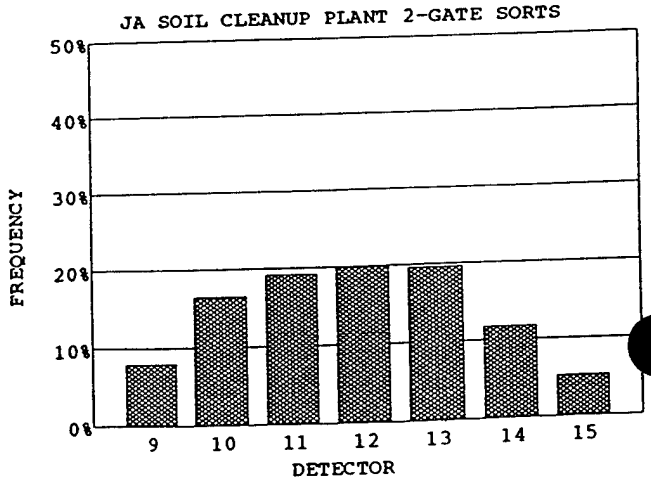
29-Apr-94

SORTER 1









SORTER 2

29-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.79 ± 0.12 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	62.6 tons	20.2 tons	82.7 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	40.5 kg	
VOLUME IN-GROUND	49.6 yd³	16.0 yd³	65.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	24.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	111,576 kBq	83,704 kBq	4,551 kBq
MAXIMUM/SORT	10,368 kBq	7,253 kBq	19 kBq
MINIMUM/SORT	2 kBq	0 Bq	-24 kBq
SPECIFIC ACTIVITY		1,338 Bq/kg	226 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,480		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1,098		None	07:55
NONE (AD=0 & MD=0 & MND>0)		41			09:18
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		341			10:49
UNEXPLAINED RECORDS		0			13:27
0<AD<1kBq & MD>0		0			15:21
AD=0 & MD>0		0			
AD<0 & MD >0		0			
2-SEC COUNT PERIODS			14,800		
2-SEC RECORDS WITH SORTS		4,887			
2-SEC RECORDS WITHOUT SORTS		9,913			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			6,367		
NONPROCESSING RECORDS (Test, calibration, etc)			9		

2-SEC SORT DETECTORS

1 DET	3,407	69.72%	5 DET	23	0.47%
2 DET	1,122	22.96%	6 DET	0	0.00%
3 DET	287	5.87%	7 DET	1	0.02%
4 DET	48	0.98%	8 DET	1	0.02%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	142	5.7%
2	427	17.2%
3	481	19.4%
4	471	19.0%
5	431	17.4%
6	337	13.6%
7	151	6.1%
8	36	1.5%
TOTAL	2,476	

2-GATE SORTS

DET	SORTS	FREQ%
9	292	12.1%
10	459	19.0%
11	535	22.2%
12	432	17.9%
13	381	15.8%
14	236	9.8%
15	76	3.2%
TOTAL	2,411	

ACT_ND (Bq)	NUM (#)
-14000	5
-12000	3
-10000	10
-8000	6
-6000	10
-4000	7
-2000	3
0	3
2000	4
4000	7
6000	5
8000	10
10000	15
12000	33
14000	49
16000	82
18000	106
20000	33
22000	0
24000	0
26000	0
>28000	0
TOTAL	391

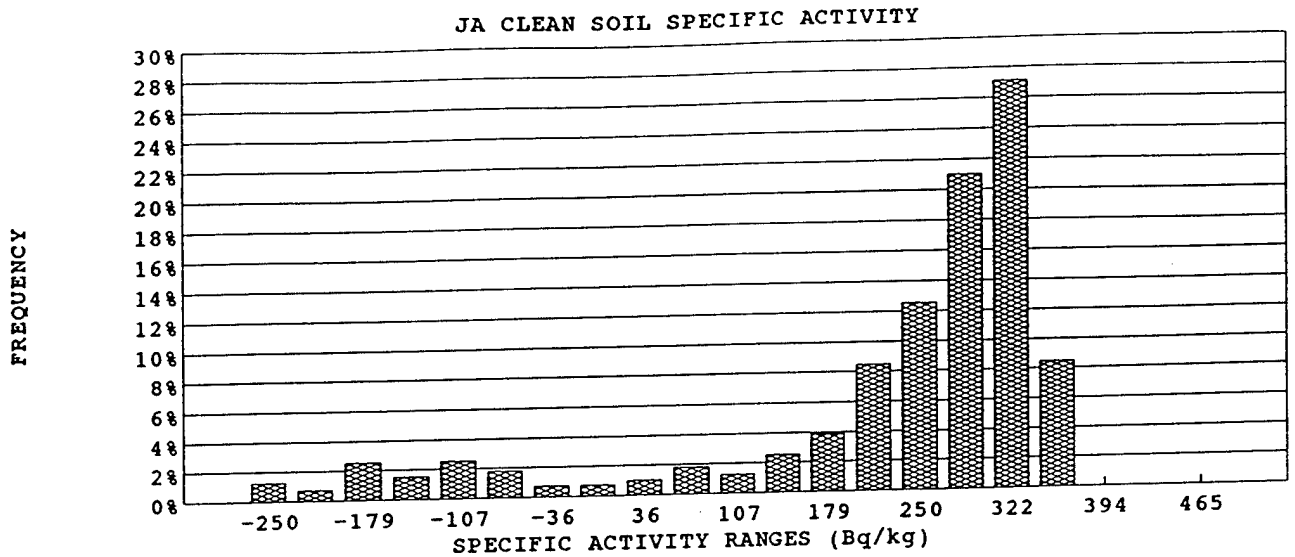
SPEC_A (Bq/kg)	FREQ%
-250	1.3%
-215	0.8%
-179	2.6%
-143	1.5%
-107	2.6%
-72	1.8%
-36	0.8%
0	0.8%
36	1.0%
72	1.8%
107	1.3%
143	2.6%
179	3.8%
215	8.4%
250	12.5%
286	21.0%
322	27.1%
358	8.4%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

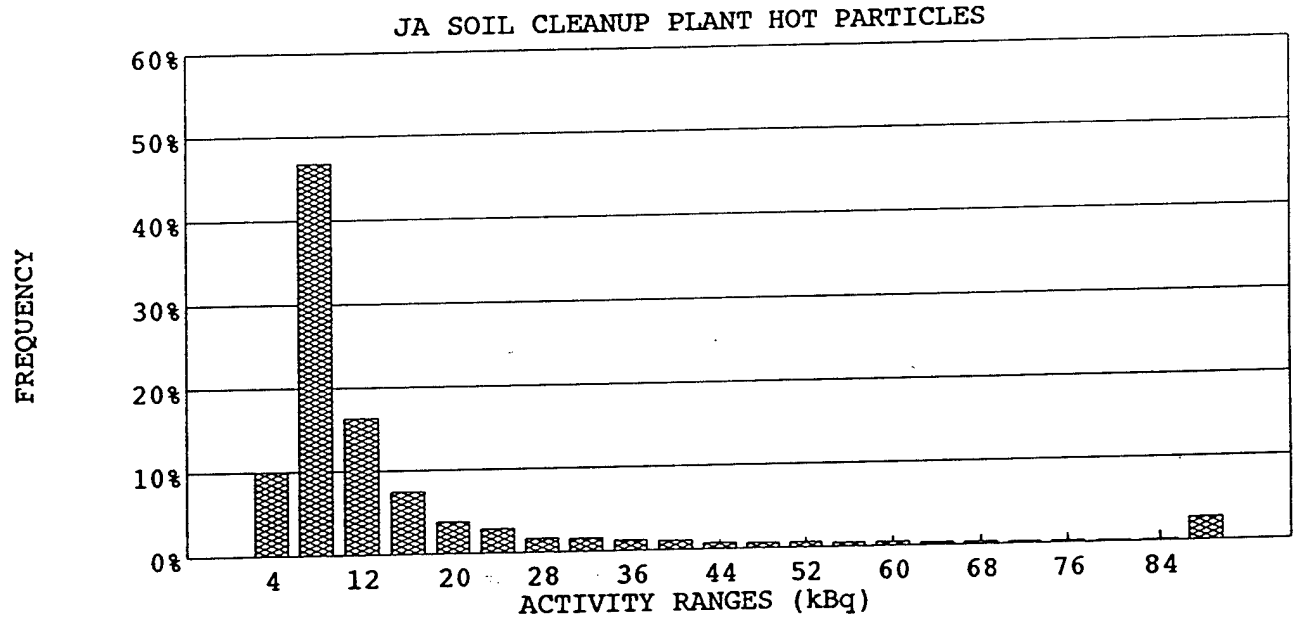
ACT_P (kBq)	NUM (#)	FREQ%
4	489	10.0%
8	2,286	46.8%
12	794	16.2%
16	363	7.4%
20	185	3.8%
24	142	2.9%
28	81	1.7%
32	78	1.6%
36	63	1.3%
40	53	1.1%
44	34	0.7%
48	32	0.7%
52	30	0.6%
56	22	0.5%
60	25	0.5%
64	18	0.4%
68	15	0.3%
72	14	0.3%
76	14	0.3%
80	7	0.1%
84	10	0.2%
>84	132	2.7%
TOTAL	4,887	

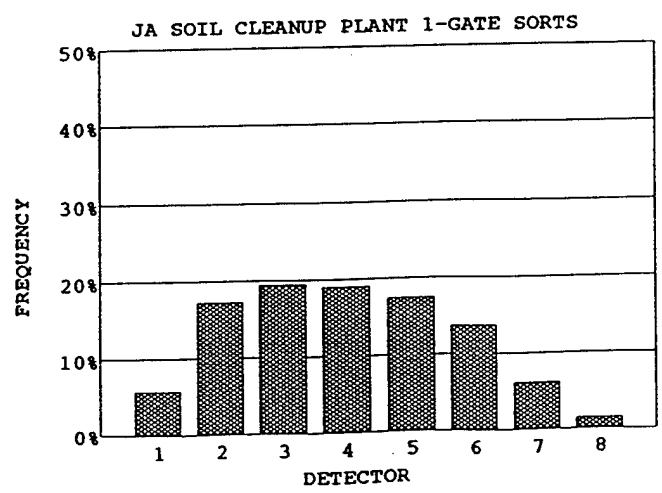
EVENT TYPES HPE 4,693 MPE 9,371 DISE 75,473

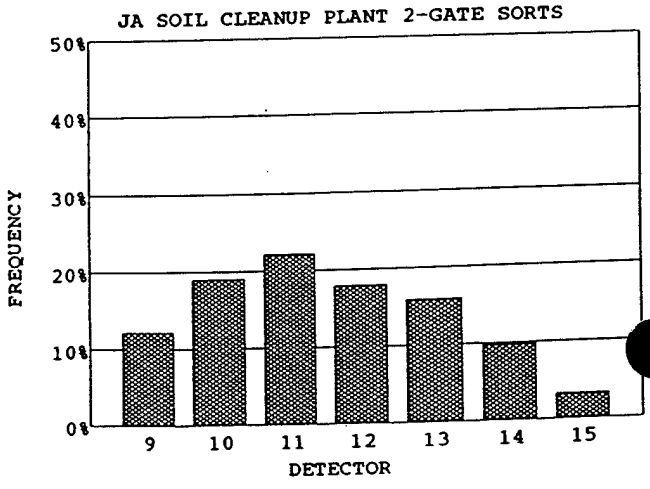
SORTER 2

29-Apr-94









SORTER 3

29-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.64 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.0 tons	78.0 tons	79.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	0.8 yd³	61.9 yd³	62.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	9,407 kBq	3,684 kBq	7,029 kBq
MAXIMUM/SORT	1,082 kBq	543 kBq	18 kBq
MINIMUM/SORT	3 kBq	(3,366)Bq	-7 kBq
SPECIFIC ACTIVITY		3,573 Bq/kg	90 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,414		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	7		07:06	07:01
NONE (AD=0 & MD=0 & MND>0)	912		07:06	07:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	495		07:25	07:11
UNEXPLAINED RECORDS	0		07:35	07:12
0<AD<1kBq & MD>0	2		12:04	07:24
AD=0 & MD>0	3		12:11	07:25
AD<0 & MD >0	1			08:21
2-SEC COUNT PERIODS		14,140		10:53
2-SEC RECORDS WITH SORTS	417			
2-SEC RECORDS WITHOUT SORTS	13,723			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,831		
NONPROCESSING RECORDS (Test, calibration, etc)		75		

2-SEC SORT DETECTORS

1 DET	329	78.90%	5 DET	1	0.24%
2 DET	73	17.51%	6 DET	0	0.00%
3 DET	13	3.12%	7 DET	0	0.00%
4 DET	1	0.24%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 86.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	3	1.4%
2	1	0.5%
3	18	8.1%
4	43	19.5%
5	35	15.8%
6	62	28.1%
7	41	18.6%
8	18	8.1%
TOTAL	221	

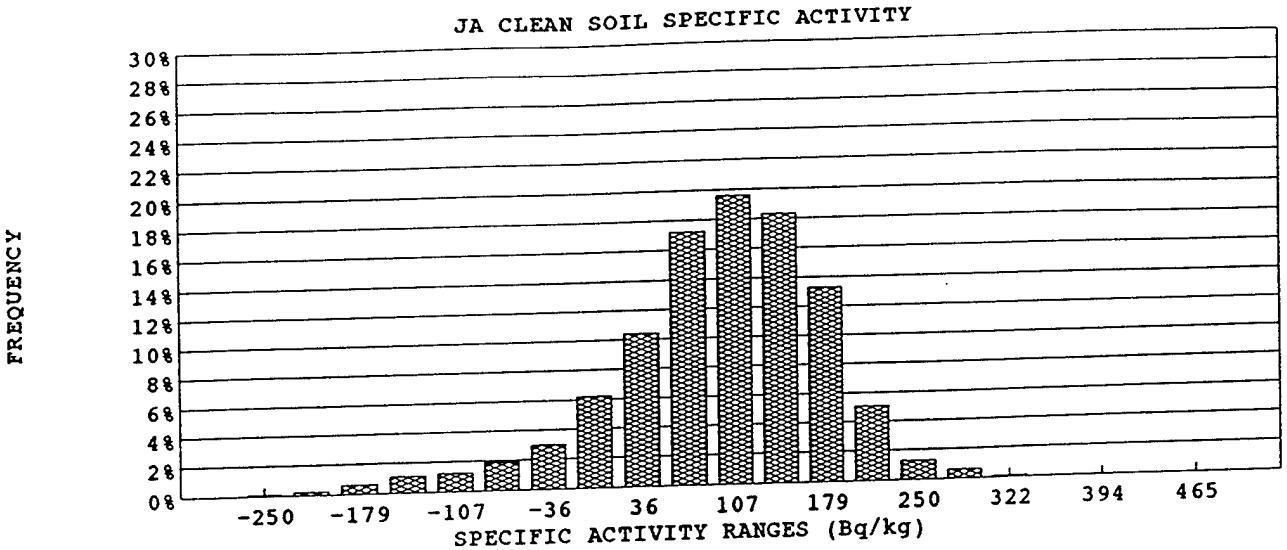
2-GATE SORTS

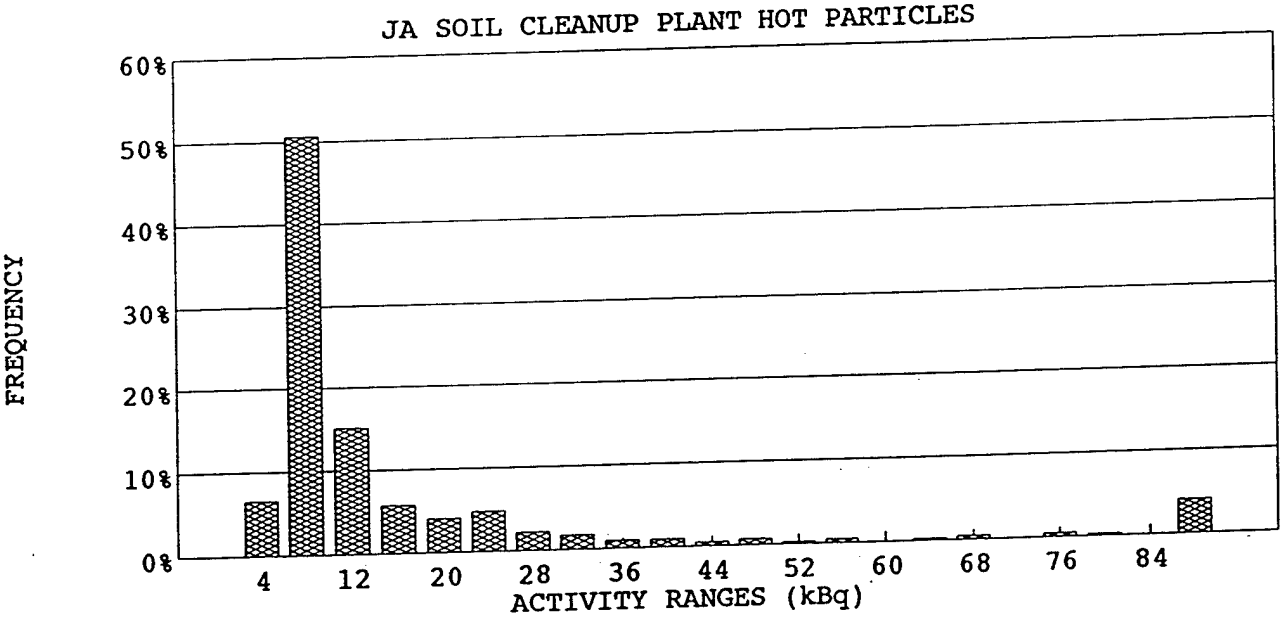
DET	SORTS	FREQ%
9	2	1.0%
10	7	3.6%
11	27	13.8%
12	33	16.8%
13	46	23.5%
14	57	29.1%
15	24	12.2%
TOTAL	196	

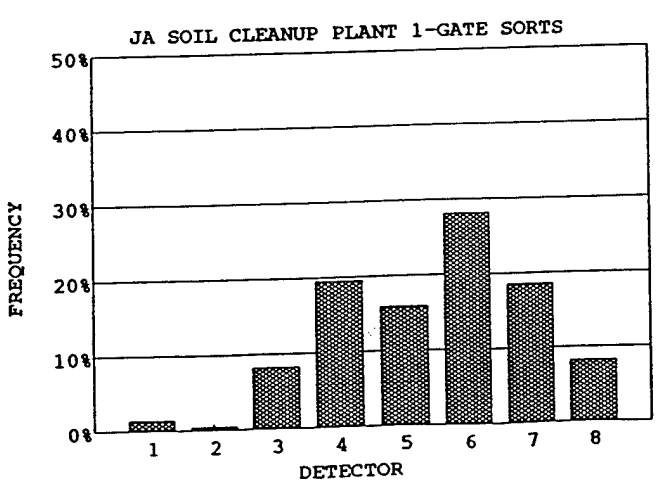
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	1	-250	0.1%	4	27	6.5%
-12000	3	-215	0.2%	8	211	50.6%
-10000	9	-179	0.6%	12	63	15.1%
-8000	16	-143	1.1%	16	24	5.8%
-6000	18	-107	1.2%	20	17	4.1%
-4000	28	-72	1.9%	24	20	4.8%
-2000	44	-36	3.0%	28	9	2.2%
0	92	0	6.2%	32	7	1.7%
2000	154	36	10.4%	36	4	1.0%
4000	255	72	17.2%	40	4	1.0%
6000	290	107	19.6%	44	2	0.5%
8000	271	143	18.3%	48	3	0.7%
10000	197	179	13.3%	52	1	0.2%
12000	75	215	5.1%	56	2	0.5%
14000	19	250	1.3%	60	0	0.0%
16000	9	286	0.6%	64	1	0.2%
18000	1	322	0.1%	68	2	0.5%
20000	0	358	0.0%	72	0	0.0%
22000	0	394	0.0%	76	2	0.5%
24000	0	429	0.0%	80	1	0.2%
26000	0	465	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	17	4.1%
TOTAL	1,482			TOTAL	417	

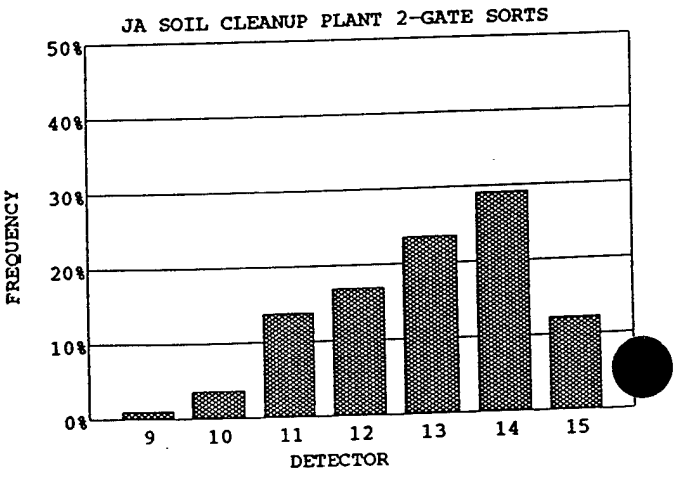
EVENT TYPES HPE 429 MPE 463 DISE 581

SORTER 3


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 4

29-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.64 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.5 tons	84.5 tons	86.0 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	1.2 yd³	67.0 yd³	68.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	15,067 kBq	6,100 kBq	15,473 kBq
MAXIMUM/SORT	1,015 kBq	653 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		3,946 Bq/kg	183 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,539		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			13		None	07:11
NONE (AD=0 & MD=0 & MND>0)			937			10:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			589			
UNEXPLAINED RECORDS			0			
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				15,390		
2-SEC RECORDS WITH SORTS			687			
2-SEC RECORDS WITHOUT SORTS			14,703			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				2,226		
NONPROCESSING RECORDS (Test, calibration, etc)				2		
2-SEC SORT DETECTORS						
1 DET	501	72.93%	5 DET	2	0.29%	
2 DET	147	21.40%	6 DET	0	0.00%	
3 DET	31	4.51%	7 DET	0	0.00%	
4 DET	6	0.87%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			61.4 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	17	4.8%
2	88	25.0%
3	67	19.0%
4	53	15.1%
5	58	16.5%
6	44	12.5%
7	22	6.3%
8	3	0.9%
TOTAL	352	

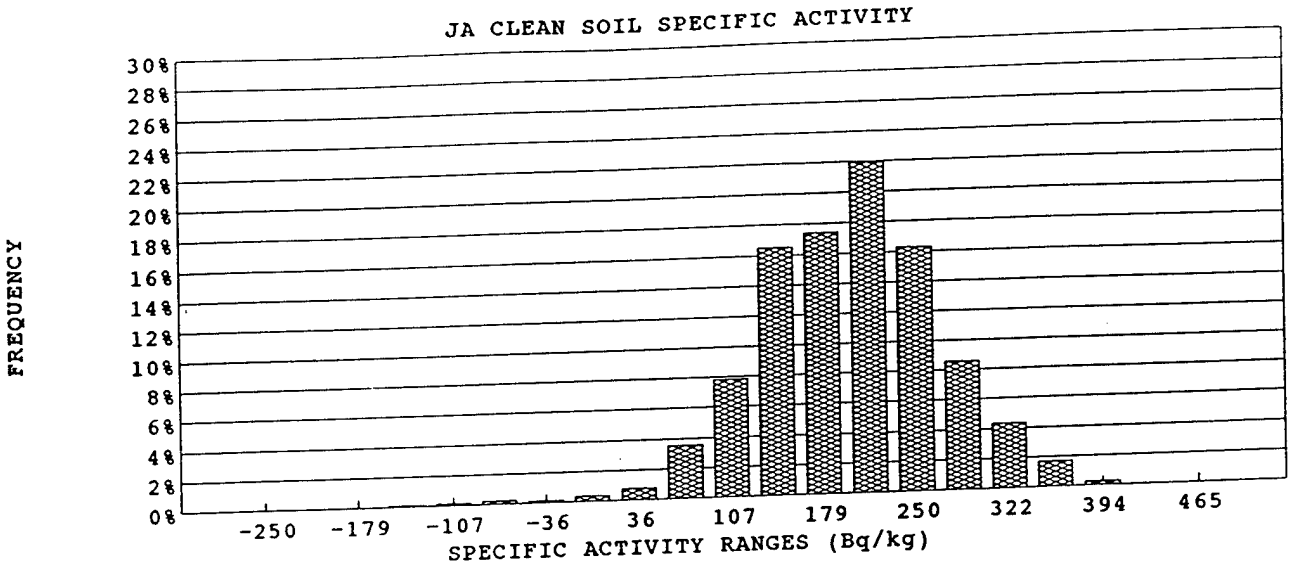
2-GATE SORTS DET	SORTS	FREQ%
9	45	13.4%
10	77	23.0%
11	62	18.5%
12	54	16.1%
13	53	15.8%
14	30	9.0%
15	14	4.2%
TOTAL	335	

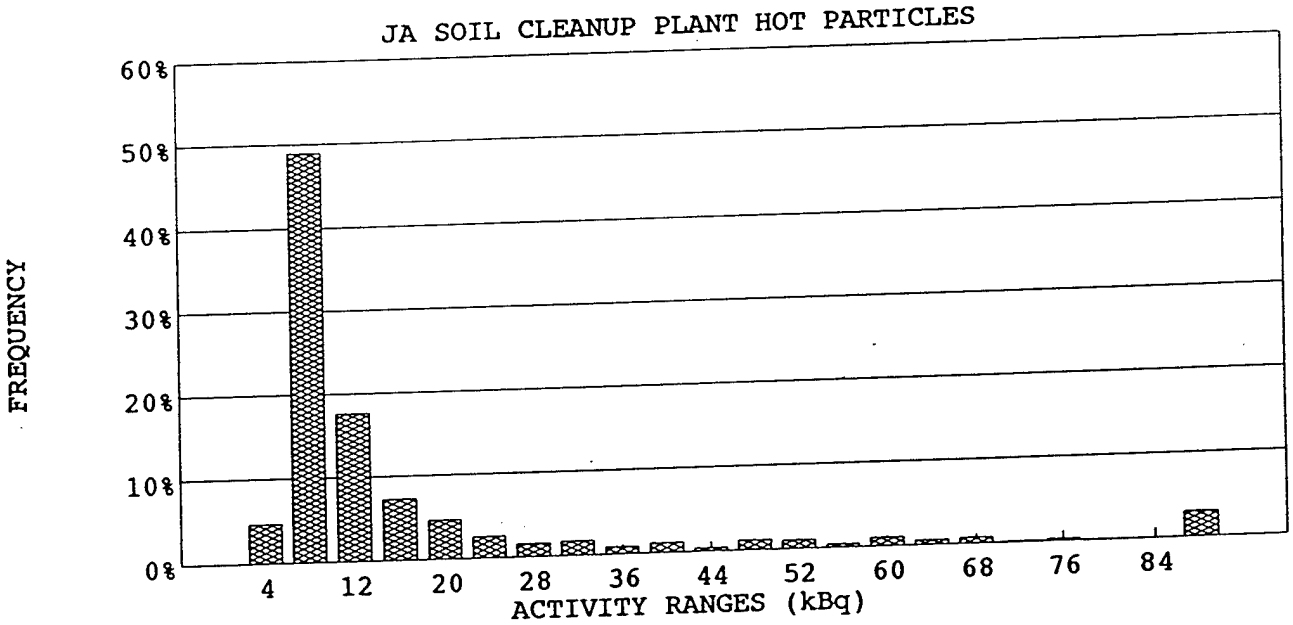
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%
-14000	0	-250	0.0%
-12000	0	-215	0.0%
-10000	0	-179	0.0%
-8000	1	-143	0.1%
-6000	2	-107	0.1%
-4000	3	-72	0.2%
-2000	2	-36	0.1%
0	5	0	0.3%
2000	12	36	0.8%
4000	54	72	3.5%
6000	120	107	7.9%
8000	252	143	16.5%
10000	266	179	17.4%
12000	335	215	21.9%
14000	249	250	16.3%
16000	131	286	8.6%
18000	66	322	4.3%
20000	26	358	1.7%
22000	4	394	0.3%
24000	0	429	0.0%
26000	0	465	0.0%
>28000	0	0	0.0%
TOTAL	1,528		

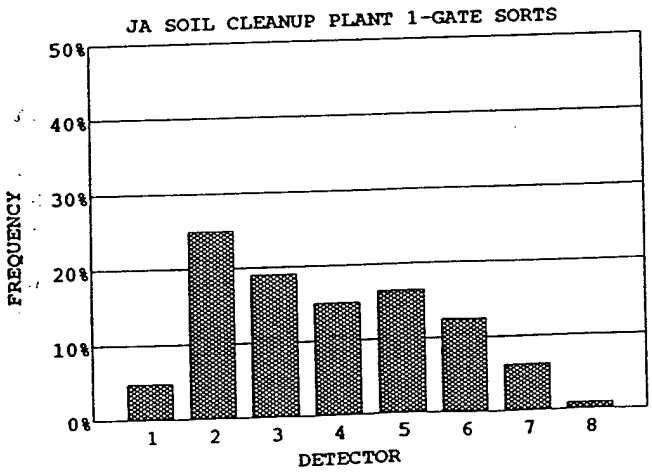
ACT_P (kBq)	NUM (#)	FREQ%
4	32	4.7%
8	336	48.9%
12	121	17.6%
16	50	7.3%
20	32	4.7%
24	18	2.6%
28	11	1.6%
32	12	1.7%
36	6	0.9%
40	8	1.2%
44	3	0.4%
48	8	1.2%
52	7	1.0%
56	3	0.4%
60	7	1.0%
64	4	0.6%
68	5	0.7%
72	1	0.1%
76	2	0.3%
80	0	0.0%
84	0	0.0%
>84	21	3.1%
TOTAL	687	

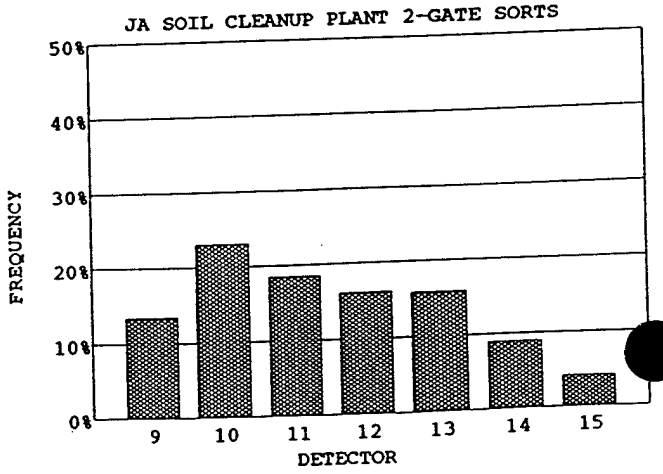
EVENT TYPES HPE 698 MPE 474 DISE 1,038

SORTER 4


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

WORK HISTORY – JA SOIL CLEANUP PLANT 30–Apr–94

WORK DAY START	05:00 AM	WORK DAY END	15:30 PM
LUNCH START	11:00 AM	TIME LOST DURING LUNCH	0.5 HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	10.0 hr	10.0 hr	10.0 hr	10.0 hr	40.0 hr
SORTER AVAILABLE HOURS	7.8 hr	7.8 hr	7.8 hr	7.8 hr	31.0 hr
SORTER START–UP	05:10	05:10	05:10	05:10	
START SOIL PROCESSING	05:27	05:28	05:30	05:30	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.3 hr	0.3 hr	1.3 hr
SORTER SHUT–DOWN	13:25	13:25	13:25	13:25	
END SOIL PROCESSING	13:12	13:10	13:04	13:04	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.3 hr	0.3 hr	1.1 hr
ACTUAL PROCESS HOURS	6.2 hr	6.2 hr	6.6 hr	6.2 hr	25.3 hr
DOWN–TIME	1.5 hr	1.6 hr	1.1 hr	1.5 hr	5.8 hr
SYSTEM PAUSE	1.5 hr	1.5 hr	1.0 hr	1.4 hr	5.5 hr
SORTER NONAVAILABLE TIME	2.3 hr	2.3 hr	2.3 hr	2.3 hr	9.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					81.5%
PRODUCTIVTY					63.1%

PRODUCTIVITY

Date	30–Apr–94
Contract day (from 6 Sep)	192
Current Contract week	32
Soil production for Day	254 MT
Cumlative Soil Production for Week	1,152 MT
Total Soil production for contract	
Since 6 Sep 93	40,468 MT
Since 6 Aug 93	42,059 MT
Total Soil production for project	68,345 MT

Excused Delays for day (sorter–hrs)	0 hr
Excused delays for contract (sorter–hrs)	3,248 hr
Excused delay days (plant–days)	81 days
Excused delay months (plant–month)	3.12 months
Percent of contract completed	42.1%
Tons Ahead or Behind Schedule	1,581 MT
Days ahead or behind schedule	5 days

MT = metric tons

File Report1 Printed on 03-May-94 at 07:56:06 AM

SORTER 1

30-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.66 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	31.1 tons	31.5 tons	62.7 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	36.3 kg	
VOLUME IN-GROUND	24.7 yd³	25.0 yd³	49.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	50.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	67,694 kBq	46,582 kBq	6,910 kBq
MAXIMUM/SORT	6,561 kBq	4,357 kBq	19 kBq
MINIMUM/SORT	2 kBq	(15,686) Bq	-16 kBq
SPECIFIC ACTIVITY		1,496 Bq/kg	219 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,121		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	522		12:20	09:13
NONE (AD=0 & MD=0 & MND>0)	47			10:27
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	552			10:52
UNEXPLAINED RECORDS	0			12:16
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		11,210		
2-SEC RECORDS WITH SORTS	2,499			
2-SEC RECORDS WITHOUT SORTS	8,711			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,620		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	1,817	72.71%	5 DET	7	0.28%
2 DET	549	21.97%	6 DET	0	0.00%
3 DET	107	4.28%	7 DET	0	0.00%
4 DET	19	0.76%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 12.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	47	3.8%
2	161	12.9%
3	195	15.6%
4	232	18.5%
5	281	22.4%
6	178	14.2%
7	131	10.5%
8	27	2.2%
TOTAL	1,252	

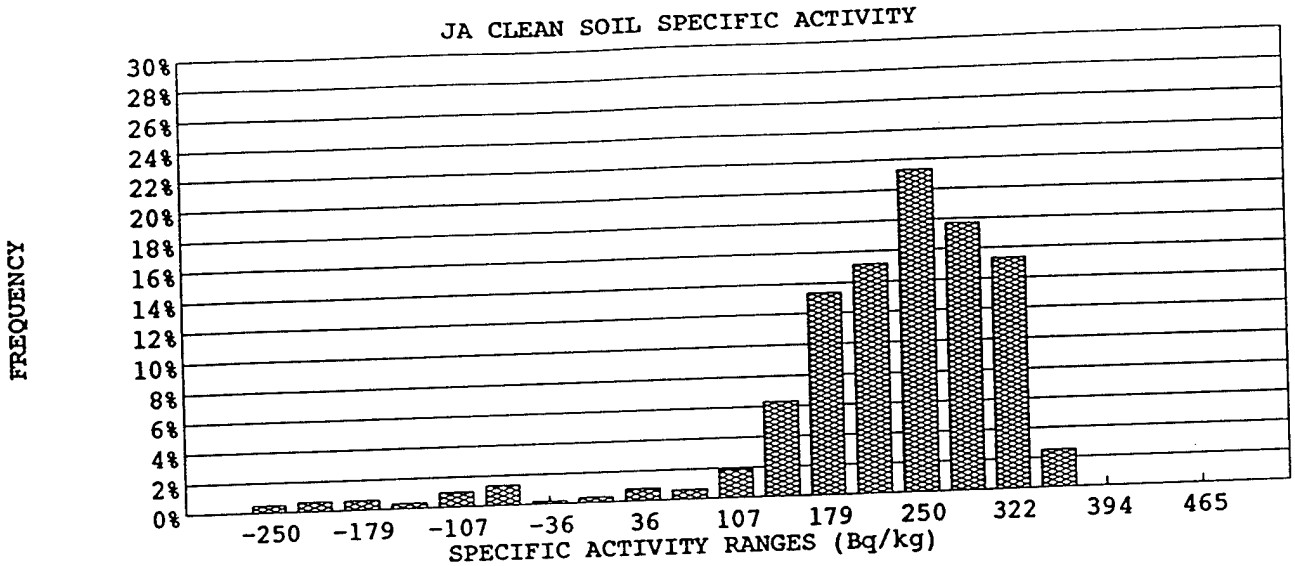
2-GATE SORTS

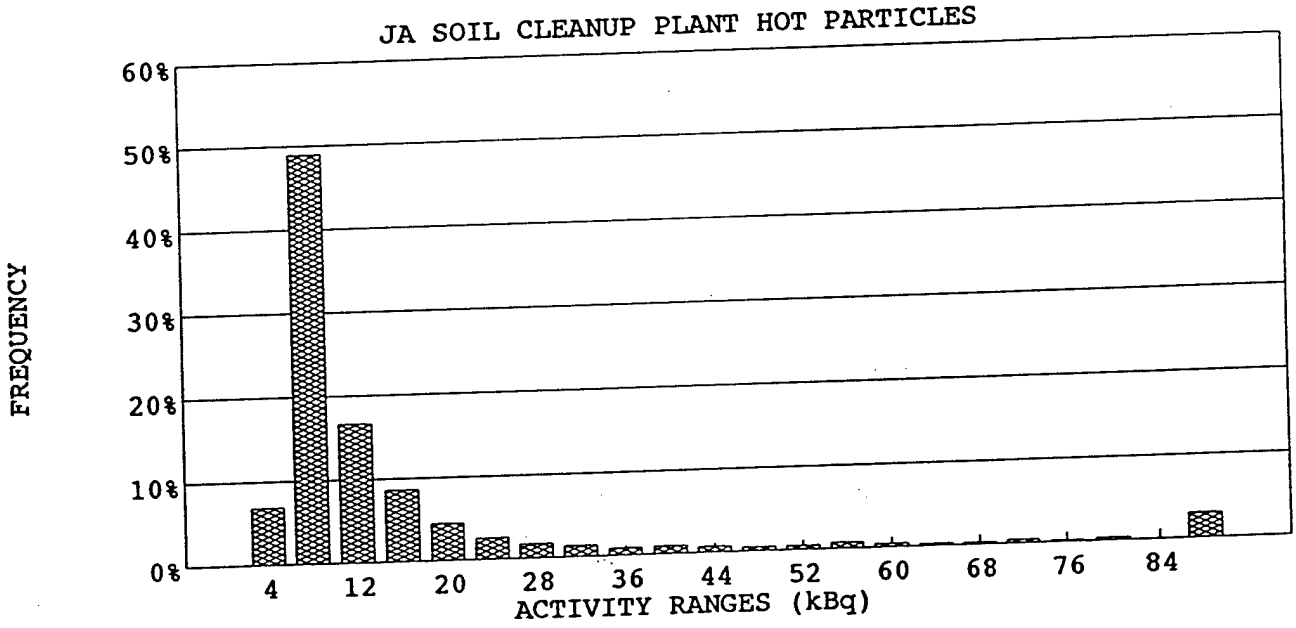
DET	SORTS	FREQ%
9	102	8.2%
10	211	16.9%
11	222	17.8%
12	268	21.5%
13	229	18.4%
14	152	12.2%
15	63	5.1%
TOTAL	1,247	

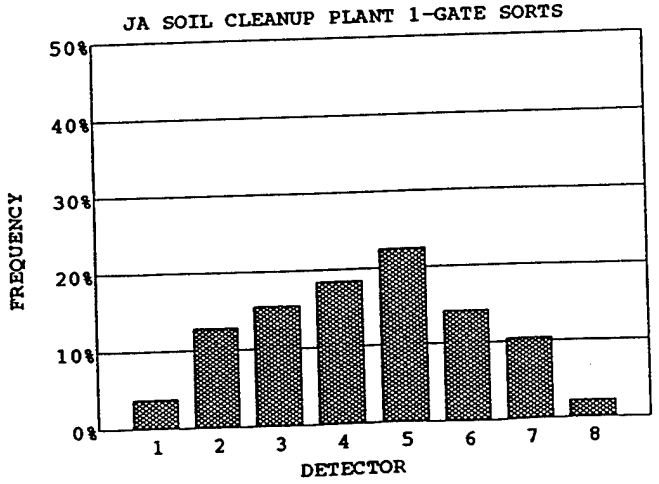
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	3	-250	0.5%	4	171	6.8%
-12000	4	-215	0.7%	8	1,223	48.9%
-10000	4	-179	0.7%	12	417	16.7%
-8000	2	-143	0.3%	16	216	8.6%
-6000	6	-107	1.0%	20	111	4.4%
-4000	8	-72	1.3%	24	63	2.5%
-2000	1	-36	0.2%	28	43	1.7%
0	2	0	0.3%	32	34	1.4%
2000	5	36	0.8%	36	21	0.8%
4000	4	72	0.7%	40	23	0.9%
6000	11	107	1.8%	44	17	0.7%
8000	38	143	6.3%	48	12	0.5%
10000	80	179	13.3%	52	12	0.5%
12000	91	215	15.2%	56	18	0.7%
14000	128	250	21.3%	60	10	0.4%
16000	106	286	17.7%	64	6	0.2%
18000	92	322	15.3%	68	6	0.2%
20000	15	358	2.5%	72	9	0.4%
22000	0	394	0.0%	76	3	0.1%
24000	0	429	0.0%	80	8	0.3%
26000	0	465	0.0%	84	1	0.0%
>28000	0	0	0.0%	>84	75	3.0%
TOTAL	600			TOTAL	2,499	

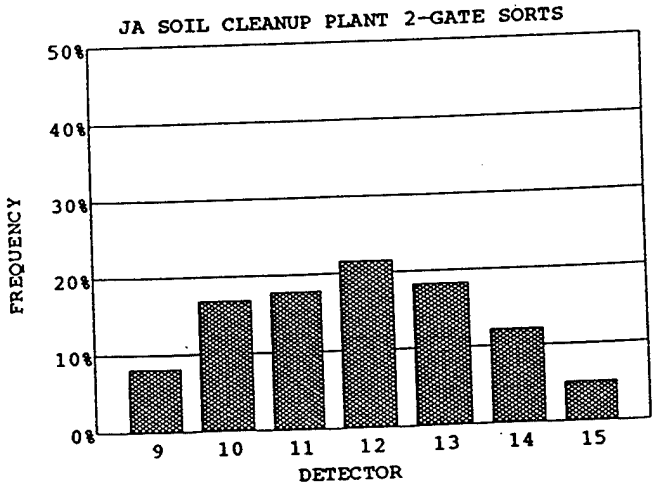
EVENT TYPES	HPE	MPE	DISE
	2,417	6,910	35,218

SORTER 1


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 2

30-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.76 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	32.8 tons	29.5 tons	62.3 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	45.4 kg	
VOLUME IN-GROUND	26.0 yd³	23.3 yd³	49.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	47.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	48,892 kBq	38,730 kBq	6,708 kBq
MAXIMUM/SORT	6,316 kBq	3,383 kBq	20 kBq
MINIMUM/SORT	2 kBq	(30,889)Bq	-15 kBq
SPECIFIC ACTIVITY		1,180 Bq/kg	228 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,114		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			566		12:20	09:13
NONE (AD=0 & MD=0 & MND>0)			73			10:27
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			475			10:52
UNEXPLAINED RECORDS			0			12:16
0<AD<1kBq & MD>0			0			
AD=0 & MD>0			0			
AD<0 & MD >0			1			
2-SEC COUNT PERIODS				11,140		
2-SEC RECORDS WITH SORTS			2,474			
2-SEC RECORDS WITHOUT SORTS			8,666			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,588		
NONPROCESSING RECORDS (Test, calibration, etc)				5		
2-SEC SORT DETECTORS						
1 DET	1,784	72.11%	5 DET	4	0.16%	
2 DET	545	22.03%	6 DET	0	0.00%	
3 DET	118	4.77%	7 DET	0	0.00%	
4 DET	23	0.93%	8 DET	0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			12.5 sec			

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	65	5.4%
2	205	17.0%
3	198	16.4%
4	257	21.3%
5	219	18.2%
6	168	13.9%
7	84	7.0%
8	9	0.7%
TOTAL	1,205	

2-GATE SORTS

DET	SORTS	FREQ%
9	151	11.9%
10	237	18.7%
11	243	19.1%
12	276	21.7%
13	202	15.9%
14	120	9.5%
15	40	3.2%
TOTAL	1,269	

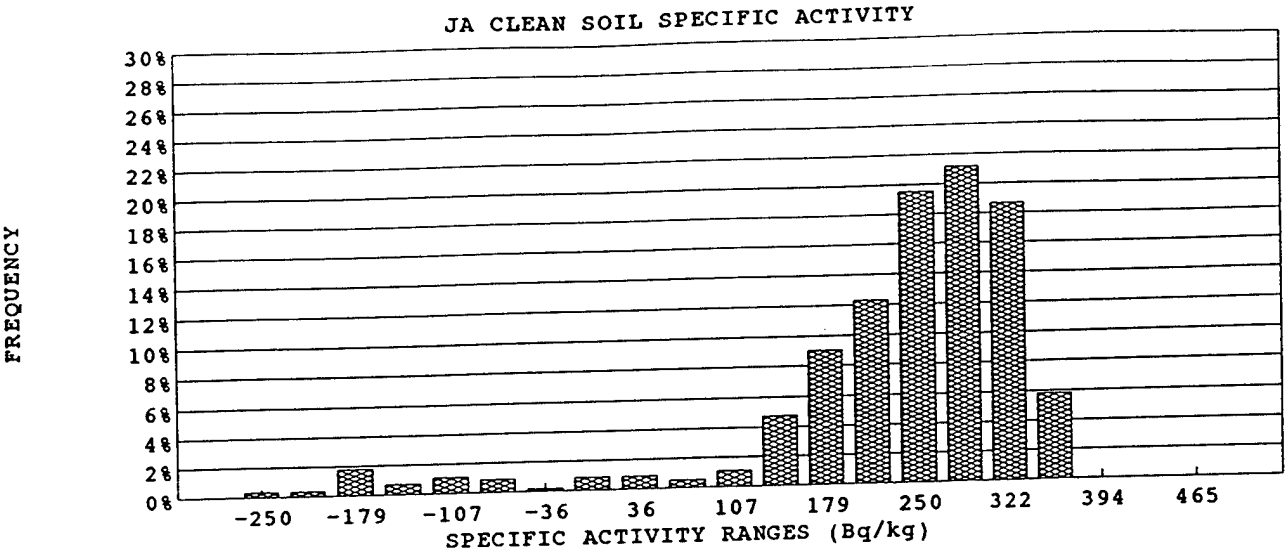
ACT_ND (Bq)	NUM (#)
-14000	2
-12000	2
-10000	10
-8000	4
-6000	6
-4000	5
-2000	1
0	5
2000	5
4000	3
6000	6
8000	26
10000	50
12000	68
14000	108
16000	117
18000	103
20000	32
22000	0
24000	0
26000	0
>28000	0
TOTAL	553

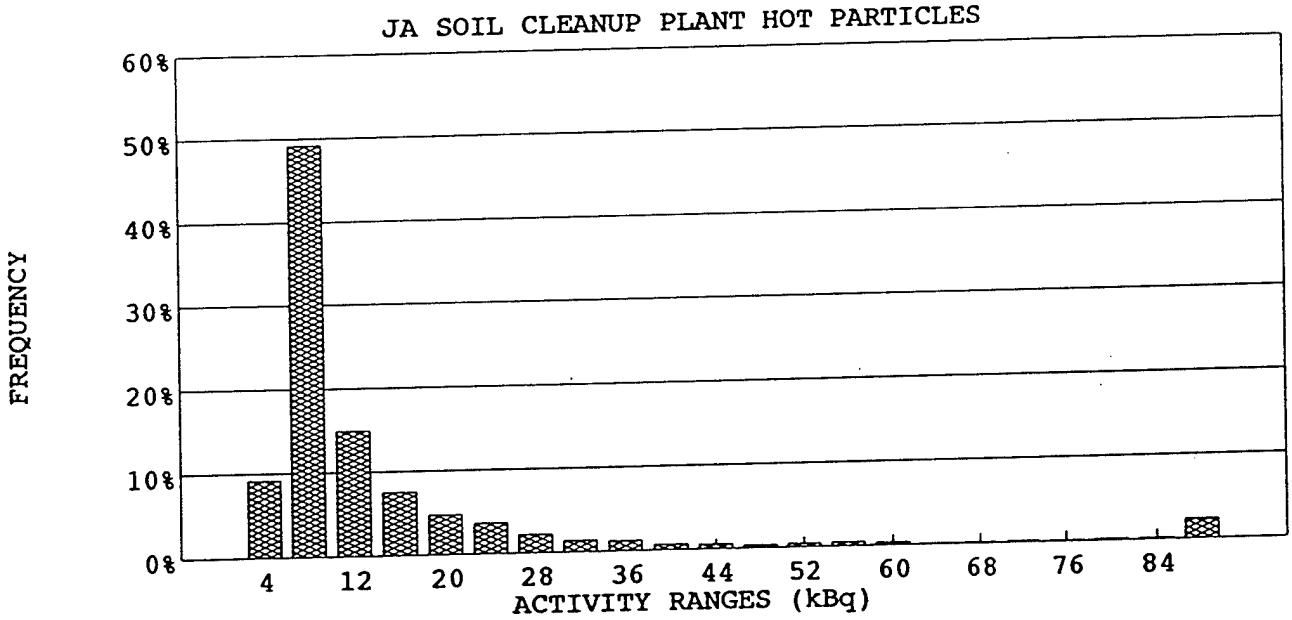
SPEC_A (Bq/kg)	FREQ%
-250	0.4%
-215	0.4%
-179	1.8%
-143	0.7%
-107	1.1%
-72	0.9%
-36	0.2%
0	0.9%
36	0.9%
72	0.5%
107	1.1%
143	4.7%
179	9.0%
215	12.3%
250	19.5%
286	21.2%
322	18.6%
358	5.8%
394	0.0%
429	0.0%
465	0.0%
0	0.0%

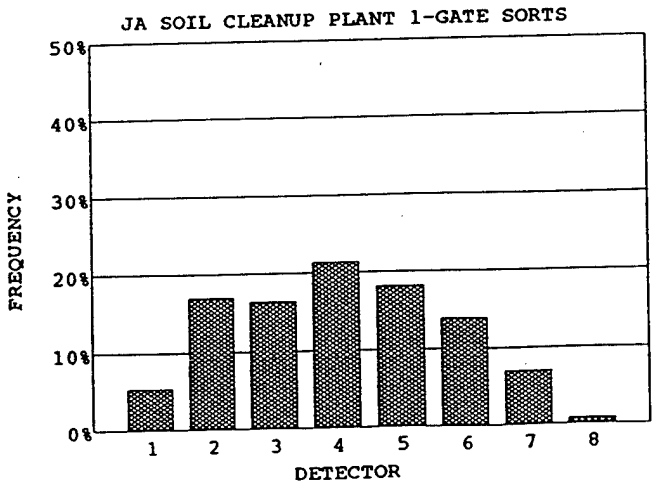
ACT_P (kBq)	NUM (#)	FREQ%
4	227	9.2%
8	1,216	49.2%
12	371	15.0%
16	186	7.5%
20	117	4.7%
24	90	3.6%
28	54	2.2%
32	33	1.3%
36	29	1.2%
40	16	0.6%
44	14	0.6%
48	8	0.3%
52	10	0.4%
56	12	0.5%
60	9	0.4%
64	3	0.1%
68	3	0.1%
72	5	0.2%
76	3	0.1%
80	5	0.2%
84	5	0.2%
>84	58	2.3%
TOTAL	2,474	

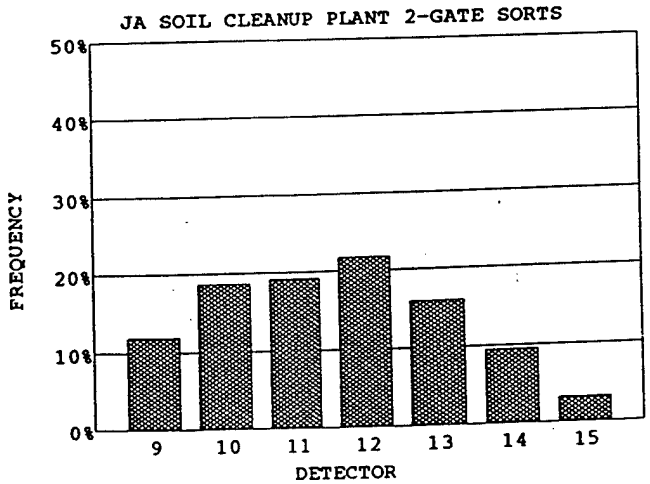
EVENT TYPES HPE 2,480 MPE 4,533 DISE 39,959

SORTER 2


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

SORTER 3

30-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.5 tons	65.0 tons	66.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	1.2 yd³	51.6 yd³	52.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	13,407 kBq	5,580 kBq	8,692 kBq
MAXIMUM/SORT	484 kBq	298 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		3,784 Bq/kg	134 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,190		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		9		08:46	10:33
NONE (AD=0 & MD=0 & MND>0)		581			10:59
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		600			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	1				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			11,900		
2-SEC RECORDS WITH SORTS		730			
2-SEC RECORDS WITHOUT SORTS		11,170			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,920		
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	532	72.88%	5 DET	1	0.14%
2 DET	166	22.74%	6 DET	0	0.00%
3 DET	29	3.97%	7 DET	0	0.00%
4 DET	2	0.27%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 44.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	3	0.8%
2	18	4.8%
3	47	12.5%
4	57	15.2%
5	73	19.4%
6	88	23.4%
7	71	18.9%
8	19	5.1%
TOTAL	376	

2-GATE SORTS

DET	SORTS	FREQ%
9	6	1.7%
10	29	8.2%
11	56	15.8%
12	62	17.5%
13	75	21.2%
14	79	22.3%
15	47	13.3%
TOTAL	354	

ACT_ND (Bq)	NUM (#)
-14000	1
-12000	1
-10000	2
-8000	26
-6000	26
-4000	19
-2000	30
0	36
2000	51
4000	89
6000	140
8000	178
10000	171
12000	142
14000	132
16000	82
18000	43
20000	15
22000	2
24000	0
26000	0
>28000	0
TOTAL	1,186

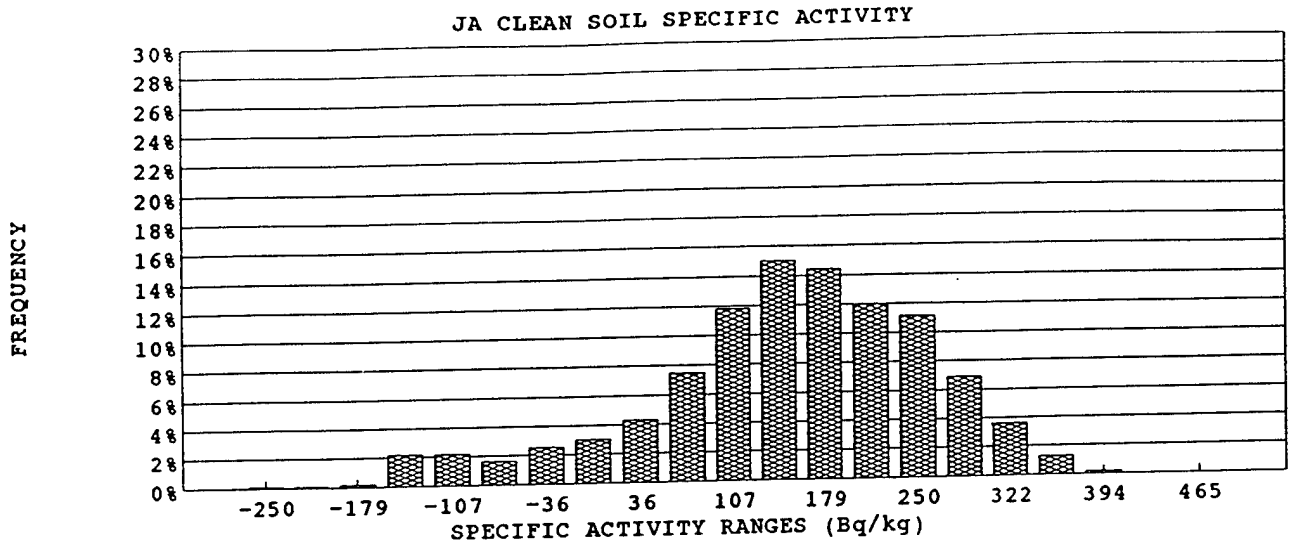
SPEC_A (Bq/kg)	FREQ%
-250	0.1%
-215	0.1%
-179	0.2%
-143	2.2%
-107	2.2%
-72	1.6%
-36	2.5%
0	3.0%
36	4.3%
72	7.5%
107	11.8%
143	15.0%
179	14.4%
215	12.0%
250	11.1%
286	6.9%
322	3.6%
358	1.3%
394	0.2%
429	0.0%
465	0.0%
0	0.0%

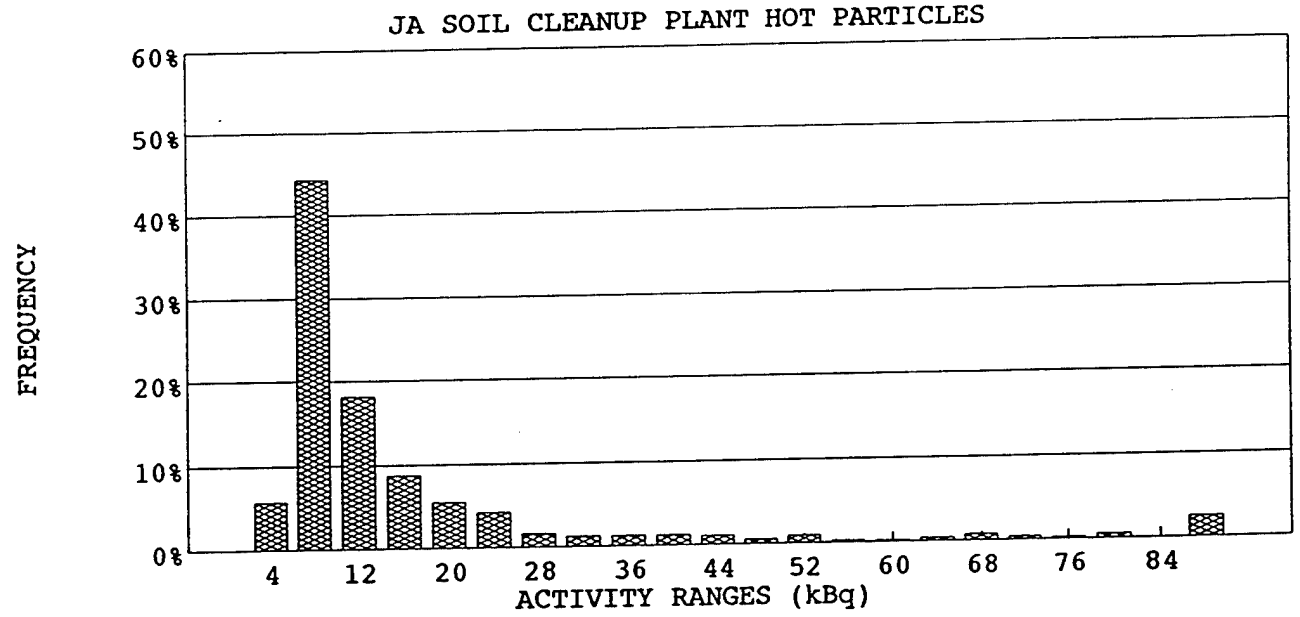
ACT_P (kBq)	NUM (#)	FREQ%
4	42	5.8%
8	324	44.4%
12	132	18.1%
16	64	8.8%
20	40	5.5%
24	31	4.2%
28	12	1.6%
32	9	1.2%
36	9	1.2%
40	9	1.2%
44	8	1.1%
48	4	0.5%
52	7	1.0%
56	2	0.3%
60	1	0.1%
64	3	0.4%
68	6	0.8%
72	3	0.4%
76	2	0.3%
80	4	0.5%
84	0	0.0%
>84	18	2.5%
TOTAL	730	

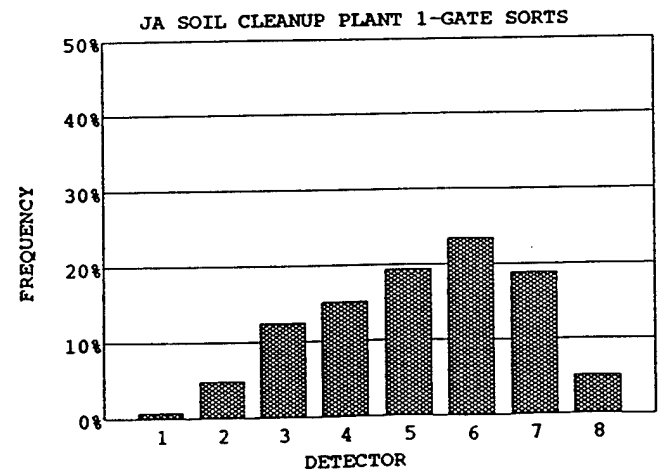
EVENT TYPES HPE 726 MPE 675 DISE 707

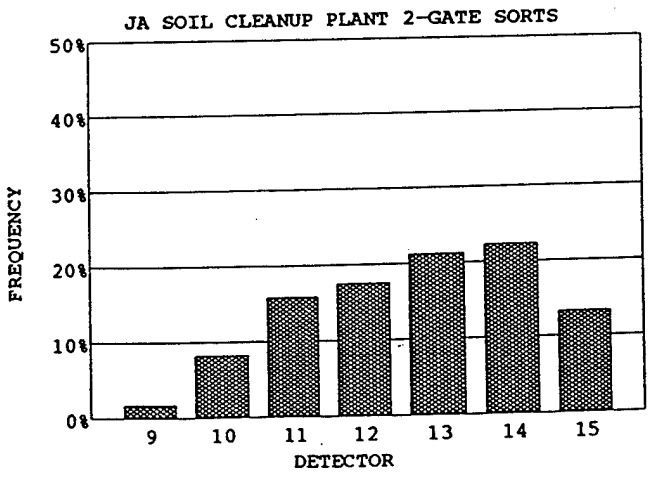
SORTER 3

30-Apr-94









SORTER 4

30-Apr-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.63 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.6 tons	59.0 tons	62.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	51.0 kg	
VOLUME IN-GROUND	2.9 yd³	46.8 yd³	49.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	94.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,691 kBq	5,706 kBq	9,676 kBq
MAXIMUM/SORT	251 kBq	160 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		1,576 Bq/kg	164 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,120		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		48		07:14	07:50
NONE (AD=0 & MD=0 & MND>0)		500		08:10	08:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		572		08:17	08:42
UNEXPLAINED RECORDS	0			09:10	08:45
0<AD<1kBq & MD>0	4			10:09	08:51
AD=0 & MD>0	2			11:53	09:06
AD<0 & MD >0	0			12:40	09:56
2-SEC COUNT PERIODS			11,200		09:59
2-SEC RECORDS WITH SORTS		759			10:05
2-SEC RECORDS WITHOUT SORTS		10,441			10:42
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,879		10:59
NONPROCESSING RECORDS (Test, calibration, etc)			5		

2-SEC SORT DETECTORS

1 DET	572	75.36%	5 DET	1	0.13%
2 DET	164	21.61%	6 DET	0	0.00%
3 DET	20	2.64%	7 DET	0	0.00%
4 DET	2	0.26%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 39.2 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	26	6.4%
2	79	19.5%
3	85	21.0%
4	70	17.3%
5	66	16.3%
6	54	13.3%
7	20	4.9%
8	5	1.2%
TOTAL	405	

2-GATE SORTS

DET	SORTS	FREQ%
9	56	15.8%
10	68	19.2%
11	58	16.4%
12	66	18.6%
13	57	16.1%
14	36	10.2%
15	13	3.7%
TOTAL	354	

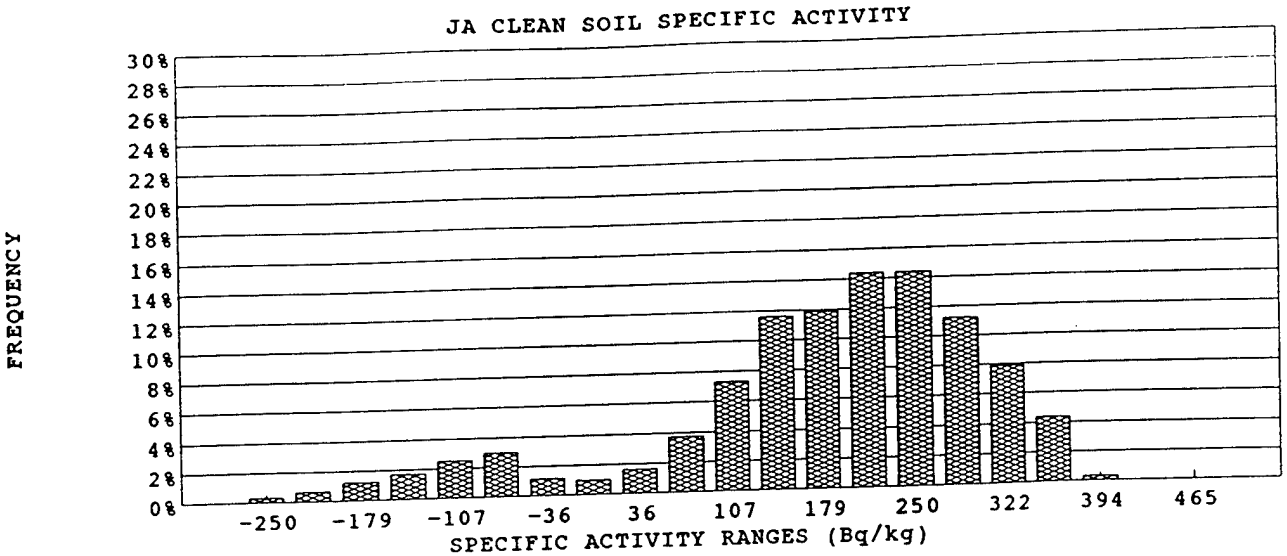
ACT_ND (Bq)	NUM (#)
-14000	3
-12000	7
-10000	13
-8000	18
-6000	27
-4000	32
-2000	12
0	10
2000	17
4000	40
6000	79
8000	125
10000	128
12000	155
14000	155
16000	121
18000	85
20000	47
22000	3
24000	0
26000	0
>28000	0
TOTAL	1,077

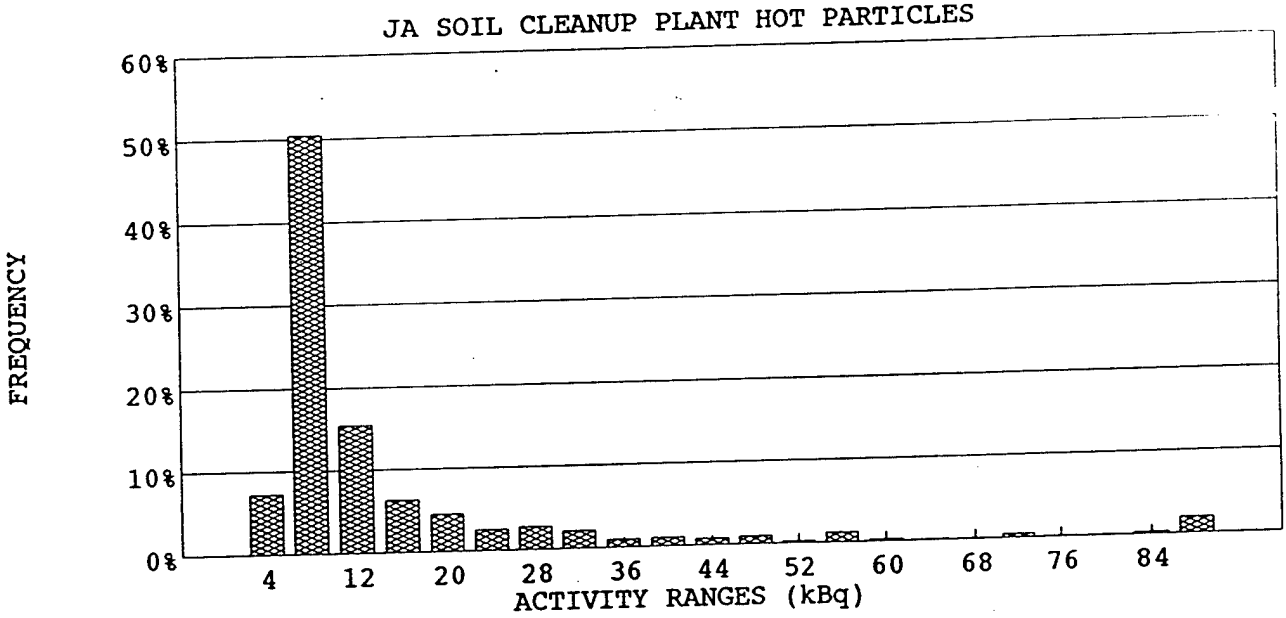
SPEC_A (Bq/kg)	FREQ%
-250	0.3%
-215	0.6%
-179	1.2%
-143	1.7%
-107	2.5%
-72	3.0%
-36	1.1%
0	0.9%
36	1.6%
72	3.7%
107	7.3%
143	11.6%
179	11.9%
215	14.4%
250	14.4%
286	11.2%
322	7.9%
358	4.4%
394	0.3%
429	0.0%
465	0.0%
0	0.0%

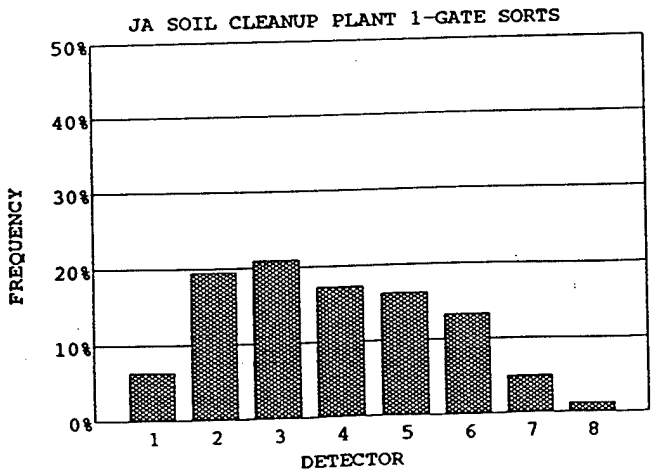
ACT_P (kBq)	NUM (#)	FREQ%
4	55	7.2%
8	383	50.5%
12	117	15.4%
16	48	6.3%
20	34	4.5%
24	19	2.5%
28	21	2.8%
32	16	2.1%
36	7	0.9%
40	8	1.1%
44	6	0.8%
48	7	0.9%
52	2	0.3%
56	9	1.2%
60	2	0.3%
64	1	0.1%
68	1	0.1%
72	4	0.5%
76	1	0.1%
80	1	0.1%
84	2	0.3%
>84	15	2.0%
TOTAL	759	

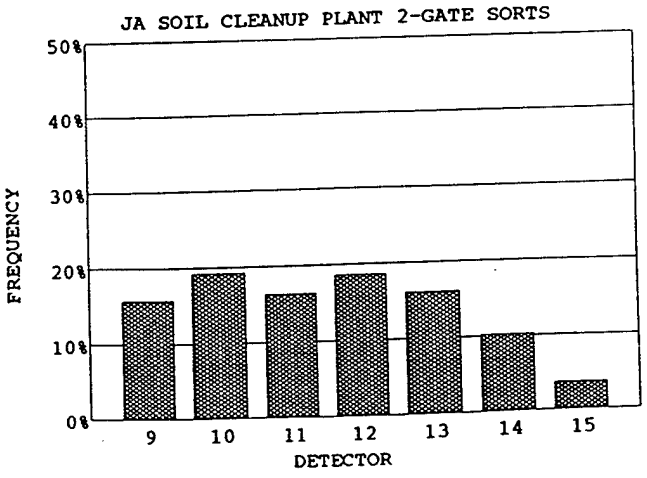
EVENT TYPES HPE 767 MPE 609 DISE 3,801

SORTER 4


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-250
-179
-107
-36
36
107
179
250
322
394
465
SPECIFIC ACTIVITY RANGES (Bq/kg)


JA SOIL CLEANUP PLANT HOT PARTICLES
FREQUENCY
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 1-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
1
2
3
4
5
6
7
8
DETECTOR


JA SOIL CLEANUP PLANT 2-GATE SORTS
FREQUENCY
50%
40%
30%
20%
10%
0%
9
10
11
12
13
14
15
DETECTOR

APPENDIX D

ACRONYMS AND SYMBOLS

AC	-	Cumulative activity present in soil which was found to meet the release criteria
ACT_ND	-	Activity Not Diverted
ACT_P	-	Activity Plutonium
AH	-	Total activity diverted - due to distributed contamination present in the soil in excess of 500 Bq/kg
ALARA	-	As Low As Reasonable Achievable
AP	-	Total activity diverted - due to particles present in the soil which exceeded 5,000 Bq
BKG	-	Background
Bq	-	Bequerels
CFM	-	Cubic Feet Per Minute
cpm	-	Counts Per Minute
DISE	-	Distributed Event
DNA	-	Defense Nuclear Agency
dps	-	Disintegrations Per Second
FCJ	-	Field Command, Johnston Atoll
FIDLER	-	Field Instrument for Detection of Low Energy Radiation
HPE	-	Hot Particle Event
JA	-	Johnston Atoll
KeV	-	Kilo Electron Volts
kg	-	Kilogram
LE-1	-	Launch Emplacement One
LE-2	-	Launch Emplacement Two
ml	-	Milliliter
MPE	-	Multiple Particle Event
mt	-	Metric Tons
PHA	-	Pulse Height Amplitude
PPE	-	Personal Protective Equipment
QC	-	Quality Control
RCA	-	Radiologically Controlled Area
RSN	-	Raytheon Services Nevada
SA	-	Specific Activity, Bequerels Per Kilogram
SH	-	Sorter-Hours
SPEC_A	-	Specific Activity
TRU	-	Transuranic
WR	-	Percent Weight Reduction
WS1	-	Weigh Scale, Unit 1 & 2 Grizzly Feed Belt
WS2	-	Weigh Scale, Unit 1 & 2 Sorter Feed Belt
WS3	-	Weigh Scale, Unit 1 & 2 Clean Soil Belt
WS4	-	Weigh Scale, Unit 1 & 2 Diverted Soil Belt
WS5	-	Weigh Scale, Unit 3 & 4 Sorter Feed Belt
WS6	-	Weigh Scale, Unit 3 & 4 Clean Soil Belt
WS7	-	Weigh Scale, Unit 3 & 4 Diverted Soil Belt
WS8	-	Weigh Scale, Wet-End Feed Belt

APPENDIX E

DEFINITIONS

Authorized Delay - Time during the normal 60 hour work specified in the contract in which soil processing is not accomplished due to circumstances beyond the control of the contractor, as approved by DNA.

These include, but are not limited to:

Inclement weather,
Plant modifications requested by DNA,
Plant testing required by DNA, and
Lack of government furnished equipment or services as specified in the contract.

Becquerel - A unit in the International System of Units (SI) for the measurement of radioactivity equivalent to one Transformation Per Second.

Clean Soil - Soil which has been verified to contain less than 500 Bq/kg total TRU activity averaged over .1 m^3 of soil and no discrete radioactive particle of 5000 Bq or more.

Down-Time - Time during the normal 60 hour work week specified in the contract in which soil processing is not accomplished due to plant maintenance or repair. Normal start-up and shut-down and Authorized Delay Time does not count as Down-Time. The contract requires that Down-Time be maintained less than 40%.

Hot Particle - An individual particle whose activity level is 5000 Bq or greater.

Transuranic - Element with an atomic number higher than that of Uranium (e.g. Plutonium, Americium).

2-Second Sort Detection - When a hot particle passes underneath a detector, the detector generates a signal to the computer, which in turn activates one of the eight diversion chutes for two seconds, as required by the Segmented Gate System.

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DSWA-TR-95-100

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