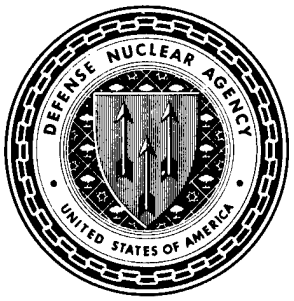


Defense Nuclear Agency
Alexandria, VA 22310-3398



DNA-TR-95-102

Johnston Atoll Plutonium Contaminated Soil Cleanup Project

5th Quarterly Report
01 August 1994 to 31 October 1994

TMA/Eberline
601 Scarboro Road
Oak Ridge, TN 37830

September 1996

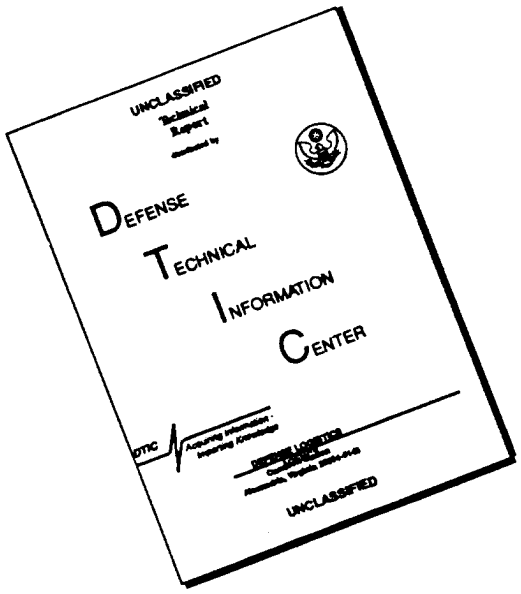
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13. ABSTRACT *(Maximum 200 words)*

Thermo NUtech 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 Contaminated 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 quarterly report summarizes JAPCSCP production, plant modifications and maintenance activities for the period from 01 August 1994 until 31 October 1994. During this period, a total of 6,129 metric tons of soil were processed. Authorized delays for the quarter totaled 2,425 sorter hours, or 606 regular hours, resulting in an adjusted production quota of 5,486 metric tons for this reporting period. The Project was 2,050 metric tons ahead of schedule at the end of the quarter.

The most significant event occurring this quarter was the complete evacuation of Johnston Atoll prior to Hurricane John and the subsequent recovery efforts. Damage to the island's infrastructure resulted in a two month halt in production. Damage to the JAPCSCP was minor in comparison to other island facilities but still required significant repairs prior to resuming operations.

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	2
	1.4.1	Personnel Assigned During this Period	2
	1.4.2	Project Management	3
2	PROJECT SCOPE		4
	2.1	STATEMENT OF WORK	4
	2.2	GOVERNMENT FURNISHED SERVICES	4
	2.3	MODIFICATION TO STATEMENT OF WORK	4
3	PROJECT MANAGEMENT		5
	3.1	TMA PROJECT MANAGEMENT	5
	3.2	DEFENSE NUCLEAR AGENCY	5
	3.3	TMA PERSONNEL ON-SITE	5
4	QUALITY CONTROL SAMPLING		6
	4.1	QUALITY CONTROL SAMPLING	6
	4.2	DIRECT SURVEYS	6
	4.3	GRAB SAMPLING	7
5	SAFETY AND HEALTH		8
	5.1	SITE SAFETY AND HEALTH PROGRAM	8
	5.2	AIRBORNE RADIOACTIVITY MONITORING	8
	5.3	ROUTINE CONTAMINATION SURVEYS	8
	5.3.1	Daily FIDLER Surveys	9
	5.4	PERSONAL PROTECTIVE EQUIPMENT	9
	5.5	PERSONNEL MONITORING	9
	5.6	RECORDS AND REPORTS	9

TABLE OF CONTENTS (Continued)

Section		Page
6	PLANT MODIFICATIONS AND MAINTENANCE	10
	6.1 PLANT MODIFICATIONS	10
	6.2 MECHANICAL MAINTENANCE	10
	6.3 ELECTRICAL MAINTENANCE	10
	6.4 ELECTRICAL MAINTENANCE AND CALIBRATION.	11
	6.5 EFFICIENCY DETERMINATIONS.	11
	6.6 ROUTINE PREVENTIVE MAINTENANCE.	12
	6.7 TESTING AND SPECIAL EVOLUTIONS	12
	6.8 DOWNTIME	13
	6.9 DAILY OPERATIONAL CHECKS	13
7	SOIL PRODUCTION	15
	7.1 PRODUCTION TOTALS	15
	7.2 AUTHORIZED DELAYS	15
	7.3 PRODUCTION VERSUS QUOTA	16
	7.4 PRODUCTION RECORDS	16
	7.4.1 Mass Processed Data Comparison	16
	7.5 SUMMARY	16

Attachments		Page
1	STATEMENT OF WORK	19
2	GOVERNMENT FURNISHED SERVICES	25

Appendices		Page
A	QUALITY CONTROL SAMPLE RESULTS	A-1
B	AIR SAMPLING RESULTS	B-1
C	SOIL PRODUCTION DATA	C-1
D	AUTHORIZED DELAYS	D-1
E	ACRONYMS AND SYMBOLS	E-1
F	DEFINITIONS	F-1

SECTION 1

INTRODUCTION

1.1 GENERAL.

This quarterly report covers the period of 01 August 1994 to 31 October 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 Contaminated 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 (SWS), 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
PLANT SUPERVISOR
PLANT ELECTRICIAN
TECHNICAL ASSISTANT
PLANT TECHNICIANS (4)

1.4.1 Personnel Assigned During this Period.

ASSIGNED

AGUADO, I.	GRANT, R.
BROWN, J.	LAW, D.
CORDOVA, D.	MONTANO, R.
CORDOVA, P.	RICHARDSON, J.
DELOVATO, A.	TRUJILLO, H.
DOANE, R.	

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 Number DNA001-93-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 Number DNA001-93-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.

One modification to the Statement of Work was made during the this period. On 31 August 1994 modification number P00003, which contained a limited stop work order directing that production activities cease until 30 September 1994. This was necessary due to limited on-island support available as a result of damages sustained during Hurricane John. TMA was directed to maintain an on-island presence of two personnel who were tasked with repair of hurricane damage.

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. Brice
Project Manager	-	Maj J. Kimbrell
Project Engineer	-	MAJ M. Melanson
Project NCOIC	-	SFC D. Richter

3.3 TMA PERSONNEL ON-SITE.

Site Manager	-	R. Grant
Plant Supervisor	-	J. Richardson
QA/QC	-	J. Brown
Technical Assistant	-	A. DeLovato
Health Physics Technician	-	H. Trujillo
Electrician	-	D. Cordova
Plant Technician	-	P. Cordova
Plant Technician	-	I. Aguado
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 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. Normal background in the area for this instrument is 200-300 dps. The alarm setpoint is 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. Survey efforts were hindered by damage to the FIDLER probes which occurred during the island surveys performed by others after the hurricane.

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 a shielded chamber, connected to an Eberline MS-2 Mini Scaler. Appendix A, Table 1 is a listing of all QC Samples taken during the quarter.

There were a smaller number of QC samples taken this quarter due to the hurricane evacuation and recovery efforts. Production for the quarter was limited to 5,261 metric tons by the hurricane, compared to over 12,000 tons the previous quarter. This reduced production and the resultant decrease in the number of QC samples drawn complicated the caparison of this quarter's results to those of last quarter. There were three days during the quarter on which QC samples were found to exceed 500 Bq/kg. In each case the sample was split and found to contain a single particle which exceeded 500 Bq, but not 5,000 Bq. All three piles were released. This seems to indicate an improvement over last quarter in which samples exceeded criteria on eleven days and several small piles required reprocessing. This improvement can be partially attributed to the decreased production and particularly attributed to the lower specific activity of most of the soil processed this quarter.

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 established.

5.2 AIRBORNE RADIOACTIVITY MONITORING.

Air samples are taken continuously at various locations around the plant during operation and analyzed on site. Air sample 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 þCi/ml. An administrative limit of 20% of the DAC value has been established to preclude the need for tracking DAC-Hours. No air samples drawn this quarter approached 20% of the DAC. 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 PERSONAL PROTECTIVE EQUIPMENT.

Personal 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 be forwarded to the US Air Force Radiological Health Laboratory. All sample results received to date have indicated less than minimum detectable Plutonium activity.

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

5.6 RECORDS AND REPORTS.

Survey records are maintained on file in building 795.

SECTION 6

PLANT MODIFICATIONS AND MAINTENANCE

6.1 PLANT MODIFICATIONS.

No significant modifications to the plant were made during this quarter.

6.2 MECHANICAL MAINTENANCE.

Mechanical maintenance performed this quarter was primarily routine preventive maintenance. Some recovery was required after the hurricane, including wash down and lubrication of all conveyors, replacement of belts blown off by the high winds and collection of debris from the site and settling ponds. Routine valve maintenance was performed on plant air valves and soil wash system valves as required. A new sheave was installed on the daybin conveyor motor to reduce belt speed.

6.3 ELECTRICAL MAINTENANCE.

Hurricane John had a significant impact on plant electrical components. Upon our return to the island after the storm, all components were checked for grounds and eight motors were found to be damaged. All eight motors were removed and replaced. Damaged motors were disassembled and baked by RSN Generator shop personnel and returned to service. A junction box for the Unit 3 and 4 Sorter Feed Scales was found to contain water resulting in damage. That box was repaired and the scale recalibrated.

Another electrical project completed after the hurricane was the rewiring of the crusher. After the Seabees completed repairs on the

crusher in August, an RSN inspection revealed deficient wiring. RSN was unable to make the necessary changes in a timely manner due to the heavy work load after the hurricane; so DNA requested that our electrician complete the necessary modifications. New conduit and wiring was run and the crusher was rewired in accordance with the specifications provided by RSN.

The final plant electrical problem noted this quarter was an inability to maintain the appropriate sorter belt speed for Units 3 and 4. Trouble shooting was performed on the Variable Frequency Drive Motor Controllers. No faults were found on the controllers, however, the programming was modified to provide a wider operating band. This corrected the error and allowed the belt to run within specifications.

6.4 ELECTRICAL MAINTENANCE AND CALIBRATION.

The semiannual electronic calibration of the sorters was performed the week of 10 October 1994. Numerous problems were discovered with electronic components. A total of six detectors, six detector boards, two Master Controller boards and two modems required replacement. In addition, two detector boards were repaired and reused. Upon completion of these repairs, all four units were recalibrated and efficiency determinations performed.

6.5 EFFICIENCY DETERMINATIONS.

The efficiency determination procedure was further revised to address DNA concerns. For particle efficiencies the source was passed beneath each detector a total of 30 times. The average of those 30 passes was used as the particle efficiency and the data was analyzed for statistical flaws. The distributed efficiency is in essence an average of the efficiencies for detectors 1-8. For distributed

efficiencies, the source was passed under each detector 6 times. The average of those six values was entered as the detector distributed efficiency. The system then takes those eight values and averages them to establish the system distributed efficiency. The system distributed efficiency is the value which is used by the Master Controller board for all distributed activity determinations.

6.6 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 weekly gate timing checks. Corrosion control activities were performed as required.

6.7 TESTING AND SPECIAL EVOLUTIONS.

One special evolution was performed during this quarter. During the week ending 23 October 1994, Sorters 3 and 4 belt speed was reduced to 20 feet per minute. Efficiency determinations were made at that belt speed and a test was run to determine if system capability to sort material containing high particle activity was significantly improved by the lower belt speed. The units were started and pre-operational checks were preformed as normal. The source of feed for the test was the hot particle pile which contains material that was diverted at 30 feet per minute due to hot particles. Much of the material in the hot particle pile is coral sand which could be released. This material is clean material which is diverted along with the Plutonium particle. Due to the large amount of this material which has been compiled to date, a cost effective method of further volume reducing the stockpile is needed. Approximately five tons of this material was processed with over 90% diverted as contaminated. It was concluded from this

test that the high concentration of particles present in this material eliminates the systems capability to sort effectively due to the limitation of counting statistics incurred when a large number of time slices are removed from the distributed matrix. After the test, the belt speed was returned to 30 feet per minute and the efficiencies returned to their previous values.

6.8 DOWNTIME.

Downtime is defined as that portion of the normal 60 hours per week work schedule in which soil processing is not accomplished due to routine 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 downtime. There were 30 hours or 4% devoted to plant maintenance and unscheduled repairs this quarter. The contract requires that downtime be maintained less than 40%.

6.9 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 individual detectors to verify that they are functioning and 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 and the sorter belts are checked weekly and the sorter belts are washed down periodically 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 sampling, serve to provide quality assurance for the program.

SECTION 7

SOIL PRODUCTION

7.1 PRODUCTION TOTALS.

During this quarter of the contract period, 6,129 metric tons of soil were processed. This total included 5,261 metric tons of soil which met DNA release criteria and 868 metric tons of soil which were diverted for further processing. The average weight reduction for soil processed this quarter was 82%. 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 requirement of 1,886 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 day's loss of production, 40 sorter hours would be lost (4 sorters x 10 hours per day). This would result in a reduction of the weekly quota by 316 metric tons (40 sorter-hours per day x 7.9 tons per sorter per hour).

A total of 60.6 days were recorded during the quarter as authorized delays. This large delay was primarily due to the evacuation of the island on 25 August 1994 in anticipation of the arrival of Hurricane John. The JAPCSCP staff did not return to the island in full force until 17 October 1994. The reduced staff present in the interim performed repairs due to damages inflicted by the storm. 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 this quarter exceeded the quota for the period by 643 metric tons. The total production for the contract to date exceeds the contract quota by 2,050 metric tons.

7.4 PRODUCTION RECORDS.

Appendix C contains the Daily Production Records for this reporting period, including the Daily Work History totals and the JA Soil Cleanup Log Overall Summary Report.

7.4.1 Mass Processed Data Comparison.

One of the ongoing project goals is to maintain close agreement in the mass process data calculated by the JACC software and that provided by weigh scales. To this end, a regular calibration and maintenance program has been instituted for the scales and feed density is measured regularly and input into the software. Mass processed this quarter, as reported by the software, was 6,129 MT. Mass processed according to the sorter feed scales was 6,223 MT. The difference in those values is 94 MT, or about 1.5%.

7.5 SUMMARY.

The Johnston Atoll Plutonium Soil Cleanup Project was impeded by island evacuation and Hurricane recovery efforts this quarter. The production quota was reduced to 5,486 MT. Most of TMA personnel were off-island from 25 August 1994 until 17 October 1994. Units 3 and 4

were brought back on-line after the repairs to the rock crusher. A total of 39,343 MT remain on the base effort. Full scale production, installation of the pond dredging system and further research on hot particle material volume reduction are the major efforts projected for the next quarter.

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 (kq).)

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.

b. Furnish equipment operators to haul soil and run soil through the cleanup plant. Process soil through the plant until DNA decides there is no more soil to process. Remove clean soil from the plant to the lay-down area toward the east of the plant.

(1) Process the minus 1/2-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 1/2-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

JOHNSTON ATOLL PLUTONIUM SOIL CLEAN UP PROJECT
Soil Sampling Results
from 01AUG to 31OCT

Date/Time/Pile	Sample Number	Gross Counts	Gross CPM	Concentration (Bq/kg)
08-01-94/0730/1,2	2700	1088	54	<108
08-01-94/0930/1,2	2701	1100	55	<108
08-01-94/1130/1,2	2702	2176	109	886
08-01-94/1405/1,2	2703	1205	60	138
08-01-94/1430/1,2	2704	1255	63	176
08-02-94/0800/1,2	2705	1237	62	196
08-02-94/1000/1,2	2706	1031	52	<106
08-02-94/1230/1,2	2707	1351	68	283
08-02-94/1430/1,2	2708	1092	55	<106
08-03-94/0740/1,2	2709	998	50	<105
08-03-94/0930/1,2	2710	1057	53	<105
08-03-94/1030/1,2	2711	1224	61	174
08-03-94/1300/1,2	2712	1015	51	<105
08-04-94/0830/1,2	2713	980	49	<90
08-04-94/1030/1,2	2714	1038	52	<90
08-04-94/1520/1,2	2715	1129	56	110
08-05-94/0800/1,2	2716	1112	56	103
08-05-94/0925/1,2	2717	1991	100	707
08-05-94/1110/1,2	2718	1487	74	361
08-05-94/1340/1,2	2719	1182	59	151
08-05-94/1520/1,2	2720	1081	54	<93
08-06-94/0805/1,2	2721	1152	58	<119
08-08-94/0840/1,2	2722	1015	51	<106
08-08-94/1100/1,2	2723	996	50	<106
08-08-94/1310/1,2	2724	1064	53	<106
08-08-94/1410/1,2	2725	1243	62	169
08-09-94/0940/1,2	2726	998	50	<100
08-09-94/1000/1,2	2727	1119	56	<100
08-09-94/1330/1,2	2728	1214	61	160
08-09-94/1430/1,2	2729	1089	54	<100
08-10-94/0840/1,2	2730	1229	61	191
08-10-94/1015/1,2	2731	1004	50	<102
08-10-94/1250/1,2	2732	1147	57	130
08-10-94/1430/1,2	2733	1096	55	<102
08-11-94/0805/1,2	2734	1135	57	<103
08-11-94/1005/1,2	2735	3986	199	2232
08-11-94/1105/1,2	2736	1319	66	238
08-11-94/1305/1,2	2737	1409	70	306
08-11-94/1435/1,2	2738	1380	69	284
08-12-94/1500/1,2	2740	1123	56	<101
08-13-94/0900/1,2	2741	1158	58	<102
08-13-94/1035/1,2	2742	1244	62	160
08-13-94/1250/1,2	2743	1061	53	<102
08-13-94/1445/1,2	2745	1084	54	<102
08-15-94/0845/1,2	2745	1037	52	<100
08-15-94/1025/1,2	2746	1024	51	<100

JOHNSTON ATOLL PLUTONIUM SOIL CLEAN UP PROJECT
Soil Sampling Results
from 01AUG to 31OCT

Date/Time/Pile	Sample Number	Gross Counts	Gross CPM	Concentration (Bq/kg)
08-15-94/1330/1,2	2747	1019	51	<100
08-16-94/1245/1,2	2748	1212	61	134
08-16-94/1530/1,2	2749	1176	59	<107
08-17-94/1030/1,2	2750	1281	64	211
08-17-94/1230/1,2	2751	1254	63	191
08-17-94/1415/1,2	2752	1372	69	278
08-18-94/0830/1,2	2753	1342	67	245
08-19-94/1320/1,2	2754	1067	53	<104
08-19-94/1500/1,2	2755	1225	61	142
08-20-94/0930/1,2	2756	1024	51	<105
08-20-94/1030/1,2	2757	951	48	<105
08-20-94/1230/1,2	2758	999	50	<105
10-20-94/0830/1,2	2759	1477	74	357
10-20-94/1030/1,2	2760	1530	77	395
10-20-94/1430/3,4	2761	1172	59	138
10-21-94/0830/1,2	2762	1435	72	326
10-21-94/0830/3,4	2763	1216	61	170
10-21-94/1030/1,2	2764	1333	67	253
10-21-94/1030/3,4	2765	1150	58	122
10-21-94/1230/1,2	2766	1337	67	256
10-21-94/1230/3,4	2767	1273	64	211
10-22-94/1030/1,2	2768	1161	58	<92
10-22-94/1230/1,2	2769	1296	65	162
10-22-94/1230/3,4	2770	1161	58	<92
10-22-94/1330/1,2	2771	1205	60	102
10-22-94/1330/3,4	2772	1159	58	<92
10-24-94/0930/1,2	2773	1238	62	116
10-24-94/0930/3,4	2774	1100	55	<87
10-24-94/1500/1,2	2775	1517	76	287
10-24-94/1500/3,4	2776	1269	63	135
10-25-94/0750/1,2	2777	1150	58	122
10-25-94/1000/1,2	2778	1388	69	293
10-25-94/1000/3,4	2779	1365	68	276
10-25-94/1430/1,2	2780	1206	60	163
10-25-94/1430/3,4	2781	1302	65	231
10-26-94/0900/1,2	2782	1130	57	<87
10-26-94/0900/3,4	2783	1169	58	<87
10-27-94/0910/1,2	2784	1715	86	465
10-27-94/0915/3,4	2785	1089	54	<94
10-27-94/1205/1,2	2786	1290	65	181
10-27-94/1210/3,4	2787	967	48	<94
10-28-94/0945/1,2	2788	967	48	<94
10-28-94/0950/3,4	2789	978	49	<94
10-28-94/1400/1,2	2790	1187	59	112
10-28-94/1405/3,4	2791	1072	54	<94
10-28-94/1500/1,2	2792	1423	71	270

JOHNSTON ATOLL PLUTONIUM SOIL CLEAN UP PROJECT
Soil Sampling Results
from 01AUG to 31OCT

Date/Time/Pile	Sample Number	Gross Counts	Gross CPM	Concentration (Bq/kg)
10-28-94/1505/3,4	2793	985	49	<94
10-29-94/0800/1,2	2794	1448	72	286
10-29-94/0805/3,4	2795	1070	54	<94
10-29-94/0900/1,2	2796	1666	83	432
10-29-94/0905/3,4	2797	1135	57	<94
10-29-94/1015/1,2	2798	1597	80	386
10-29-94/1020/3,4	2799	1049	52	<94
10-31-94/0850/1,2	2800	1745	87	456
10-31-94/0855/3,4	2801	1077	54	<81

APPENDIX B

AIR SAMPLING RESULTS

JOHNSTON ATOLL PLUTONIUM SOIL CLEANUP PROJECT
Air Sampling Results from 1 AUG 94 to 31 OCT 94

Sample Date	Reported Activity µCi/ml	Critical Level µ Ci/ml	Sample Area Description
01-AUG-94	1.2E-13	1.4E-14	LOADER #9112
01-AUG-94	3.6E-14	4.6E-15	SORTER 1 AREA #1083
01-AUG-94	1.7E-13	1.4E-14	LOADER #9112
01-AUG-94	6.1E-14	5.0E-15	HOT PARTICLE BELT #7219
01-AUG-94	4.7E-14	4.6E-15	WEST PERIMETER #7218
03-AUG-94	5.0E-14	6.5E-15	HOT PARTICLE BELT #7219
03-AUG-94	3.9E-14	7.2E-15	SORTER 1 AREA #1083
03-AUG-94	1.2E-13	1.1E-14	WEST PERIMETER #7218
05-AUG-94	2.5E-14	6.2E-15	WEST PERIMETER #7218
05-AUG-94	2.9E-14	3.8E-15	HOT PARTICLE BELT #7219
05-AUG-94	2.5E-14	4.2E-15	SORTER 1 AREA #1083
09-AUG-94	8.1E-14	1.0E-14	SORTER 1 AREA #1083
09-AUG-94	8.8E-14	9.7E-15	HOT PARTICLE BELT #7219
09-AUG-94	1.3E-13	8.5E-15	WEST PERIMETER #7218
11-AUG-94	4.0E-14	8.1E-15	SORTER 1 AREA #1083
12-AUG-94	3.2E-14	4.1E-15	S1,2 HOT BELT AREA #7219
13-AUG-94	3.2E-14	4.0E-15	WEST PERIMETER #7218
13-AUG-94	6.5E-14	7.2E-15	SORTER 1 AREA #1083
13-AUG-94	3.5E-14	3.7E-15	S1,2 HOT BELT AREA #7219
13-AUG-94	1.9E-14	5.7E-15	SORTER 1 AREA #1083
13-AUG-94	4.5E-14	5.7E-15	S1,2 HOT BELT AREA #7219
13-AUG-94	5.6E-14	1.2E-14	SORTER 1 AREA #1083
13-AUG-94	2.6E-14	4.2E-15	S1,2 HOT BELT AREA #7219
15-AUG-94	6.7E-14	9.0E-15	SORTER 1 AREA #1083
15-AUG-94	2.2E-14	4.8E-15	S1,2 HOT BELT AREA #7219
15-AUG-94	2.5E-14	4.9E-15	SORTER 1 AREA #1083
15-AUG-94	6.0E-14	8.7E-15	S1,2 HOT BELT AREA #7219
15-AUG-94	4.3E-14	4.0E-15	S1,2 HOT BELT AREA #7219
16-AUG-94	3.2E-14	8.5E-15	SORTER 1 AREA #1083
16-AUG-94	8.2E-14	7.7E-15	S1,2 HOT BELT AREA #7219
16-AUG-94	1.8E-14	8.6E-15	SORTER 1 AREA #1083
16-AUG-94	4.5E-14	8.4E-15	S1,2 HOT BELT AREA #7219
16-AUG-94	7.2E-14	5.5E-15	S1,2 HOT BELT AREA #7219
16-AUG-94	9.9E-15	5.0E-15	S2 STAIRS #1079 RAS-1
16-AUG-94	4.8E-14	5.8E-15	SORTER 1 AREA #1083
16-AUG-94	3.4E-14	5.1E-15	S1,2 HOT BELT AREA #7219
16-AUG-94	2.5E-14	4.3E-15	SORTER 1 AREA #1083
17-AUG-94	3.8E-14	6.4E-15	S1,2 HOT BELT AREA #7219
17-AUG-94	4.5E-14	5.8E-15	S1,2 HOT BELT AREA #7219
17-AUG-94	7.0E-14	6.4E-15	WEST PERIMETER #7218
17-AUG-94	1.5E-13	4.3E-15	SORTER 1 AREA #1083
17-AUG-94	1.0E-13	3.2E-15	SORTER 1 AREA #1083
17-AUG-94	8.3E-14	2.9E-15	SORTER 1 AREA #1083
17-AUG-94	3.9E-13	3.0E-15	S1,2 HOT BELT AREA #7219
17-AUG-94	4.9E-14	2.7E-15	S1,2 HOT BELT AREA #7219
19-OCT-94	2.0E-14	3.5E-15	#1083 S-1 AREA
19-OCT-94	2.1E-14	2.1E-15	#1083 S-1 AREA

JOHNSTON ATOLL PLUTONIUM SOIL CLEANUP PROJECT
Air Sampling Results from 1 AUG 94 to 31 OCT 94

Sample Date	Reported Activity µCi/ml	Critical Level µCi/ml	Sample Area Description
19-OCT-94	4.7E-14	3.7E-15	#7219 HOT PART. BELT AREA
20-OCT-94	1.7E-14	5.2E-15	#1083 S-1 AREA
20-OCT-94	2.7E-14	4.7E-15	#7219 HOT PART. BELT AREA
21-OCT-94	3.3E-14	9.6E-15	#1083 S-1 AREA
21-OCT-94	1.4E-14	3.1E-15	#1083 S-1 AREA
21-OCT-94	3.4E-14	4.9E-15	#1083 S-1 AREA
21-OCT-94	5.9E-14	1.0E-14	#7219 HOT PART. BELT AREA
21-OCT-94	2.9E-14	5.8E-15	#7219 HOT PART. BELT AREA
21-OCT-94	2.1E-14	2.9E-15	#7219 HOT PART. BELT AREA
21-OCT-94	< 7.3E-14	7.3E-14	#507993 S2 STAIRS
22-OCT-94	1.8E-14	6.2E-15	#1083 S-1 AREA
22-OCT-94	1.8E-14	5.4E-15	#1083 S-1 AREA
22-OCT-94	2.1E-14	4.1E-15	#1083 S-1 AREA
22-OCT-94	2.8E-14	7.3E-15	#1083 S-1 AREA
22-OCT-94	5.9E-14	5.3E-15	#7219 HOT PART. BELT AREA
24-OCT-94	2.6E-14	1.9E-15	#7219 HOT PART. BELT AREA
24-OCT-94	1.8E-14	1.9E-15	#1083 S-1 AREA
24-OCT-94	2.8E-14	4.2E-15	#1083 S-1 AREA
25-OCT-94	2.5E-14	2.5E-15	#1083 S-1 AREA
25-OCT-94	5.8E-14	1.0E-14	#1083 S-1 AREA
25-OCT-94	3.8E-14	1.6E-14	#1083 S-1 AREA

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)
421	01-Aug	S12	15.90	205.93	92.8	359.9	77.9	50.8	247	0.1	0.2	9.5	95	90	176	20,281	8	174
422	02-Aug	S12	0.74	164.72	99.6	24.9	5.3	16.2	98	0.1	0.4	8.1	89	81	131	3,644	111	148
423	03-Aug	S12	2.64	162.31	98.4	60.8	13.0	16.1	99	0.1	0.2	8.6	91	86	131	4,613	56	168
424	04-Aug	S12	6.97	133.76	95.0	97.1	22.1	20.4	153	0.1	0.2	7.1	75	71	112	5,282	26	140
425	05-Aug	S12	8.58	173.98	95.3	148.9	33.1	34.1	196	0.1	0.1	8.3	88	83	145	11,246	10	187
426	06-Aug	S12	0.73	42.40	98.3	14.9	3.2	4.0	93	0.1	0.2	2.0	63	20	34	1,555	24	42
427	08-Aug	S12	4.38	156.08	97.3	48.7	11.7	13.9	89	0.2	0.2	7.9	88	79	127	5,482	30	154
428	09-Aug	S12	1.06	143.31	99.3	31.7	6.8	9.2	64	0.2	0.2	7.5	79	75	114	3,921	61	151
429	10-Aug	S12	11.50	151.27	92.9	112.1	27.8	20.7	136	0.1	0.3	8.4	89	84	129	7,175	21	153
430	11-Aug	S12	8.63	166.13	95.1	181.1	39.9	31.3	188	0.1	0.0	8.5	93	85	139	10,758	11	182
431	12-Aug	S12	11.22	36.61	76.5	47.3	15.7	7.8	213	0.1	0.2	2.5	82	25	38	3,204	11	37
432	13-Aug	S12	53.70	94.44	63.7	191.7	69.5	19.8	210	0.1	0.2	7.8	93	74	117	11,261	10	99
433	15-Aug	S12	8.21	126.77	93.9	55.5	15.6	12.0	95	0.2	0.3	7.1	85	71	107	5,028	29	130
434	16-Aug	S12	73.63	78.71	51.7	319.5	140.2	16.0	203	0.1	0.2	8.0	86	80	121	22,050	5	84
435	17-Aug	S12	58.64	100.01	63.0	210.1	74.2	26.4	266	0.1	0.2	8.3	89	83	126	12,422	9	106
436	18-Aug	S12	134.10	20.56	13.3	813.4	336.6	6.2	301	0.3	0.1	7.7	80	77	123	41,062	2	20
437	19-Aug	S12	77.49	98.66	56.0	400.0	151.5	20.0	202	0.6	0.1	8.8	88	83	140	20,689	6	94
438	20-Aug	S1234	3.28	151.60	97.9	199.5	40.1	13.1	169	0.1	0.2	3.8	83	38	123	5,550	25	129
439	22-Aug	S2	6.39	0.93	12.7	20.1	7.7	0.3	290	0.3	0.0	0.7	70	7	6	866	5	1
440	23-Aug	S12	9.53	33.63	77.9	33.8	11.5	5.3	158	1.0	0.1	2.1	66	21	34	2,442	13	30
441	19-Oct	S12	30.76	105.85	77.5	127.7	43.3	29.8	282	0.2	0.2	6.3	92	60	108	7,241	13	0
442	20-Oct	S1234	24.32	215.05	89.8	69.3	27.8	37.4	221	0.8	0.3	5.5	59	52	190	7,287	55	0
443	21-Oct	S1234	23.68	394.76	94.3	272.2	59.5	90.6	232	0.2	0.2	9.6	96	92	332	16,044	37	170
444	22-Oct	S1234	20.87	309.57	93.7	107.0	34.4	63.7	207	0.3	0.1	7.6	93	72	262	10,246	36	133
445	24-Oct	S1234	40.42	304.34	88.3	202.4	66.8	65.6	212	0.3	1.4	7.9	82	75	273	12,900	36	147
446	25-Oct	S1234	33.84	365.18	91.5	199.7	62.5	72.4	201	0.1	0.1	9.2	96	87	316	14,038	34	152
447	26-Oct	S1234	2.83	151.45	98.2	86.4	14.9	20.8	141	0.1	0.3	3.5	39	34	122	4,856	40	59
448	27-Oct	S1234	47.86	351.22	88.0	156.6	58.9	58.5	182	0.4	0.2	9.2	88	85	316	13,320	76	136
449	28-Oct	S1234	40.99	296.11	87.8	134.3	50.4	60.3	179	0.2	0.2	7.7	83	71	267	11,649	58	146
450	29-Oct	S1234	36.28	239.32	86.8	115.2	43.0	45.1	203	0.2	0.4	6.3	89	60	218	9,721	50	85
451	31-Oct	S1234	68.63	286.16	80.7	145.1	66.5	51.5	210	0.4	0.2	8.1	83	78	281	12,087	56	94
TOTAL			868	5,261		4,987	1,631	939							4,858	317,920		3,352
DAY/WK AVG			28	170	82.2				185	0.2	0.2	6.9	83	67			31	
NUMB DAYS/WKS			31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31

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)
TOTAL			868	5,261														
GRAND TOTAL				6,129														

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-WS2,5 (ton)	OVR (%)	AVL (hr)	WEEKLY H+C (ton)	WEEKLY WS2 (ton)	Date
228	197	20	0	0	0	0	31	222	24	13	10			01-Aug
232	159	3	0	0	0	0	73	165	7	32	9			02-Aug
243	193	5	0	0	0	0	49	165	(28)	20	9			03-Aug
202	158	10	0	0	0	0	43	141	(18)	21	7			04-Aug
235	213	14	0	0	0	12	22	183	(31)	9	9			05-Aug
61	46	2	0	0	0	0	15	43	(3)	24	2	918.65	966.76	06-Aug
233	164	7	0	0	0	0	70	160	(3)	30	8			08-Aug
224	158	3	0	0	0	29	65	144	(14)	29	8			09-Aug
222	171	14	0	0	0	12	51	163	(8)	23	9			10-Aug
251	199	14	0	0	0	0	52	175	(24)	21	9			11-Aug
60	53	13	0	0	0	9	8	48	(5)	12	3			12-Aug
226	164	65	0	0	0	0	62	148	(16)	28	8	838.32	908.82	13-Aug
207	148	10	0	0	0	35	59	135	(13)	28	8			15-Aug
246	172	85	0	0	0	0	73	152	(20)	30	8			16-Aug
256	181	70	0	0	0	31	75	159	(23)	29	9			17-Aug
223	179	160	0	0	0	37	44	155	(24)	20	8			18-Aug
257	188	90	0	0	0	32	69	176	(12)	27	9			19-Aug
198	143	3	12	11	0	45	55	155	(0)	28	4	931.66	1023.74	20-Aug
12	8	7	0	0	0	0	3	7	(1)	29	1			22-Aug
60	43	11	0	0	0	10	17	43	(0)	28	3	50.48	51.70	23-Aug
170	140	32	0	0	0	0	30	137	(4)	18	7			19-Oct
82	70	21	205	153	0	0	11	239	(36)	14	7			20-Oct
264	223	261	185	180	0	21	41	418	10	15	10			21-Oct
185	174	22	148	146	0	0	10	330	8	6	8	1124.86	1146.63	22-Oct
256	203	38	132	125	0	0	53	345	10	21	10			24-Oct
265	201	4	183	174	0	2	64	399	16	24	9			25-Oct
94	71	3	73	71	0	0	23	154	10	25	4			26-Oct
327	202	49	169	160	0	26	125	399	28	38	10			27-Oct
351	203	40	114	99	0	31	149	337	21	42	8			28-Oct
223	133	35	119	111	0	24	90	276	24	40	7	1909.84	1801.48	29-Oct
269	167	62	157	141	0	14	103	355	31	38	9			31-Oct
6,362	4,726	1,170	1,497	1,371	0	369	1,636	6,129	(94)		228	6,129	6,223	TOTAL
										25	7.4	962	983	DAY/WK AVG
31	31	31	31	31	31	31	31	31	31	31	31	6	6	NUMB DAYS/WKS

WORK HISTORY – JA SOIL CLEANUP PLANT 01–Aug–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	9.9 hr	9.9 hr	0.0 hr	0.0 hr	19.8 hr
SORTER START–UP	06:25	06:25	NA	NA	
START SOIL PROCESSING	06:30	06:30	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	16:20	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	9.5 hr	9.4 hr	0.0 hr	0.0 hr	18.9 hr
DOWN–TIME	0.5 hr	0.5 hr	0.0 hr	0.0 hr	0.9 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.3 hr
SORTER NONAVAILABLE TIME	0.6 hr	0.6 hr	10.0 hr	10.0 hr	21.2 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					95.3%
PRODUCTIVTY					45.0%

PRODUCTIVITY

Date	01–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	271	Excused delays for contract (sorter–hrs)	4,830 hr
Current Contract week	46	Excused delay days (plant–days)	121 days
		Excused delay months (plant–month)	4.64 months
Soil production for Day	222 MT		
Cumlative Soil Production for Week	222 MT	Percent of contract completed	54.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,784 MT
Since 6 Sep 93	53,159 MT	Days ahead or behind schedule	5.6 days
Since 6 Aug 93	54,750 MT		
Total Soil production for project	81,037 MT		

MT = metric tons

File Report1 Printed on 05-Aug-94 at 10:48:47 AM

SORTER 1

01-Aug-94

SORTER SOIL DENSITY 1.40 tons/m³ BACKGROUND 0.70 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	7.3 tons	103.8 tons	111.0 tons
MAXIMUM/SORT	65.2 kg	65.2 kg	
MINIMUM/SORT	0.8 kg	49.7 kg	
VOLUME IN-GROUND	5.7 yd³	82.3 yd³	88.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	186,696 kBq	39,673 kBq	24,253 kBq
MAXIMUM/SORT	2,377 kBq	898 kBq	27 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		5,471 Bq/kg	234 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,703		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			7			
NONE (AD=0 & MD=0 & MND>0)			426		06:53	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			1,270			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		1				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				17,030		
2-SEC RECORDS WITH SORTS			8,107			
2-SEC RECORDS WITHOUT SORTS			8,923			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				9,810		
NONPROCESSING RECORDS (Test, calibration, etc)				5		

2-SEC SORT DETECTORS

1 DET	5,350	65.99%	5 DET	28	0.35%
2 DET	2,033	25.08%	6 DET	0	0.00%
3 DET	573	7.07%	7 DET	1	0.01%
4 DET	123	1.52%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.5 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

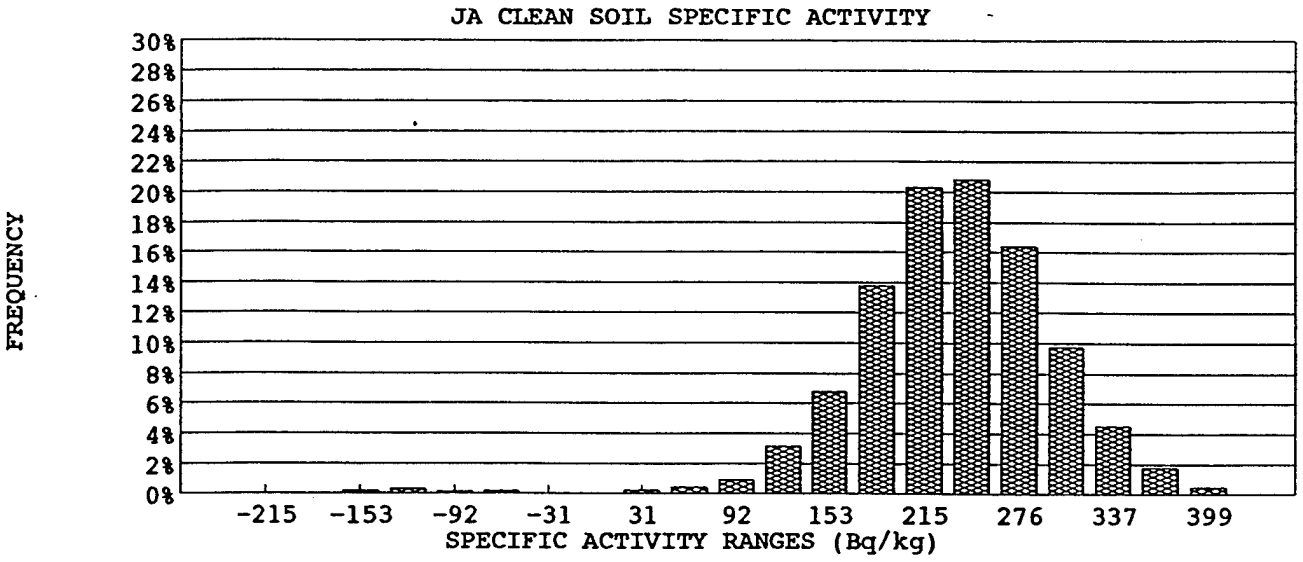
DET	SORTS	FREQ%
1	116	2.8%
2	526	12.9%
3	663	16.3%
4	669	16.4%
5	819	20.1%
6	602	14.8%
7	570	14.0%
8	112	2.7%
TOTAL	4,077	

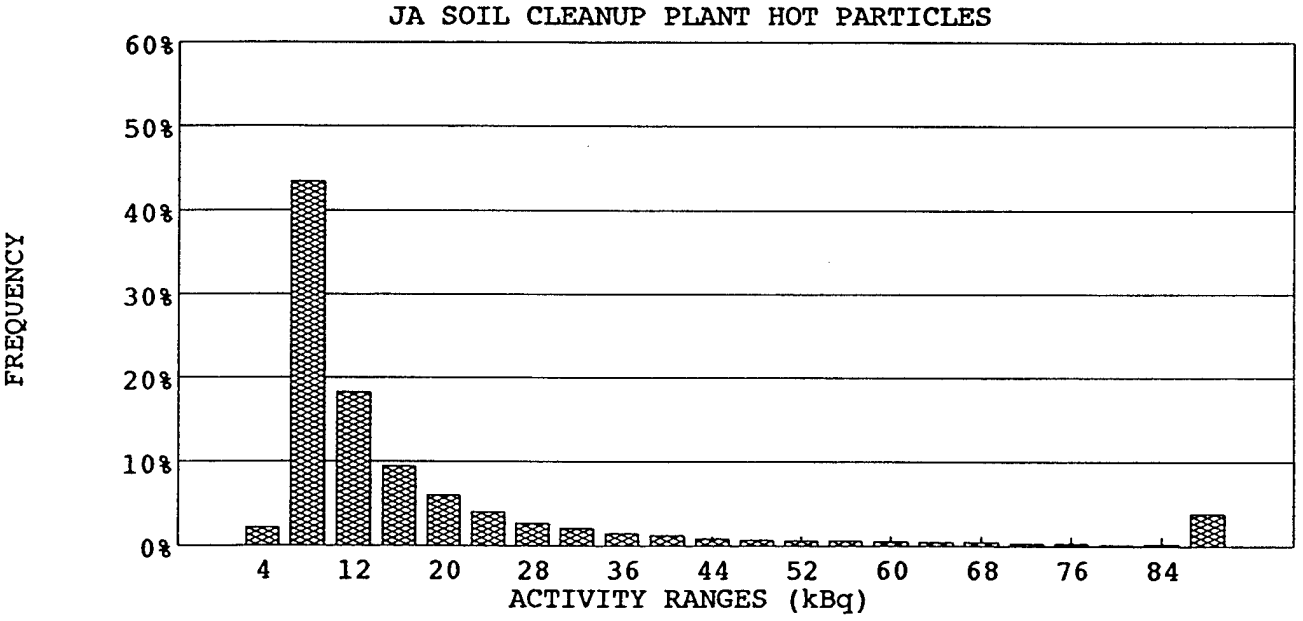
2-GATE SORTS

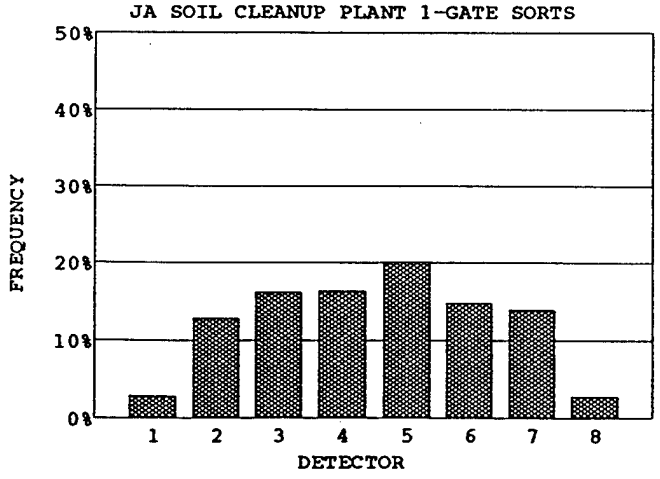
DET	SORTS	FREQ%
9	312	7.7%
10	616	15.3%
11	695	17.2%
12	775	19.2%
13	776	19.3%
14	550	13.6%
15	306	7.6%
TOTAL	4,030	

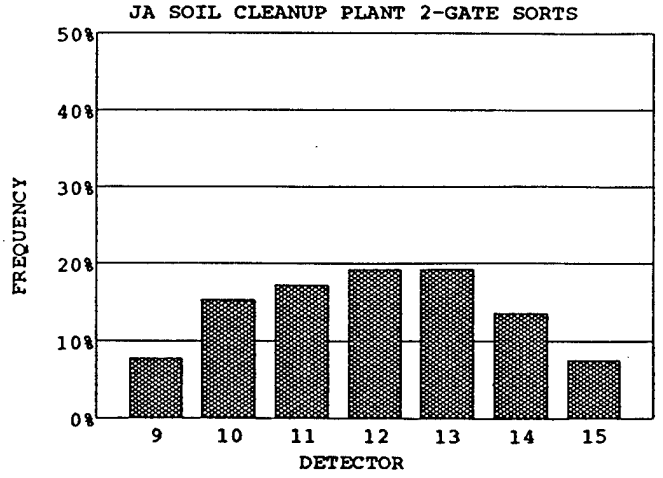
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-215	0.0%	4	173	2.1%
-12000	0	-184	0.0%	8	3,523	43.5%
-10000	3	-153	0.2%	12	1,484	18.3%
-8000	5	-123	0.3%	16	770	9.5%
-6000	2	-92	0.1%	20	485	6.0%
-4000	3	-61	0.2%	24	323	4.0%
-2000	0	-31	0.0%	28	221	2.7%
0	0	0	0.0%	32	168	2.1%
2000	4	31	0.2%	36	118	1.5%
4000	7	61	0.4%	40	99	1.2%
6000	15	92	0.9%	44	70	0.9%
8000	53	123	3.1%	48	57	0.7%
10000	115	153	6.8%	52	52	0.6%
12000	234	184	13.8%	56	48	0.6%
14000	345	215	20.3%	60	47	0.6%
16000	354	245	20.8%	64	37	0.5%
18000	279	276	16.4%	68	36	0.4%
20000	166	307	9.8%	72	25	0.3%
22000	77	337	4.5%	76	26	0.3%
24000	30	368	1.8%	80	16	0.2%
26000	8	399	0.5%	84	17	0.2%
>28000	1	0	0.1%	>84	312	3.8%
TOTAL	1,701			TOTAL	8,107	

EVENT TYPES HPE 7,509 MPE 889 DISE 498


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-215 -153 -92 -31 31 92 153 215 276 337 399
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

01-Aug-94

SORTER SOIL DENSITY 1.40 tons/m³ BACKGROUND 0.76 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.6 tons	102.1 tons	110.8 tons
MAXIMUM/SORT	65.2 kg	65.2 kg	
MINIMUM/SORT	0.8 kg	48.1 kg	
VOLUME IN-GROUND	6.9 yd³	81.0 yd³	87.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	92.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	173,157 kBq	38,262 kBq	26,539 kBq
MAXIMUM/SORT	2,543 kBq	888 kBq	26 kBq
MINIMUM/SORT	2 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		4,425 Bq/kg	260 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,699		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	20			
NONE (AD=0 & MD=0 & MND>0)	381		13:32	13:32
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,298		15:24	13:41
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,990		
2-SEC RECORDS WITH SORTS	8,772			
2-SEC RECORDS WITHOUT SORTS	8,218			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		10,471		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

1 DET	5,870	66.92%	5 DET	28	0.32%
2 DET	2,201	25.09%	6 DET	0	0.00%
3 DET	534	6.09%	7 DET	0	0.00%
4 DET	139	1.58%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.0 sec

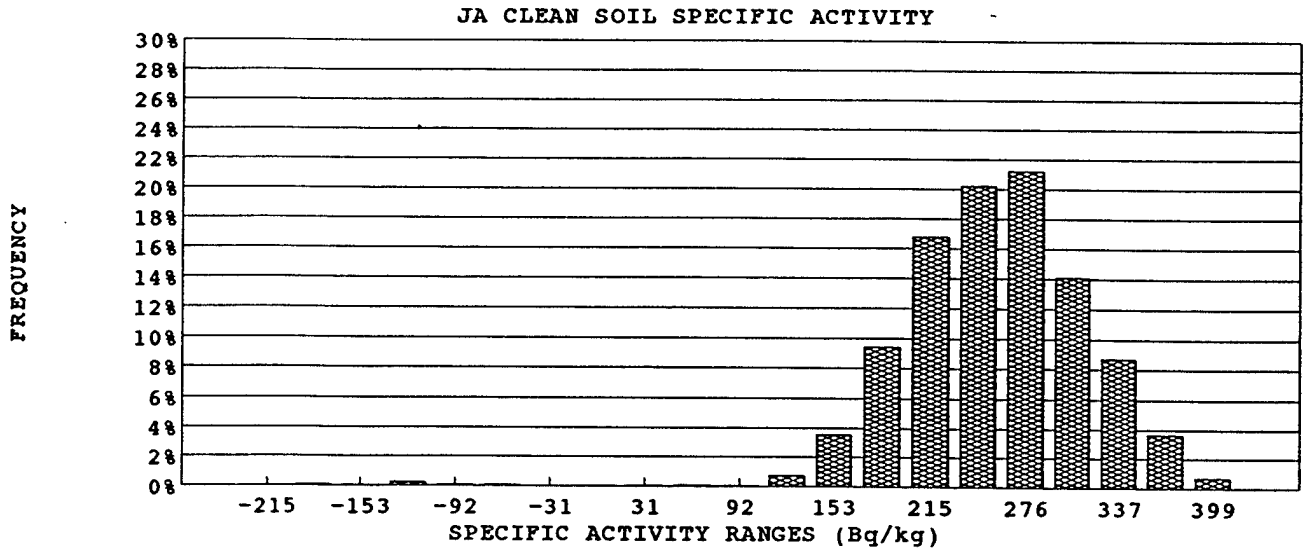
FREQUENCY DISTRIBUTIONS

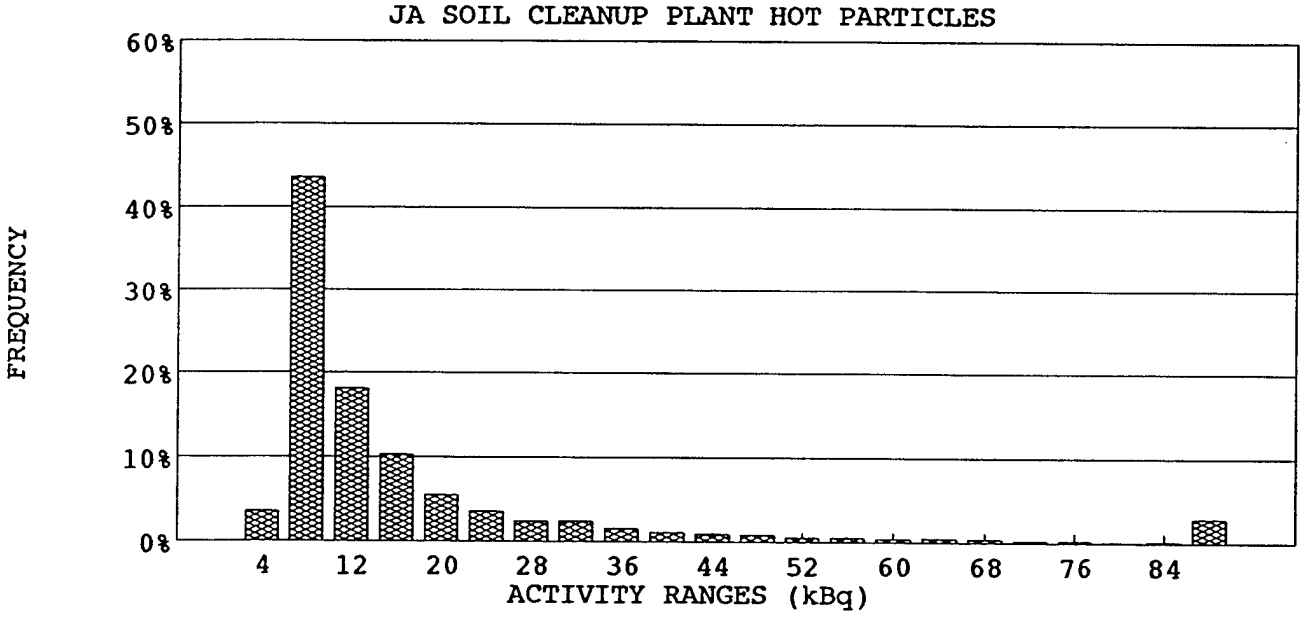
1-GATE SORTS DET	SORTS	FREQ%
1	269	6.2%
2	806	18.5%
3	808	18.5%
4	839	19.2%
5	755	17.3%
6	522	12.0%
7	300	6.9%
8	63	1.4%
TOTAL	4,362	

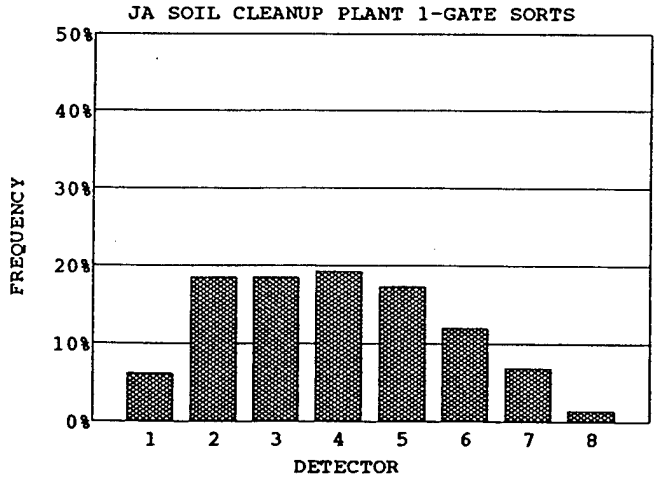
2-GATE SORTS DET	SORTS	FREQ%
9	571	12.9%
10	865	19.6%
11	956	21.7%
12	815	18.5%
13	672	15.2%
14	396	9.0%
15	135	3.1%
TOTAL	4,410	

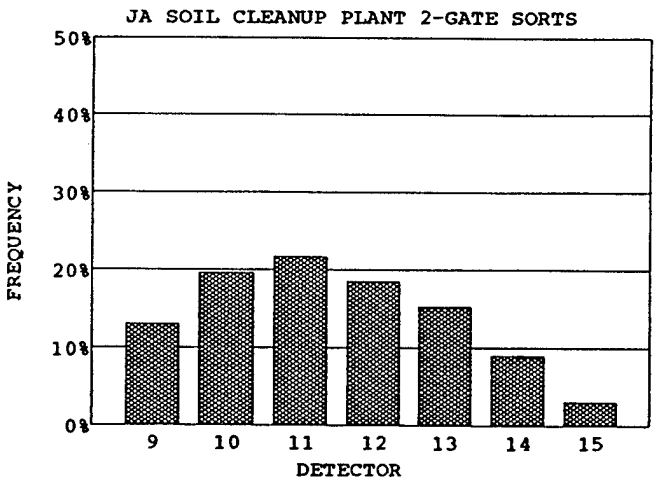
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-215	0.0%	4	317	3.6%
-12000	2	-184	0.1%	8	3,824	43.6%
-10000	1	-153	0.1%	12	1,593	18.2%
-8000	5	-123	0.3%	16	906	10.3%
-6000	2	-92	0.1%	20	485	5.5%
-4000	2	-61	0.1%	24	312	3.6%
-2000	0	-31	0.0%	28	212	2.4%
0	1	0	0.1%	32	211	2.4%
2000	1	31	0.1%	36	136	1.6%
4000	2	61	0.1%	40	95	1.1%
6000	1	92	0.1%	44	82	0.9%
8000	13	123	0.8%	48	74	0.8%
10000	60	153	3.6%	52	48	0.5%
12000	159	184	9.4%	56	48	0.5%
14000	283	215	16.8%	60	33	0.4%
16000	341	245	20.2%	64	43	0.5%
18000	358	276	21.2%	68	34	0.4%
20000	238	307	14.1%	72	23	0.3%
22000	147	337	8.7%	76	21	0.2%
24000	61	368	3.6%	80	9	0.1%
26000	12	399	0.7%	84	15	0.2%
>28000	0	0	0.0%	>84	251	2.9%
TOTAL	1,689			TOTAL	8,772	

EVENT TYPES						
	HPE	8,182	MPE	967	DISE	1,459


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-215
-153
-92
-31
31
92
153
215
276
337
399
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 1

01-Aug-94

SORTER SOIL DENSITY 1.40 tons/m³ BACKGROUND 0.71 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	7.1 tons	75.7 tons	82.8 tons
MAXIMUM/SORT	65.2 kg	65.2 kg	
MINIMUM/SORT	0.8 kg	49.7 kg	
VOLUME IN-GROUND	5.6 yd³	60.0 yd³	65.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	91.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	183,565 kBq	39,016 kBq	18,966 kBq
MAXIMUM/SORT	2,377 kBq	898 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		5,500 Bq/kg	250 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,270		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	6			
NONE (AD=0 & MD=0 & MND>0)	47		06:53	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,217			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,700		
2-SEC RECORDS WITH SORTS	8,005			
2-SEC RECORDS WITHOUT SORTS	4,695			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		9,275		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

1 DET	5,275	65.90%	5 DET	26	0.32%
2 DET	2,011	25.12%	6 DET	0	0.00%
3 DET	571	7.13%	7 DET	1	0.01%
4 DET	122	1.52%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 4.9 sec

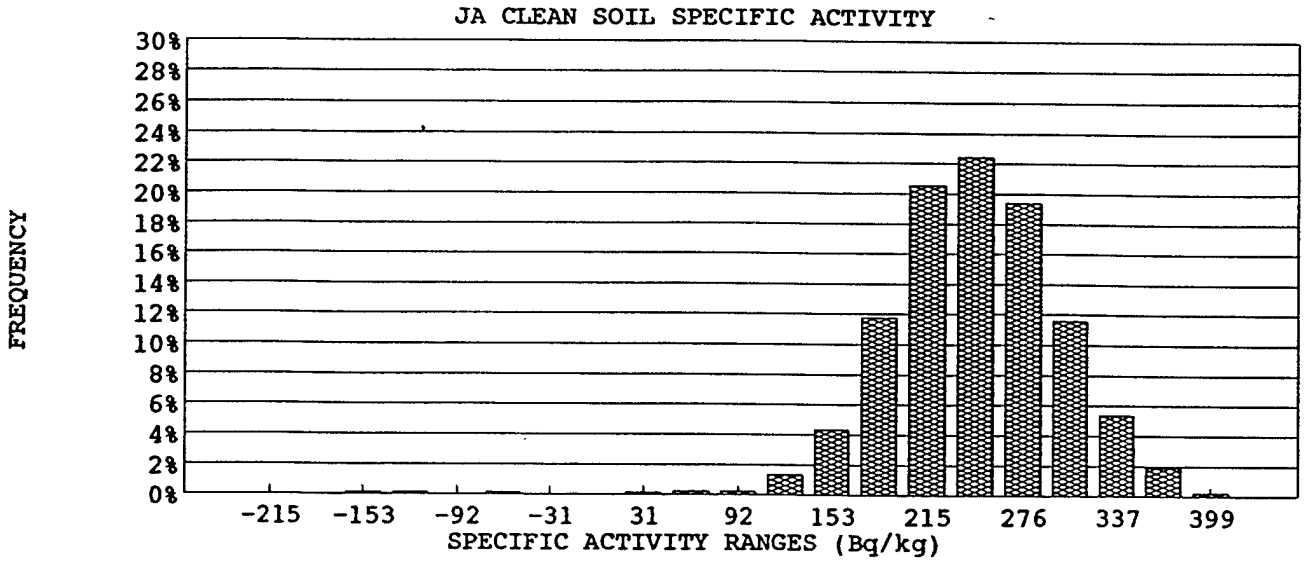
FREQUENCY DISTRIBUTIONS

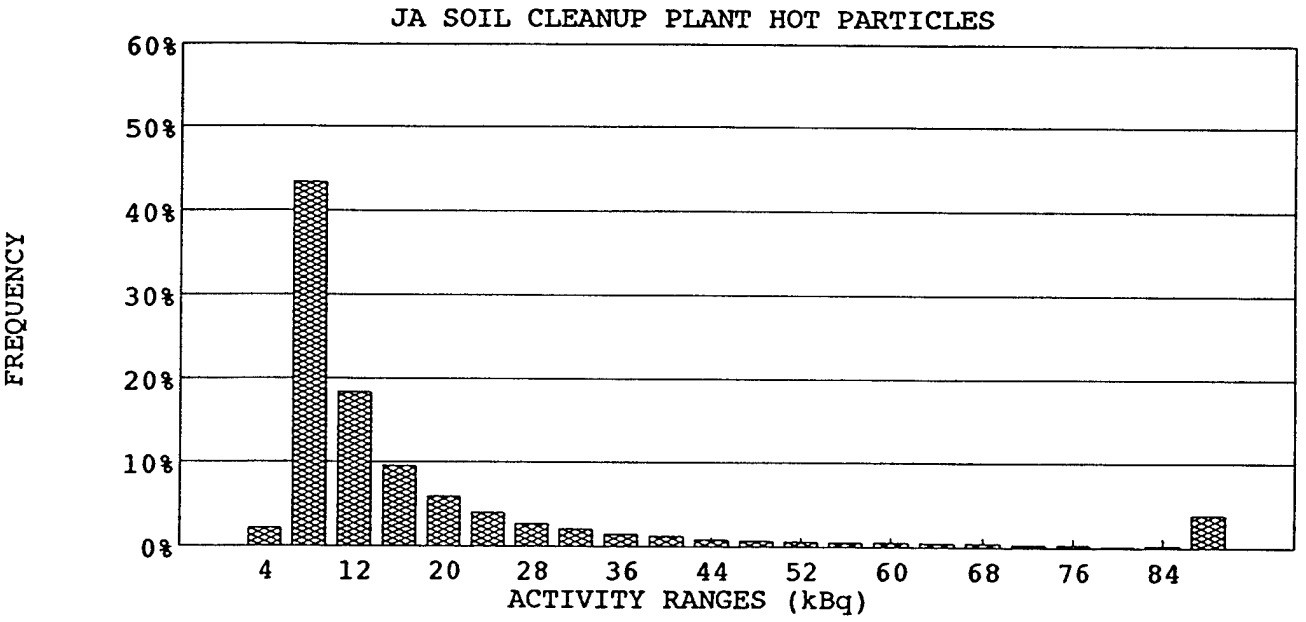
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	114	2.8%	-14000	0	-215	0.0%	4	171	2.1%
2	515	12.8%	-12000	0	-184	0.0%	8	3,477	43.4%
3	655	16.3%	-10000	2	-153	0.2%	12	1,469	18.4%
4	660	16.4%	-8000	2	-123	0.2%	16	763	9.5%
5	809	20.1%	-6000	0	-92	0.0%	20	477	6.0%
6	597	14.8%	-4000	2	-61	0.2%	24	318	4.0%
7	562	14.0%	-2000	0	-31	0.0%	28	217	2.7%
8	112	2.8%	0	0	0	0.0%	32	165	2.1%
TOTAL	4,024		2000	2	31	0.2%	36	117	1.5%
			4000	3	61	0.2%	40	99	1.2%
2-GATE SORTS			6000	3	92	0.2%	44	70	0.9%
DET	SORTS	FREQ%	8000	17	123	1.3%	48	57	0.7%
9	308	7.7%	10000	55	153	4.3%	52	52	0.6%
10	607	15.2%	12000	149	184	11.7%	56	47	0.6%
11	685	17.2%	14000	261	215	20.6%	60	44	0.5%
12	769	19.3%	16000	285	245	22.5%	64	36	0.4%
13	765	19.2%	18000	246	276	19.4%	68	36	0.4%
14	544	13.7%	20000	147	307	11.6%	72	24	0.3%
15	303	7.6%	22000	68	337	5.4%	76	26	0.3%
TOTAL	3,981		24000	24	368	1.9%	80	16	0.2%
			26000	3	399	0.2%	84	17	0.2%
			>28000	0	0	0.0%	>84	307	3.8%
			TOTAL	1,269			TOTAL	8,005	

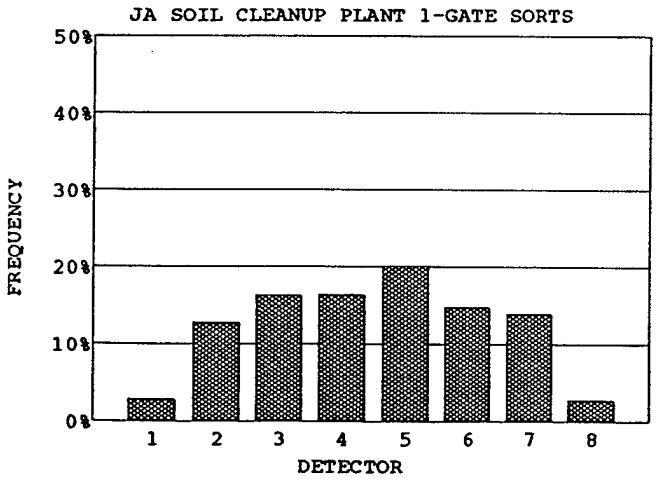
EVENT TYPES	HPE	MPE	DISE
	7,408	876	418

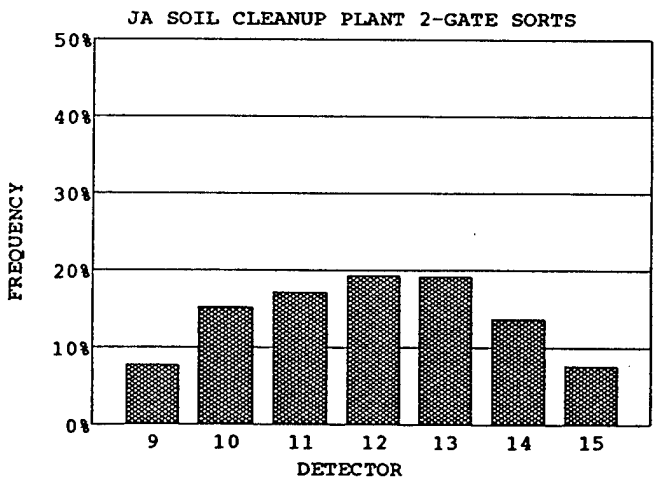
SORTER 1

Wet End Feed
01-Aug-94









SORTER 2

01-Aug-94

SORTER SOIL DENSITY 1.40 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.3 tons	74.5 tons	82.7 tons
MAXIMUM/SORT	65.2 kg	65.2 kg	
MINIMUM/SORT	0.8 kg	48.1 kg	
VOLUME IN-GROUND	6.6 yd³	59.0 yd³	65.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	90.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	170,301 kBq	37,512 kBq	20,234 kBq
MAXIMUM/SORT	2,543 kBq	888 kBq	26 kBq
MINIMUM/SORT	2 kBq	0 Bq	0 kBq
SPECIFIC ACTIVITY		4,534 Bq/kg	272 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,269		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	16			
NONE (AD=0 & MD=0 & MND>0)	27		13:32	13:32
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,226			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,690		
2-SEC RECORDS WITH SORTS	8,651			
2-SEC RECORDS WITHOUT SORTS	4,039			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		9,920		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

1 DET	5,780	66.81%	5 DET	28	0.32%
2 DET	2,179	25.19%	6 DET	0	0.00%
3 DET	527	6.09%	7 DET	0	0.00%
4 DET	137	1.58%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 4.6 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	262	6.1%
2	790	18.4%
3	800	18.6%
4	827	19.2%
5	747	17.4%
6	514	12.0%
7	295	6.9%
8	63	1.5%
TOTAL	4,298	

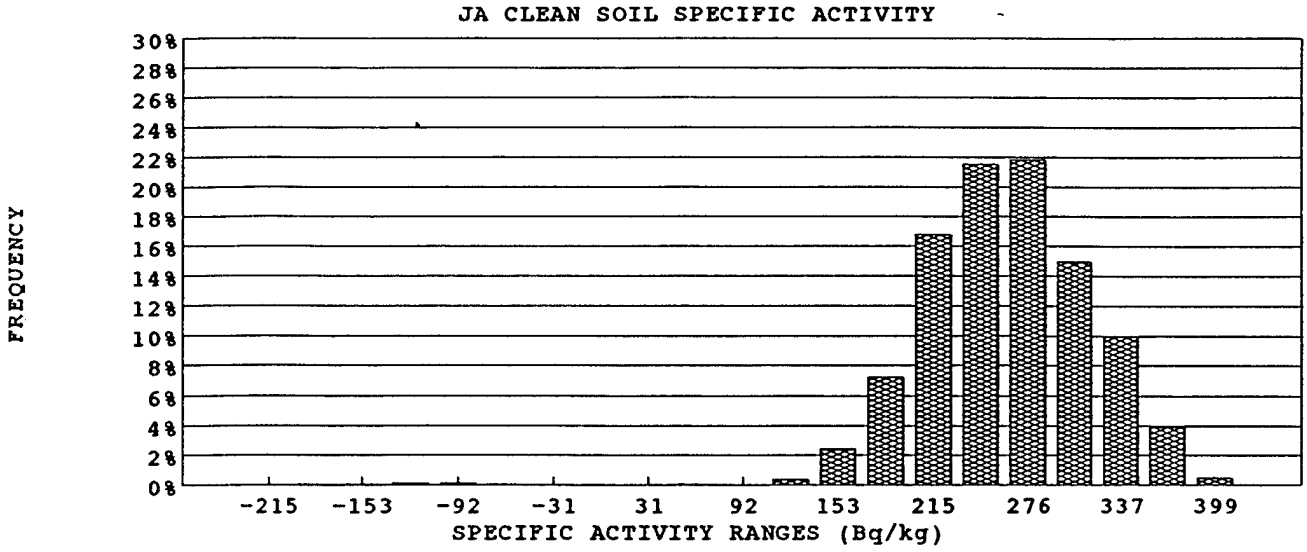
2-GATE SORTS DET	SORTS	FREQ%
9	562	12.9%
10	855	19.6%
11	942	21.6%
12	807	18.5%
13	665	15.3%
14	390	9.0%
15	132	3.0%
TOTAL	4,353	

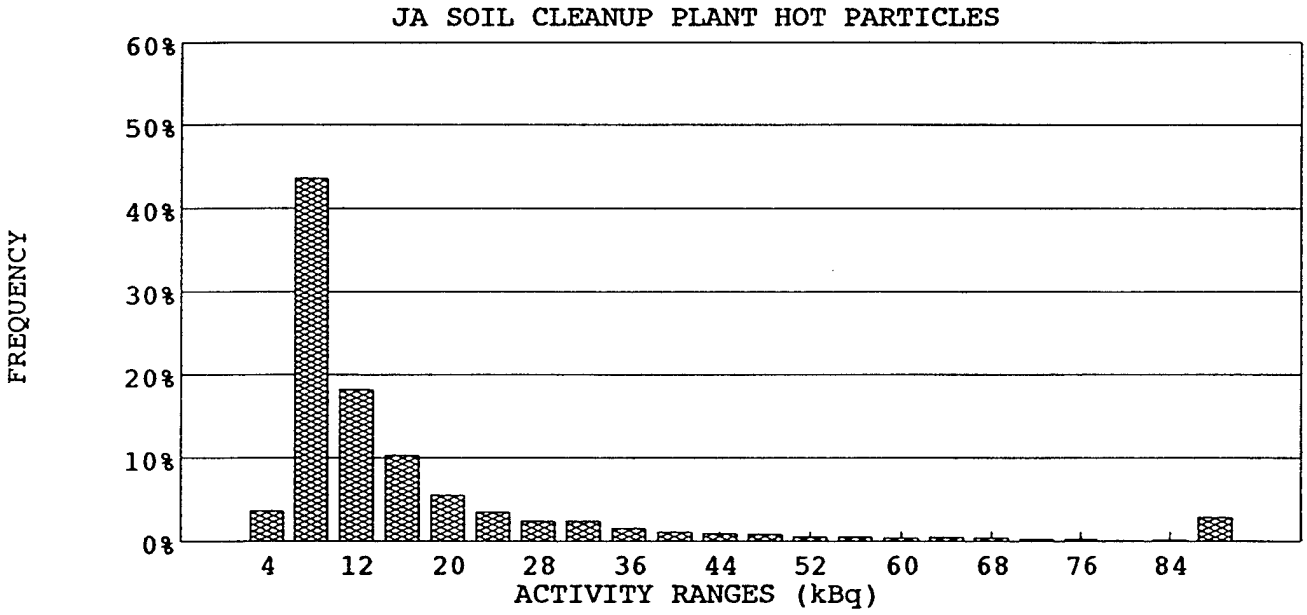
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-215	0.0%	4	316	3.7%
-12000	1	-184	0.1%	8	3,771	43.6%
-10000	1	-153	0.1%	12	1,574	18.2%
-8000	2	-123	0.2%	16	892	10.3%
-6000	2	-92	0.2%	20	475	5.5%
-4000	1	-61	0.1%	24	306	3.5%
-2000	0	-31	0.0%	28	212	2.5%
0	0	0	0.0%	32	206	2.4%
2000	0	31	0.0%	36	133	1.5%
4000	1	61	0.1%	40	94	1.1%
6000	0	92	0.0%	44	81	0.9%
8000	5	123	0.4%	48	73	0.8%
10000	31	153	2.5%	52	48	0.6%
12000	91	184	7.2%	56	48	0.6%
14000	211	215	16.7%	60	33	0.4%
16000	271	245	21.5%	64	42	0.5%
18000	275	276	21.8%	68	34	0.4%
20000	188	307	14.9%	72	23	0.3%
22000	125	337	9.9%	76	20	0.2%
24000	49	368	3.9%	80	9	0.1%
26000	6	399	0.5%	84	14	0.2%
>28000	0	0	0.0%	>84	247	2.9%
TOTAL	1,260			TOTAL	8,651	

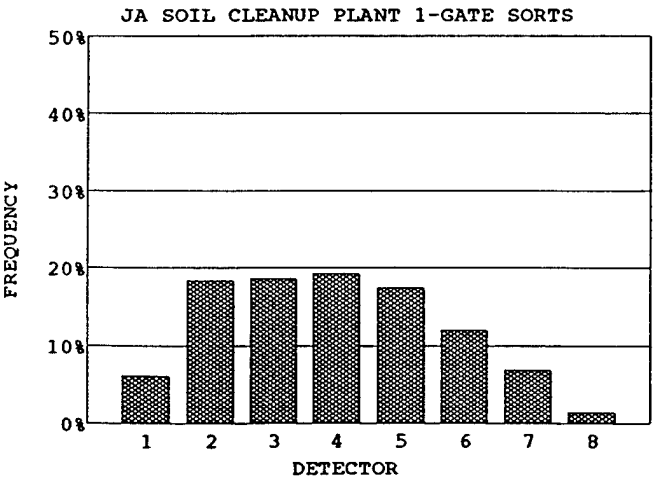
EVENT TYPES	HPE	MPE	DISE
	8,058	948	1,141

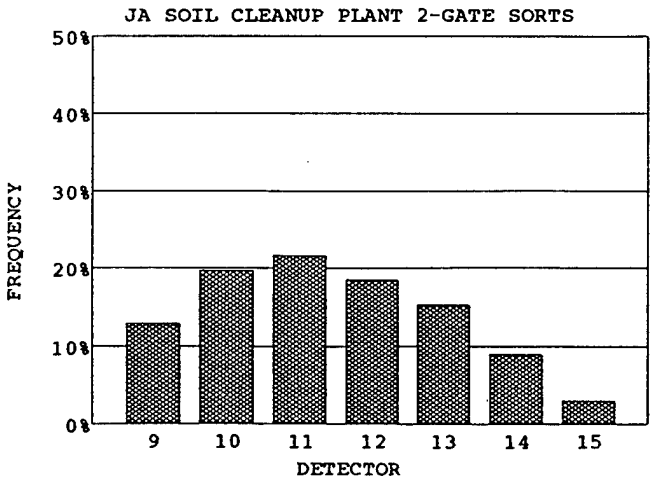
SORTER 2

Wet End Feed
01-Aug-94









WORK HISTORY – JA SOIL CLEANUP PLANT 02–Aug–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	9.1 hr	9.1 hr	0.0 hr	0.0 hr	18.1 hr
SORTER START–UP	06:11	06:11	NA	NA	
START SOIL PROCESSING	06:16	06:15	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	15:45	15:45	NA	NA	
END SOIL PROCESSING	15:23	15:24	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	8.1 hr	8.1 hr	0.0 hr	0.0 hr	16.1 hr
DOWN–TIME	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.0 hr
SYSTEM PAUSE	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.2 hr
SORTER NONAVAILABLE TIME	0.9 hr	0.9 hr	10.0 hr	10.0 hr	21.9 hr
AUTHORIZED DELAY TIME	0.7 hr	0.7 hr	10.0 hr	10.0 hr	21.4 hr
PLANT PERFORMANCE					89.0%
PRODUCTIVTY					40.3%

PRODUCTIVITY

Date	02–Aug–94	Excused Delays for day (sorter–hrs)	21.4 hr
Contract day (from 6 Sep)	272	Excused delays for contract (sorter–hrs)	4,852 hr
Current Contract week	46	Excused delay days (plant–days)	121 days
		Excused delay months (plant–month)	4.67 months
Soil production for Day	165 MT		
Cumlative Soil Production for Week	387 MT	Percent of contract completed	54.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,802 MT
Since 6 Sep 93	53,324 MT	Days ahead or behind schedule	5.7 days
Since 6 Aug 93	54,915 MT		
Total Soil production for project	81,202 MT		

MT = metric tons

File Report1 Printed on 05-Aug-94 at 11:15:09 AM

SORTER 1

02-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	82.4 tons	82.8 tons
MAXIMUM/SORT	55.7 kg	65.2 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
VOLUME IN-GROUND	0.3 yd³	65.3 yd³	65.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	18,420 kBq	3,917 kBq	8,763 kBq
MAXIMUM/SORT	2,469 kBq	998 kBq	22 kBq
MINIMUM/SORT	4 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		10,395 Bq/kg	106 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,453		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1			
NONE (AD=0 & MD=0 & MND>0)	1,236		07:46	08:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	216		08:41	10:53
UNEXPLAINED RECORDS	0		09:24	
0<AD<1kBq & MD>0	4		12:20	
AD=0 & MD>0	1		13:51	
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,530		
2-SEC RECORDS WITH SORTS	382			
2-SEC RECORDS WITHOUT SORTS	14,148			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,835		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

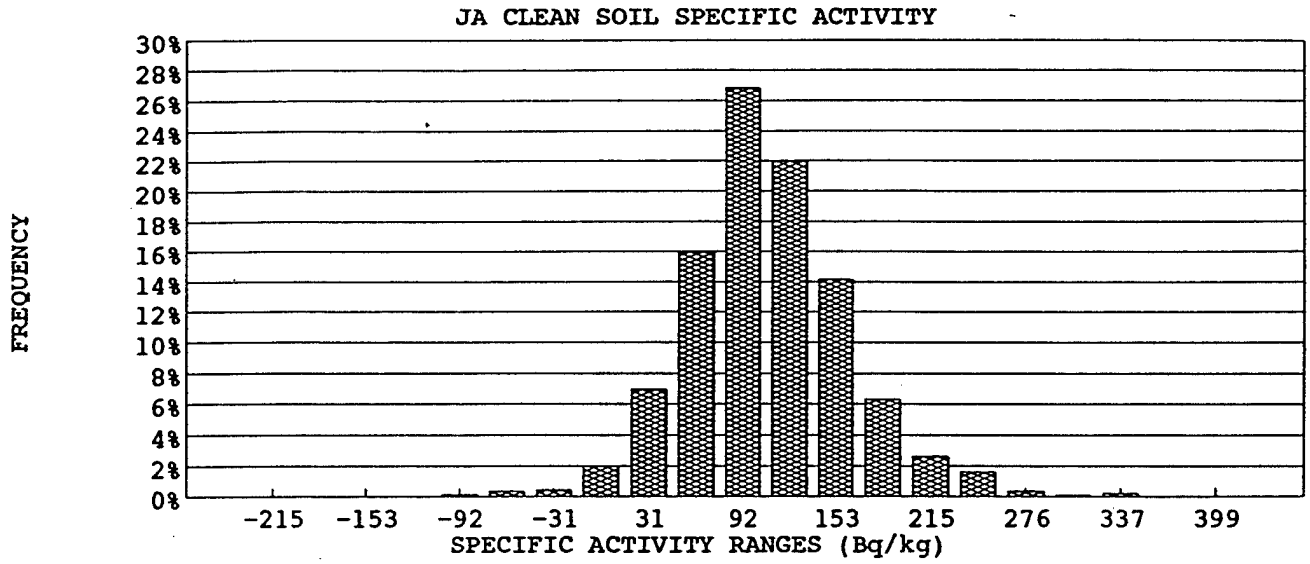
1 DET	264	69.11%	5 DET	0	0.00%
2 DET	88	23.04%	6 DET	0	0.00%
3 DET	25	6.54%	7 DET	0	0.00%
4 DET	5	1.31%	8 DET	0	0.00%

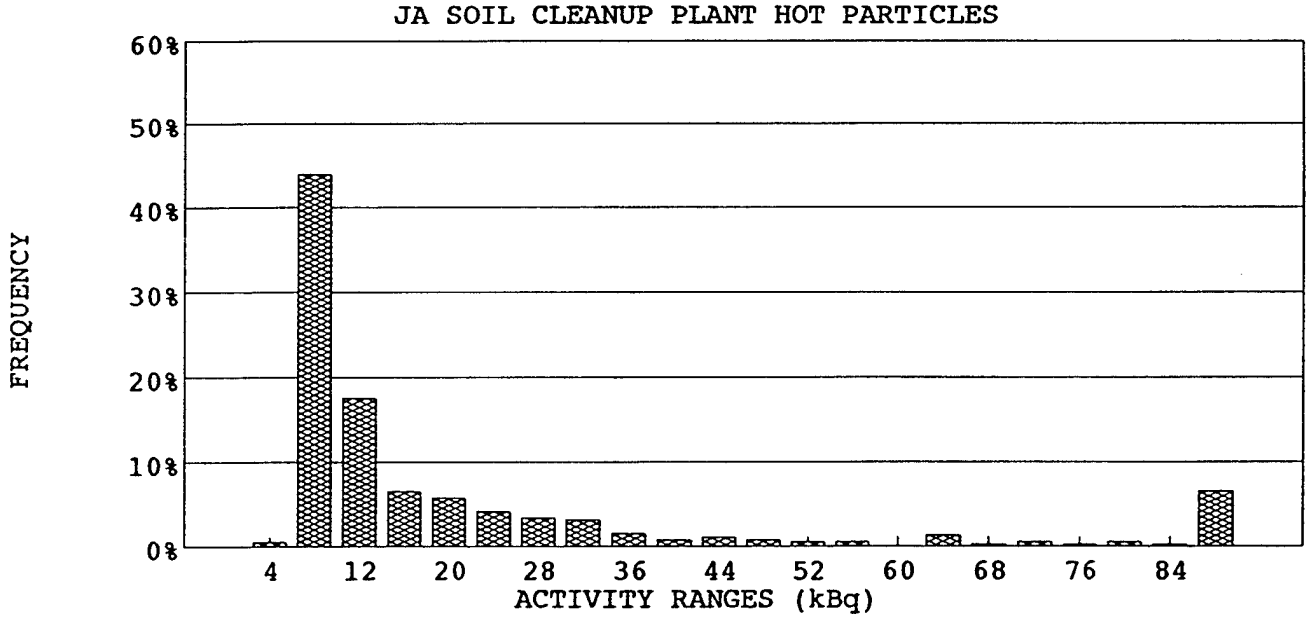
AVERAGE TIME BETWEEN 2-SEC SORTS 110.1 sec

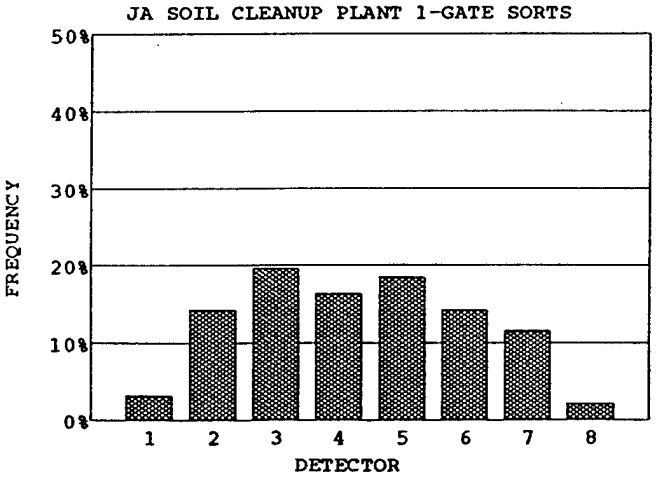
FREQUENCY DISTRIBUTIONS

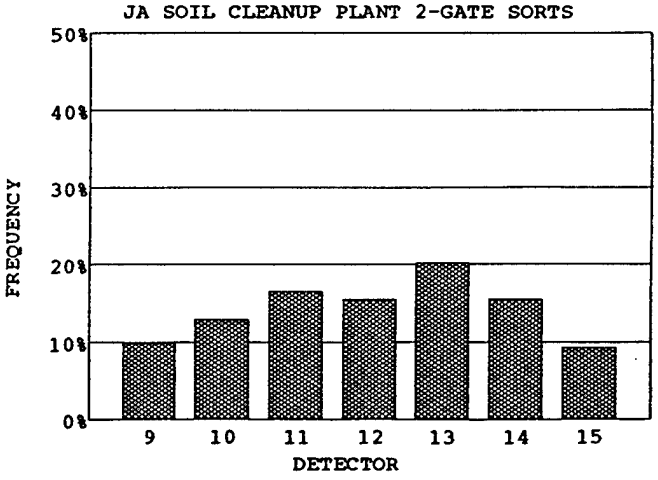
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	6	3.2%	-14000	0	-215	0.0%	4	2	0.5%
2	27	14.3%	-12000	0	-184	0.0%	8	168	44.0%
3	37	19.6%	-10000	0	-153	0.0%	12	67	17.5%
4	31	16.4%	-8000	0	-123	0.0%	16	25	6.5%
5	35	18.5%	-6000	2	-92	0.1%	20	22	5.8%
6	27	14.3%	-4000	5	-61	0.3%	24	16	4.2%
7	22	11.6%	-2000	6	-31	0.4%	28	13	3.4%
8	4	2.1%	0	29	0	2.0%	32	12	3.1%
TOTAL	189		2000	101	31	6.9%	36	6	1.6%
			4000	233	61	16.0%	40	3	0.8%
2-GATE DET	SORTS	FREQ%	6000	391	92	26.9%	44	4	1.0%
			8000	320	123	22.0%	48	3	0.8%
9	19	9.8%	10000	206	153	14.2%	52	2	0.5%
10	25	13.0%	12000	92	184	6.3%	56	2	0.5%
11	32	16.6%	14000	38	215	2.6%	60	0	0.0%
12	30	15.5%	16000	23	245	1.6%	64	5	1.3%
13	39	20.2%	18000	5	276	0.3%	68	1	0.3%
14	30	15.5%	20000	1	307	0.1%	72	2	0.5%
15	18	9.3%	22000	3	337	0.2%	76	1	0.3%
TOTAL	193		24000	0	368	0.0%	80	2	0.5%
			26000	0	399	0.0%	84	1	0.3%
			>28000	0	0	0.0%	>84	25	6.5%
			TOTAL	1,455			TOTAL	382	

EVENT TYPES	HPE	383	MPE	82	DISE	83


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-215 -153 -92 -31 31 92 153 215 276 337 399
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

02-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.72 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	82.3 tons	82.7 tons
MAXIMUM/SORT	55.7 kg	65.2 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.3 yd³	65.3 yd³	65.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	6,443 kBq	1,410 kBq	7,455 kBq
MAXIMUM/SORT	267 kBq	105 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		3,863 Bq/kg	91 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,452		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		1			
NONE (AD=0 & MD=0 & MND>0)		1,238		08:25	08:35
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		214		09:36	10:51
UNEXPLAINED RECORDS	(1)			15:02	
0<AD<1kBq & MD>0	5			15:14	
AD=0 & MD>0	0			15:16	
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			14,520		
2-SEC RECORDS WITH SORTS		357			
2-SEC RECORDS WITHOUT SORTS		14,163			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,809		
NONPROCESSING RECORDS (Test, calibration, etc)			1		

2-SEC SORT DETECTORS

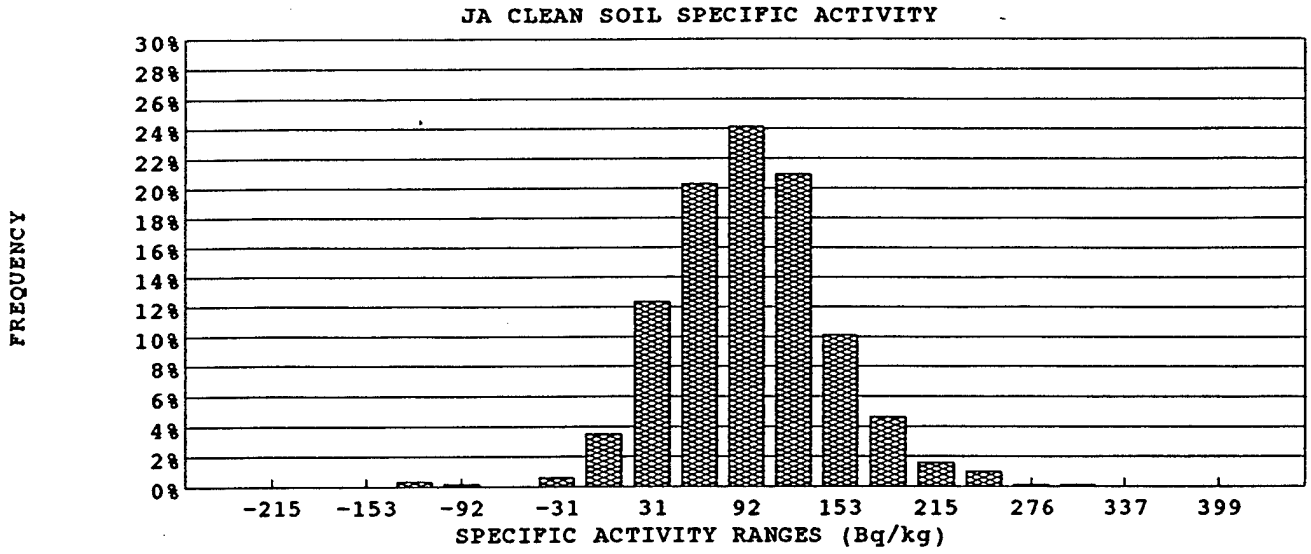
1 DET	258	72.27%	5 DET	0	0.00%
2 DET	80	22.41%	6 DET	0	0.00%
3 DET	17	4.76%	7 DET	0	0.00%
4 DET	2	0.56%	8 DET	0	0.00%

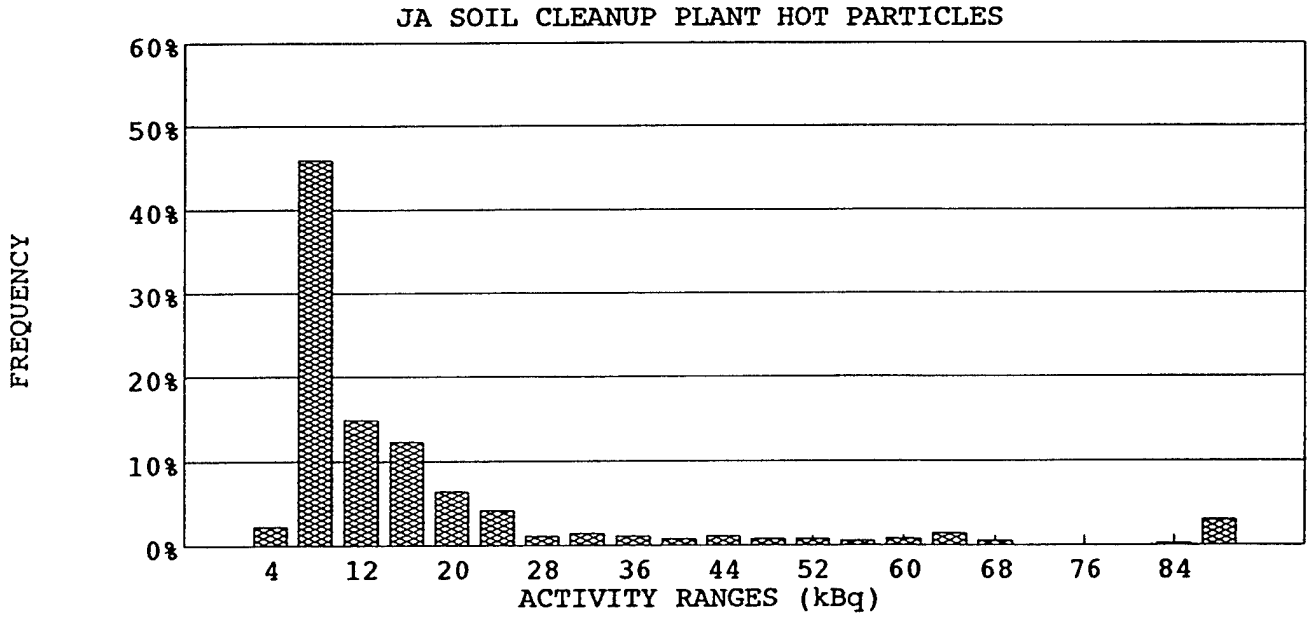
AVERAGE TIME BETWEEN 2-SEC SORTS 112.6 sec

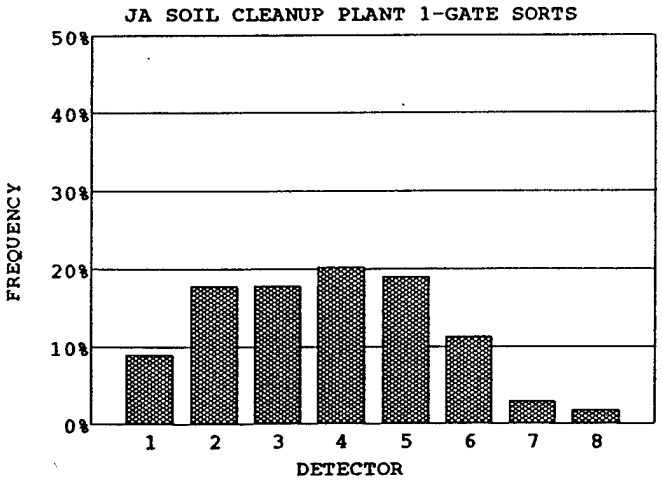
FREQUENCY DISTRIBUTIONS

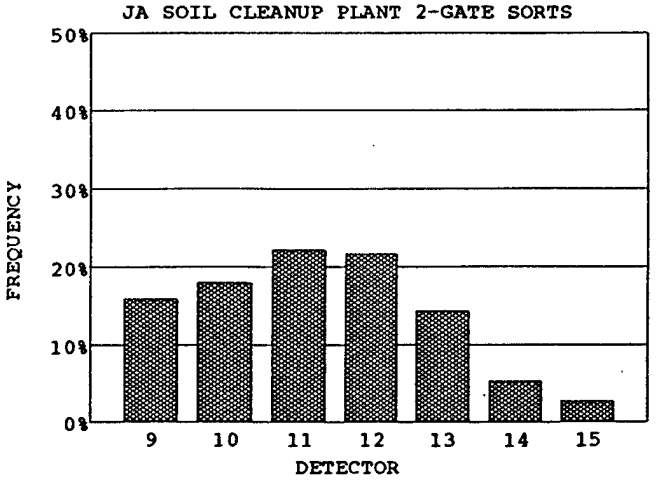
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	15	8.9%	-14000	0	-215	0.0%	4	8	2.2%
2	30	17.9%	-12000	0	-184	0.0%	8	164	45.9%
3	30	17.9%	-10000	0	-153	0.0%	12	53	14.8%
4	34	20.2%	-8000	5	-123	0.3%	16	44	12.3%
5	32	19.0%	-6000	3	-92	0.2%	20	23	6.4%
6	19	11.3%	-4000	0	-61	0.0%	24	15	4.2%
7	5	3.0%	-2000	9	-31	0.6%	28	4	1.1%
8	3	1.8%	0	51	0	3.5%	32	5	1.4%
TOTAL	168		2000	179	31	12.3%	36	4	1.1%
			4000	295	61	20.3%	40	3	0.8%
2-GATE DET	SORTS	FREQ%	6000	350	92	24.1%	44	4	1.1%
			8000	304	123	20.9%	48	3	0.8%
9	30	15.9%	10000	147	153	10.1%	52	3	0.8%
10	34	18.0%	12000	67	184	4.6%	56	2	0.6%
11	42	22.2%	14000	23	215	1.6%	60	3	0.8%
12	41	21.7%	16000	15	245	1.0%	64	5	1.4%
13	27	14.3%	18000	2	276	0.1%	68	2	0.6%
14	10	5.3%	20000	2	307	0.1%	72	0	0.0%
15	5	2.6%	22000	0	337	0.0%	76	0	0.0%
TOTAL	189		24000	0	368	0.0%	80	0	0.0%
			26000	0	399	0.0%	84	1	0.3%
			>28000	0	0	0.0%	>84	11	3.1%
			TOTAL	1,452			TOTAL	357	

EVENT TYPES	HPE	376	MPE	68	DISE	83


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-215 -153 -92 -31 31 92 153 215 276 337 399
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–Aug–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	9.4 hr	9.4 hr	0.0 hr	0.0 hr	18.7 hr
SORTER START–UP	06:33	06:33	NA	NA	
START SOIL PROCESSING	06:37	06:37	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	16:24	16:24	NA	NA	
END SOIL PROCESSING	16:08	16:09	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	8.5 hr	8.6 hr	0.0 hr	0.0 hr	17.1 hr
DOWN–TIME	0.8 hr	0.8 hr	0.0 hr	0.0 hr	1.6 hr
SYSTEM PAUSE	1.0 hr	1.0 hr	0.0 hr	0.0 hr	1.9 hr
SORTER NONAVAILABLE TIME	0.6 hr	0.6 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					91.4%
PRODUCTIVTY					42.8%

PRODUCTIVITY

Date	03–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	273	Excused delays for contract (sorter–hrs)	4,872 hr
Current Contract week	46	Excused delay days (plant–days)	122 days
		Excused delay months (plant–month)	4.68 months
Soil production for Day	165 MT		
Cumlative Soil Production for Week	552 MT	Percent of contract completed	55.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,808 MT
Since 6 Sep 93	53,489 MT	Days ahead or behind schedule	5.7 days
Since 6 Aug 93	55,080 MT		
Total Soil production for project	81,367 MT		

MT = metric tons

File Report1 Printed on 05-Aug-94 at 12:42:10 PM

SORTER 1

03-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.69 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.9 tons	81.5 tons	82.4 tons
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.7 yd³	64.6 yd³	65.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	16,840 kBq	3,787 kBq	7,995 kBq
MAXIMUM/SORT	972 kBq	394 kBq	20 kBq
MINIMUM/SORT	4 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		4,311 Bq/kg	98 Bq/kg

SORTS

20-SEC PROCESS PERIODS		1,538	UNEXP TIME	PAUSE TIME
ALL 80 ELEMENTS SORT (MD>0&MND=0)	6			
NONE (AD=0 & MD=0 & MND>0)	1,178		07:15	10:54
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	354		08:32	
UNEXPLAINED RECORDS	0		09:09	
0<AD<1kBq & MD>0	5		10:44	
AD=0 & MD>0	0		13:38	
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		15,380		
2-SEC RECORDS WITH SORTS	678			
2-SEC RECORDS WITHOUT SORTS	14,702			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,216		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

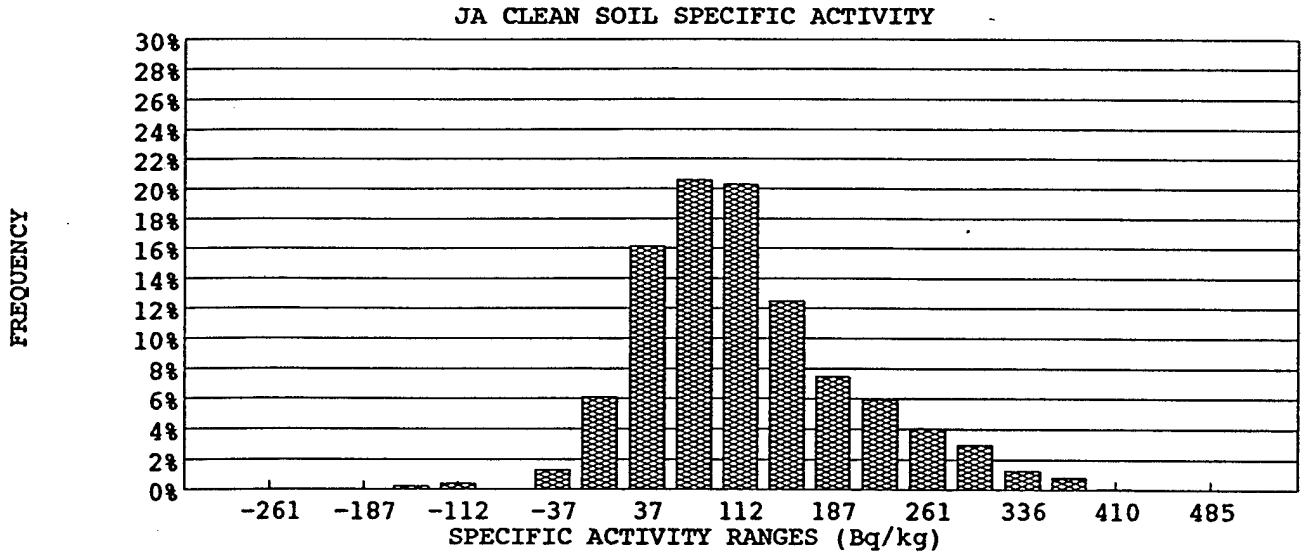
1 DET	491	72.42%	5 DET	1	0.15%
2 DET	148	21.83%	6 DET	0	0.00%
3 DET	30	4.42%	7 DET	0	0.00%
4 DET	8	1.18%	8 DET	0	0.00%

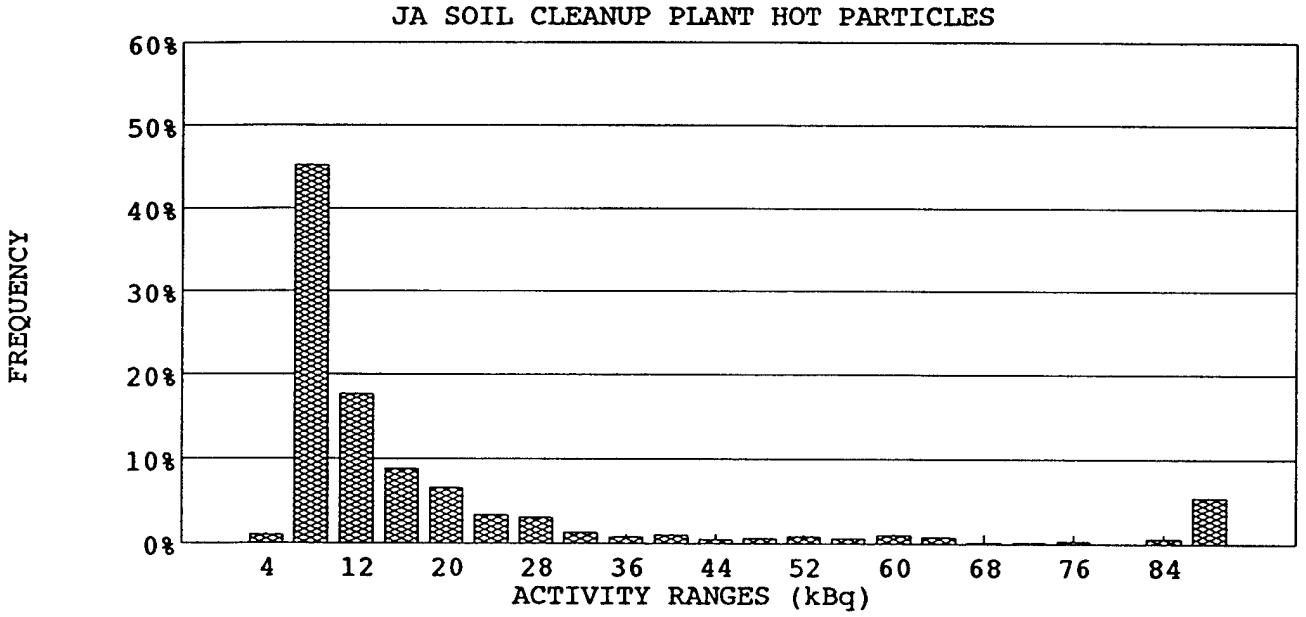
AVERAGE TIME BETWEEN 2-SEC SORTS 62.6 sec

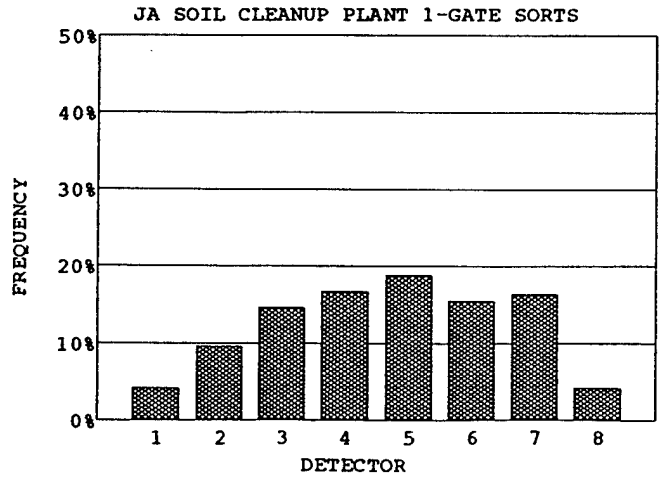
FREQUENCY DISTRIBUTIONS

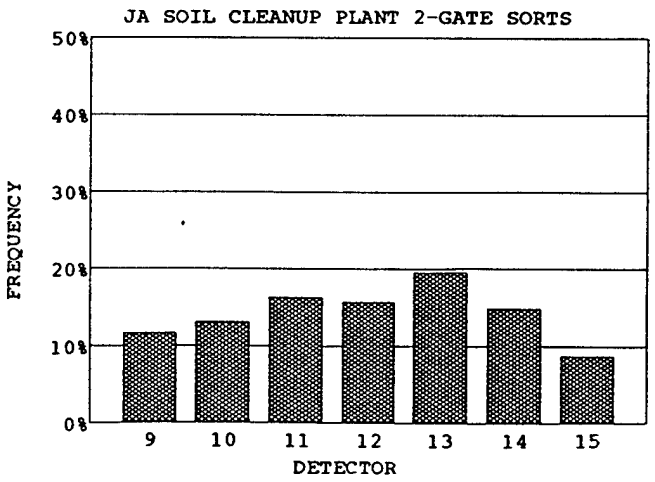
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	14	4.2%	-14000	0	-261	0.0%	4	7	1.0%
2	32	9.6%	-12000	0	-224	0.0%	8	307	45.3%
3	49	14.6%	-10000	0	-187	0.0%	12	120	17.7%
4	56	16.7%	-8000	3	-149	0.2%	16	60	8.8%
5	63	18.8%	-6000	6	-112	0.4%	20	45	6.6%
6	52	15.5%	-4000	0	-75	0.0%	24	23	3.4%
7	55	16.4%	-2000	20	-37	1.3%	28	21	3.1%
8	14	4.2%	0	94	0	6.1%	32	9	1.3%
TOTAL	335		2000	248	37	16.1%	36	5	0.7%
			4000	317	75	20.6%	40	7	1.0%
2-GATE DET	SORTS	FREQ%	6000	312	112	20.3%	44	3	0.4%
9	40	11.7%	8000	192	149	12.5%	48	4	0.6%
10	45	13.1%	10000	115	187	7.5%	52	6	0.9%
11	56	16.3%	12000	91	224	5.9%	56	4	0.6%
12	54	15.7%	14000	62	261	4.0%	60	7	1.0%
13	67	19.5%	16000	46	299	3.0%	64	5	0.7%
14	51	14.9%	18000	19	336	1.2%	68	1	0.1%
15	30	8.7%	20000	13	373	0.8%	72	1	0.1%
TOTAL	343		22000	1	410	0.1%	76	2	0.3%
			24000	0	448	0.0%	80	0	0.0%
			26000	0	485	0.0%	84	4	0.6%
			>28000	0	0	0.0%	>84	37	5.5%
			TOTAL	1,539			TOTAL	678	

EVENT TYPES	HPE	692	MPE	153	DISE	472


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-261 -187 -112 -37 37 112 187 261 336 410 485
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–Aug–94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.74 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.8 tons	80.8 tons	82.5 tons
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
VOLUME IN–GROUND	1.4 yd³	64.0 yd³	65.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	43,969 kBq	9,236 kBq	8,152 kBq
MAXIMUM/SORT	4,220 kBq	1,689 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	−6 kBq
SPECIFIC ACTIVITY		5,256 Bq/kg	101 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS				1,540		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			20			
NONE (AD=0 & MD=0 & MND>0)			1,134		08:00	10:54
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			386		08:48	
UNEXPLAINED RECORDS		0			10:25	
0<AD<1kBq & MD>0		3				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2–SEC COUNT PERIODS				15,400		
2–SEC RECORDS WITH SORTS			857			
2–SEC RECORDS WITHOUT SORTS			14,543			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)				2,397		
NONPROCESSING RECORDS (Test, calibration, etc)				5		

2–SEC SORT DETECTORS

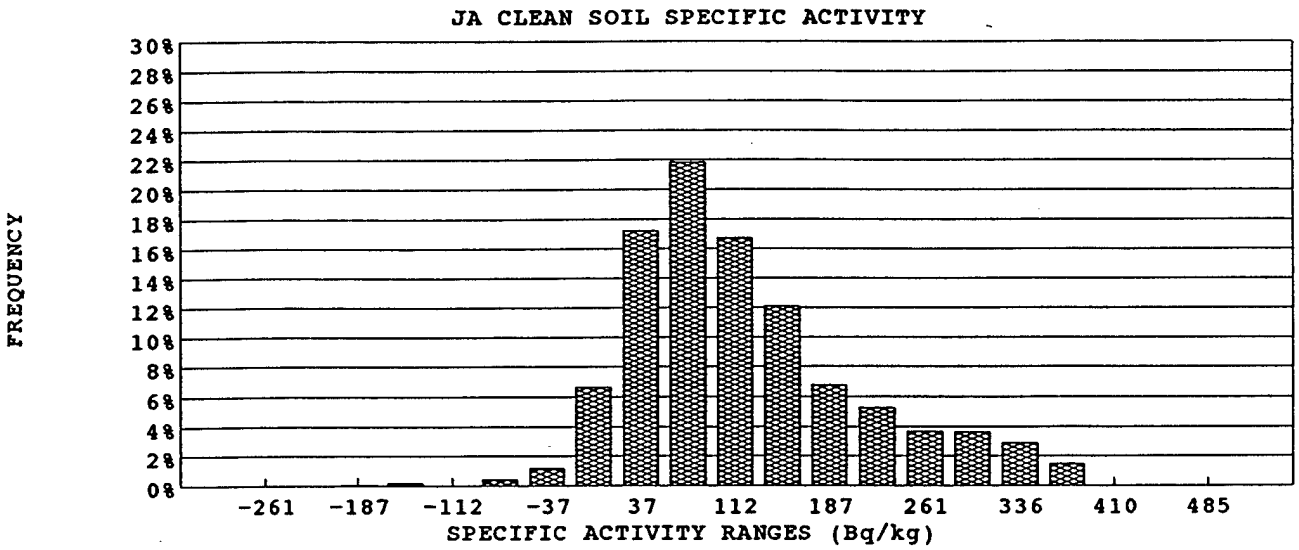
1 DET	624	72.81%	5 DET	3	0.35%
2 DET	182	21.24%	6 DET	0	0.00%
3 DET	38	4.43%	7 DET	0	0.00%
4 DET	10	1.17%	8 DET	0	0.00%

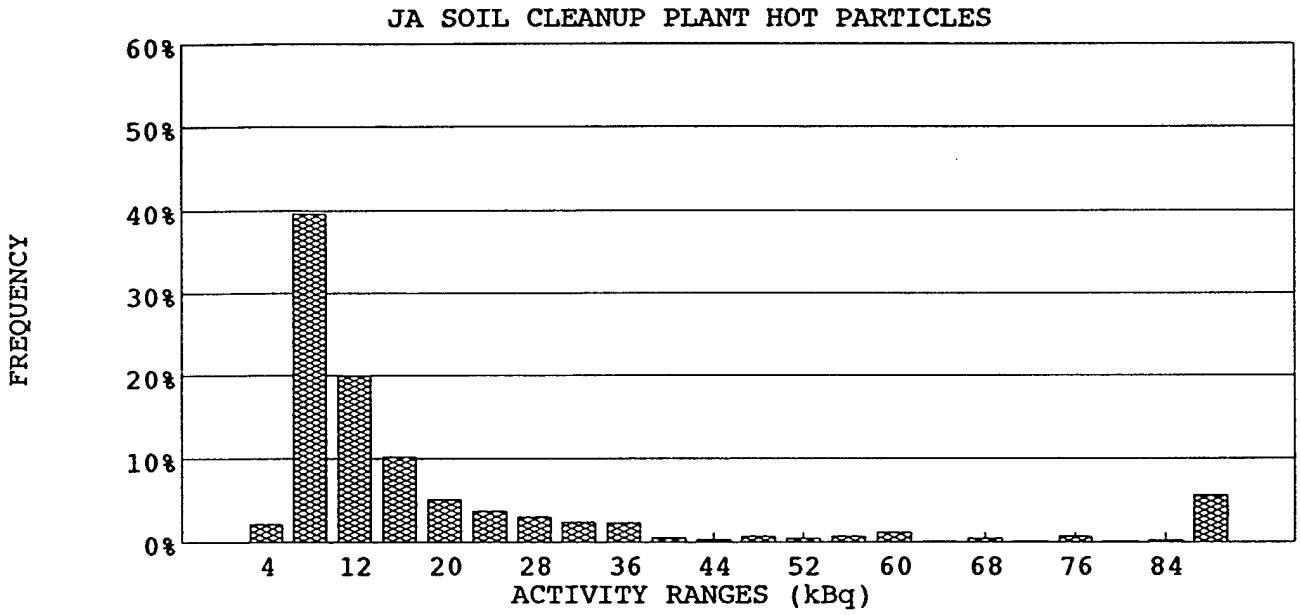
AVERAGE TIME BETWEEN 2–SEC SORTS 49.4 sec

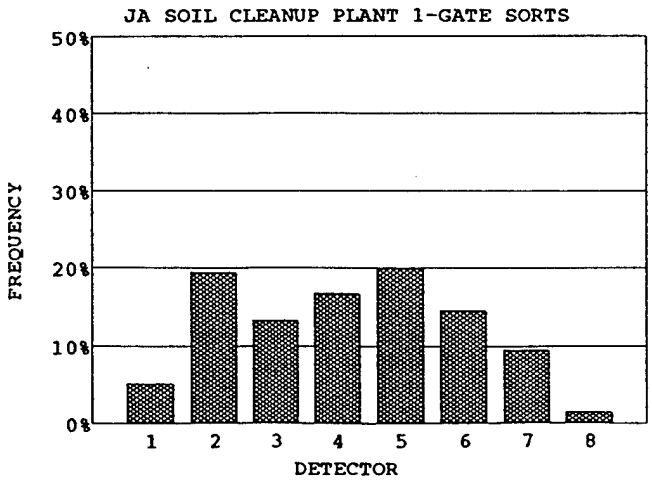
FREQUENCY DISTRIBUTIONS

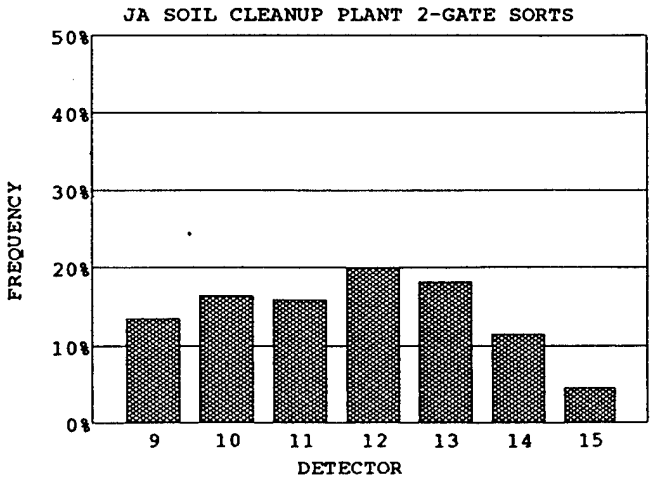
1–GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	21	5.1%	−14000	0	−261	0.0%	4	19	2.2%
2	80	19.4%	−12000	0	−224	0.0%	8	339	39.6%
3	55	13.3%	−10000	1	−187	0.1%	12	171	20.0%
4	69	16.7%	−8000	3	−149	0.2%	16	88	10.3%
5	82	19.9%	−6000	0	−112	0.0%	20	44	5.1%
6	60	14.6%	−4000	7	−75	0.5%	24	32	3.7%
7	39	9.5%	−2000	18	−37	1.2%	28	26	3.0%
8	6	1.5%	0	101	0	6.6%	32	21	2.5%
TOTAL	412		2000	262	37	17.2%	36	20	2.3%
			4000	333	75	21.8%	40	5	0.6%
2–GATE SORTS			6000	255	112	16.7%	44	3	0.4%
DET	SORTS	FREQ%	8000	184	149	12.1%	48	6	0.7%
9	60	13.5%	10000	103	187	6.8%	52	4	0.5%
10	73	16.4%	12000	80	224	5.2%	56	6	0.7%
11	71	16.0%	14000	56	261	3.7%	60	10	1.2%
12	89	20.0%	16000	55	299	3.6%	64	1	0.1%
13	81	18.2%	18000	44	336	2.9%	68	4	0.5%
14	51	11.5%	20000	23	373	1.5%	72	1	0.1%
15	20	4.5%	22000	0	410	0.0%	76	6	0.7%
TOTAL	445		24000	0	448	0.0%	80	1	0.1%
			26000	0	485	0.0%	84	2	0.2%
			>28000	0	0	0.0%	>84	48	5.6%
			TOTAL	1,525			TOTAL	857	

EVENT TYPES HPE 889 MPE 197 DISE 1,544


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-261 -187 -112 -37 37 112 187 261 336 410 485
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–Aug–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	9.4 hr	9.4 hr	0.0 hr	0.0 hr	18.8 hr
SORTER START–UP	06:32	06:32	NA	NA	
START SOIL PROCESSING	06:39	06:39	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	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:14	16:11	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	7.1 hr	7.0 hr	0.0 hr	0.0 hr	14.1 hr
DOWN–TIME	2.3 hr	2.4 hr	0.0 hr	0.0 hr	4.7 hr
SYSTEM PAUSE	2.5 hr	2.5 hr	0.0 hr	0.0 hr	5.0 hr
SORTER NONAVAILABLE TIME	0.6 hr	0.6 hr	10.0 hr	10.0 hr	21.2 hr
AUTHORIZED DELAY TIME	2.0 hr	2.0 hr	10.0 hr	10.0 hr	24.0 hr
PLANT PERFORMANCE					75.1%
PRODUCTIVTY					35.3%

PRODUCTIVITY

Date	04–Aug–94
Contract day (from 6 Sep)	274
Current Contract week	46
Soil production for Day	141 MT
Cumlative Soil Production for Week	693 MT
Total Soil production for contract	
Since 6 Sep 93	53,630 MT
Since 6 Aug 93	55,221 MT
Total Soil production for project	81,508 MT

Excused Delays for day (sorter–hrs)	24 hr
Excused delays for contract (sorter–hrs)	4,896 hr
Excused delay days (plant–days)	122 days
Excused delay months (plant–month)	4.71 months
Percent of contract completed	55.2%
Tons Ahead or Behind Schedule	1,823 MT
Days ahead or behind schedule	5.8 days

MT = metric tons

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SORTER 1

04-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.70 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	2.7 tons	68.2 tons	70.9 tons
MAXIMUM/SORT	61.0 kg	61.0 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
VOLUME IN-GROUND	2.1 yd³	54.1 yd³	56.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	34,305 kBq	7,918 kBq	9,945 kBq
MAXIMUM/SORT	3,377 kBq	1,271 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	-15 kBq
SPECIFIC ACTIVITY		2,953 Bq/kg	146 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,278		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	29			
NONE (AD=0 & MD=0 & MND>0)	818		07:19	11:25
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	451		09:35	13:56
UNEXPLAINED RECORDS	(20)		10:44	
0<AD<1kBq & MD>0	4		13:26	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,780		
2-SEC RECORDS WITH SORTS	1,285			
2-SEC RECORDS WITHOUT SORTS	11,495			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,563		
NONPROCESSING RECORDS (Test, calibration, etc)		9		

2-SEC SORT DETECTORS

1 DET	913	71.05%	5 DET	4	0.31%
2 DET	294	22.88%	6 DET	0	0.00%
3 DET	61	4.75%	7 DET	0	0.00%
4 DET	13	1.01%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 28.0 sec

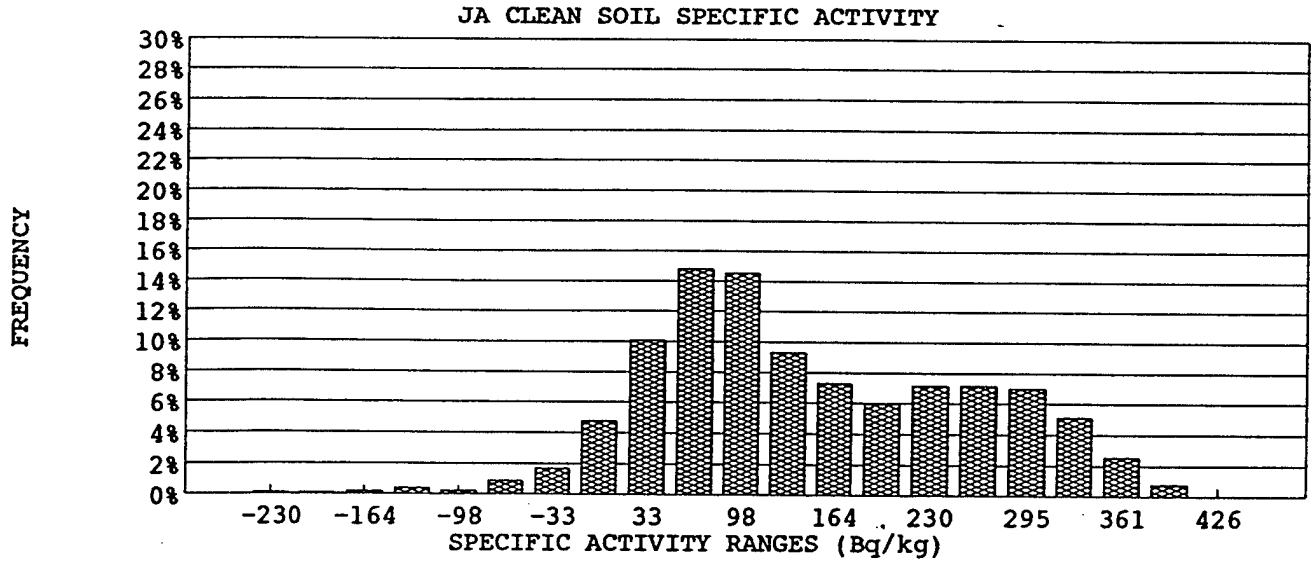
FREQUENCY DISTRIBUTIONS

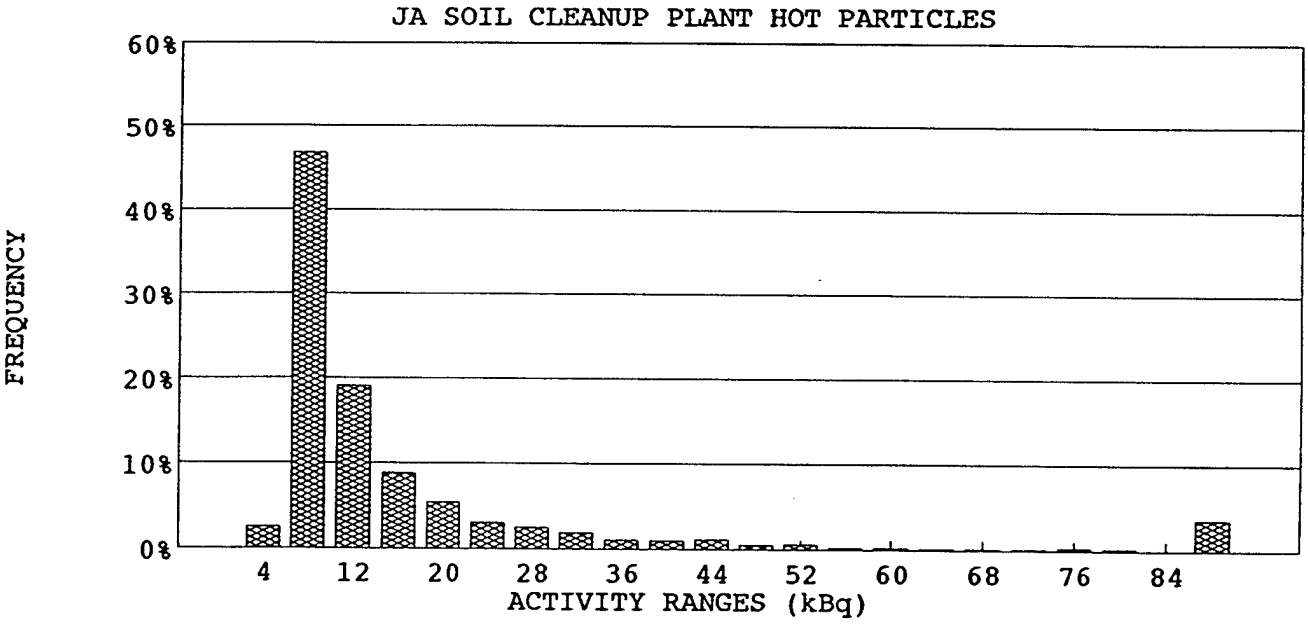
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	33	5.1%	-14000	1	-230	0.1%	4	33	2.6%
2	106	16.5%	-12000	1	-197	0.1%	8	601	46.8%
3	88	13.7%	-10000	2	-164	0.2%	12	245	19.1%
4	95	14.8%	-8000	5	-131	0.4%	16	114	8.9%
5	112	17.4%	-6000	3	-98	0.2%	20	71	5.5%
6	74	11.5%	-4000	11	-66	0.9%	24	40	3.1%
7	103	16.0%	-2000	21	-33	1.7%	28	33	2.6%
8	33	5.1%	0	60	0	4.8%	32	25	1.9%
TOTAL	644		2000	127	33	10.1%	36	14	1.1%
			4000	186	66	14.8%	40	13	1.0%
2-GATE DET	SORTS	FREQ%	6000	183	98	14.5%	44	15	1.2%
			8000	117	131	9.3%	48	7	0.5%
9	81	12.6%	10000	92	164	7.3%	52	8	0.6%
10	85	13.3%	12000	75	197	6.0%	56	3	0.2%
11	94	14.7%	14000	90	230	7.2%	60	3	0.2%
12	114	17.8%	16000	90	262	7.2%	64	2	0.2%
13	105	16.4%	18000	88	295	7.0%	68	2	0.2%
14	86	13.4%	20000	64	328	5.1%	72	2	0.2%
15	76	11.9%	22000	32	361	2.5%	76	4	0.3%
TOTAL	641		24000	10	393	0.8%	80	3	0.2%
			26000	0	426	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	47	3.7%
			TOTAL	1,258			TOTAL	1,285	

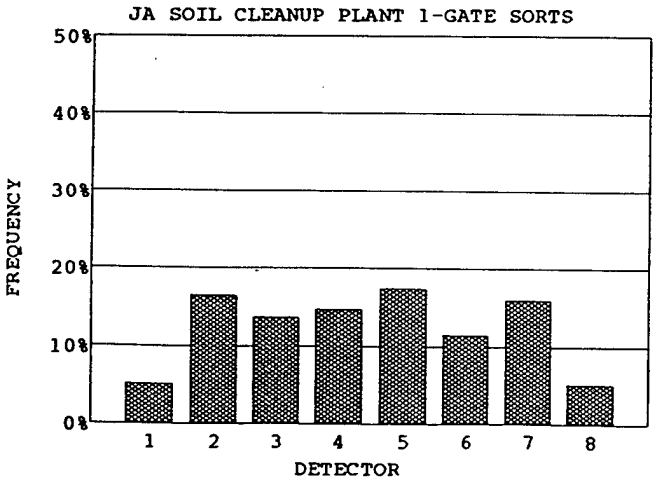
EVENT TYPES	HPE	MPE	DISE
	1,298	223	2,237

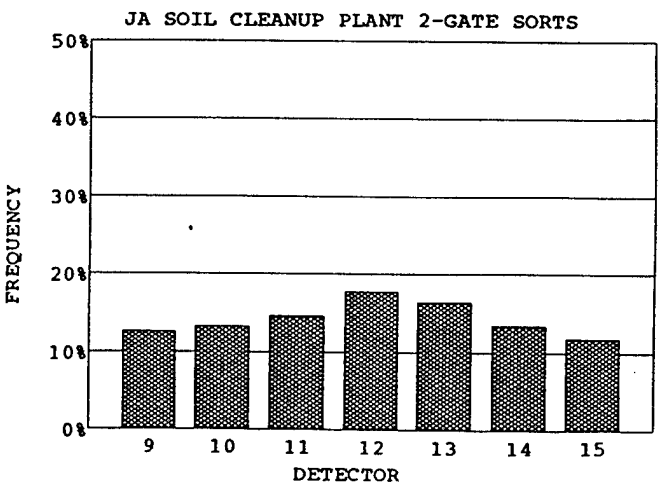
SORTER 1

04-Aug-94









SORTER 2

04-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.77 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.3 tons	65.6 tons	69.8 tons
MAXIMUM/SORT	61.0 kg	61.0 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
VOLUME IN-GROUND	3.4 yd³	52.0 yd³	55.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	62,842 kBq	14,195 kBq	10,479 kBq
MAXIMUM/SORT	6,774 kBq	3,306 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		3,311 Bq/kg	160 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,260		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	57			
NONE (AD=0 & MD=0 & MND>0)	736		10:21	11:25
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	518			13:54
UNEXPLAINED RECORDS	(51)			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,600		
2-SEC RECORDS WITH SORTS	1,459			
2-SEC RECORDS WITHOUT SORTS	11,141			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,719		
NONPROCESSING RECORDS (Test, calibration, etc)		11		

2-SEC SORT DETECTORS

1 DET	1,030	70.60%	5 DET	4	0.27%
2 DET	329	22.55%	6 DET	0	0.00%
3 DET	77	5.28%	7 DET	0	0.00%
4 DET	19	1.30%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 24.5 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

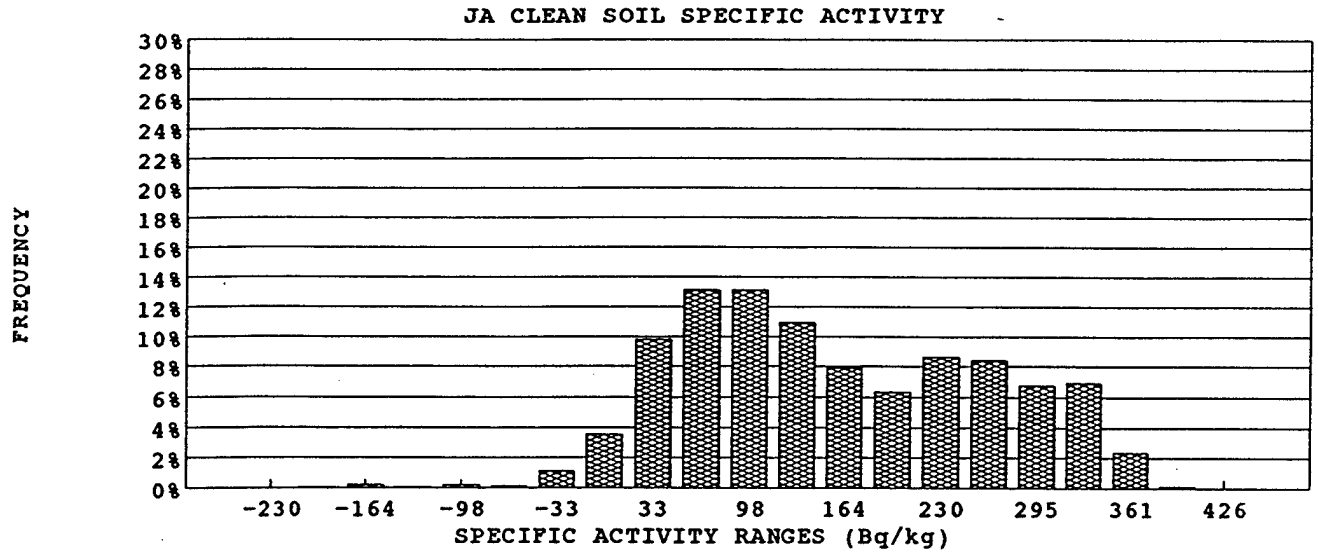
DET	SORTS	FREQ%
1	34	4.6%
2	139	18.9%
3	124	16.9%
4	131	17.8%
5	130	17.7%
6	100	13.6%
7	63	8.6%
8	13	1.8%
TOTAL	734	

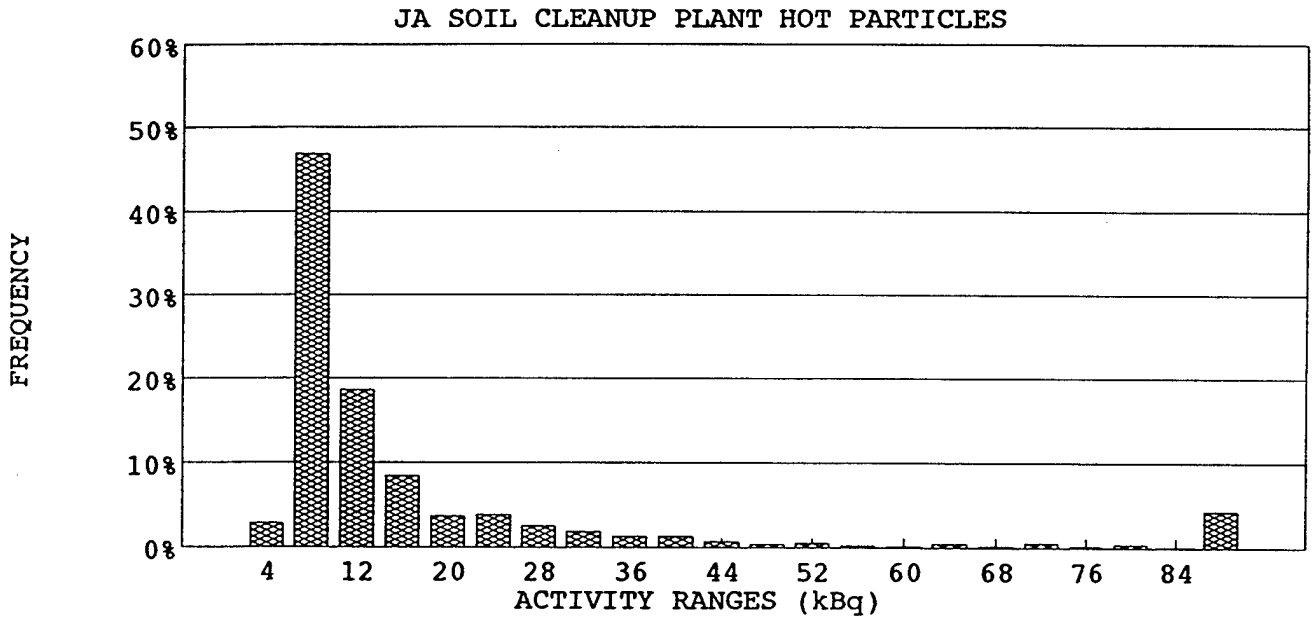
2-GATE SORTS

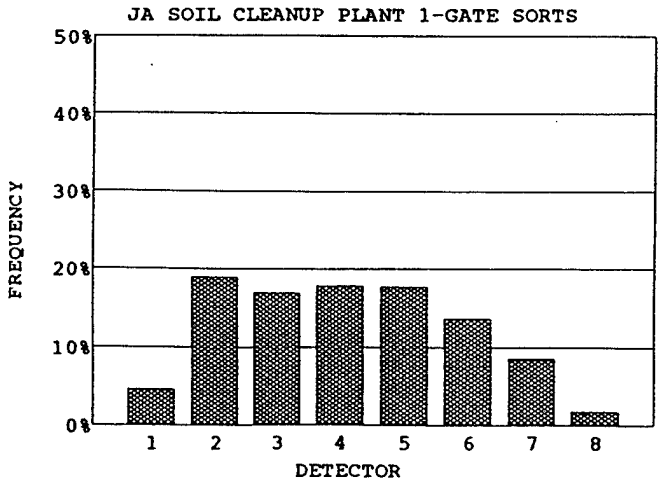
DET	SORTS	FREQ%
9	95	13.1%
10	144	19.9%
11	125	17.2%
12	141	19.4%
13	110	15.2%
14	78	10.8%
15	32	4.4%
TOTAL	725	

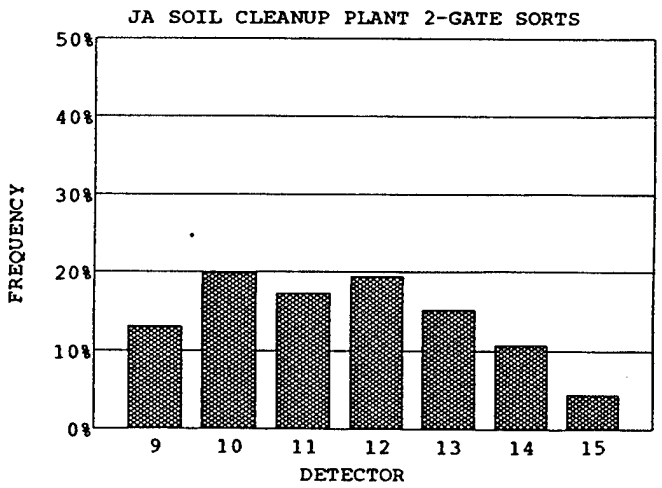
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-230	0.0%	4	42	2.9%
-12000	1	-197	0.1%	8	683	46.8%
-10000	3	-164	0.2%	12	271	18.6%
-8000	1	-131	0.1%	16	123	8.4%
-6000	3	-98	0.2%	20	55	3.8%
-4000	2	-66	0.2%	24	57	3.9%
-2000	14	-33	1.2%	28	38	2.6%
0	43	0	3.5%	32	28	1.9%
2000	119	33	9.8%	36	20	1.4%
4000	159	66	13.1%	40	19	1.3%
6000	159	98	13.1%	44	11	0.8%
8000	133	131	11.0%	48	6	0.4%
10000	96	164	7.9%	52	8	0.5%
12000	77	197	6.3%	56	4	0.3%
14000	105	230	8.6%	60	3	0.2%
16000	102	262	8.4%	64	7	0.5%
18000	82	295	6.8%	68	3	0.2%
20000	84	328	6.9%	72	8	0.5%
22000	29	361	2.4%	76	2	0.1%
24000	2	393	0.2%	80	6	0.4%
26000	0	426	0.0%	84	1	0.1%
>28000	0	0	0.0%	>84	64	4.4%
TOTAL	1,214			TOTAL	1,459	

EVENT TYPES HPE 1,458 MPE 243 DISE 4,470


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-230 -164 -98 -33 33 98 164 230 295 361 426
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–Aug–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	9.4 hr	9.4 hr	0.0 hr	0.0 hr	18.8 hr
SORTER START–UP	06:26	06:26	NA	NA	
START SOIL PROCESSING	06:31	06:31	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	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:12	16:12	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	8.3 hr	8.3 hr	0.0 hr	0.0 hr	16.6 hr
DOWN–TIME	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.2 hr
SYSTEM PAUSE	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.7 hr
SORTER NONAVAILABLE TIME	0.6 hr	0.6 hr	10.0 hr	10.0 hr	21.2 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.4%
PRODUCTIVTY					41.6%

PRODUCTIVITY

Date	05–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	275	Excused delays for contract (sorter–hrs)	4,916 hr
Current Contract week	46	Excused delay days (plant–days)	123 days
		Excused delay months (plant–month)	4.73 months
Soil production for Day	183 MT		
Cumlative Soil Production for Week	876 MT	Percent of contract completed	55.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,847 MT
Since 6 Sep 93	53,813 MT	Days ahead or behind schedule	5.8 days
Since 6 Aug 93	55,404 MT		
Total Soil production for project	81,690 MT		

MT = metric tons

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SORTER 1

05-Aug-94

SORTER SOIL DENSITY 1.31 tons/m³ BACKGROUND 0.82 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.1 tons	87.1 tons	91.2 tons
MAXIMUM/SORT	61.0 kg	61.0 kg	
MINIMUM/SORT	0.8 kg	50.3 kg	
VOLUME IN-GROUND	3.3 yd³	69.0 yd³	72.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	85,907 kBq	18,420 kBq	17,504 kBq
MAXIMUM/SORT	9,222 kBq	3,214 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-18 kBq
SPECIFIC ACTIVITY		4,446 Bq/kg	201 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,495			
ALL 80 ELEMENTS SORT (MD>0&MND=0)		13				
NONE (AD=0 & MD=0 & MND>0)		303			10:49	11:22
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		1,179			11:09	
UNEXPLAINED RECORDS	0				11:11	
0<AD<1kBq & MD>0	4				15:48	
AD=0 & MD>0	0					
AD<0 & MD >0	0					
2-SEC COUNT PERIODS			14,950			
2-SEC RECORDS WITH SORTS		3,902				
2-SEC RECORDS WITHOUT SORTS		11,048				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			5,397			
NONPROCESSING RECORDS (Test, calibration, etc)			8			

2-SEC SORT DETECTORS

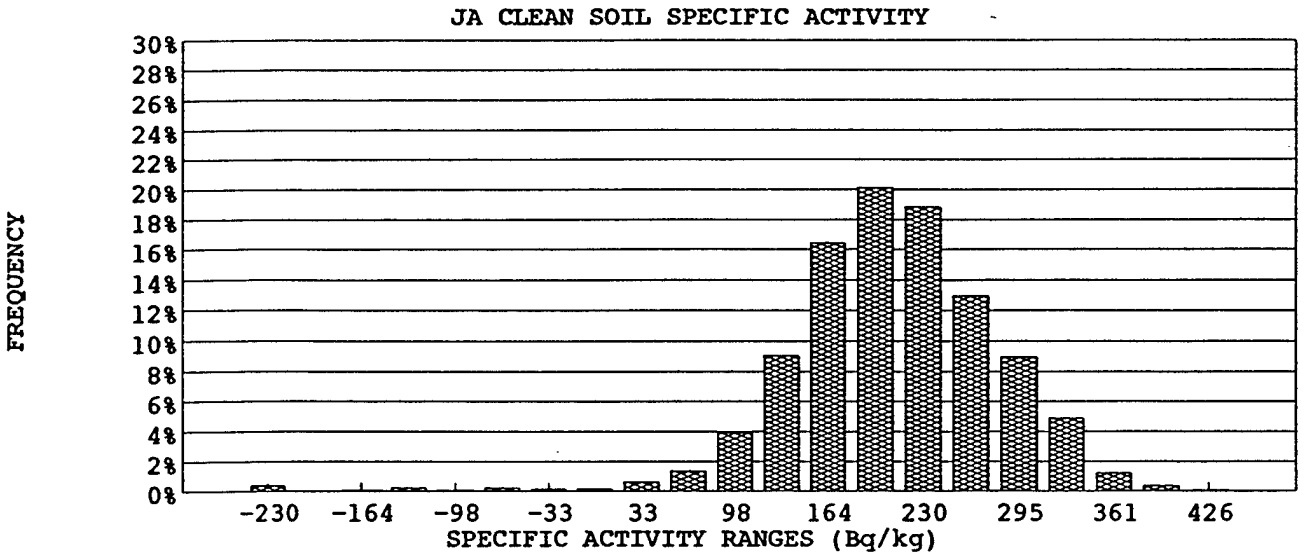
1 DET	2,880	73.81%	5 DET	11	0.28%
2 DET	829	21.25%	6 DET	0	0.00%
3 DET	159	4.07%	7 DET	0	0.00%
4 DET	23	0.59%	8 DET	0	0.00%

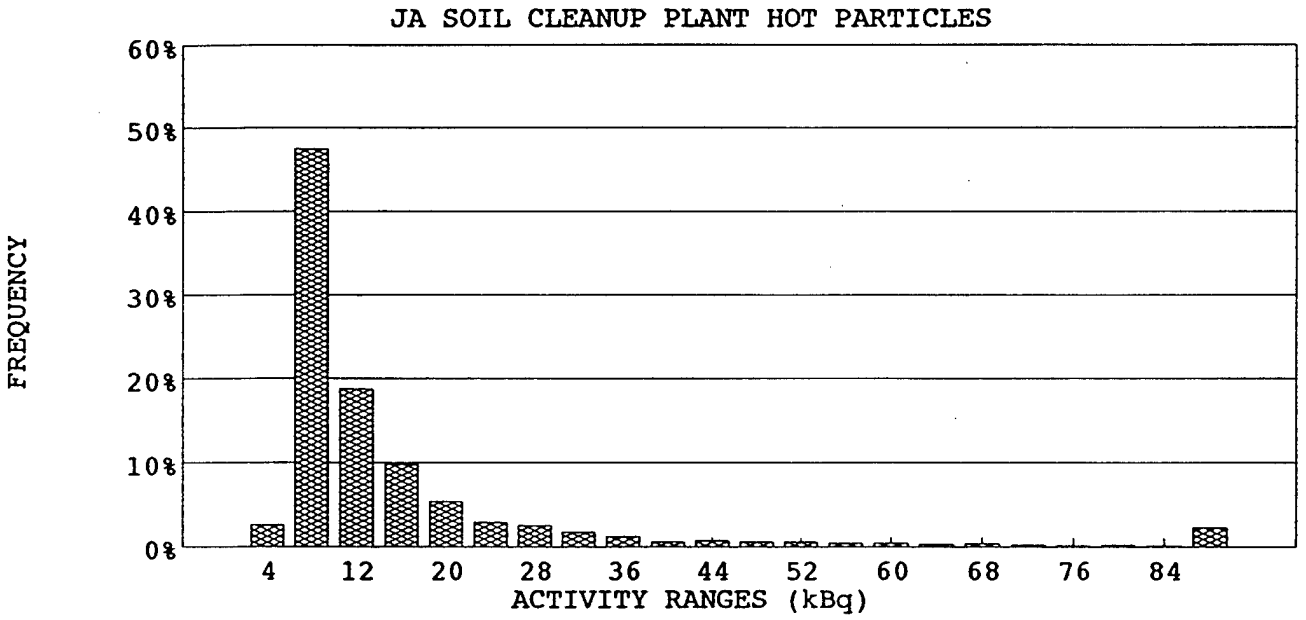
AVERAGE TIME BETWEEN 2-SEC SORTS 10.4 sec

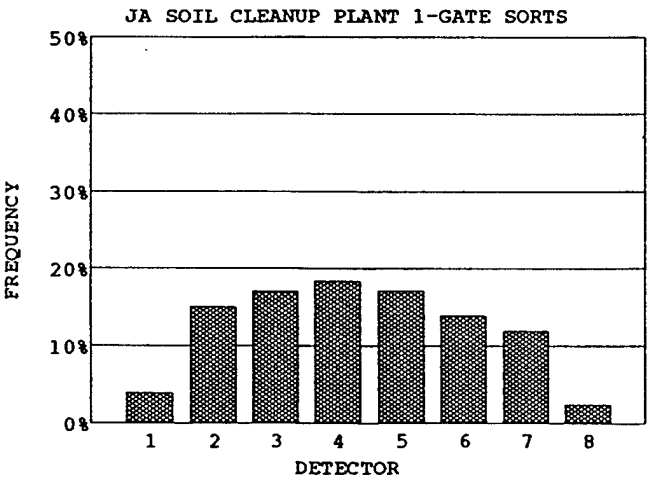
FREQUENCY DISTRIBUTIONS

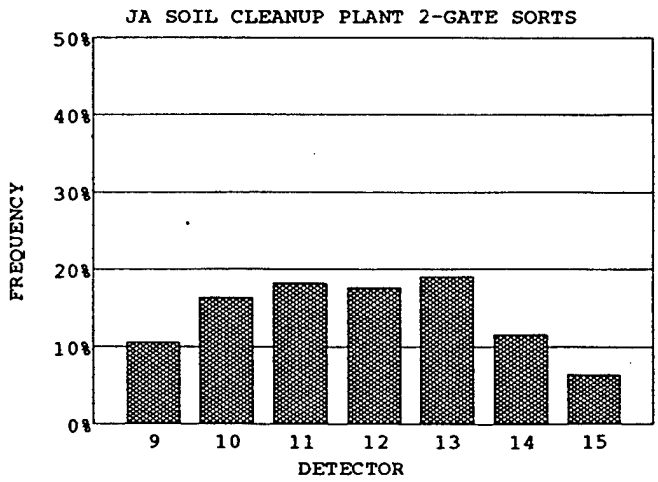
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	79	4.0%	-14000	6	-230	0.4%	4	102	2.6%
2	299	15.0%	-12000	0	-197	0.0%	8	1,854	47.5%
3	339	17.0%	-10000	1	-164	0.1%	12	732	18.8%
4	367	18.5%	-8000	3	-131	0.2%	16	381	9.8%
5	341	17.1%	-6000	1	-98	0.1%	20	212	5.4%
6	278	14.0%	-4000	3	-66	0.2%	24	116	3.0%
7	238	12.0%	-2000	2	-33	0.1%	28	101	2.6%
8	48	2.4%	0	2	0	0.1%	32	69	1.8%
TOTAL	1,989		2000	9	33	0.6%	36	49	1.3%
			4000	20	66	1.3%	40	24	0.6%
2-GATE SORTS			6000	58	98	3.9%	44	30	0.8%
DET	SORTS	FREQ%	8000	135	131	9.1%	48	23	0.6%
9	202	10.6%	10000	245	164	16.4%	52	23	0.6%
10	314	16.4%	12000	300	197	20.1%	56	17	0.4%
11	349	18.2%	14000	281	230	18.9%	60	19	0.5%
12	337	17.6%	16000	193	262	13.0%	64	11	0.3%
13	365	19.1%	18000	134	295	9.0%	68	14	0.4%
14	222	11.6%	20000	73	328	4.9%	72	10	0.3%
15	124	6.5%	22000	18	361	1.2%	76	7	0.2%
TOTAL	1,913		24000	5	393	0.3%	80	10	0.3%
			26000	1	426	0.1%	84	8	0.2%
			>28000	0	0	0.0%	>84	90	2.3%
			TOTAL	1,490			TOTAL	3,902	

EVENT TYPES HPE 3,897 MPE 539 DISE 986


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-230 -164 -98 -33 33 98 164 230 295 361 426
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–Aug–94

SORTER SOIL DENSITY 1.31 tons/m³ BACKGROUND 0.89 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.4 tons	86.9 tons	91.3 tons
MAXIMUM/SORT	61.0 kg	61.0 kg	
MINIMUM/SORT	0.8 kg	48.8 kg	
VOLUME IN–GROUND	3.5 yd³	68.9 yd³	72.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	62,959 kBq	14,650 kBq	16,597 kBq
MAXIMUM/SORT	447 kBq	158 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	–6 kBq
SPECIFIC ACTIVITY		3,303 Bq/kg	191 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,497		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	11			
NONE (AD=0 & MD=0 & MND>0)	250		07:07	11:22
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,236		09:35	
UNEXPLAINED RECORDS	0		09:35	
0<AD<1kBq & MD>0	6		09:57	
AD=0 & MD>0	0		10:24	
AD<0 & MD >0	0		14:03	
2–SEC COUNT PERIODS		14,970		
2–SEC RECORDS WITH SORTS	4,352			
2–SEC RECORDS WITHOUT SORTS	10,618			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		5,849		
NONPROCESSING RECORDS (Test, calibration, etc)		6		

2–SEC SORT DETECTORS

1 DET	3,228	74.17%	5 DET	3	0.07%
2 DET	920	21.14%	6 DET	0	0.00%
3 DET	175	4.02%	7 DET	0	0.00%
4 DET	26	0.60%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2–SEC SORTS 9.3 sec

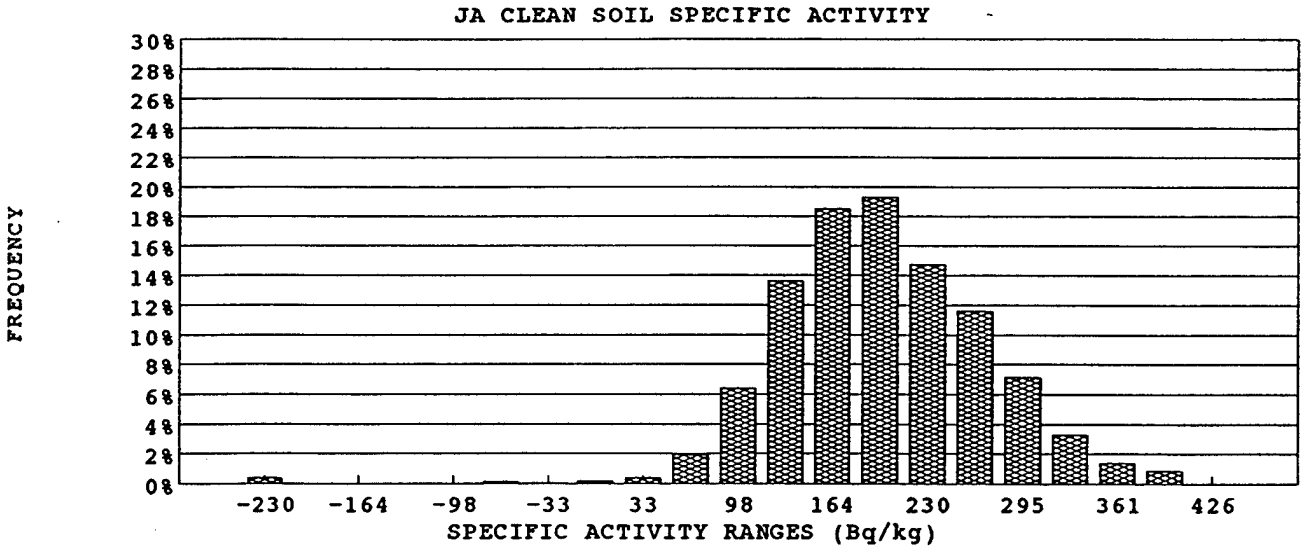
FREQUENCY DISTRIBUTIONS

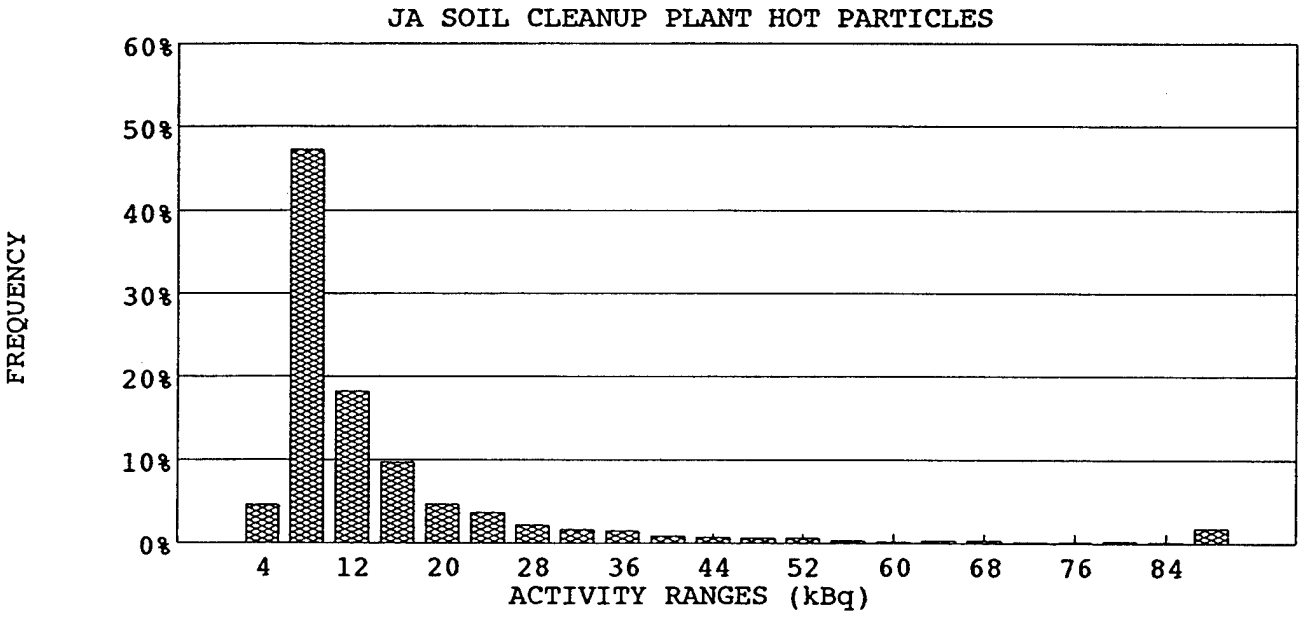
1–GATE DET	SORTS	FREQ%
1	126	5.8%
2	385	17.6%
3	350	16.0%
4	428	19.6%
5	425	19.4%
6	305	13.9%
7	147	6.7%
8	22	1.0%
TOTAL	2,188	

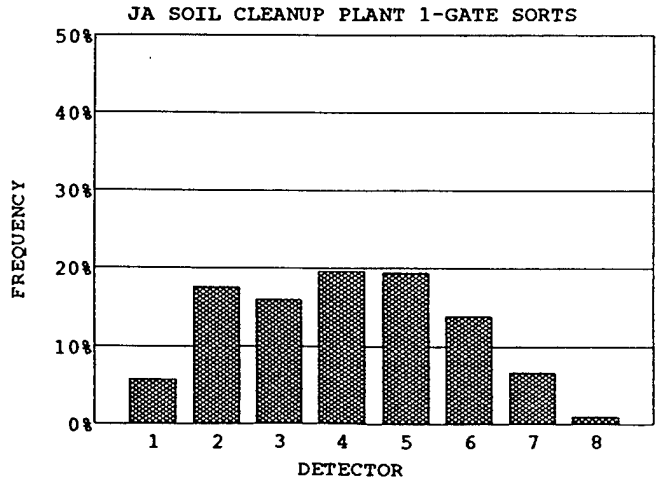
2–GATE DET	SORTS	FREQ%
9	272	12.6%
10	399	18.4%
11	424	19.6%
12	432	20.0%
13	364	16.8%
14	213	9.8%
15	60	2.8%
TOTAL	2,164	

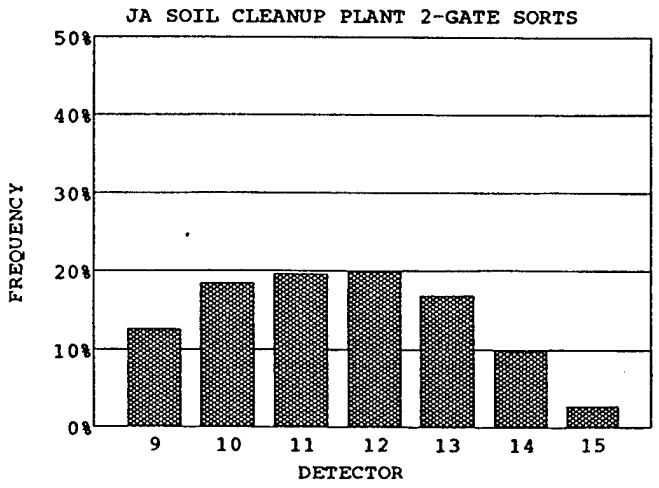
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
–14000	6	–230	0.4%	4	200	4.6%
–12000	0	–197	0.0%	8	2,055	47.2%
–10000	0	–164	0.0%	12	791	18.2%
–8000	0	–131	0.0%	16	421	9.7%
–6000	0	–98	0.0%	20	204	4.7%
–4000	2	–66	0.1%	24	158	3.6%
–2000	1	–33	0.1%	28	97	2.2%
0	3	0	0.2%	32	71	1.6%
2000	6	33	0.4%	36	65	1.5%
4000	29	66	1.9%	40	37	0.9%
6000	95	98	6.4%	44	33	0.8%
8000	203	131	13.6%	48	27	0.6%
10000	276	164	18.5%	52	27	0.6%
12000	288	197	19.3%	56	16	0.4%
14000	220	230	14.7%	60	7	0.2%
16000	173	262	11.6%	64	16	0.4%
18000	107	295	7.2%	68	15	0.3%
20000	49	328	3.3%	72	9	0.2%
22000	21	361	1.4%	76	8	0.2%
24000	13	393	0.9%	80	10	0.2%
26000	0	426	0.0%	84	7	0.2%
>28000	0	0	0.0%	>84	78	1.8%
TOTAL	1,492			TOTAL	4,352	

EVENT TYPES						
	HPE	4,384	MPE	589	DISE	831


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-230 -164 -98 -33 33 98 164 230 295 361 426
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–Aug–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	3.1 hr	3.1 hr	0.0 hr	0.0 hr	6.2 hr
SORTER START–UP	07:09	07:09	NA	NA	
START SOIL PROCESSING	07:14	07:14	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	10:15	10:15	NA	NA	
END SOIL PROCESSING	10:04	10:02	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	2.0 hr	1.9 hr	0.0 hr	0.0 hr	3.9 hr
DOWN–TIME	1.1 hr	1.2 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	6.9 hr	6.9 hr	10.0 hr	10.0 hr	33.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					63.4%
PRODUCTIVTY					9.8%

PRODUCTIVITY

Date	06–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	276	Excused delays for contract (sorter–hrs)	4,936 hr
Current Contract week	46	Excused delay days (plant–days)	123 days
		Excused delay months (plant–month)	4.75 months
Soil production for Day	43 MT		
Cumlative Soil Production for Week	919 MT	Percent of contract completed	55.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,732 MT
Since 6 Sep 93	53,856 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	55,447 MT		
Total Soil production for project	81,733 MT		

MT = metric tons

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SORTER 1

06-Aug-94

SORTER SOIL DENSITY 1.31 tons/m³ BACKGROUND 0.73 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	21.8 tons	22.1 tons
MAXIMUM/SORT	9.9 kg	61.0 kg	
MINIMUM/SORT	0.8 kg	51.1 kg	
VOLUME IN-GROUND	0.3 yd³	17.2 yd³	17.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	5,331 kBq	1,243 kBq	2,126 kBq
MAXIMUM/SORT	174 kBq	76 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		3,735 Bq/kg	98 Bq/kg

SORTS

20-SEC PROCESS PERIODS					362		UNEXP TIME	PAUSE TIME
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0					
NONE (AD=0 & MD=0 & MND>0)			235				07:41	08:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			127					
UNEXPLAINED RECORDS		0						
0<AD<1kBq & MD>0		1						
AD=0 & MD>0		0						
AD<0 & MD >0		0						
2-SEC COUNT PERIODS					3,620			
2-SEC RECORDS WITH SORTS			382					
2-SEC RECORDS WITHOUT SORTS			3,238					
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					744			
NONPROCESSING RECORDS (Test, calibration, etc)					15			
2-SEC SORT DETECTORS								
1 DET	267	69.90%		5 DET	0	0.00%		
2 DET	84	21.99%		6 DET	0	0.00%		
3 DET	25	6.54%		7 DET	0	0.00%		
4 DET	6	1.57%		8 DET	0	0.00%		
AVERAGE TIME BETWEEN 2-SEC SORTS			27.1 sec					

FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%
1	3	1.6%
2	23	12.0%
3	36	18.8%
4	35	18.2%
5	38	19.8%
6	22	11.5%
7	26	13.5%
8	9	4.7%
TOTAL	192	

2-GATE SORTS DET	SORTS	FREQ%
9	22	11.6%
10	28	14.7%
11	30	15.8%
12	36	18.9%
13	31	16.3%
14	23	12.1%
15	20	10.5%
TOTAL	190	

ACT_ND (Bq)	NUM (#)
-14000	3
-12000	0
-10000	1
-8000	4
-6000	5
-4000	10
-2000	25
0	52
2000	55
4000	65
6000	27
8000	10
10000	9
12000	10
14000	24
16000	26
18000	20
20000	17
22000	12
24000	2
26000	0
>28000	0
TOTAL	377

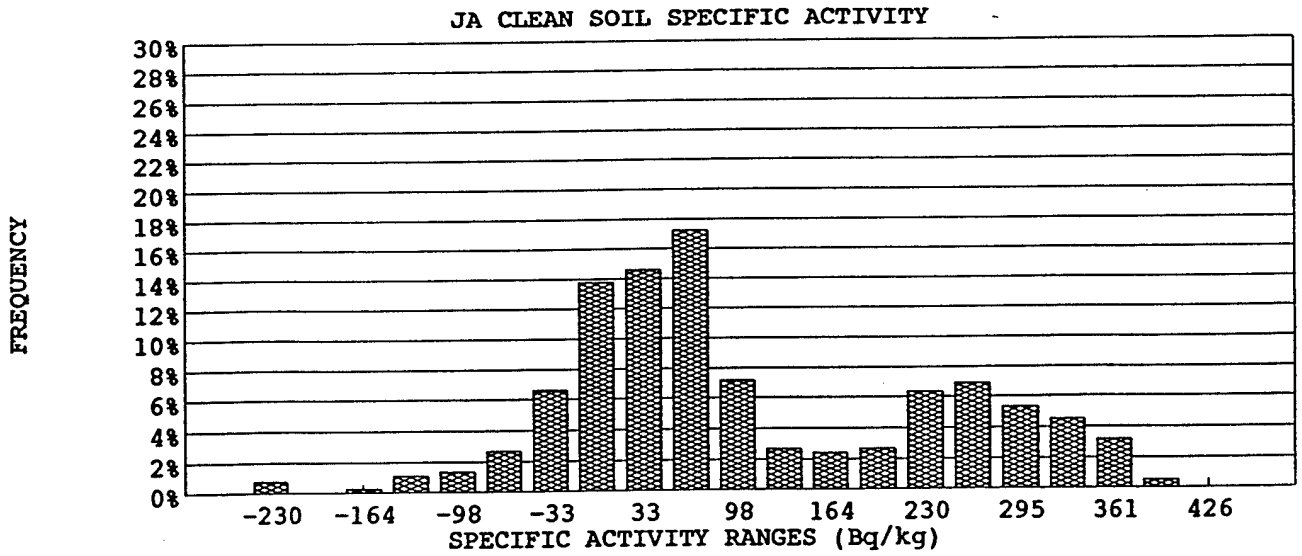
SPEC_A (Bq/kg)	FREQ%
-230	0.8%
-197	0.0%
-164	0.3%
-131	1.1%
-98	1.3%
-66	2.7%
-33	6.6%
0	13.8%
33	14.6%
66	17.2%
98	7.2%
131	2.7%
164	2.4%
197	2.7%
230	6.4%
262	6.9%
295	5.3%
328	4.5%
361	3.2%
393	0.5%
426	0.0%
0	0.0%

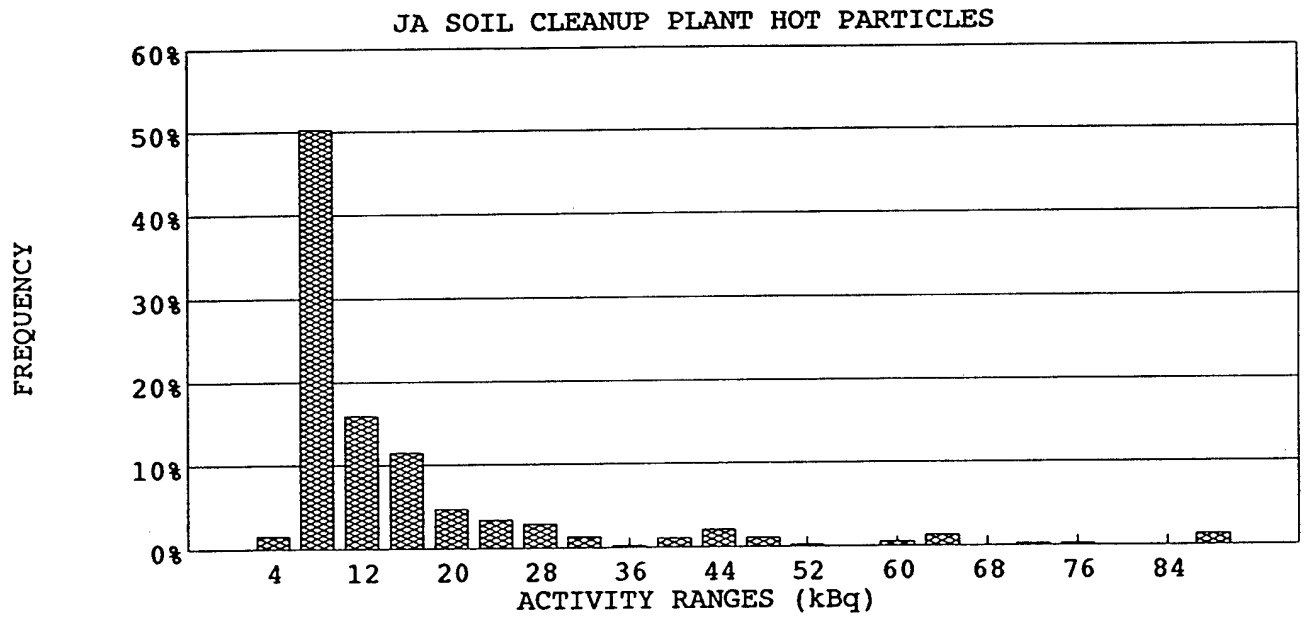
ACT_P (kBq)	NUM (#)	FREQ%
4	6	1.6%
8	192	50.3%
12	61	16.0%
16	44	11.5%
20	18	4.7%
24	13	3.4%
28	11	2.9%
32	5	1.3%
36	1	0.3%
40	4	1.0%
44	8	2.1%
48	4	1.0%
52	1	0.3%
56	0	0.0%
60	2	0.5%
64	5	1.3%
68	0	0.0%
72	1	0.3%
76	1	0.3%
80	0	0.0%
84	0	0.0%
>84	5	1.3%
TOTAL	382	

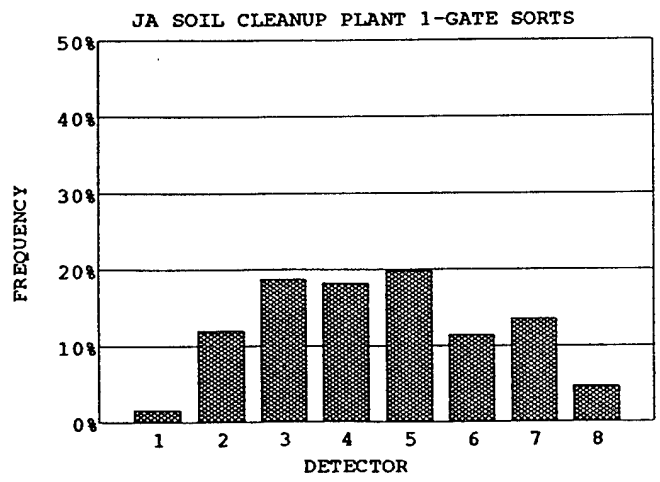
EVENT TYPES					
	HPE	389	MPE	46	DISE	0

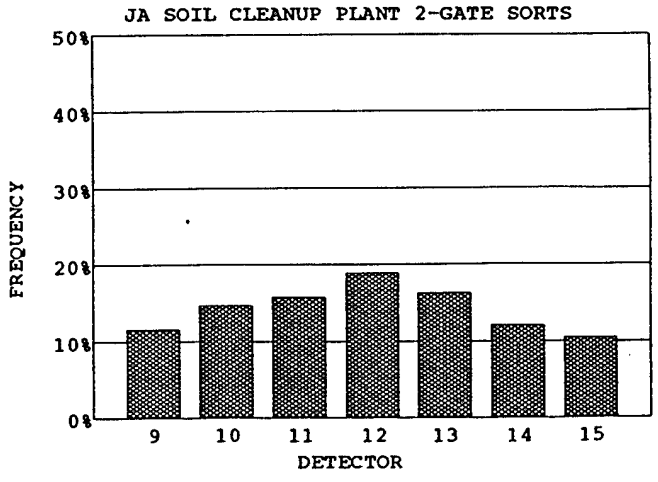
SORTER 1

06-Aug-94









SORTER 2

06-Aug-94

SORTER SOIL DENSITY 1.31 tons/m³ BACKGROUND 0.80 ± 0.07 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	20.6 tons	21.0 tons
MAXIMUM/SORT	10.7 kg	61.0 kg	
MINIMUM/SORT	0.8 kg	50.3 kg	
VOLUME IN-GROUND	0.3 yd³	16.4 yd³	16.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	9,541 kBq	1,975 kBq	1,835 kBq
MAXIMUM/SORT	1,484 kBq	431 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		4,917 Bq/kg	89 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		345		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	207		None	08:13
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	138			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		3,450		
2-SEC RECORDS WITH SORTS	466			
2-SEC RECORDS WITHOUT SORTS	2,984			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		811		
NONPROCESSING RECORDS (Test, calibration, etc)		32		

2-SEC SORT DETECTORS

1 DET	331	71.03%	5 DET	1	0.21%
2 DET	101	21.67%	6 DET	0	0.00%
3 DET	26	5.58%	7 DET	0	0.00%
4 DET	7	1.50%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 20.8 sec

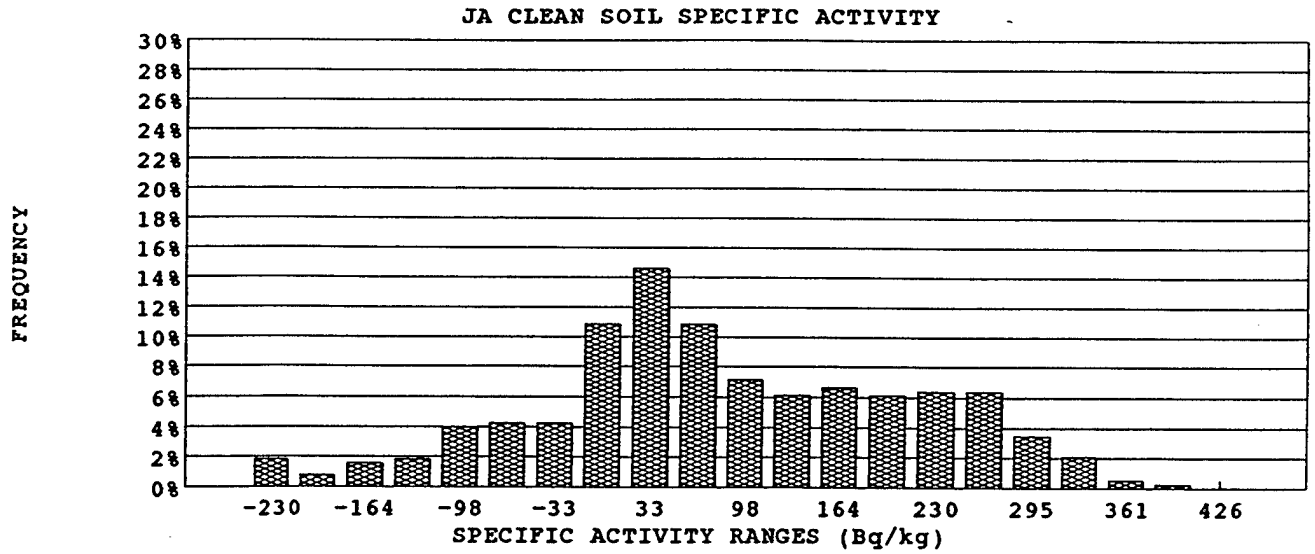
FREQUENCY DISTRIBUTIONS

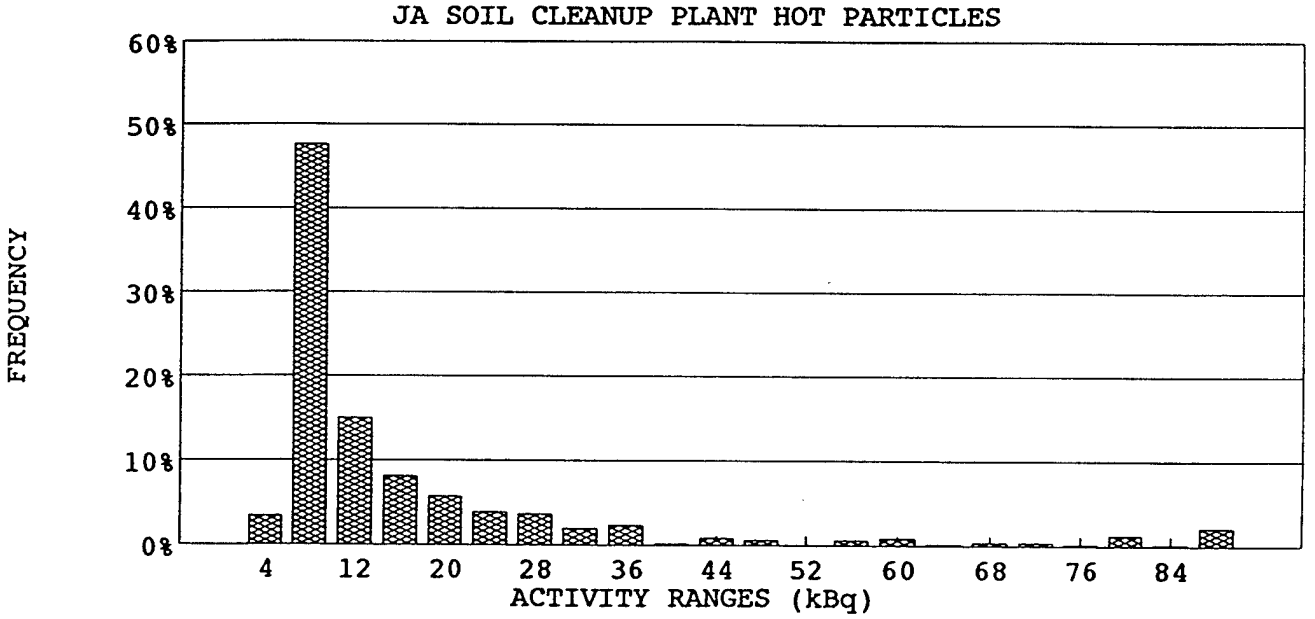
1-GATE DET	SORTS	FREQ%
1	15	6.5%
2	41	17.7%
3	47	20.3%
4	42	18.1%
5	42	18.1%
6	31	13.4%
7	11	4.7%
8	3	1.3%
TOTAL	232	

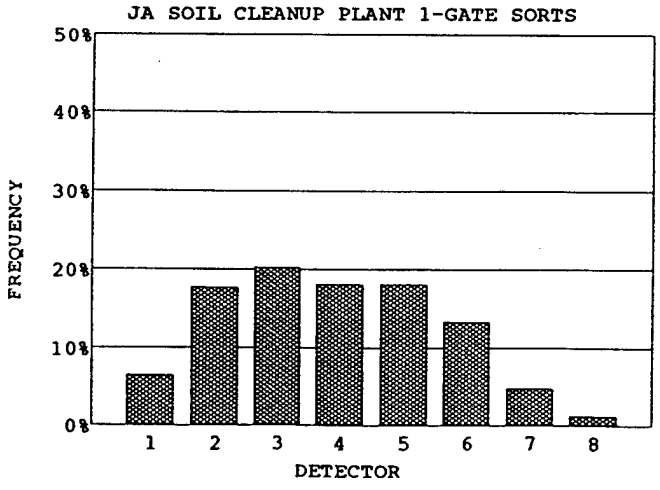
2-GATE DET	SORTS	FREQ%
9	26	11.1%
10	52	22.2%
11	49	20.9%
12	45	19.2%
13	38	16.2%
14	17	7.3%
15	7	3.0%
TOTAL	234	

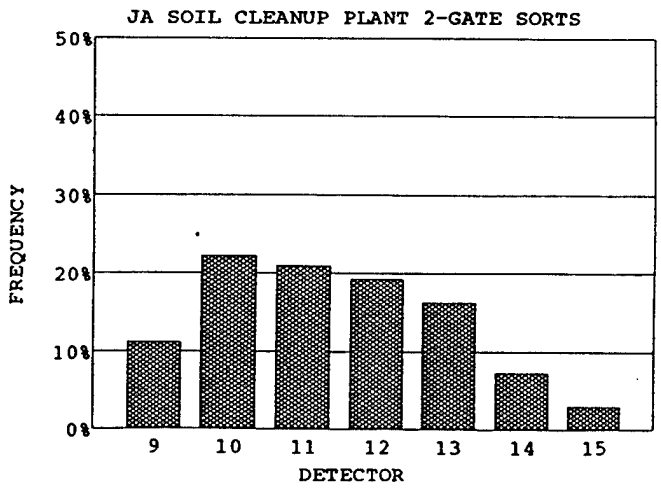
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	7	-230	1.9%	4	16	3.4%
-12000	3	-197	0.8%	8	222	47.6%
-10000	6	-164	1.6%	12	70	15.0%
-8000	7	-131	1.9%	16	38	8.2%
-6000	15	-98	4.0%	20	27	5.8%
-4000	16	-66	4.2%	24	18	3.9%
-2000	16	-33	4.2%	28	17	3.6%
0	41	0	10.9%	32	9	1.9%
2000	55	33	14.6%	36	11	2.4%
4000	41	66	10.9%	40	1	0.2%
6000	27	98	7.2%	44	4	0.9%
8000	23	131	6.1%	48	3	0.6%
10000	25	164	6.6%	52	0	0.0%
12000	23	197	6.1%	56	3	0.6%
14000	24	230	6.4%	60	4	0.9%
16000	24	262	6.4%	64	1	0.2%
18000	13	295	3.4%	68	2	0.4%
20000	8	328	2.1%	72	2	0.4%
22000	2	361	0.5%	76	1	0.2%
24000	1	393	0.3%	80	6	1.3%
26000	0	426	0.0%	84	1	0.2%
>28000	0	0	0.0%	>84	10	2.1%
TOTAL	377			TOTAL	466	

EVENT TYPES HPE 460 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%
-230 -164 -98 -33 33 98 164 230 295 361 426
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–Aug–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	9.0 hr	9.0 hr	0.0 hr	0.0 hr	17.9 hr
SORTER START–UP	06:53	06:53	NA	NA	
START SOIL PROCESSING	07:03	07:04	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	16:07	16:08	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	7.9 hr	7.9 hr	0.0 hr	0.0 hr	15.8 hr
DOWN–TIME	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.1 hr
SYSTEM PAUSE	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.3 hr
SORTER NONAVAILABLE TIME	1.0 hr	1.0 hr	10.0 hr	10.0 hr	22.1 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					88.5%
PRODUCTIVTY					39.6%

PRODUCTIVITY

Date	08–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	277	Excused delays for contract (sorter–hrs)	4,956 hr
Current Contract week	47	Excused delay days (plant–days)	124 days
		Excused delay months (plant–month)	4.77 months
Soil production for Day	160 MT		
Cumlative Soil Production for Week	160 MT	Percent of contract completed	55.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,734 MT
Since 6 Sep 93	54,016 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	55,607 MT		
Total Soil production for project	81,894 MT		

MT = metric tons

File Report1 Printed on 09-Aug-94 at 02:24:40 PM

SORTER 1

08-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.69 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.9 tons	78.4 tons	80.3 tons
MAXIMUM/SORT	53.6 kg	61.0 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
VOLUME IN-GROUND	1.5 yd³	62.1 yd³	63.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	23,533 kBq	5,525 kBq	7,199 kBq
MAXIMUM/SORT	564 kBq	250 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		2,869 Bq/kg	92 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,427		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	18			
NONE (AD=0 & MD=0 & MND>0)	919		08:08	11:17
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	508		14:55	
UNEXPLAINED RECORDS	(18)		15:03	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,270		
2-SEC RECORDS WITH SORTS	1,241			
2-SEC RECORDS WITHOUT SORTS	13,029			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,668		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

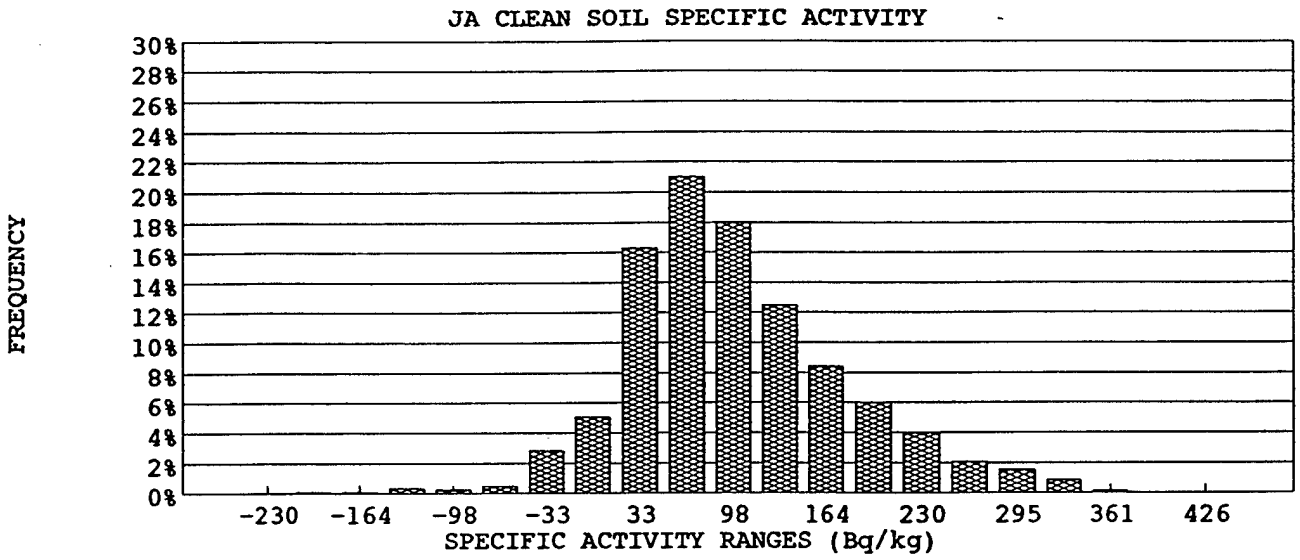
1 DET	885	71.31%	5 DET	1	0.08%
2 DET	290	23.37%	6 DET	0	0.00%
3 DET	53	4.27%	7 DET	0	0.00%
4 DET	12	0.97%	8 DET	0	0.00%

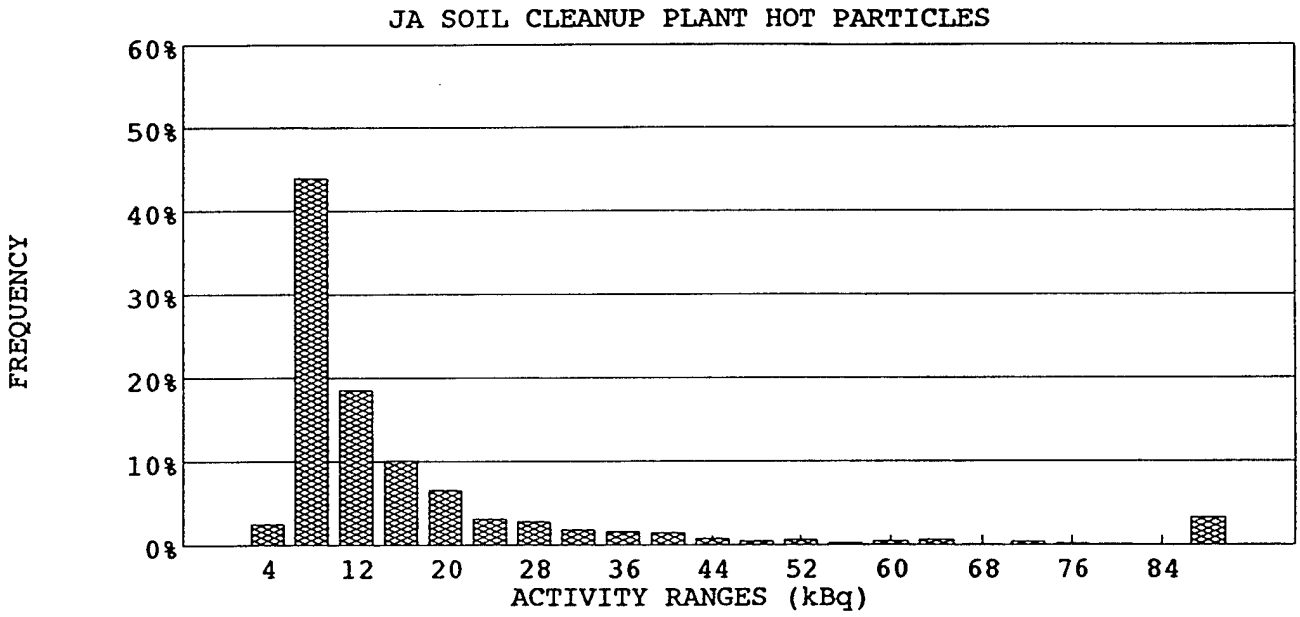
AVERAGE TIME BETWEEN 2-SEC SORTS 32.2 sec

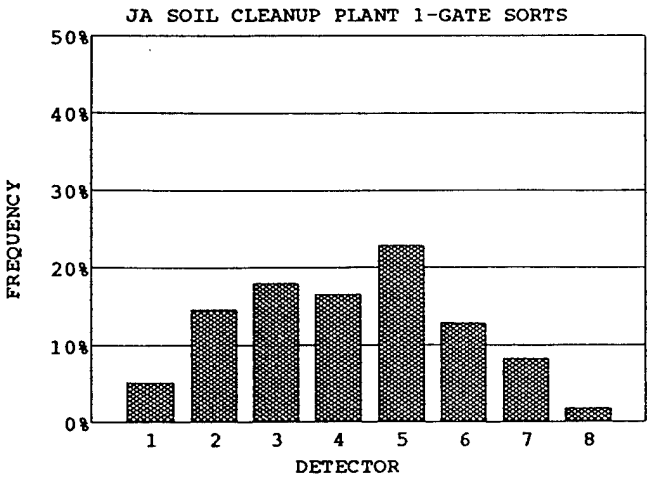
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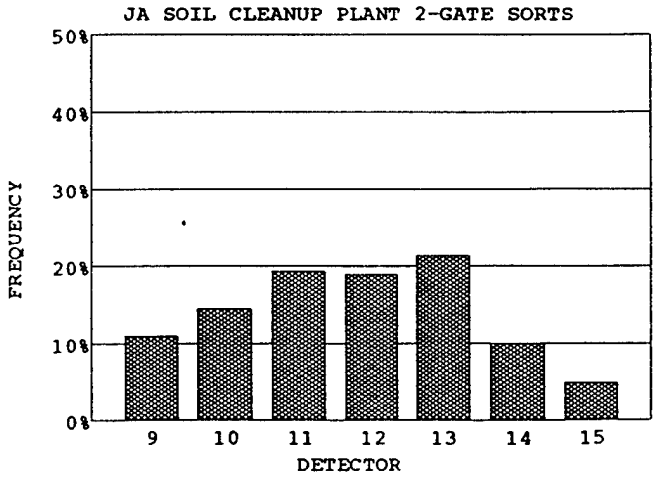
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	32	5.1%	-14000	0	-230	0.0%	4	32	2.6%
2	91	14.6%	-12000	1	-197	0.1%	8	545	43.9%
3	112	18.0%	-10000	1	-164	0.1%	12	230	18.5%
4	103	16.6%	-8000	5	-131	0.4%	16	125	10.1%
5	142	22.8%	-6000	4	-98	0.3%	20	82	6.6%
6	80	12.9%	-4000	7	-66	0.5%	24	39	3.1%
7	51	8.2%	-2000	40	-33	2.8%	28	36	2.9%
8	11	1.8%	0	72	0	5.1%	32	23	1.9%
TOTAL	622		2000	231	33	16.3%	36	20	1.6%
			4000	298	66	21.0%	40	18	1.5%
2-GATE DET	SORTS	FREQ%	6000	255	98	18.0%	44	10	0.8%
			8000	177	131	12.5%	48	6	0.5%
9	68	11.0%	10000	119	164	8.4%	52	8	0.6%
10	90	14.5%	12000	85	197	6.0%	56	3	0.2%
11	120	19.4%	14000	56	230	4.0%	60	6	0.5%
12	117	18.9%	16000	29	262	2.0%	64	8	0.6%
13	132	21.3%	18000	22	295	1.6%	68	1	0.1%
14	62	10.0%	20000	12	328	0.8%	72	5	0.4%
15	30	4.8%	22000	2	361	0.1%	76	2	0.2%
TOTAL	619		24000	0	393	0.0%	80	1	0.1%
			26000	0	426	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	41	3.3%
			TOTAL	1,416			TOTAL	1,241	

EVENT TYPES	HPE	MPE	DISE
	1,230	225	1,349


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-230 -164 -98 -33 33 98 164 230 295 361 426
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

08–Aug–94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	2.5 tons	77.7 tons	80.1 tons
MAXIMUM/SORT	53.6 kg	61.0 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN–GROUND	1.9 yd³	61.6 yd³	63.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	25,162 kBq	6,190 kBq	6,720 kBq
MAXIMUM/SORT	894 kBq	341 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	–7 kBq
SPECIFIC ACTIVITY		2,524 Bq/kg	87 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,424		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	26			
NONE (AD=0 & MD=0 & MND>0)	875		07:34	11:17
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	549		09:56	
UNEXPLAINED RECORDS	(26)		10:53	
0<AD<1kBq & MD>0	5		12:55	
AD=0 & MD>0	0		13:13	
AD<0 & MD >0	0			
2–SEC COUNT PERIODS		14,240		
2–SEC RECORDS WITH SORTS	1,390			
2–SEC RECORDS WITHOUT SORTS	12,850			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		2,814		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2–SEC SORT DETECTORS

1 DET	1,028	73.96%	5 DET	6	0.43%
2 DET	294	21.15%	6 DET	0	0.00%
3 DET	55	3.96%	7 DET	0	0.00%
4 DET	7	0.50%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2–SEC SORTS 27.7 sec

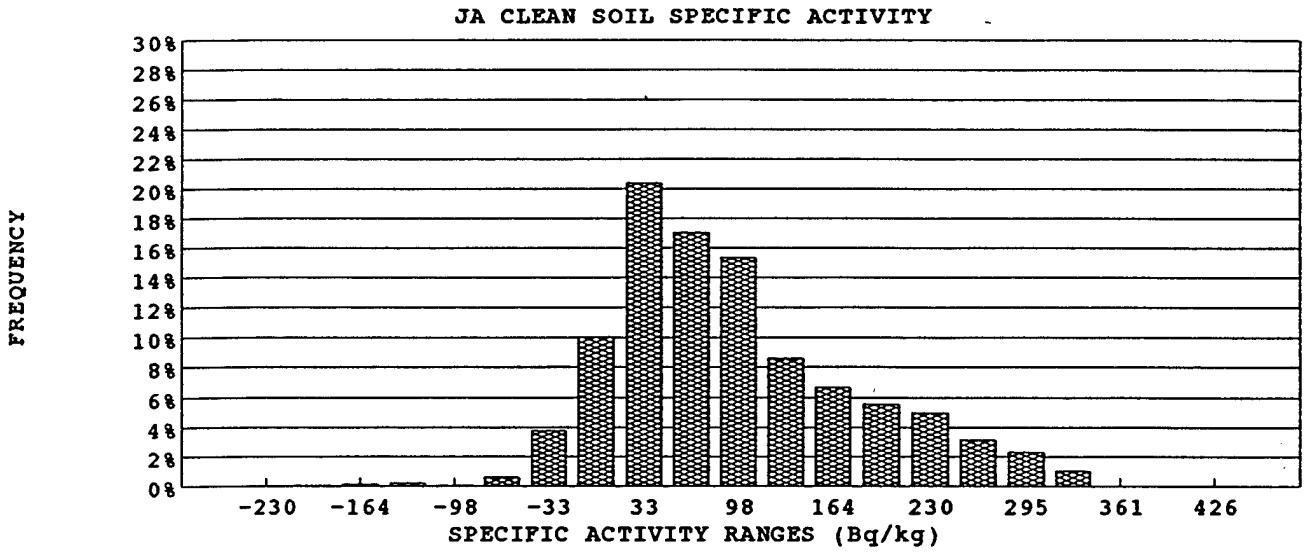
FREQUENCY DISTRIBUTIONS

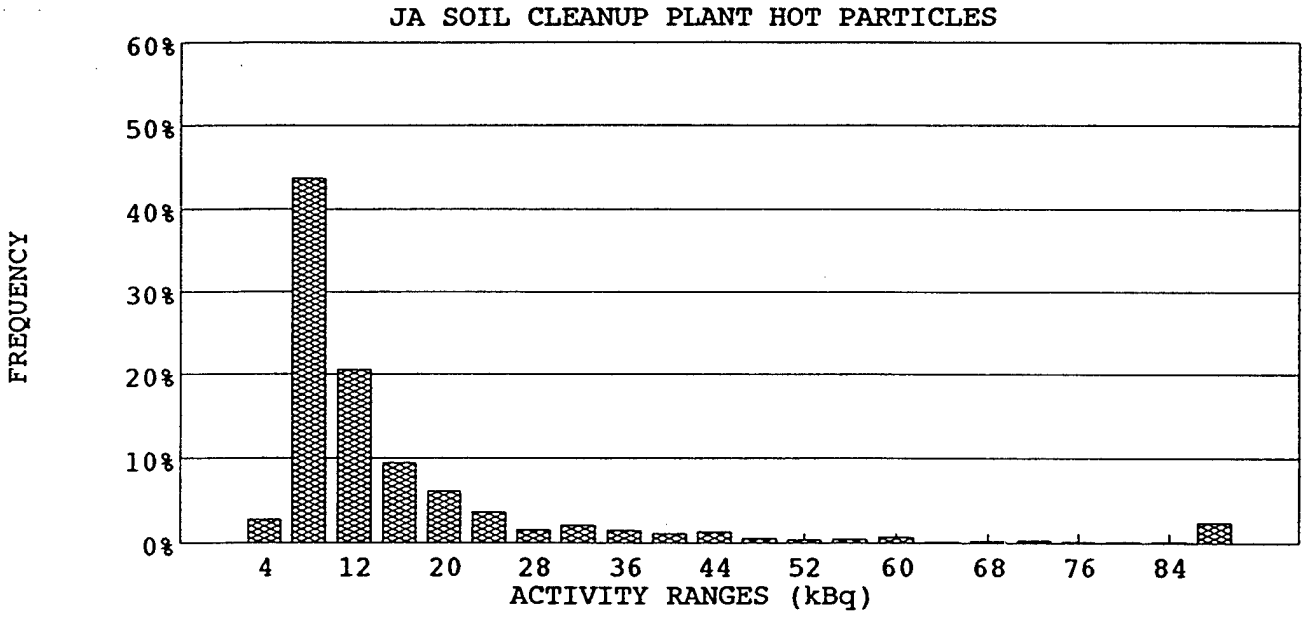
1–GATE DET	SORTS	FREQ%
1	53	7.6%
2	115	16.5%
3	108	15.5%
4	131	18.8%
5	112	16.1%
6	99	14.2%
7	70	10.1%
8	8	1.1%
TOTAL	696	

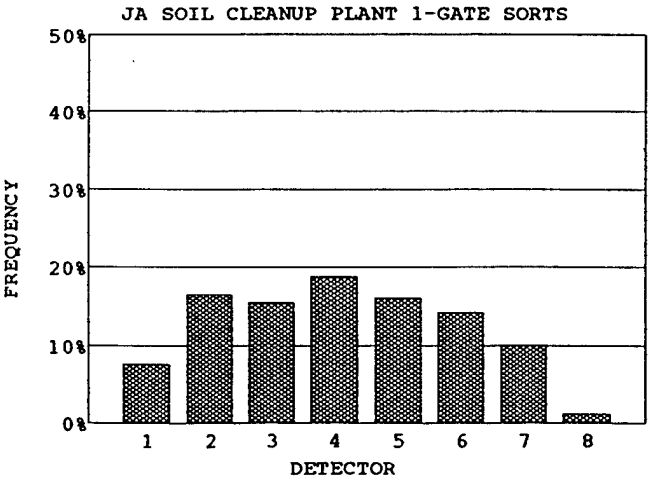
2–GATE DET	SORTS	FREQ%
9	94	13.5%
10	108	15.6%
11	120	17.3%
12	136	19.6%
13	121	17.4%
14	84	12.1%
15	31	4.5%
TOTAL	694	

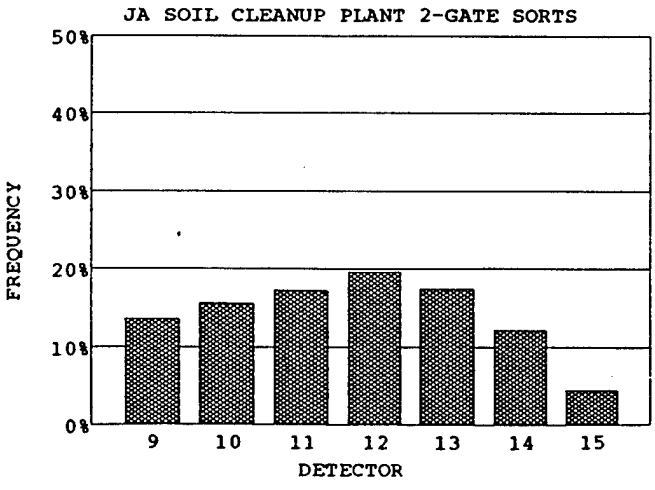
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
–14000	0	–230	0.0%	4	39	2.8%
–12000	1	–197	0.1%	8	607	43.7%
–10000	2	–164	0.1%	12	285	20.5%
–8000	3	–131	0.2%	16	132	9.5%
–6000	1	–98	0.1%	20	85	6.1%
–4000	9	–66	0.6%	24	51	3.7%
–2000	53	–33	3.8%	28	22	1.6%
0	141	0	10.0%	32	29	2.1%
2000	287	33	20.4%	36	21	1.5%
4000	240	66	17.0%	40	15	1.1%
6000	216	98	15.3%	44	18	1.3%
8000	121	131	8.6%	48	8	0.6%
10000	94	164	6.7%	52	6	0.4%
12000	78	197	5.5%	56	7	0.5%
14000	70	230	5.0%	60	10	0.7%
16000	44	262	3.1%	64	3	0.2%
18000	33	295	2.3%	68	4	0.3%
20000	15	328	1.1%	72	5	0.4%
22000	0	361	0.0%	76	3	0.2%
24000	0	393	0.0%	80	3	0.2%
26000	0	426	0.0%	84	3	0.2%
>28000	0	0	0.0%	>84	34	2.4%
TOTAL	1,408			TOTAL	1,390	

EVENT TYPES HPE 1,404 MPE 248 DISE 1,941


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-230 -164 -98 -33 33 98 164 230 295 361 426
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–Aug–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	06:24	06:24	NA	NA	
START SOIL PROCESSING	06:36	06:36	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	16:11	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	7.5 hr	7.5 hr	0.0 hr	0.0 hr	15.0 hr
DOWN–TIME	2.0 hr	2.0 hr	0.0 hr	0.0 hr	4.1 hr
SYSTEM PAUSE	2.0 hr	2.0 hr	0.0 hr	0.0 hr	4.1 hr
SORTER NONAVAILABLE TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
AUTHORIZED DELAY TIME	0.2 hr	0.2 hr	10.0 hr	10.0 hr	20.4 hr
PLANT PERFORMANCE					78.6%
PRODUCTIVTY					37.4%

PRODUCTIVITY

Date	09–Aug–94	Excused Delays for day (sorter–hrs)	20.4 hr
Contract day (from 6 Sep)	278	Excused delays for contract (sorter–hrs)	4,976 hr
Current Contract week	47	Excused delay days (plant–days)	124 days
		Excused delay months (plant–month)	4.78 months
Soil production for Day	144 MT		
Cumlative Soil Production for Week	305 MT	Percent of contract completed	55.8%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,723 MT
Since 6 Sep 93	54,161 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	55,752 MT		
Total Soil production for project	82,038 MT		

MT = metric tons

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SORTER 1

09–Aug–94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.68 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	71.7 tons	72.2 tons
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	46.9 kg	
VOLUME IN–GROUND	0.4 yd³	56.8 yd³	57.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	11,763 kBq	2,584 kBq	4,782 kBq
MAXIMUM/SORT	1,082 kBq	229 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	–7 kBq
SPECIFIC ACTIVITY		4,902 Bq/kg	67 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,347		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1			
NONE (AD=0 & MD=0 & MND>0)	1,020		08:45	11:19
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	326		10:08	15:24
UNEXPLAINED RECORDS	0		10:42	
0<AD<1kBq & MD>0	8		10:55	
AD=0 & MD>0	0		11:04	
AD<0 & MD >0	0		11:08	
2–SEC COUNT PERIODS		13,470	14:34	
2–SEC RECORDS WITH SORTS	578		14:57	
2–SEC RECORDS WITHOUT SORTS	12,892			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		1,925		
NONPROCESSING RECORDS (Test, calibration, etc)		20		

2–SEC SORT DETECTORS

1 DET	422	73.01%	5 DET	2	0.35%
2 DET	123	21.28%	6 DET	0	0.00%
3 DET	24	4.15%	7 DET	0	0.00%
4 DET	7	1.21%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2–SEC SORTS 63.8 sec

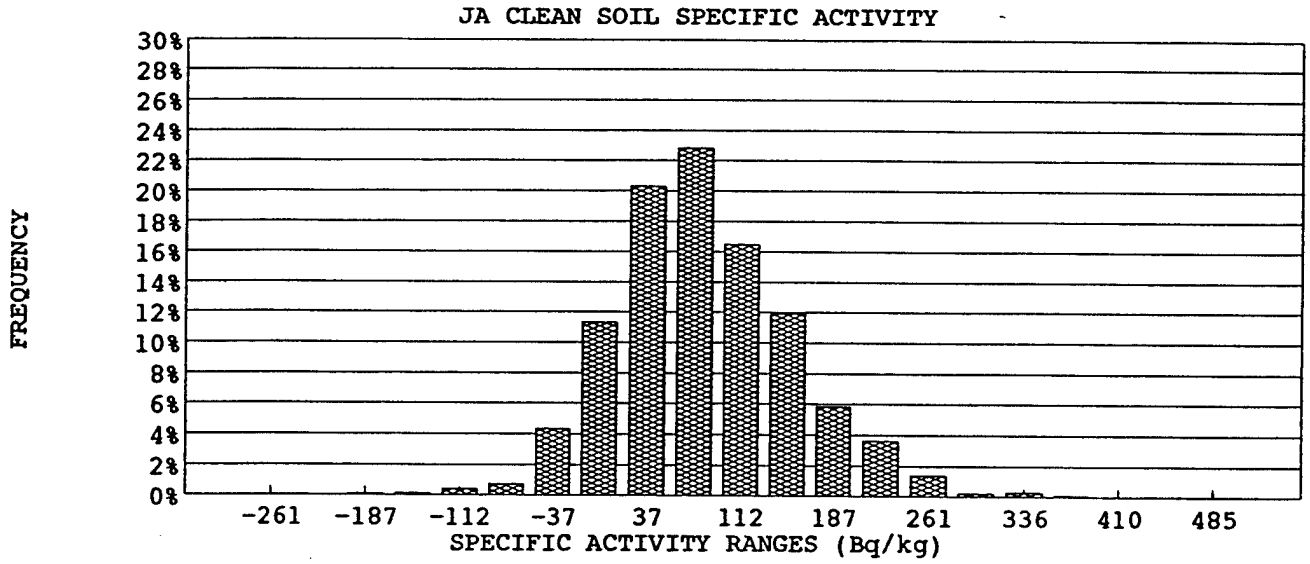
FREQUENCY DISTRIBUTIONS

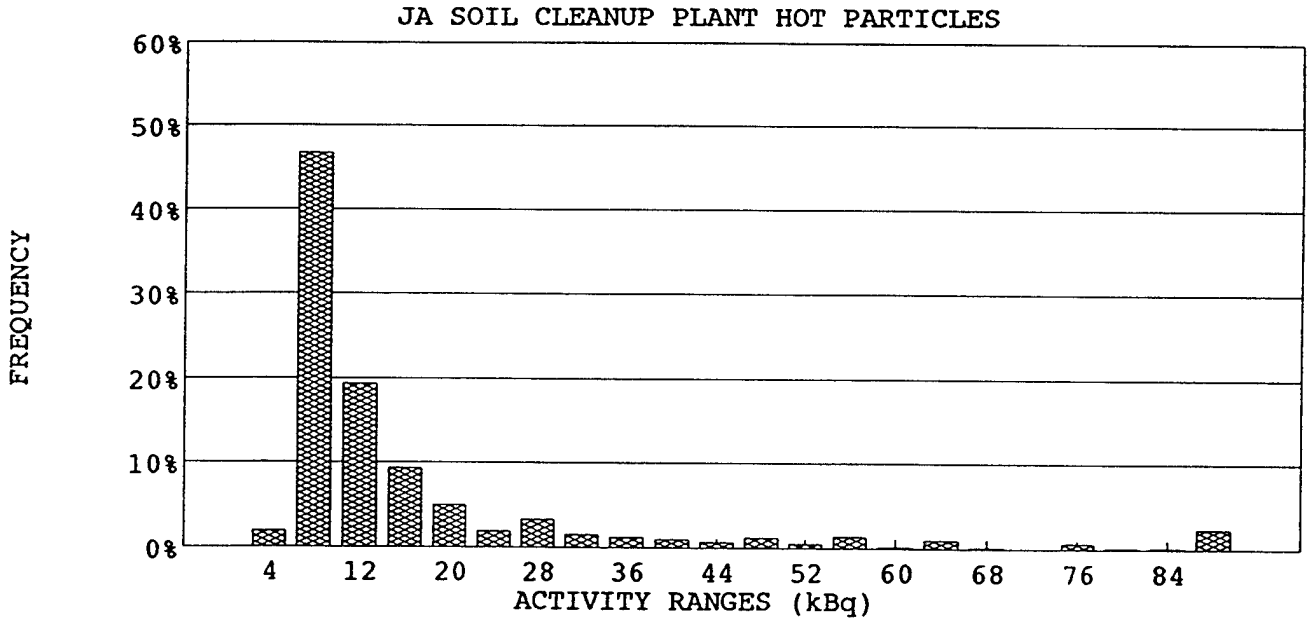
1–GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	8	2.7%	–14000	0	–261	0.0%	4	11	1.9%
2	42	14.1%	–12000	0	–224	0.0%	8	270	46.7%
3	58	19.5%	–10000	1	–187	0.1%	12	112	19.4%
4	52	17.4%	–8000	2	–149	0.1%	16	54	9.3%
5	49	16.4%	–6000	6	–112	0.4%	20	29	5.0%
6	36	12.1%	–4000	10	–75	0.7%	24	11	1.9%
7	39	13.1%	–2000	59	–37	4.3%	28	19	3.3%
8	14	4.7%	0	155	0	11.3%	32	9	1.6%
TOTAL	298		2000	277	37	20.3%	36	7	1.2%
			4000	312	75	22.8%	40	6	1.0%
2–GATE			6000	225	112	16.5%	44	4	0.7%
DET	SORTS	FREQ%	8000	163	149	11.9%	48	7	1.2%
9	27	9.6%	10000	80	187	5.9%	52	3	0.5%
10	46	16.4%	12000	49	224	3.6%	56	8	1.4%
11	53	18.9%	14000	19	261	1.4%	60	1	0.2%
12	50	17.9%	16000	3	299	0.2%	64	6	1.0%
13	47	16.8%	18000	4	336	0.3%	68	1	0.2%
14	31	11.1%	20000	1	373	0.1%	72	0	0.0%
15	26	9.3%	22000	0	410	0.0%	76	4	0.7%
TOTAL	280		24000	0	448	0.0%	80	1	0.2%
			26000	0	485	0.0%	84	1	0.2%
			>28000	0	0	0.0%	>84	14	2.4%
			TOTAL	1,366			TOTAL	578	

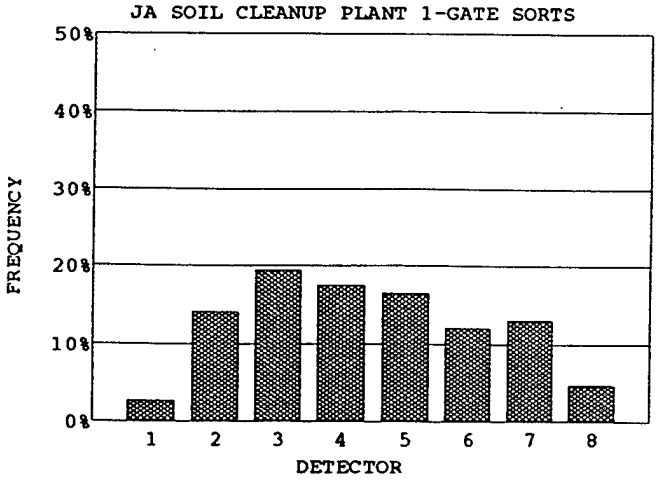
EVENT TYPES	HPE	586	MPE	128	DISE	77

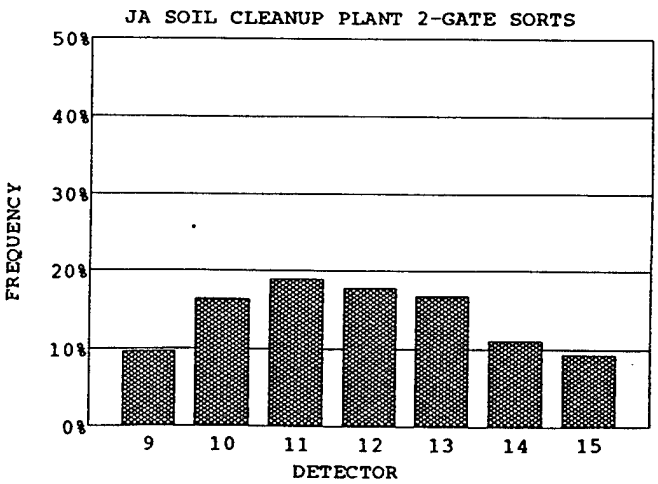
SORTER 1

09-Aug-94









SORTER 2

09-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.75 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	71.7 tons	72.2 tons
MAXIMUM/SORT	5.4 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	48.2 kg	
VOLUME IN-GROUND	0.4 yd³	56.8 yd³	57.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	19,927 kBq	4,188 kBq	4,433 kBq
MAXIMUM/SORT	3,413 kBq	1,216 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		7,875 Bq/kg	62 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,347		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,008		07:11	11:19
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	339		07:29	15:24
UNEXPLAINED RECORDS	0		08:10	
0<AD<1kBq & MD>0	7		11:13	
AD=0 & MD>0	0		13:31	
AD<0 & MD >0	0		13:37	
2-SEC COUNT PERIODS		13,470	13:47	
2-SEC RECORDS WITH SORTS	649			
2-SEC RECORDS WITHOUT SORTS	12,821			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,996		
NONPROCESSING RECORDS (Test, calibration, etc)		20		

2-SEC SORT DETECTORS

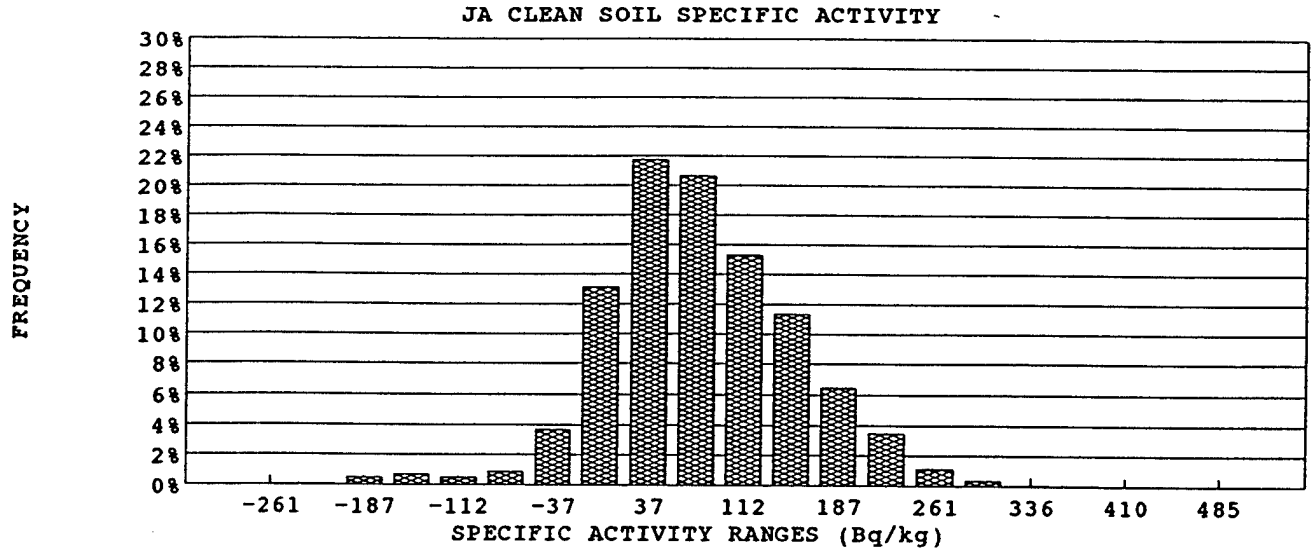
1 DET	464	71.49%	5 DET	2	0.31%
2 DET	147	22.65%	6 DET	0	0.00%
3 DET	27	4.16%	7 DET	0	0.00%
4 DET	9	1.39%	8 DET	0	0.00%

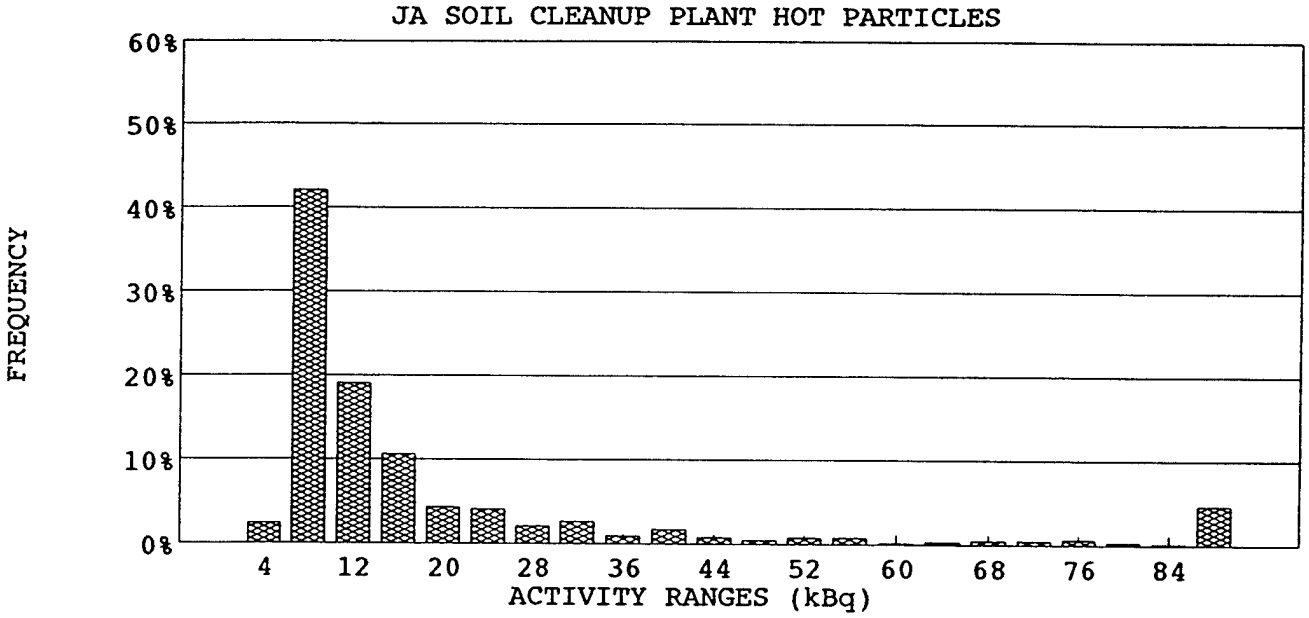
AVERAGE TIME BETWEEN 2-SEC SORTS 58.1 sec

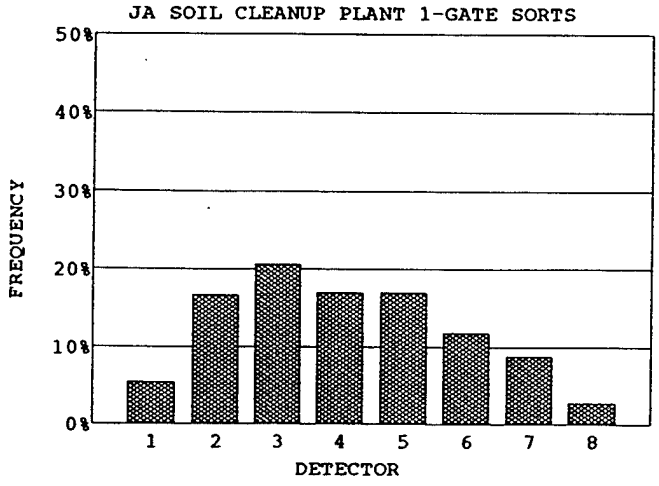
FREQUENCY DISTRIBUTIONS

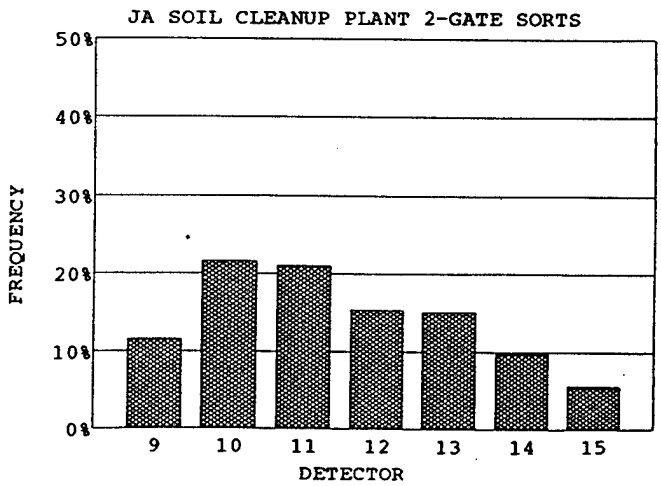
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	18	5.5%	-14000	0	-261	0.0%	4	16	2.5%
2	55	16.7%	-12000	1	-224	0.1%	8	273	42.1%
3	68	20.6%	-10000	7	-187	0.5%	12	124	19.1%
4	56	17.0%	-8000	10	-149	0.7%	16	69	10.6%
5	56	17.0%	-6000	7	-112	0.5%	20	28	4.3%
6	39	11.8%	-4000	12	-75	0.9%	24	27	4.2%
7	29	8.8%	-2000	50	-37	3.7%	28	14	2.2%
8	9	2.7%	0	179	0	13.1%	32	17	2.6%
TOTAL	330		2000	297	37	21.7%	36	6	0.9%
			4000	282	75	20.6%	40	11	1.7%
2-GATE DET	SORTS	FREQ%	6000	209	112	15.3%	44	5	0.8%
			8000	155	149	11.3%	48	3	0.5%
9	37	11.6%	10000	88	187	6.4%	52	5	0.8%
10	69	21.6%	12000	47	224	3.4%	56	5	0.8%
11	67	21.0%	14000	16	261	1.2%	60	1	0.2%
12	49	15.4%	16000	5	299	0.4%	64	2	0.3%
13	48	15.0%	18000	1	336	0.1%	68	3	0.5%
14	31	9.7%	20000	1	373	0.1%	72	3	0.5%
15	18	5.6%	22000	0	410	0.0%	76	4	0.6%
TOTAL	319		24000	0	448	0.0%	80	2	0.3%
			26000	0	485	0.0%	84	1	0.2%
			>28000	0	0	0.0%	>84	30	4.6%
			TOTAL	1,367			TOTAL	649	

EVENT TYPES HPE 668 MPE 131 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-261
-187
-112
-37
37
112
187
261
336
410
485
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 10–Aug–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	18.9 hr
SORTER START–UP	06:28	06:28	NA	NA	
START SOIL PROCESSING	06:33	06:33	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	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:10	16:08	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	8.5 hr	8.4 hr	0.0 hr	0.0 hr	16.9 hr
DOWN–TIME	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.0 hr
SYSTEM PAUSE	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.3 hr
SORTER NONAVAILABLE TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.1 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					89.3%
PRODUCTIVTY					42.2%

PRODUCTIVITY

Date	10–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	279	Excused delays for contract (sorter–hrs)	4,996 hr
Current Contract week	47	Excused delay days (plant–days)	125 days
		Excused delay months (plant–month)	4.80 months
Soil production for Day	163 MT		
Cumlative Soil Production for Week	468 MT	Percent of contract completed	55.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,727 MT
Since 6 Sep 93	54,323 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	55,914 MT		
Total Soil production for project	82,201 MT		

MT = metric tons

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SORTER 1

10-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.69 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.9 tons	77.8 tons	81.7 tons
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	44.2 kg	
VOLUME IN-GROUND	3.1 yd³	61.7 yd³	64.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	51,793 kBq	12,077 kBq	10,820 kBq
MAXIMUM/SORT	2,186 kBq	833 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		3,074 Bq/kg	139 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,525		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	47			
NONE (AD=0 & MD=0 & MND>0)	768		10:49	11:20
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	710		10:50	
UNEXPLAINED RECORDS	0		11:14	
0<AD<1kBq & MD>0	7		13:11	
AD=0 & MD>0	0		14:42	
AD<0 & MD >0	0		15:26	
2-SEC COUNT PERIODS		15,250	15:59	
2-SEC RECORDS WITH SORTS	1,928			
2-SEC RECORDS WITHOUT SORTS	13,322			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,453		
NONPROCESSING RECORDS (Test, calibration, etc)		6		

2-SEC SORT DETECTORS

1 DET	1,366	70.85%	5 DET	4	0.21%
2 DET	443	22.98%	6 DET	0	0.00%
3 DET	93	4.82%	7 DET	0	0.00%
4 DET	22	1.14%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 22.3 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

DET	SORTS	FREQ%
1	29	3.0%
2	127	13.1%
3	141	14.6%
4	155	16.0%
5	223	23.1%
6	137	14.2%
7	129	13.3%
8	26	2.7%
TOTAL	967	

2-GATE SORTS

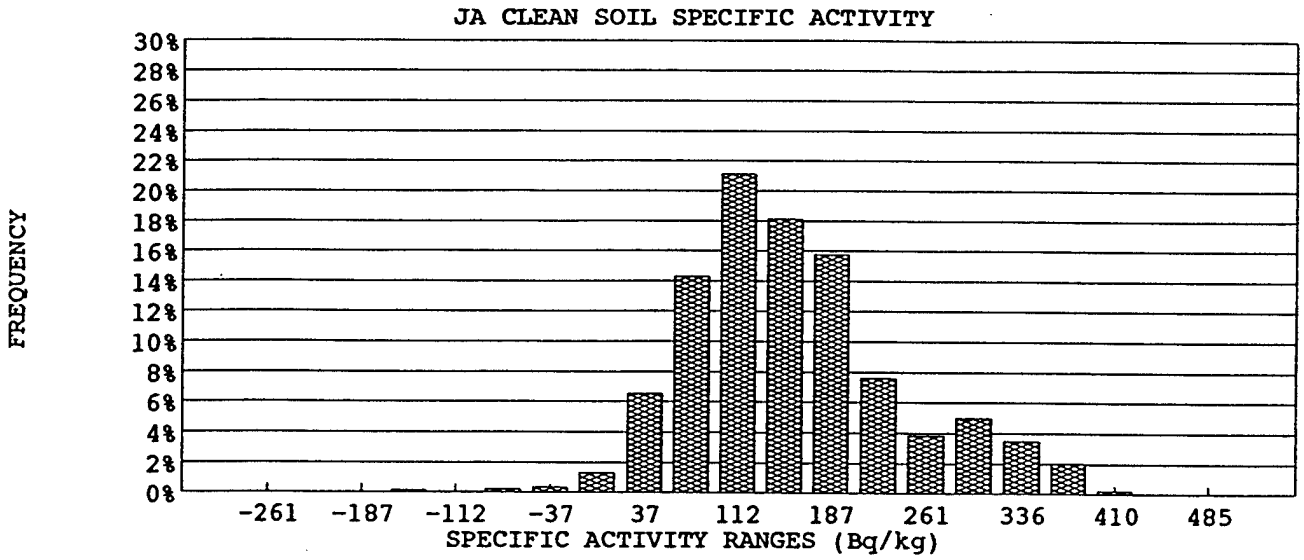
DET	SORTS	FREQ%
9	89	9.3%
10	129	13.4%
11	153	15.9%
12	185	19.3%
13	198	20.6%
14	131	13.6%
15	76	7.9%
TOTAL	961	

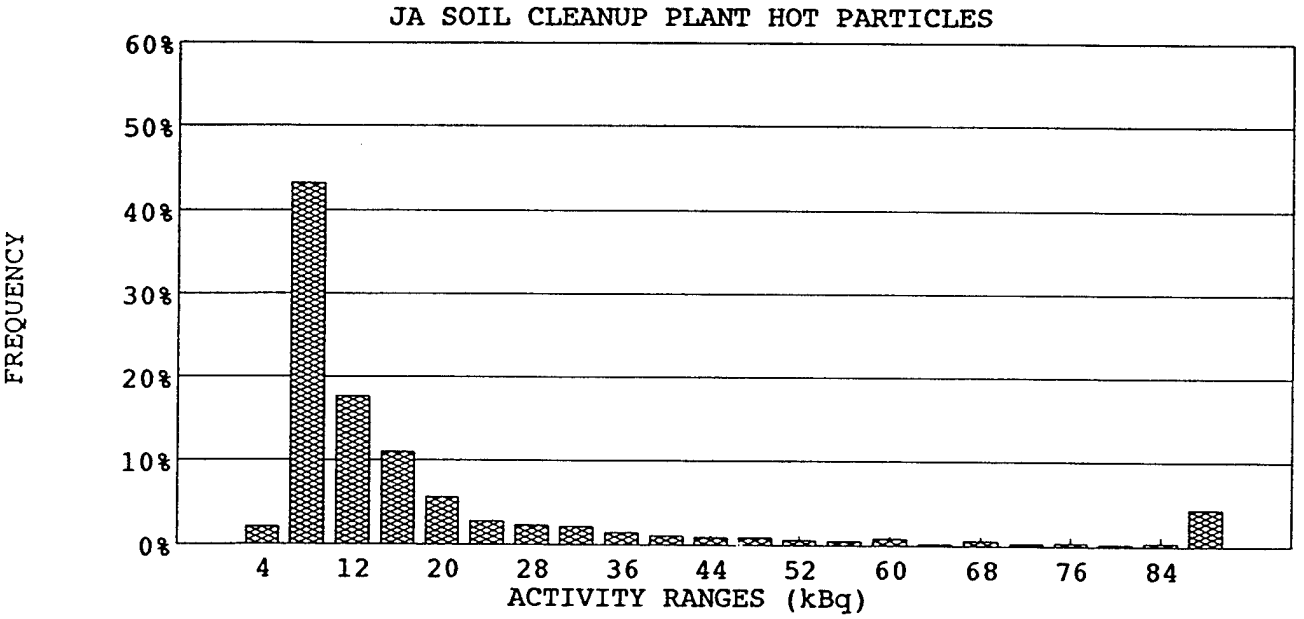
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-261	0.0%	4	40	2.1%
-12000	0	-224	0.0%	8	834	43.3%
-10000	0	-187	0.0%	12	340	17.6%
-8000	2	-149	0.1%	16	213	11.0%
-6000	1	-112	0.1%	20	108	5.6%
-4000	3	-75	0.2%	24	54	2.8%
-2000	5	-37	0.3%	28	45	2.3%
0	19	0	1.3%	32	41	2.1%
2000	97	37	6.5%	36	29	1.5%
4000	212	75	14.3%	40	21	1.1%
6000	313	112	21.1%	44	18	0.9%
8000	269	149	18.1%	48	18	0.9%
10000	234	187	15.8%	52	12	0.6%
12000	113	224	7.6%	56	11	0.6%
14000	57	261	3.8%	60	16	0.8%
16000	74	299	5.0%	64	5	0.3%
18000	52	336	3.5%	68	12	0.6%
20000	30	373	2.0%	72	6	0.3%
22000	3	410	0.2%	76	7	0.4%
24000	0	448	0.0%	80	5	0.3%
26000	0	485	0.0%	84	8	0.4%
>28000	0	0	0.0%	>84	85	4.4%
TOTAL	1,484			TOTAL	1,928	

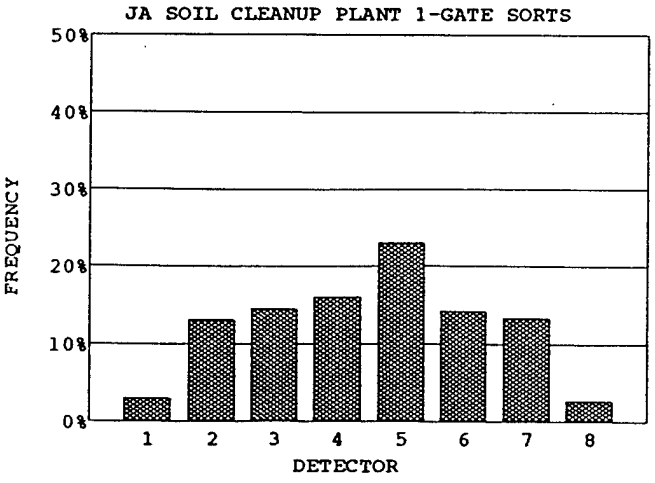
EVENT TYPES HPE 1,923 MPE 437 DISE 3,514

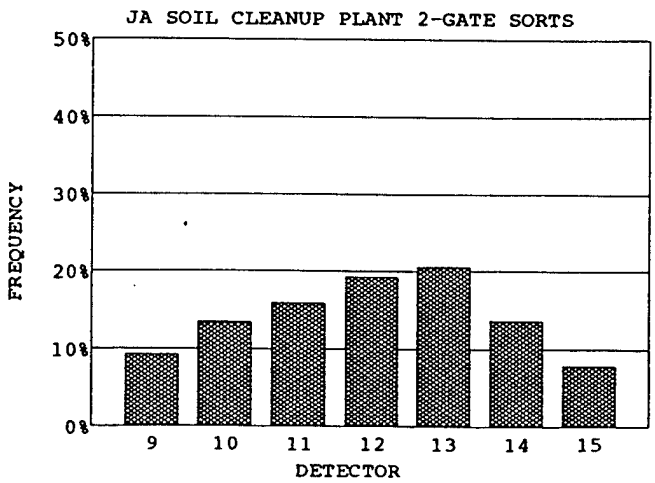
SORTER 1

10-Aug-94









SORTER 2

10-Aug-94

SORTER SOIL DENSITY 1.15 tons/m³ BACKGROUND 0.76 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	7.6 tons	73.5 tons	81.1 tons
MAXIMUM/SORT	53.6 kg	53.6 kg	
MINIMUM/SORT	0.7 kg	45.5 kg	
VOLUME IN-GROUND	6.0 yd³	58.3 yd³	64.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	90.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	60,346 kBq	15,754 kBq	9,833 kBq
MAXIMUM/SORT	4,766 kBq	1,679 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		2,080 Bq/kg	134 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,513		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	116		07:31	11:20
NONE (AD=0 & MD=0 & MND>0)	701		09:14	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	695		09:25	
UNEXPLAINED RECORDS	1		11:11	
0<AD<1kBq & MD>0	4		16:01	
AD=0 & MD>0	1			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		15,130		
2-SEC RECORDS WITH SORTS	2,209			
2-SEC RECORDS WITHOUT SORTS	12,921			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,722		
NONPROCESSING RECORDS (Test, calibration, etc)		11		

2-SEC SORT DETECTORS

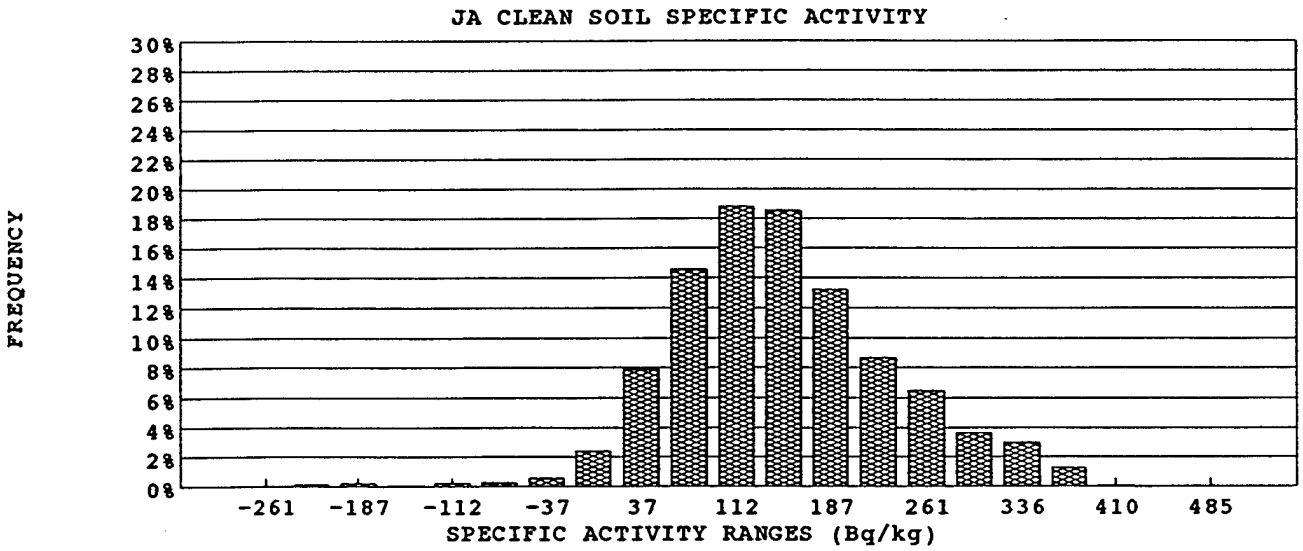
1 DET	1,574	71.25%	5 DET	6	0.27%
2 DET	519	23.49%	6 DET	0	0.00%
3 DET	90	4.07%	7 DET	0	0.00%
4 DET	20	0.91%	8 DET	0	0.00%

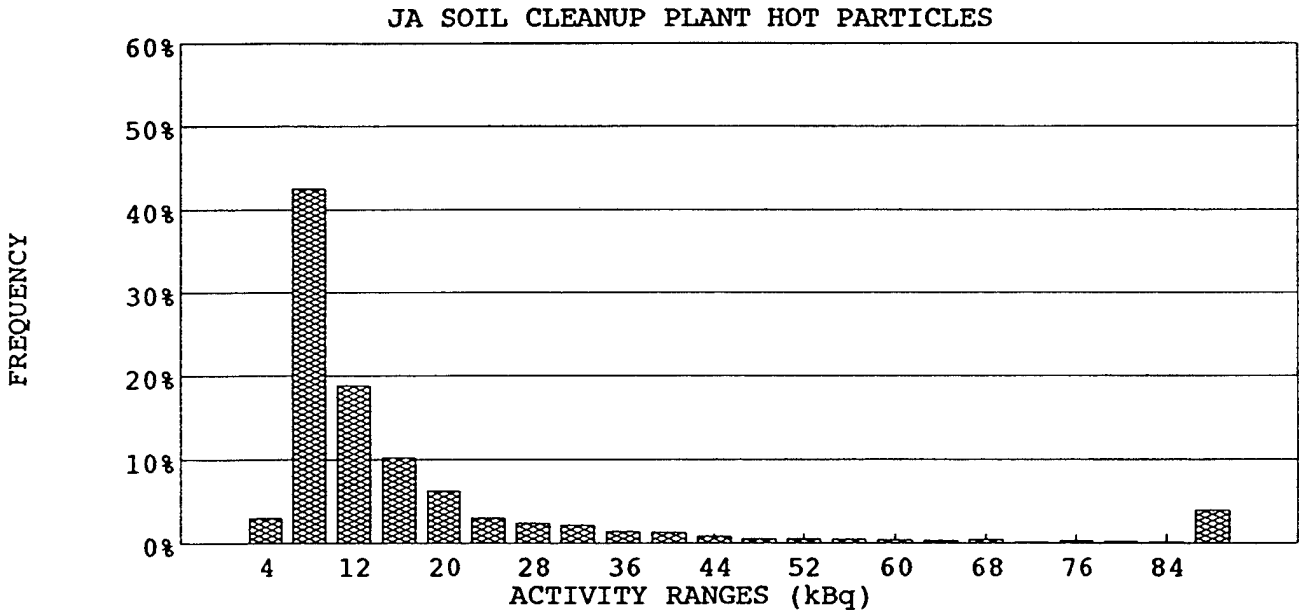
AVERAGE TIME BETWEEN 2-SEC SORTS 19.2 sec

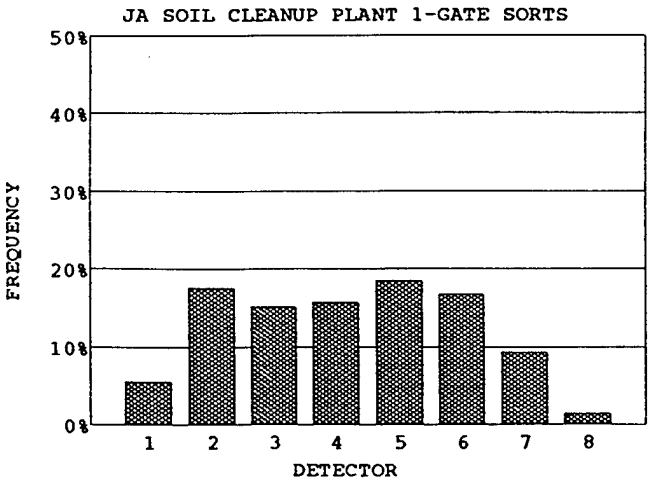
FREQUENCY DISTRIBUTIONS

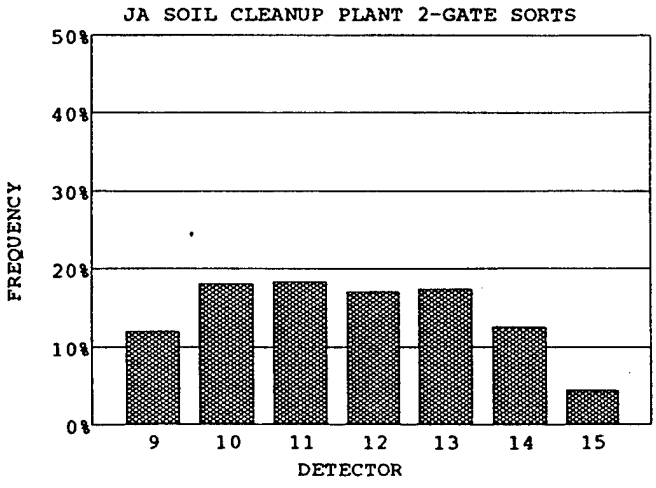
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	61	5.5%	-14000	0	-261	0.0%	4	68	3.1%
2	195	17.6%	-12000	2	-224	0.1%	8	939	42.5%
3	168	15.1%	-10000	3	-187	0.2%	12	416	18.8%
4	175	15.8%	-8000	1	-149	0.1%	16	226	10.2%
5	205	18.5%	-6000	3	-112	0.2%	20	140	6.3%
6	186	16.8%	-4000	4	-75	0.3%	24	68	3.1%
7	103	9.3%	-2000	8	-37	0.6%	28	53	2.4%
8	16	1.4%	0	34	0	2.4%	32	48	2.2%
TOTAL	1,109		2000	111	37	7.9%	36	32	1.4%
			4000	205	75	14.6%	40	29	1.3%
2-GATE SORTS			6000	265	112	18.8%	44	20	0.9%
DET	SORTS	FREQ%	8000	261	149	18.5%	48	13	0.6%
9	132	12.0%	10000	186	187	13.2%	52	13	0.6%
10	199	18.1%	12000	122	224	8.7%	56	10	0.5%
11	202	18.4%	14000	91	261	6.5%	60	9	0.4%
12	188	17.1%	16000	51	299	3.6%	64	8	0.4%
13	192	17.5%	18000	42	336	3.0%	68	11	0.5%
14	138	12.5%	20000	18	373	1.3%	72	3	0.1%
15	49	4.5%	22000	1	410	0.1%	76	8	0.4%
TOTAL	1,100		24000	0	448	0.0%	80	5	0.2%
			26000	0	485	0.0%	84	3	0.1%
			>28000	0	0	0.0%	>84	87	3.9%
			TOTAL	1,408			TOTAL	2,209	

EVENT TYPES	HPE	MPE	DISE
	2,168	614	8,535


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-261 -187 -112 -37 37 112 187 261 336 410 485
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–Aug–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	9.1 hr	9.1 hr	0.0 hr	0.0 hr	18.3 hr
SORTER START–UP	06:28	06:28	NA	NA	
START SOIL PROCESSING	06:35	06:36	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	16:06	16:06	NA	NA	
END SOIL PROCESSING	16:06	16:05	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	8.5 hr	8.4 hr	0.0 hr	0.0 hr	16.9 hr
DOWN–TIME	0.7 hr	0.7 hr	0.0 hr	0.0 hr	1.3 hr
SYSTEM PAUSE	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.1 hr
SORTER NONAVAILABLE TIME	0.9 hr	0.9 hr	10.0 hr	10.0 hr	21.7 hr
AUTHORIZED DELAY TIME	0.4 hr	0.4 hr	10.0 hr	10.0 hr	20.8 hr
PLANT PERFORMANCE					92.6%
PRODUCTIVTY					42.3%

PRODUCTIVITY

Date	11–Aug–94	Excused Delays for day (sorter–hrs)	20.8 hr
Contract day (from 6 Sep)	280	Excused delays for contract (sorter–hrs)	5,017 hr
Current Contract week	47	Excused delay days (plant–days)	125 days
		Excused delay months (plant–month)	4.82 months
Soil production for Day	175 MT		
Cumlative Soil Production for Week	642 MT	Percent of contract completed	56.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,750 MT
Since 6 Sep 93	54,498 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	56,089 MT		
Total Soil production for project	82,376 MT		

MT = metric tons

File Report1 Printed on 12-Aug-94 at 10:40:07 AM

SORTER 1

11-Aug-94

SORTER SOIL DENSITY 1.24 tons/m³ BACKGROUND 0.74 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.4 tons	83.2 tons	87.5 tons
MAXIMUM/SORT	57.8 kg	57.8 kg	
MINIMUM/SORT	0.7 kg	46.2 kg	
VOLUME IN-GROUND	3.5 yd³	65.9 yd³	69.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	74,600 kBq	16,721 kBq	16,002 kBq
MAXIMUM/SORT	1,345 kBq	580 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	-3 kBq
SPECIFIC ACTIVITY		3,832 Bq/kg	192 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,525		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	24			
NONE (AD=0 & MD=0 & MND>0)	377		07:38	11:19
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,124		09:19	
UNEXPLAINED RECORDS	0		11:18	
0<AD<1kBq & MD>0	4		13:26	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		15,250		
2-SEC RECORDS WITH SORTS	3,675			
2-SEC RECORDS WITHOUT SORTS	11,575			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,200		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

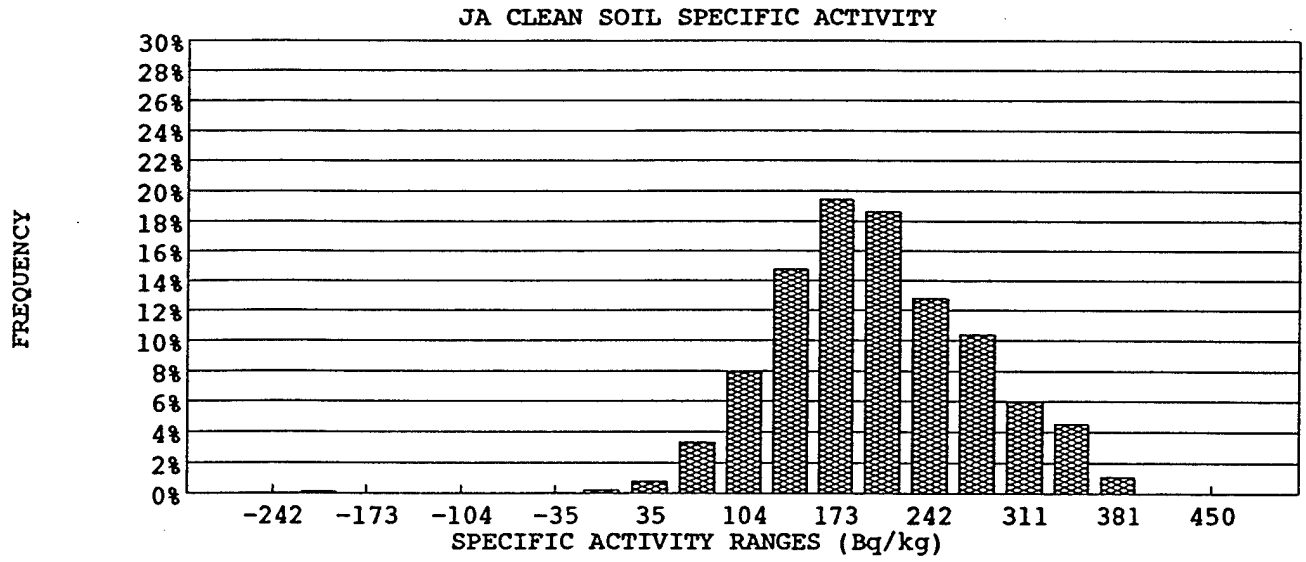
1 DET	2,636	71.73%	5 DET	9	0.24%
2 DET	825	22.45%	6 DET	0	0.00%
3 DET	177	4.82%	7 DET	0	0.00%
4 DET	28	0.76%	8 DET	0	0.00%

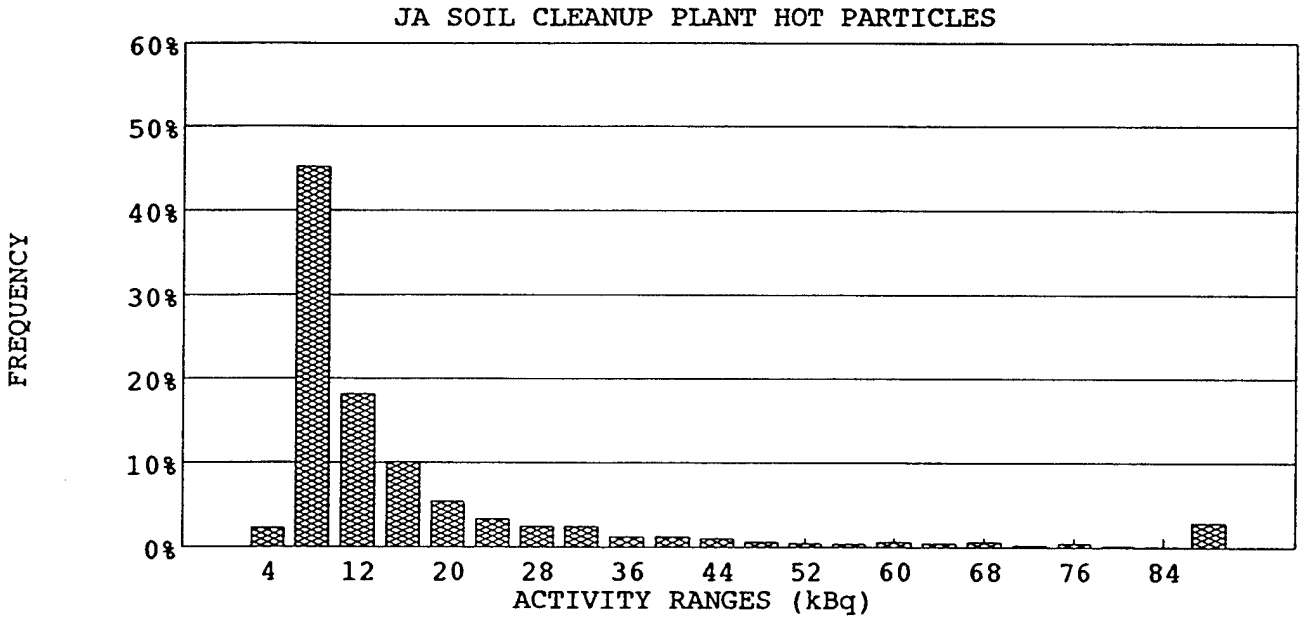
AVERAGE TIME BETWEEN 2-SEC SORTS 11.6 sec

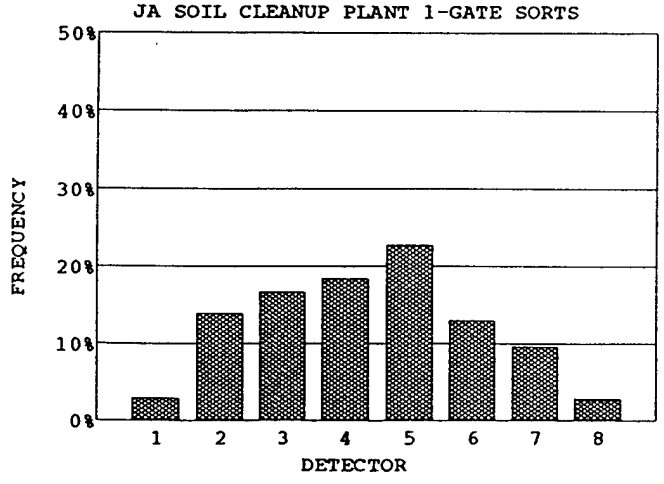
FREQUENCY DISTRIBUTIONS

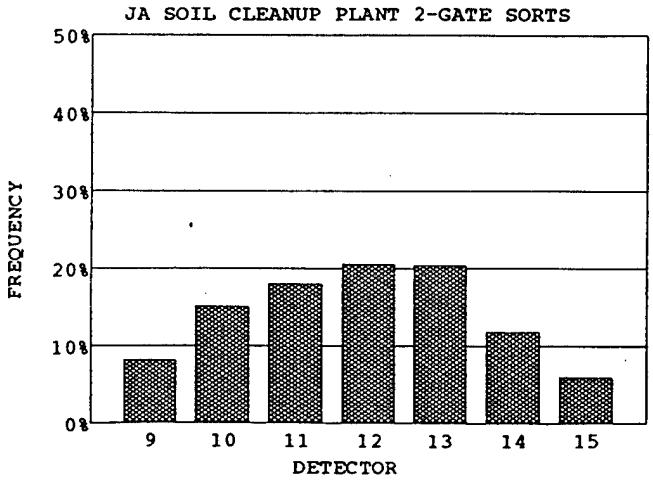
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	54	2.9%	-14000	0	-242	0.0%	4	86	2.3%
2	255	13.8%	-12000	2	-208	0.1%	8	1,659	45.1%
3	307	16.7%	-10000	0	-173	0.0%	12	667	18.1%
4	340	18.4%	-8000	0	-138	0.0%	16	371	10.1%
5	419	22.7%	-6000	0	-104	0.0%	20	200	5.4%
6	239	13.0%	-4000	0	-69	0.0%	24	125	3.4%
7	176	9.5%	-2000	1	-35	0.1%	28	90	2.4%
8	53	2.9%	0	3	0	0.2%	32	90	2.4%
TOTAL	1,843		2000	12	35	0.8%	36	45	1.2%
			4000	50	69	3.3%	40	46	1.3%
2-GATE DET	SORTS	FREQ%	6000	119	104	7.9%	44	36	1.0%
			8000	222	138	14.8%	48	23	0.6%
9	150	8.2%	10000	292	173	19.4%	52	16	0.4%
10	276	15.1%	12000	280	208	18.6%	56	15	0.4%
11	330	18.0%	14000	192	242	12.8%	60	22	0.6%
12	377	20.6%	16000	156	277	10.4%	64	17	0.5%
13	375	20.5%	18000	90	311	6.0%	68	24	0.7%
14	215	11.7%	20000	68	346	4.5%	72	9	0.2%
15	109	5.9%	22000	16	381	1.1%	76	17	0.5%
TOTAL	1,832		24000	0	415	0.0%	80	5	0.1%
			26000	0	450	0.0%	84	4	0.1%
			>28000	0	0	0.0%	>84	108	2.9%
			TOTAL	1,503			TOTAL	3,675	

EVENT TYPES	HPE	MPE	DISE
	3,628	682	1,765


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-242 -173 -104 -35 35 104 173 242 311 381 450
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-Aug-94

SORTER SOIL DENSITY 1.24 tons/m³ BACKGROUND 0.83 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.3 tons	83.0 tons	87.2 tons
MAXIMUM/SORT	57.8 kg	57.8 kg	
MINIMUM/SORT	0.7 kg	47.5 kg	
VOLUME IN-GROUND	3.4 yd³	65.8 yd³	69.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	106,497 kBq	23,155 kBq	15,283 kBq
MAXIMUM/SORT	5,552 kBq	2,493 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	−5 kBq
SPECIFIC ACTIVITY		5,432 Bq/kg	184 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,520		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			18			
NONE (AD=0 & MD=0 & MND>0)			345		06:46	11:19
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			1,159		08:19	
UNEXPLAINED RECORDS			(2)		09:57	
0<AD<1kBq & MD>0			5		11:12	
AD=0 & MD>0			0		14:27	
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				15,200		
2-SEC RECORDS WITH SORTS			4,038			
2-SEC RECORDS WITHOUT SORTS			11,162			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				5,558		
NONPROCESSING RECORDS (Test, calibration, etc)				7		

2-SEC SORT DETECTORS

1 DET	2,920	72.31%	5 DET	8	0.20%
2 DET	890	22.04%	6 DET	0	0.00%
3 DET	181	4.48%	7 DET	1	0.02%
4 DET	39	0.97%	8 DET	1	0.02%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

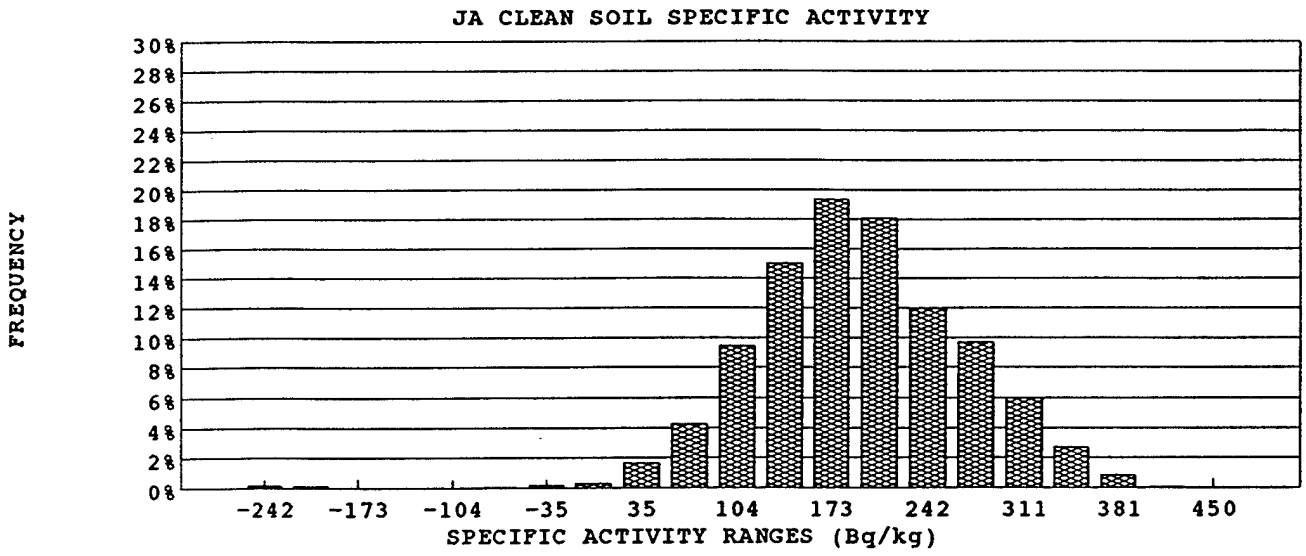
DET	SORTS	FREQ%
1	129	6.4%
2	429	21.2%
3	388	19.2%
4	352	17.4%
5	360	17.8%
6	240	11.9%
7	106	5.2%
8	19	0.9%
TOTAL	2,023	

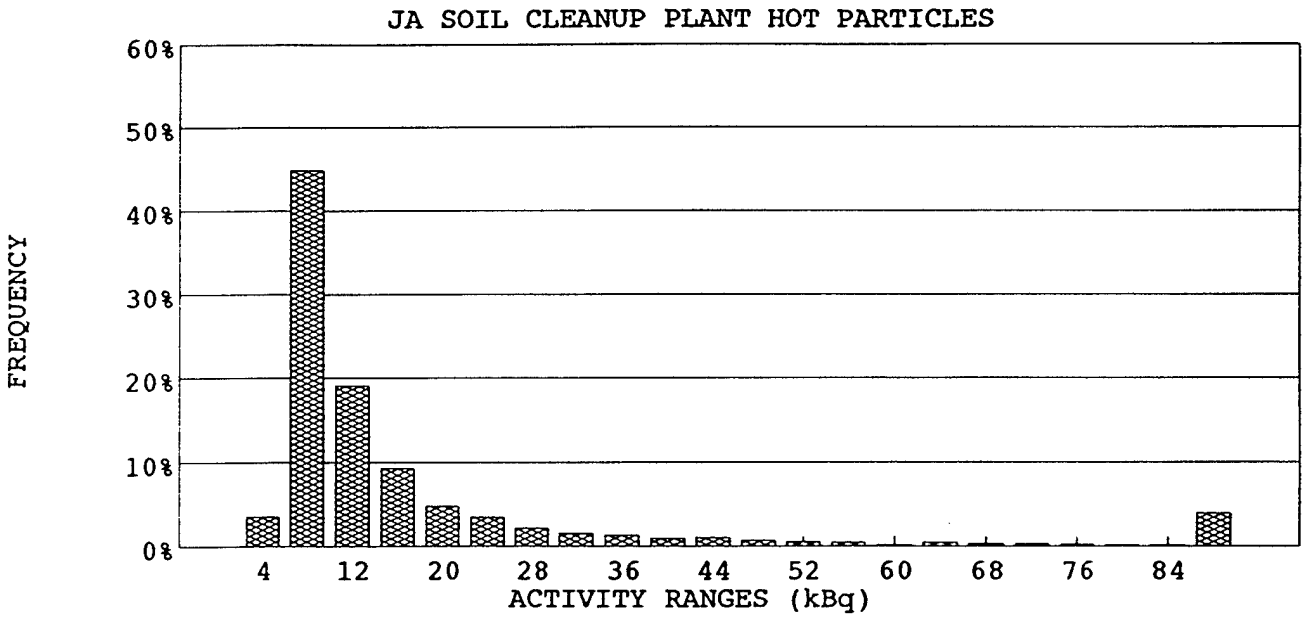
2-GATE SORTS

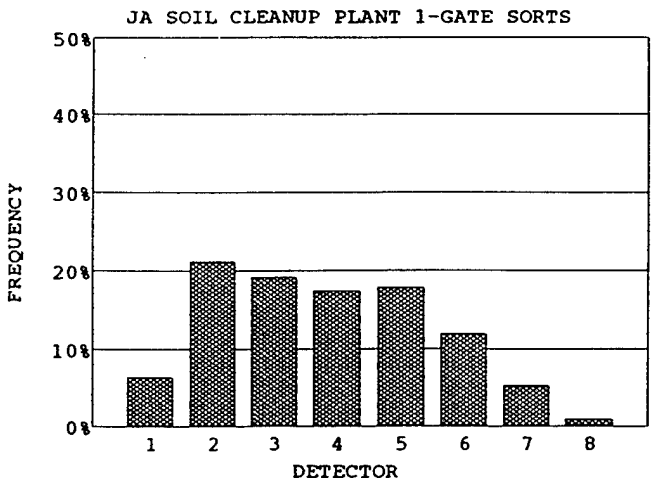
DET	SORTS	FREQ%
9	275	13.6%
10	431	21.4%
11	406	20.1%
12	370	18.4%
13	321	15.9%
14	165	8.2%
15	47	2.3%
TOTAL	2,015	

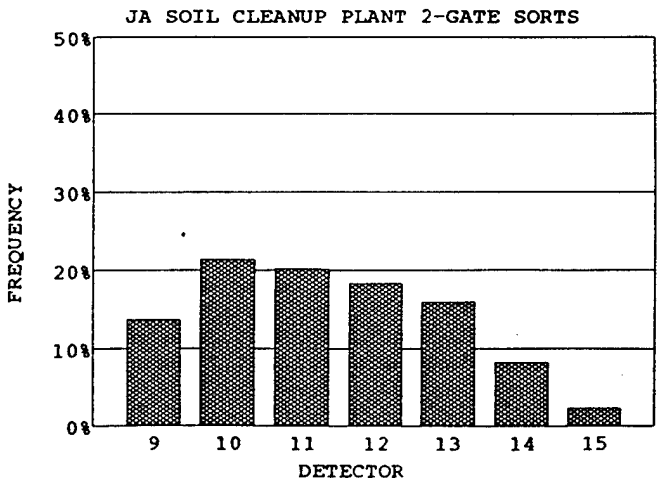
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
−14000	3	−242	0.2%	4	146	3.6%
−12000	2	−208	0.1%	8	1,811	44.8%
−10000	0	−173	0.0%	12	771	19.1%
−8000	0	−138	0.0%	16	375	9.3%
−6000	0	−104	0.0%	20	196	4.9%
−4000	1	−69	0.1%	24	141	3.5%
−2000	3	−35	0.2%	28	90	2.2%
0	5	0	0.3%	32	65	1.6%
2000	25	35	1.7%	36	53	1.3%
4000	64	69	4.2%	40	39	1.0%
6000	143	104	9.5%	44	43	1.1%
8000	226	138	15.0%	48	30	0.7%
10000	292	173	19.4%	52	22	0.5%
12000	273	208	18.1%	56	19	0.5%
14000	181	242	12.0%	60	9	0.2%
16000	146	277	9.7%	64	18	0.4%
18000	90	311	6.0%	68	14	0.3%
20000	41	346	2.7%	72	13	0.3%
22000	13	381	0.9%	76	10	0.2%
24000	1	415	0.1%	80	6	0.1%
26000	0	450	0.0%	84	6	0.1%
>28000	0	0	0.0%	>84	161	4.0%
TOTAL	1,509			TOTAL	4,038	

EVENT TYPES HPE 3,995 MPE 641 DISE 1,310


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-242 -173 -104 -35 35 104 173 242 311 381 450
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–Aug–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	13:19	13:19	NA	NA	
START SOIL PROCESSING	13:24	13:23	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	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:05	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	2.5 hr	2.5 hr	0.0 hr	0.0 hr	5.0 hr
DOWN–TIME	0.5 hr	0.5 hr	0.0 hr	0.0 hr	1.1 hr
SYSTEM PAUSE	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.4 hr
SORTER NONAVAILABLE TIME	7.0 hr	7.0 hr	10.0 hr	10.0 hr	34.0 hr
AUTHORIZED DELAY TIME	6.7 hr	6.7 hr	10.0 hr	10.0 hr	33.4 hr
PLANT PERFORMANCE					82.4%
PRODUCTIVTY					12.4%

PRODUCTIVITY

Date	12–Aug–94	Excused Delays for day (sorter–hrs)	33.4 hr
Contract day (from 6 Sep)	281	Excused delays for contract (sorter–hrs)	5,050 hr
Current Contract week	47	Excused delay days (plant–days)	126 days
		Excused delay months (plant–month)	4.86 months
Soil production for Day	48 MT		
Cumlative Soil Production for Week	690 MT	Percent of contract completed	56.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,746 MT
Since 6 Sep 93	54,546 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	56,137 MT		
Total Soil production for project	82,424 MT		

MT = metric tons

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SORTER 1

12-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.71 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	5.6 tons	18.1 tons	23.7 tons
MAXIMUM/SORT	57.8 kg	57.8 kg	
MINIMUM/SORT	0.6 kg	43.2 kg	
VOLUME IN-GROUND	4.4 yd³	14.4 yd³	18.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	76.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	19,824 kBq	7,008 kBq	3,638 kBq
MAXIMUM/SORT	1,214 kBq	452 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-14 kBq
SPECIFIC ACTIVITY		1,253 Bq/kg	201 Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					444		
ALL 80 ELEMENTS SORT (MD>0&MND=0)				93		None	14:13
NONE (AD=0 & MD=0 & MND>0)				118			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)				298			
UNEXPLAINED RECORDS				(65)			
0<AD<1kBq & MD>0				0			
AD=0 & MD>0				0			
AD<0 & MD >0				0			
2-SEC COUNT PERIODS					4,440		
2-SEC RECORDS WITH SORTS				1,035			
2-SEC RECORDS WITHOUT SORTS				3,405			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					1,479		
NONPROCESSING RECORDS (Test, calibration, etc)					3		
2-SEC SORT DETECTORS							
1 DET	729	70.43%	5 DET		2	0.19%	
2 DET	248	23.96%	6 DET		0	0.00%	
3 DET	48	4.64%	7 DET		0	0.00%	
4 DET	8	0.77%	8 DET		0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			12.2 sec				

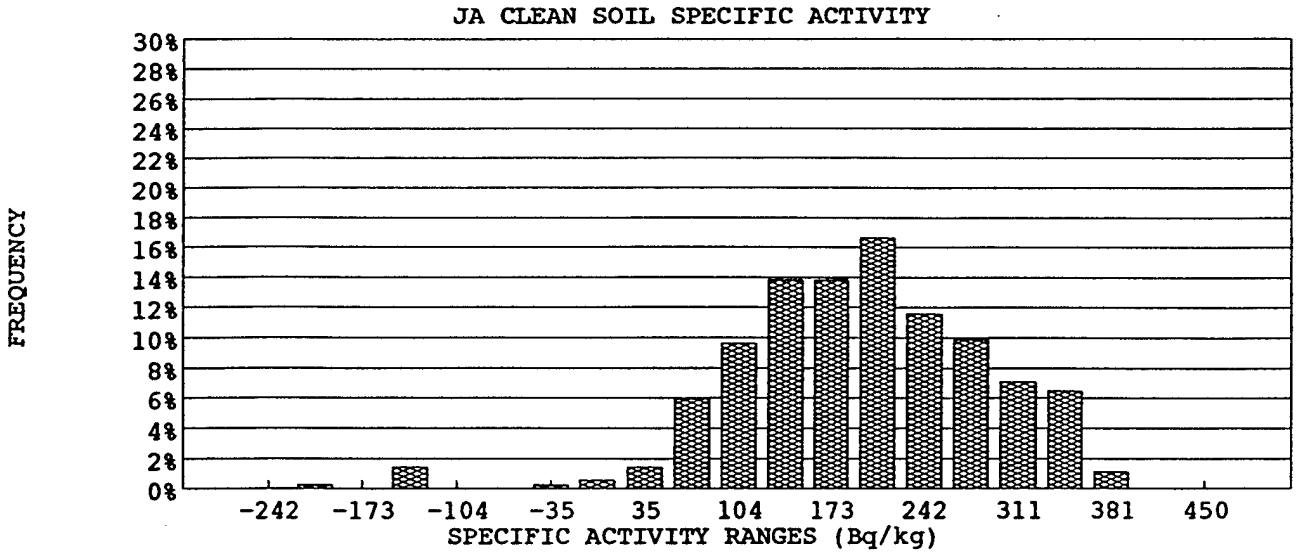
FREQUENCY DISTRIBUTIONS

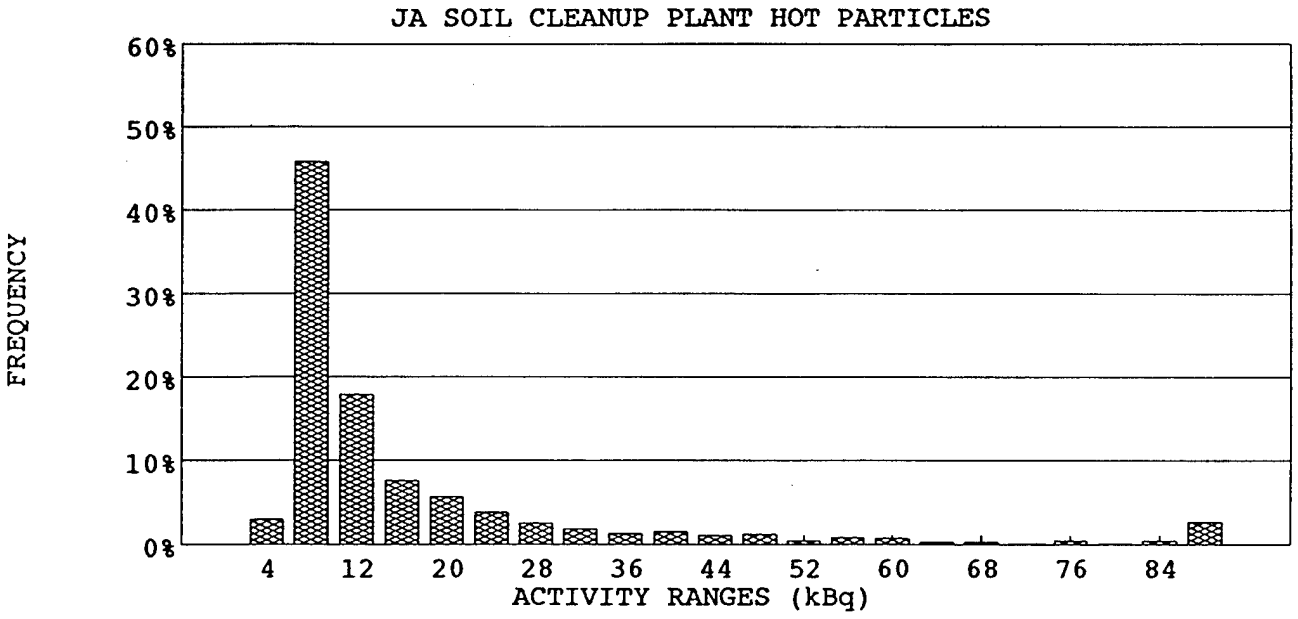
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	8	1.5%	-14000	0	-242	0.0%	4	31	3.0%
2	78	15.0%	-12000	1	-208	0.3%	8	474	45.8%
3	101	19.5%	-10000	0	-173	0.0%	12	185	17.9%
4	98	18.9%	-8000	5	-138	1.4%	16	79	7.6%
5	98	18.9%	-6000	0	-104	0.0%	20	59	5.7%
6	59	11.4%	-4000	0	-69	0.0%	24	40	3.9%
7	56	10.8%	-2000	1	-35	0.3%	28	26	2.5%
8	21	4.0%	0	2	0	0.6%	32	19	1.8%
TOTAL	519		2000	5	35	1.4%	36	14	1.4%
			4000	21	69	5.9%	40	16	1.5%
2-GATE SORTS			6000	34	104	9.6%	44	11	1.1%
DET	SORTS	FREQ%	8000	49	138	13.8%	48	13	1.3%
9	43	8.3%	10000	49	173	13.8%	52	5	0.5%
10	79	15.3%	12000	59	208	16.7%	56	9	0.9%
11	93	18.0%	14000	41	242	11.6%	60	8	0.8%
12	104	20.2%	16000	35	277	9.9%	64	3	0.3%
13	93	18.0%	18000	25	311	7.1%	68	3	0.3%
14	65	12.6%	20000	23	346	6.5%	72	1	0.1%
15	39	7.6%	22000	4	381	1.1%	76	5	0.5%
TOTAL	516		24000	0	415	0.0%	80	1	0.1%
			26000	0	450	0.0%	84	5	0.5%
			>28000	0	0	0.0%	>84	28	2.7%
			TOTAL	354			TOTAL	1,035	

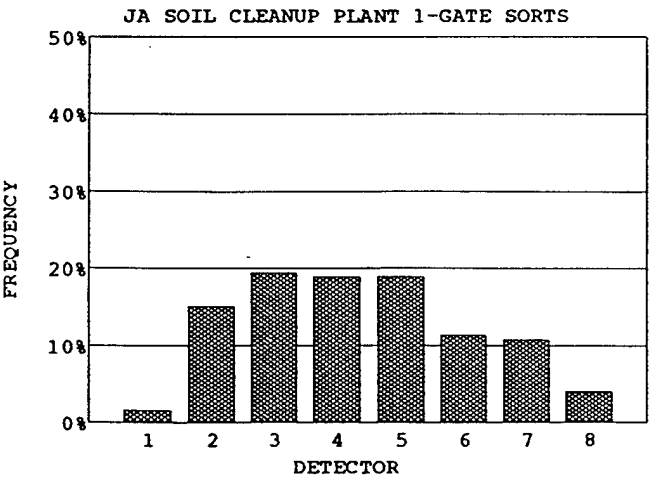
EVENT TYPES HPE 1,002 MPE 379 DISE 6,853

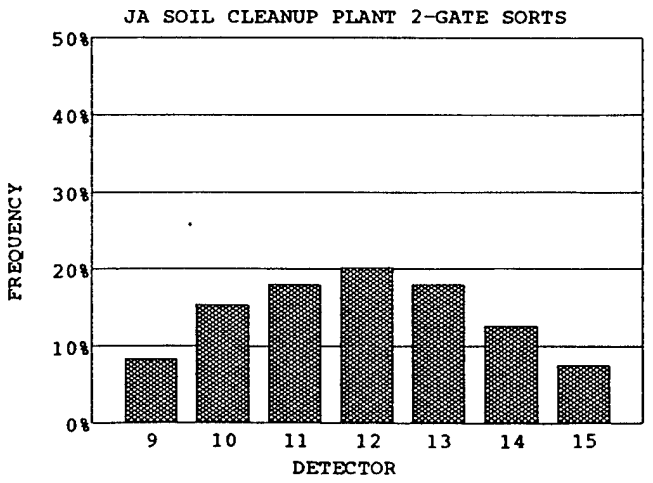
SORTER 1

12-Aug-94









SORTER 2

12-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	5.6 tons	18.5 tons	24.1 tons
MAXIMUM/SORT	57.8 kg	57.8 kg	
MINIMUM/SORT	0.6 kg	42.6 kg	
VOLUME IN-GROUND	4.5 yd³	14.6 yd³	19.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	76.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	27,490 kBq	8,656 kBq	4,152 kBq
MAXIMUM/SORT	1,130 kBq	515 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,539 Bq/kg	225 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		451		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	92			
NONE (AD=0 & MD=0 & MND>0)	98		15:02	14:14
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	332			
UNEXPLAINED RECORDS	(71)			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		4,510		
2-SEC RECORDS WITH SORTS	1,274			
2-SEC RECORDS WITHOUT SORTS	3,236			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,725		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	893	70.09%	5 DET	8	0.63%
2 DET	294	23.08%	6 DET	0	0.00%
3 DET	58	4.55%	7 DET	0	0.00%
4 DET	21	1.65%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.1 sec

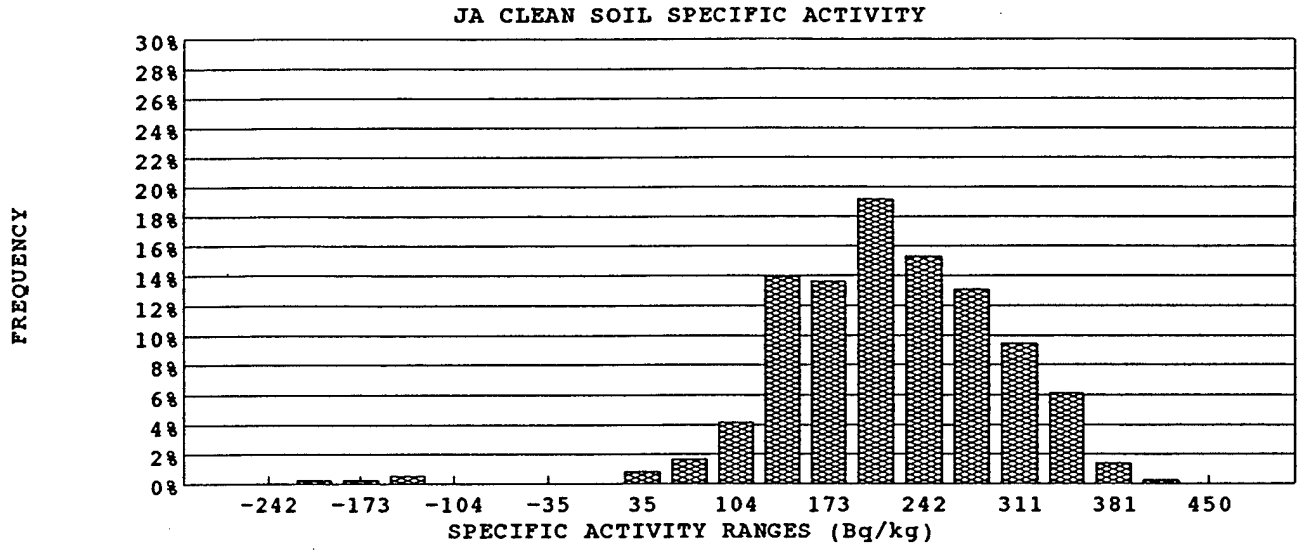
FREQUENCY DISTRIBUTIONS

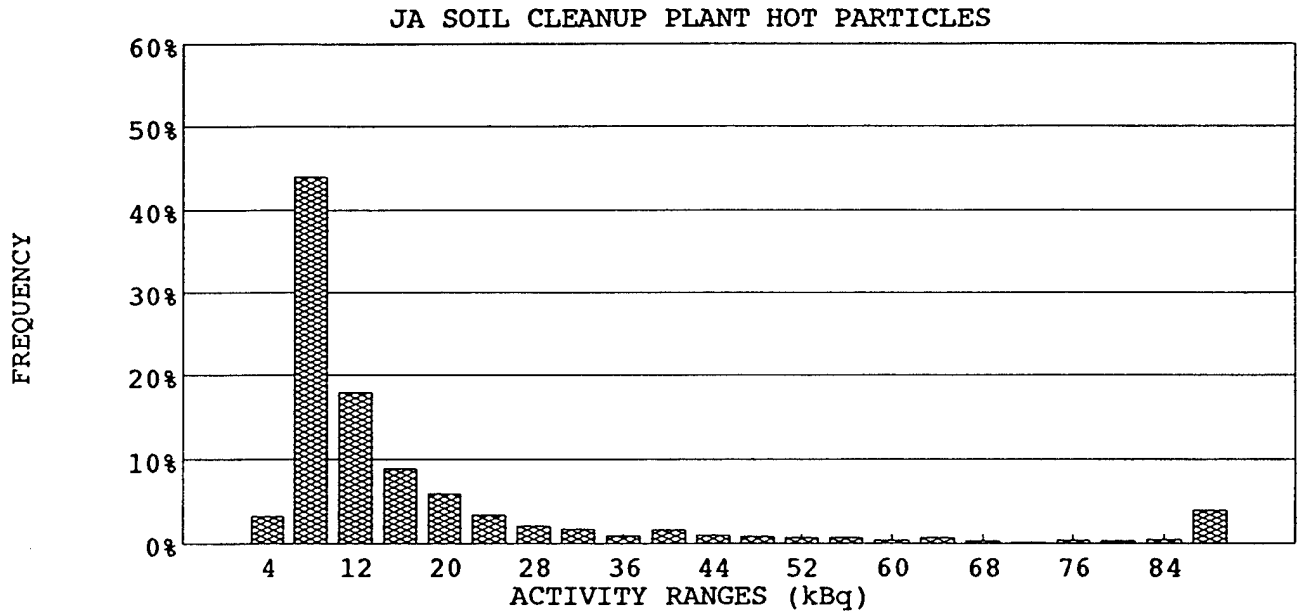
1-GATE DET	SORTS	FREQ%
1	45	7.2%
2	122	19.6%
3	95	15.3%
4	122	19.6%
5	83	13.4%
6	91	14.7%
7	55	8.9%
8	8	1.3%
TOTAL	621	

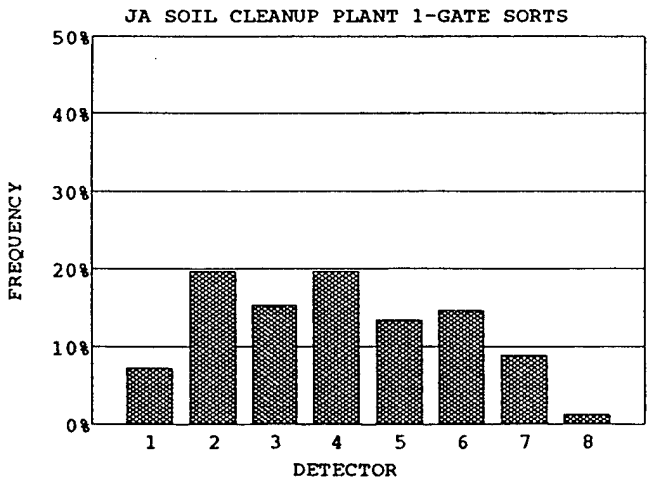
2-GATE DET	SORTS	FREQ%
9	92	14.1%
10	122	18.7%
11	137	21.0%
12	112	17.2%
13	99	15.2%
14	68	10.4%
15	23	3.5%
TOTAL	653	

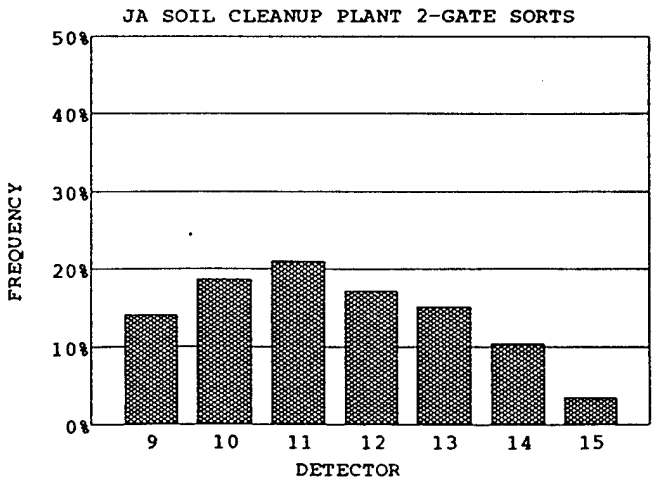
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-242	0.0%	4	42	3.3%
-12000	1	-208	0.3%	8	560	44.0%
-10000	1	-173	0.3%	12	228	17.9%
-8000	2	-138	0.6%	16	114	8.9%
-6000	0	-104	0.0%	20	76	6.0%
-4000	0	-69	0.0%	24	44	3.5%
-2000	0	-35	0.0%	28	27	2.1%
0	0	0	0.0%	32	22	1.7%
2000	3	35	0.8%	36	12	0.9%
4000	6	69	1.7%	40	21	1.6%
6000	15	104	4.2%	44	13	1.0%
8000	50	138	13.9%	48	11	0.9%
10000	49	173	13.6%	52	9	0.7%
12000	69	208	19.2%	56	9	0.7%
14000	55	242	15.3%	60	5	0.4%
16000	47	277	13.1%	64	9	0.7%
18000	34	311	9.4%	68	4	0.3%
20000	22	346	6.1%	72	2	0.2%
22000	5	381	1.4%	76	5	0.4%
24000	1	415	0.3%	80	4	0.3%
26000	0	450	0.0%	84	6	0.5%
>28000	0	0	0.0%	>84	51	4.0%
TOTAL	360			TOTAL	1,274	

EVENT TYPES HPE 1,222 MPE 456 DISE 6,649


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-242 -173 -104 -35 35 104 173 242 311 381 450
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–Aug–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	8.3 hr	8.3 hr	0.0 hr	0.0 hr	16.6 hr
SORTER START–UP	06:57	06:57	NA	NA	
START SOIL PROCESSING	07:02	07:02	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	15:15	15:15	NA	NA	
END SOIL PROCESSING	15:01	15:00	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	7.7 hr	0.0 hr	0.0 hr	15.5 hr
DOWN–TIME	0.5 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
SYSTEM PAUSE	0.2 hr	0.2 hr	0.0 hr	0.0 hr	0.3 hr
SORTER NONAVAILABLE TIME	2.2 hr	2.2 hr	10.0 hr	10.0 hr	24.4 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	10.0 hr	10.0 hr	20.0 hr
PLANT PERFORMANCE					93.4%
PRODUCTIVTY					36.9%

PRODUCTIVITY

Date	13–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	282	Excused delays for contract (sorter–hrs)	5,070 hr
Current Contract week	47	Excused delay days (plant–days)	127 days
		Excused delay months (plant–month)	4.88 months
Soil production for Day	148 MT		
Cumlative Soil Production for Week	838 MT	Percent of contract completed	56.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,735 MT
Since 6 Sep 93	54,694 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	56,285 MT		
Total Soil production for project	82,572 MT		

MT = metric tons

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SORTER 1

13-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.71 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	21.7 tons	52.5 tons	74.2 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	41.8 kg	
VOLUME IN-GROUND	17.2 yd³	41.6 yd³	58.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	70.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	88,154 kBq	29,481 kBq	10,827 kBq
MAXIMUM/SORT	2,813 kBq	1,146 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		1,359 Bq/kg	206 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,397		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	378			
NONE (AD=0 & MD=0 & MND>0)	351		None	09:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	668			13:14
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,970		
2-SEC RECORDS WITH SORTS	3,760			
2-SEC RECORDS WITHOUT SORTS	10,210			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,157		
NONPROCESSING RECORDS (Test, calibration, etc)		13		

2-SEC SORT DETECTORS

1 DET	2,601	69.18%	5 DET	16	0.43%
2 DET	873	23.22%	6 DET	0	0.00%
3 DET	222	5.90%	7 DET	0	0.00%
4 DET	48	1.28%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 10.7 sec

FREQUENCY DISTRIBUTIONS

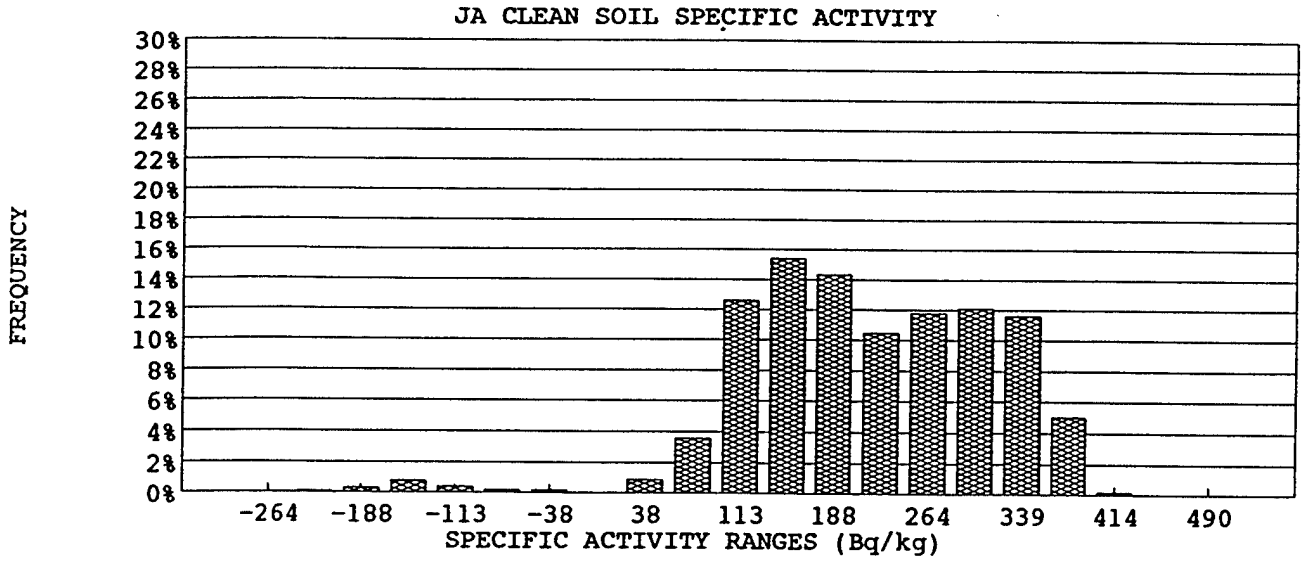
1-GATE DET	SORTS	FREQ%
1	67	3.6%
2	224	11.9%
3	301	16.0%
4	331	17.5%
5	389	20.6%
6	258	13.7%
7	248	13.1%
8	69	3.7%
TOTAL	1,887	

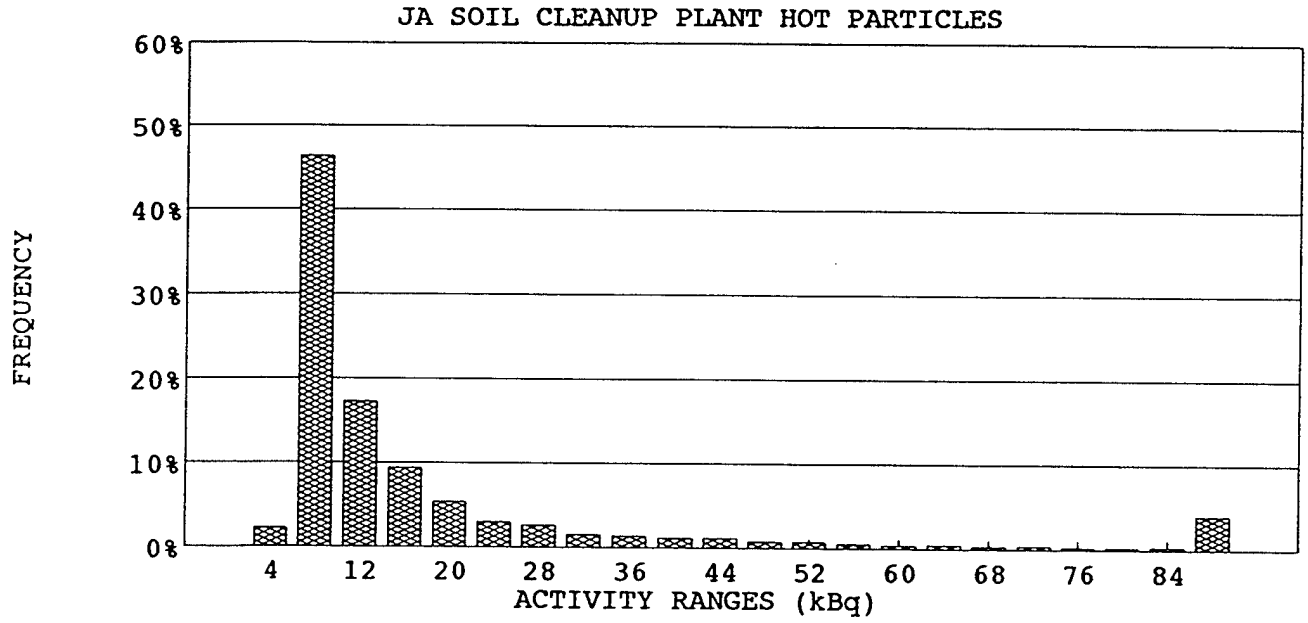
2-GATE DET	SORTS	FREQ%
9	138	7.4%
10	267	14.3%
11	329	17.6%
12	362	19.3%
13	383	20.4%
14	236	12.6%
15	158	8.4%
TOTAL	1,873	

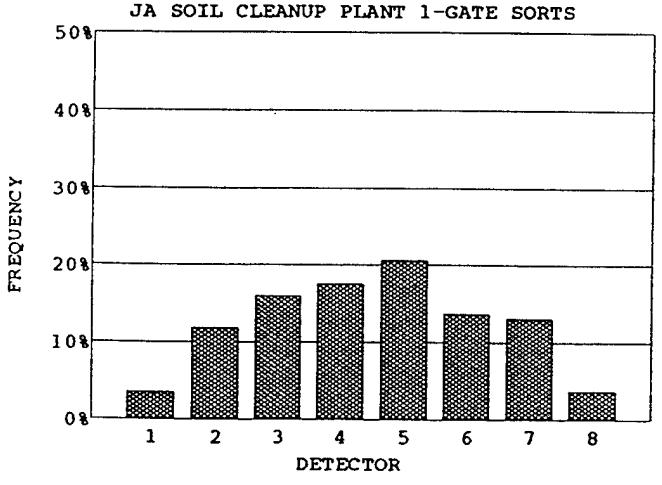
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%
-14000	0	-264	0.0%
-12000	1	-226	0.1%
-10000	3	-188	0.3%
-8000	8	-151	0.8%
-6000	4	-113	0.4%
-4000	2	-75	0.2%
-2000	2	-38	0.2%
0	0	0	0.0%
2000	9	38	0.9%
4000	37	75	3.6%
6000	130	113	12.6%
8000	159	151	15.4%
10000	148	188	14.3%
12000	108	226	10.5%
14000	122	264	11.8%
16000	125	301	12.1%
18000	120	339	11.6%
20000	52	377	5.0%
22000	2	414	0.2%
24000	0	452	0.0%
26000	0	490	0.0%
>28000	0	0	0.0%
TOTAL	1,032		

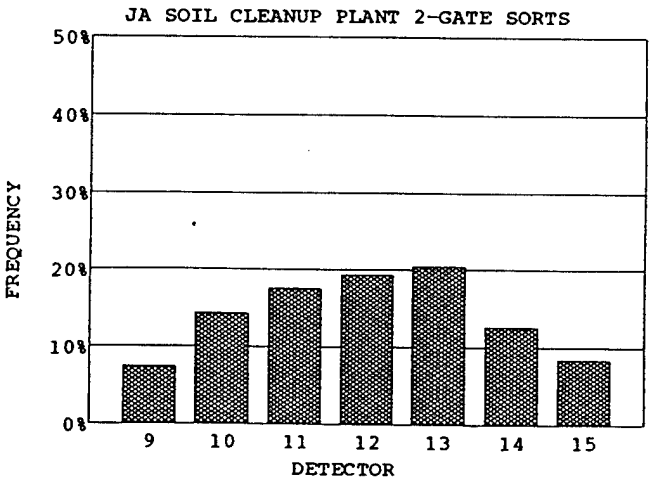
ACT_P (kBq)	NUM (#)	FREQ%
4	84	2.2%
8	1,746	46.4%
12	651	17.3%
16	353	9.4%
20	202	5.4%
24	114	3.0%
28	99	2.6%
32	57	1.5%
36	52	1.4%
40	44	1.2%
44	44	1.2%
48	28	0.7%
52	28	0.7%
56	21	0.6%
60	14	0.4%
64	16	0.4%
68	11	0.3%
72	15	0.4%
76	9	0.2%
80	9	0.2%
84	11	0.3%
>84	152	4.0%
TOTAL	3,760	

EVENT TYPES	HPE	MPE	DISE
	3,576	1,406	27,700


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-264
-188
-113
-38
38
113
188
264
339
414
490
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

13-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	32.0 tons	42.0 tons	74.0 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	42.5 kg	
VOLUME IN-GROUND	25.4 yd³	33.3 yd³	58.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	56.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	103,588 kBq	40,020 kBq	8,981 kBq
MAXIMUM/SORT	2,764 kBq	1,173 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		1,250 Bq/kg	214 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,393		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	580			
NONE (AD=0 & MD=0 & MND>0)	303		11:33	09:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	510		11:56	13:14
UNEXPLAINED RECORDS	0		13:33	
0<AD<1kBq & MD>0	4		14:12	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,930		
2-SEC RECORDS WITH SORTS	4,711			
2-SEC RECORDS WITHOUT SORTS	9,219			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		6,104		
NONPROCESSING RECORDS (Test, calibration, etc)		16		

2-SEC SORT DETECTORS

1 DET	3,215	68.24%	5 DET	25	0.53%
2 DET	1,109	23.54%	6 DET	0	0.00%
3 DET	293	6.22%	7 DET	0	0.00%
4 DET	69	1.46%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 8.7 sec

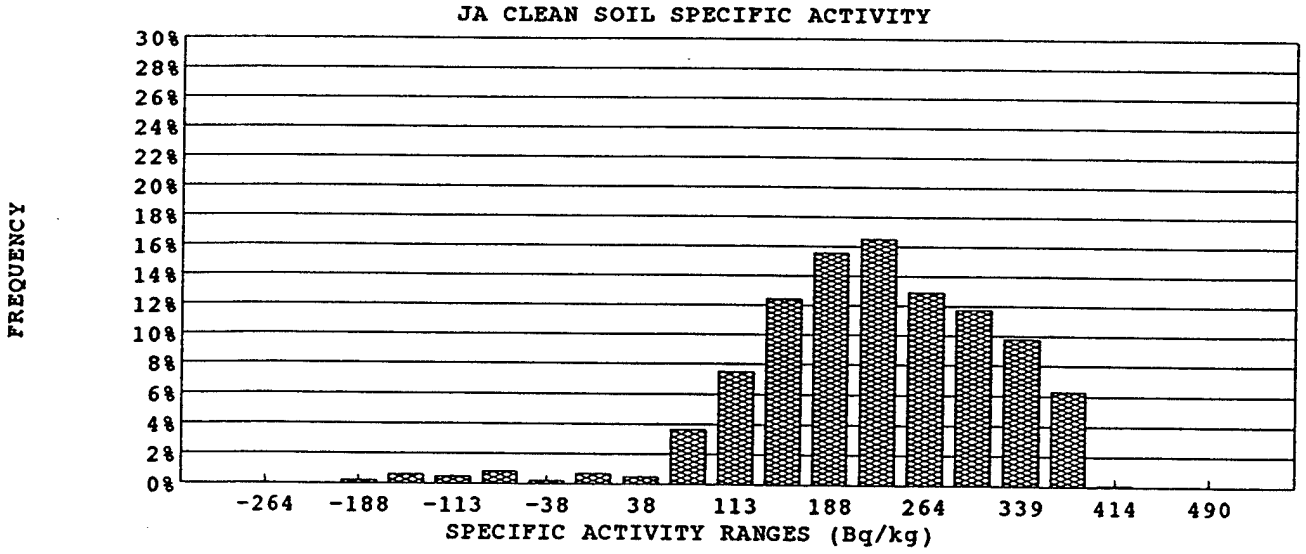
FREQUENCY DISTRIBUTIONS

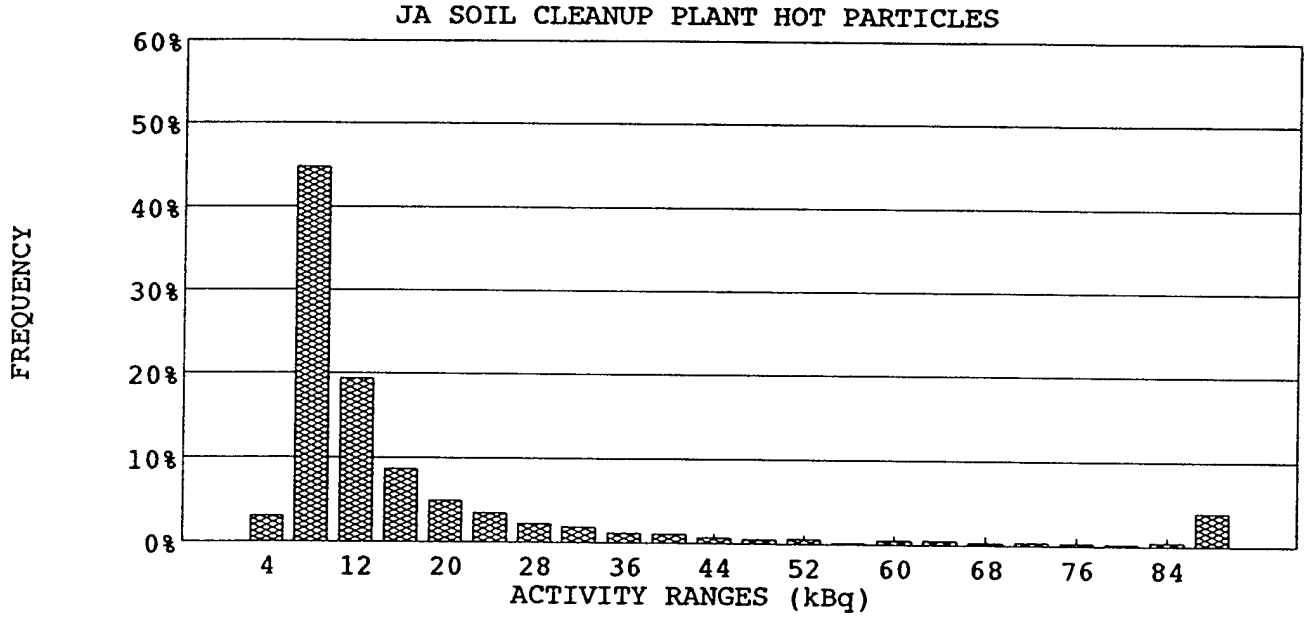
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	141	6.0%	-14000	0	-264	0.0%	4	147	3.1%
2	422	17.9%	-12000	0	-226	0.0%	8	2,110	44.8%
3	397	16.8%	-10000	2	-188	0.2%	12	913	19.4%
4	411	17.4%	-8000	5	-151	0.6%	16	409	8.7%
5	402	17.0%	-6000	4	-113	0.5%	20	236	5.0%
6	314	13.3%	-4000	7	-75	0.8%	24	166	3.5%
7	232	9.8%	-2000	2	-38	0.2%	28	107	2.3%
8	42	1.8%	0	6	0	0.7%	32	87	1.8%
TOTAL	2,361		2000	4	38	0.5%	36	57	1.2%
			4000	30	75	3.6%	40	51	1.1%
2-GATE DET	SORTS	FREQ%	6000	62	113	7.5%	44	35	0.7%
			8000	103	151	12.4%	48	26	0.6%
9	280	11.9%	10000	129	188	15.6%	52	30	0.6%
10	461	19.6%	12000	137	226	16.5%	56	10	0.2%
11	452	19.2%	14000	107	264	12.9%	60	28	0.6%
12	405	17.2%	16000	97	301	11.7%	64	26	0.6%
13	362	15.4%	18000	81	339	9.8%	68	17	0.4%
14	275	11.7%	20000	52	377	6.3%	72	20	0.4%
15	115	4.9%	22000	1	414	0.1%	76	17	0.4%
TOTAL	2,350		24000	0	452	0.0%	80	11	0.2%
			26000	0	490	0.0%	84	22	0.5%
			>28000	0	0	0.0%	>84	186	3.9%
			TOTAL	829			TOTAL	4,711	

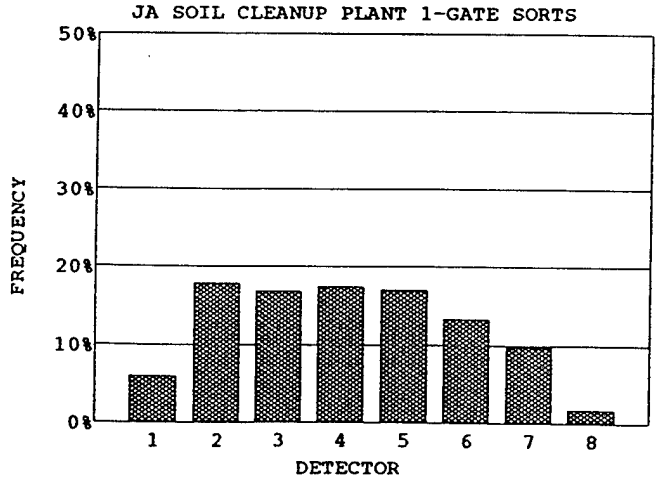
EVENT TYPES	HPE	4,434	MPE	2,111	DISE	41,672

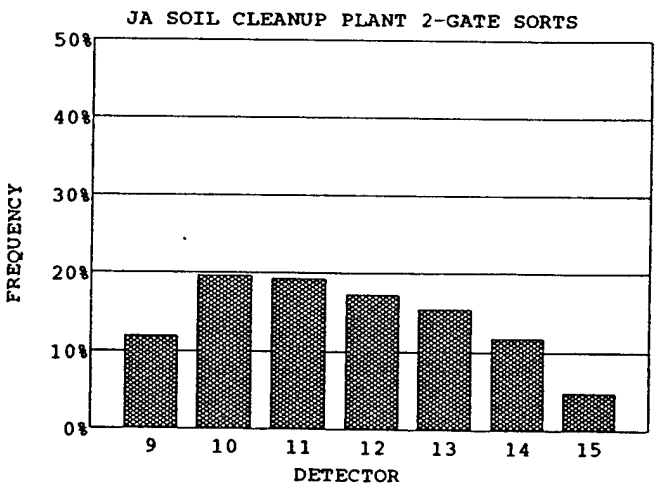
SORTER 2

13-Aug-94









WORK HISTORY – JA SOIL CLEANUP PLANT 15–Aug–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	8.3 hr	8.3 hr	0.0 hr	0.0 hr	16.6 hr
SORTER START–UP	06:32	06:32	NA	NA	
START SOIL PROCESSING	06:46	06:47	NA	NA	
TIME REQUIRED TO START–UP	0.2 hr	0.3 hr	0.0 hr	0.0 hr	0.5 hr
SORTER SHUT–DOWN	15:20	15:20	NA	NA	
END SOIL PROCESSING	15:02	15:01	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	7.1 hr	7.1 hr	0.0 hr	0.0 hr	14.1 hr
DOWN–TIME	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.5 hr
SYSTEM PAUSE	1.2 hr	1.2 hr	0.0 hr	0.0 hr	2.3 hr
SORTER NONAVAILABLE TIME	1.7 hr	1.7 hr	10.0 hr	10.0 hr	23.4 hr
AUTHORIZED DELAY TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
PLANT PERFORMANCE					85.1%
PRODUCTIVTY					35.3%

PRODUCTIVITY

Date	15–Aug–94	Excused Delays for day (sorter–hrs)	21 hr
Contract day (from 6 Sep)	283	Excused delays for contract (sorter–hrs)	5,091 hr
Current Contract week	48	Excused delay days (plant–days)	127 days
		Excused delay months (plant–month)	4.90 months
Soil production for Day	135 MT		
Cumlative Soil Production for Week	135 MT	Percent of contract completed	56.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,720 MT
Since 6 Sep 93	54,829 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	56,420 MT		
Total Soil production for project	82,707 MT		

MT = metric tons

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SORTER 1

15–Aug–94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.70 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.7 tons	63.7 tons	67.5 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	44.5 kg	
VOLUME IN–GROUND	3.0 yd³	50.5 yd³	53.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	94.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	31,355 kBq	8,201 kBq	5,501 kBq
MAXIMUM/SORT	2,063 kBq	919 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	–4 kBq
SPECIFIC ACTIVITY		2,192 Bq/kg	86 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,271		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	57			
NONE (AD=0 & MD=0 & MND>0)	837		07:02	10:51
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	377		08:10	
UNEXPLAINED RECORDS	0		14:01	
0<AD<1kBq & MD>0	4		14:12	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2–SEC COUNT PERIODS		12,710		
2–SEC RECORDS WITH SORTS	1,185			
2–SEC RECORDS WITHOUT SORTS	11,525			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		2,456		
NONPROCESSING RECORDS (Test, calibration, etc)		8		

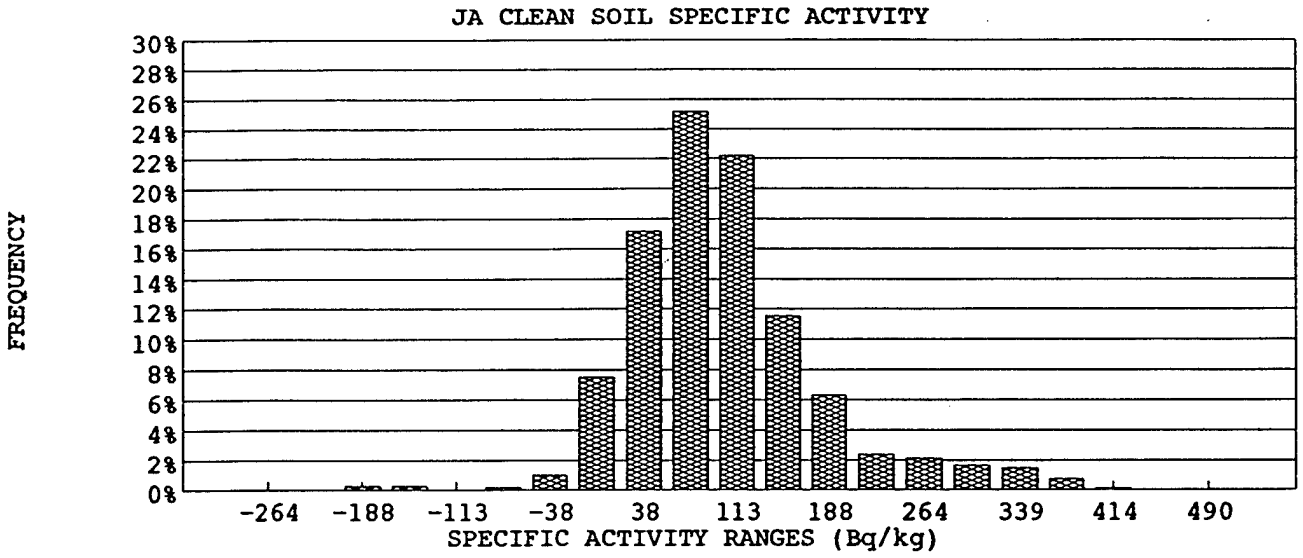
2–SEC SORT DETECTORS

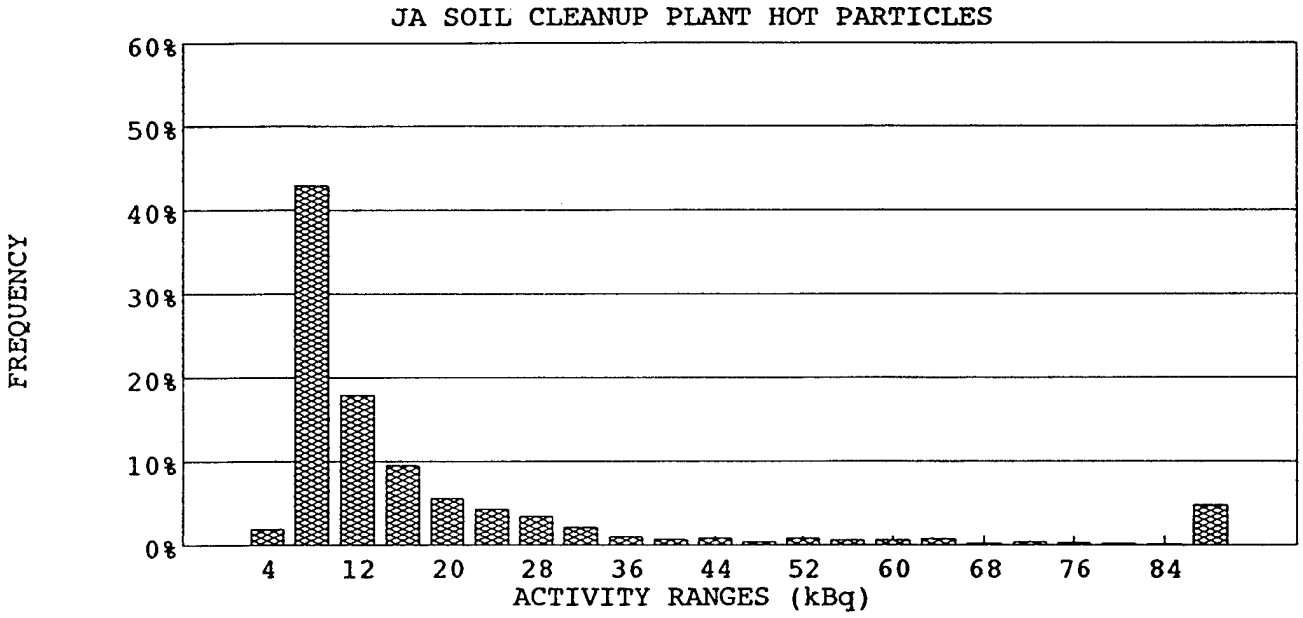
1 DET	809	68.27%	5 DET	1	0.08%
2 DET	295	24.89%	6 DET	0	0.00%
3 DET	63	5.32%	7 DET	0	0.00%
4 DET	17	1.43%	8 DET	0	0.00%

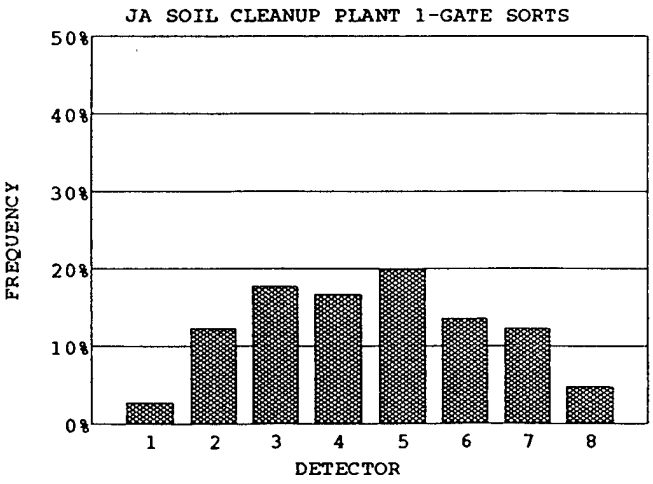
AVERAGE TIME BETWEEN 2–SEC SORTS 31.4 sec

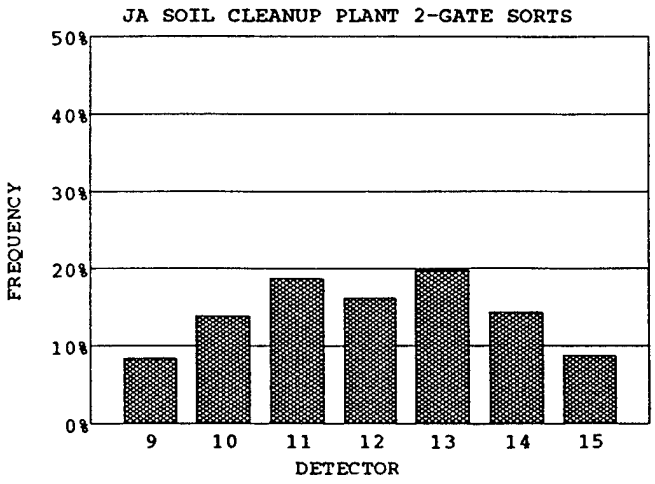
FREQUENCY DISTRIBUTIONS

1–GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	16	2.7%	–14000	0	–264	0.0%	4	23	1.9%
2	72	12.3%	–12000	0	–226	0.0%	8	509	43.0%
3	104	17.7%	–10000	3	–188	0.2%	12	212	17.9%
4	98	16.7%	–8000	3	–151	0.2%	16	113	9.5%
5	117	19.9%	–6000	0	–113	0.0%	20	67	5.7%
6	80	13.6%	–4000	2	–75	0.2%	24	51	4.3%
7	72	12.3%	–2000	12	–38	1.0%	28	41	3.5%
8	28	4.8%	0	92	0	7.5%	32	26	2.2%
TOTAL	587		2000	210	38	17.2%	36	12	1.0%
			4000	308	75	25.2%	40	8	0.7%
2–GATE DET	SORTS	FREQ%	6000	271	113	22.2%	44	10	0.8%
9	50	8.4%	8000	141	151	11.5%	48	5	0.4%
10	83	13.9%	10000	77	188	6.3%	52	10	0.8%
11	112	18.7%	12000	29	226	2.4%	56	7	0.6%
12	97	16.2%	14000	26	264	2.1%	60	7	0.6%
13	118	19.7%	16000	20	301	1.6%	64	9	0.8%
14	86	14.4%	18000	18	339	1.5%	68	3	0.3%
15	52	8.7%	20000	9	377	0.7%	72	5	0.4%
TOTAL	598		22000	1	414	0.1%	76	4	0.3%
			24000	0	452	0.0%	80	3	0.3%
			26000	0	490	0.0%	84	2	0.2%
			>28000	0	0	0.0%	>84	58	4.9%
			TOTAL	1,222			TOTAL	1,185	
EVENT TYPES		HPE	1,147	MPE	334	DISE	4,157		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-264 -188 -113 -38 38 113 188 264 339 414 490
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-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.77 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.5 tons	63.0 tons	67.5 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	45.1 kg	
VOLUME IN-GROUND	3.5 yd³	50.0 yd³	53.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	24,129 kBq	7,395 kBq	6,536 kBq
MAXIMUM/SORT	1,495 kBq	651 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		1,656 Bq/kg	104 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,271			
ALL 80 ELEMENTS SORT (MD>0&MND=0)		70				
NONE (AD=0 & MD=0 & MND>0)		792			10:12	10:52
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		409			12:47	
UNEXPLAINED RECORDS	0					
0<AD<1kBq & MD>0	2					
AD=0 & MD>0	0					
AD<0 & MD >0	0					
2-SEC COUNT PERIODS			12,710			
2-SEC RECORDS WITH SORTS		1,301				
2-SEC RECORDS WITHOUT SORTS		11,409				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,572			
NONPROCESSING RECORDS (Test, calibration, etc)			6			

2-SEC SORT DETECTORS

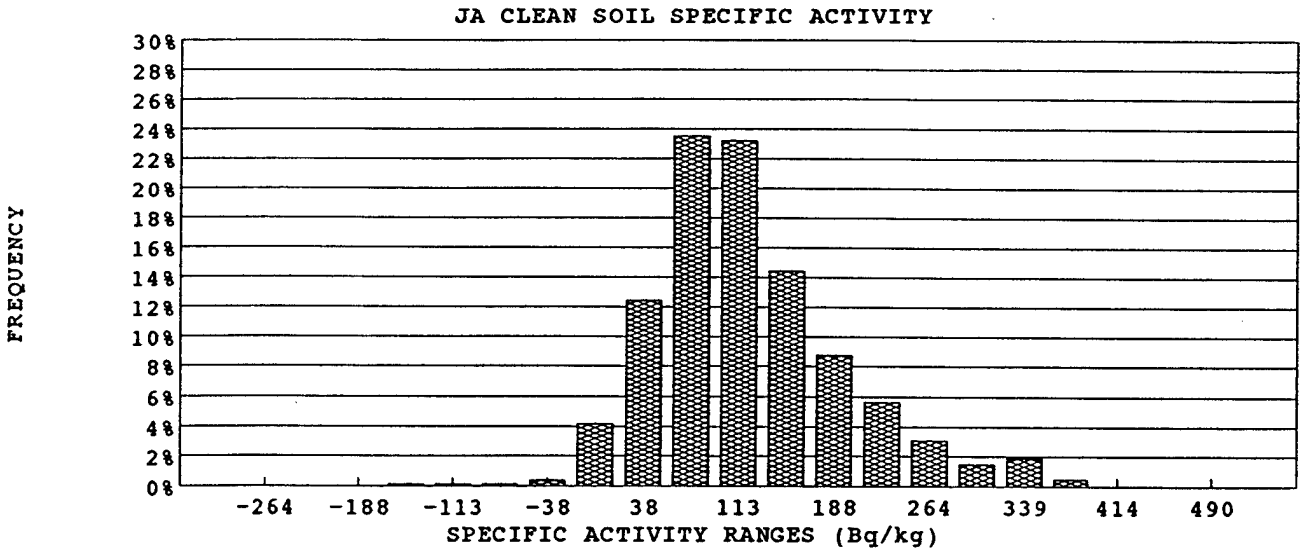
1 DET	941	72.33%	5 DET	3	0.23%
2 DET	288	22.14%	6 DET	0	0.00%
3 DET	54	4.15%	7 DET	0	0.00%
4 DET	15	1.15%	8 DET	0	0.00%

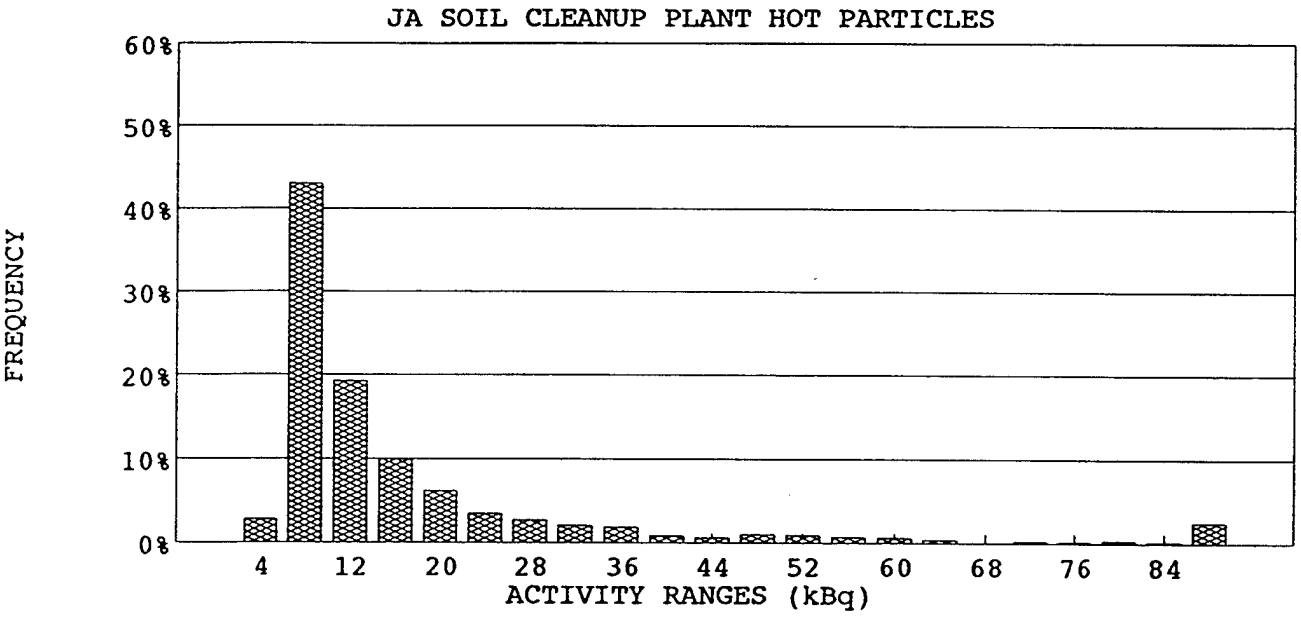
AVERAGE TIME BETWEEN 2-SEC SORTS 27.0 sec

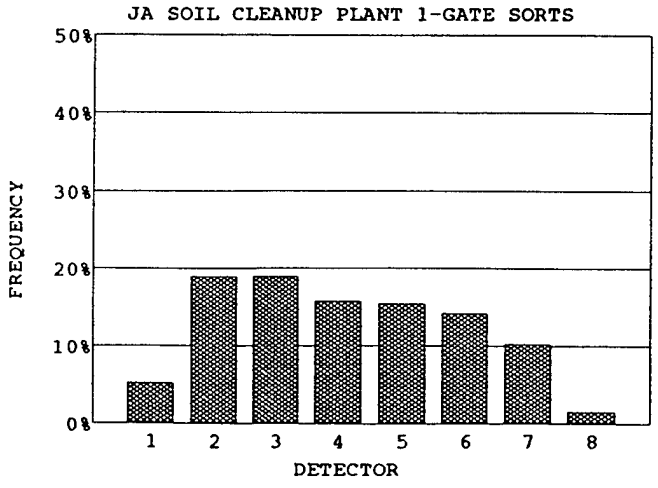
FREQUENCY DISTRIBUTIONS

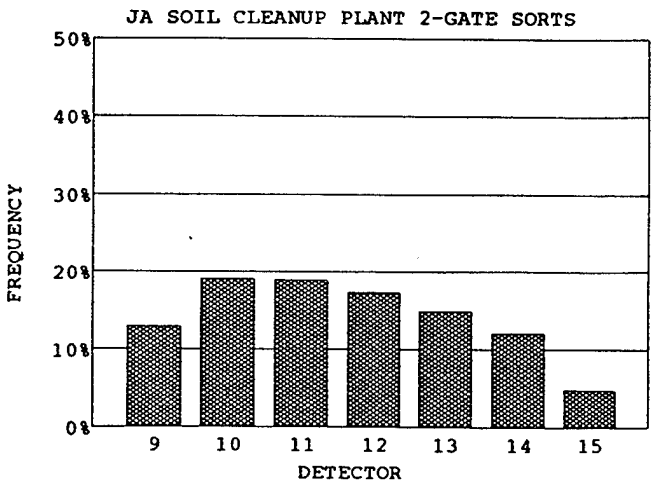
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	34	5.2%	-14000	0	-264	0.0%	4	37	2.8%
2	124	18.9%	-12000	0	-226	0.0%	8	559	43.0%
3	124	18.9%	-10000	0	-188	0.0%	12	250	19.2%
4	103	15.7%	-8000	2	-151	0.2%	16	130	10.0%
5	101	15.4%	-6000	2	-113	0.2%	20	81	6.2%
6	93	14.2%	-4000	2	-75	0.2%	24	46	3.5%
7	67	10.2%	-2000	5	-38	0.4%	28	35	2.7%
8	10	1.5%	0	50	0	4.1%	32	28	2.2%
TOTAL	656		2000	150	38	12.4%	36	24	1.8%
			4000	284	75	23.5%	40	11	0.8%
2-GATE SORTS			6000	280	113	23.2%	44	8	0.6%
DET	SORTS	FREQ%	8000	174	151	14.4%	48	14	1.1%
9	83	12.9%	10000	106	188	8.8%	52	12	0.9%
10	123	19.1%	12000	68	226	5.6%	56	9	0.7%
11	122	18.9%	14000	37	264	3.1%	60	8	0.6%
12	112	17.4%	16000	18	301	1.5%	64	5	0.4%
13	96	14.9%	18000	23	339	1.9%	68	0	0.0%
14	78	12.1%	20000	6	377	0.5%	72	3	0.2%
15	31	4.8%	22000	0	414	0.0%	76	2	0.2%
TOTAL	645		24000	0	452	0.0%	80	4	0.3%
			26000	0	490	0.0%	84	2	0.2%
			>28000	0	0	0.0%	>84	33	2.5%
			TOTAL	1,207			TOTAL	1,301	

EVENT TYPES HPE 1,287 MPE 365 DISE 5,071


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-264
-188
-113
-38
38
113
188
264
339
414
490
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–Aug–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	9.3 hr	9.3 hr	0.0 hr	0.0 hr	18.6 hr
SORTER START–UP	06:33	06:33	NA	NA	
START SOIL PROCESSING	06:39	06:38	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	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:05	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	7.9 hr	8.0 hr	0.0 hr	0.0 hr	15.9 hr
DOWN–TIME	1.3 hr	1.3 hr	0.0 hr	0.0 hr	2.6 hr
SYSTEM PAUSE	1.4 hr	1.4 hr	0.0 hr	0.0 hr	2.9 hr
SORTER NONAVAILABLE TIME	0.7 hr	0.7 hr	10.0 hr	10.0 hr	21.4 hr
AUTHORIZED DELAY TIME	0.5 hr	0.5 hr	10.0 hr	10.0 hr	21.0 hr
PLANT PERFORMANCE					85.8%
PRODUCTIVTY					39.8%

PRODUCTIVITY

Date	16–Aug–94	Excused Delays for day (sorter–hrs)	21 hr
Contract day (from 6 Sep)	284	Excused delays for contract (sorter–hrs)	5,112 hr
Current Contract week	48	Excused delay days (plant–days)	128 days
		Excused delay months (plant–month)	4.92 months
Soil production for Day	152 MT		
Cumlative Soil Production for Week	287 MT	Percent of contract completed	56.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,722 MT
Since 6 Sep 93	54,981 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	56,572 MT		
Total Soil production for project	82,859 MT		

MT = metric tons

File Report1 Printed on 22-Aug-94 at 08:30:56 AM

SORTER 1

16–Aug–94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.69 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	36.5 tons	39.5 tons	75.9 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	34.5 kg	
VOLUME IN-GROUND	28.9 yd³	31.3 yd³	60.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	52.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	158,365 kBq	68,071 kBq	7,121 kBq
MAXIMUM/SORT	2,491 kBq	1,185 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	−10 kBq
SPECIFIC ACTIVITY		1,867 Bq/kg	180 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,430		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	670			
NONE (AD=0 & MD=0 & MND>0)	294		12:55	07:24
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	466		14:04	08:19
UNEXPLAINED RECORDS	0		14:47	12:55
0<AD<1kBq & MD>0	3			10:14
AD=0 & MD>0	0			10:49
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,300		
2-SEC RECORDS WITH SORTS	9,216			
2-SEC RECORDS WITHOUT SORTS	5,084			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		10,646		
NONPROCESSING RECORDS (Test, calibration, etc)		16		

2-SEC SORT DETECTORS

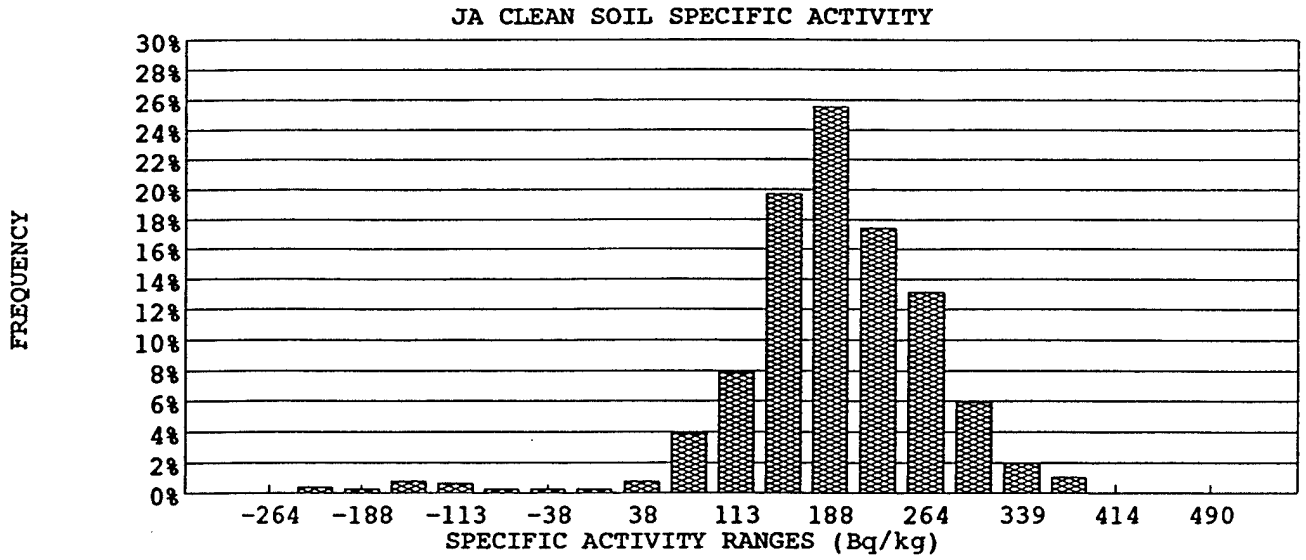
1 DET	5,712	61.98%	5 DET	58	0.63%
2 DET	2,432	26.39%	6 DET	0	0.00%
3 DET	787	8.54%	7 DET	2	0.02%
4 DET	227	2.46%	8 DET	0	0.00%

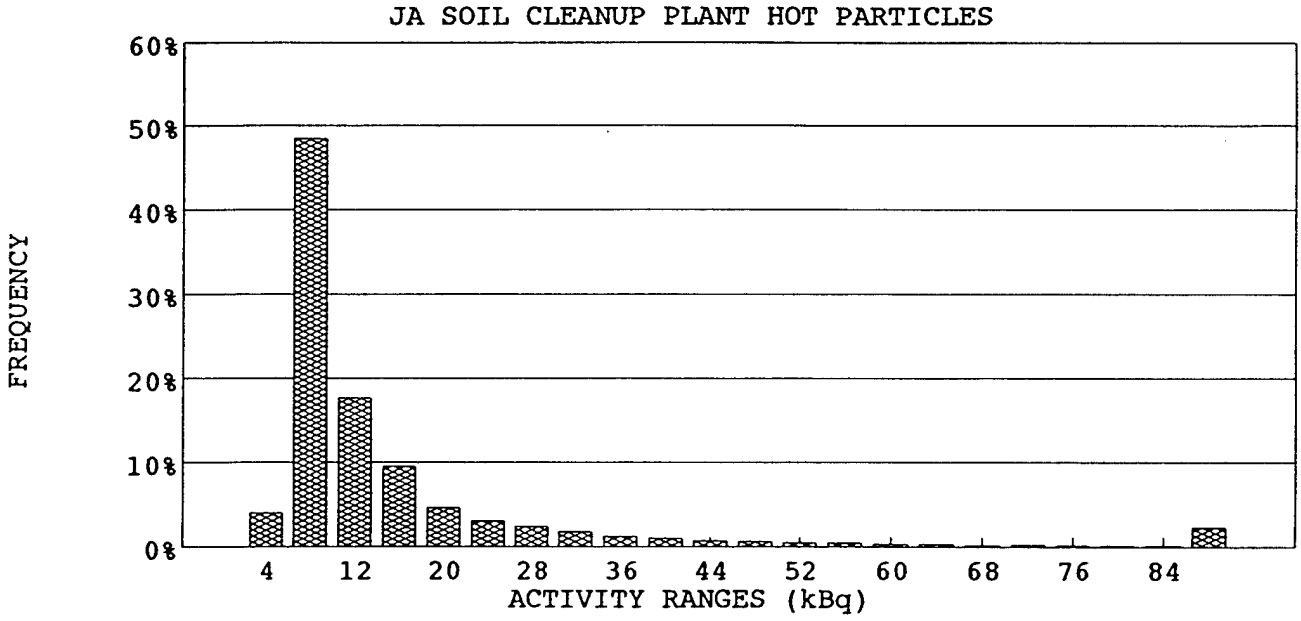
AVERAGE TIME BETWEEN 2-SEC SORTS 4.9 sec

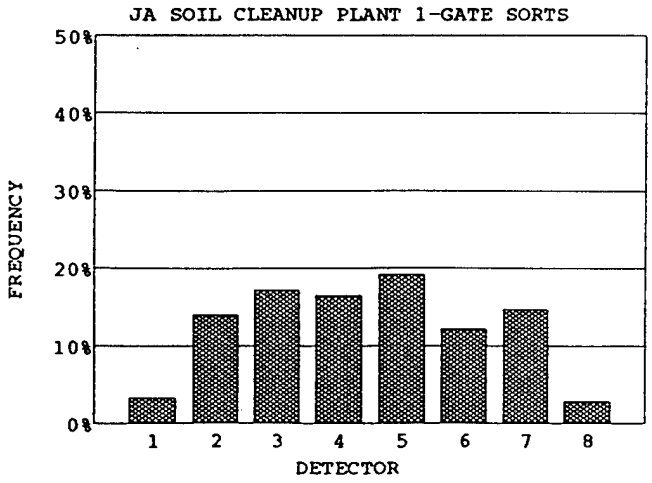
FREQUENCY DISTRIBUTIONS

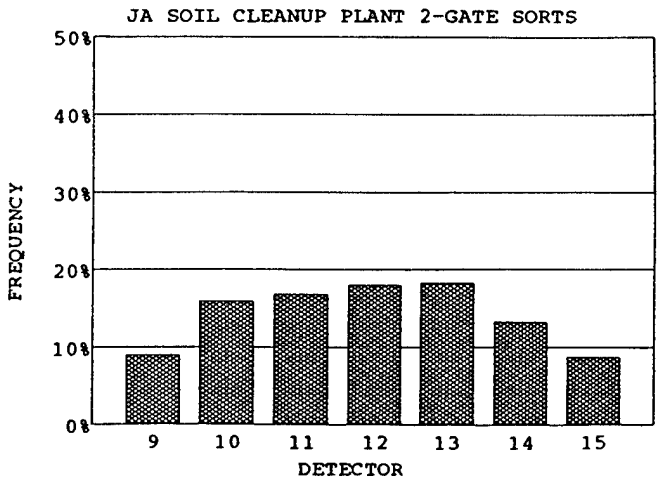
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	152	3.3%	−14000	0	−264	0.0%	4	368	4.0%
2	649	14.1%	−12000	3	−226	0.4%	8	4,468	48.5%
3	797	17.3%	−10000	2	−188	0.3%	12	1,628	17.7%
4	759	16.4%	−8000	6	−151	0.8%	16	880	9.5%
5	884	19.1%	−6000	5	−113	0.6%	20	428	4.6%
6	564	12.2%	−4000	2	−75	0.3%	24	286	3.1%
7	681	14.7%	−2000	2	−38	0.3%	28	219	2.4%
8	131	2.8%	0	2	0	0.3%	32	162	1.8%
TOTAL	4,617		2000	6	38	0.8%	36	115	1.2%
			4000	30	75	3.9%	40	93	1.0%
2-GATE DET	SORTS	FREQ%	6000	61	113	7.9%	44	63	0.7%
			8000	153	151	19.7%	48	59	0.6%
9	413	9.0%	10000	198	188	25.5%	52	41	0.4%
10	732	15.9%	12000	135	226	17.4%	56	45	0.5%
11	775	16.9%	14000	102	264	13.1%	60	28	0.3%
12	828	18.0%	16000	46	301	5.9%	64	28	0.3%
13	838	18.2%	18000	15	339	1.9%	68	19	0.2%
14	612	13.3%	20000	8	377	1.0%	72	21	0.2%
15	401	8.7%	22000	0	414	0.0%	76	19	0.2%
TOTAL	4,599		24000	0	452	0.0%	80	12	0.1%
			26000	0	490	0.0%	84	17	0.2%
			>28000	0	0	0.0%	>84	217	2.4%
			TOTAL	776			TOTAL	9,216	

EVENT TYPES	HPE	8,018	MPE	6,999	DISE	39,925


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-264 -188 -113 -38 38 113 188 264 339 414 490
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-Aug-94

SORTER SOIL DENSITY 1.14 tons/m³ BACKGROUND 0.76 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	37.2 tons	39.3 tons	76.4 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	37.2 kg	
VOLUME IN-GROUND	29.5 yd³	31.1 yd³	60.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	51.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	161,098 kBq	72,107 kBq	8,858 kBq
MAXIMUM/SORT	1,028 kBq	479 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		1,941 Bq/kg	226 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,439		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	682			
NONE (AD=0 & MD=0 & MND>0)	281		12:09	07:24
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	476		13:39	08:20
UNEXPLAINED RECORDS	0		14:41	12:09
0<AD<1kBq & MD>0	4		15:29	10:14
AD=0 & MD>0	0			10:50
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,390		
2-SEC RECORDS WITH SORTS	9,965			
2-SEC RECORDS WITHOUT SORTS	4,425			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		11,404		
NONPROCESSING RECORDS (Test, calibration, etc)		12		

2-SEC SORT DETECTORS

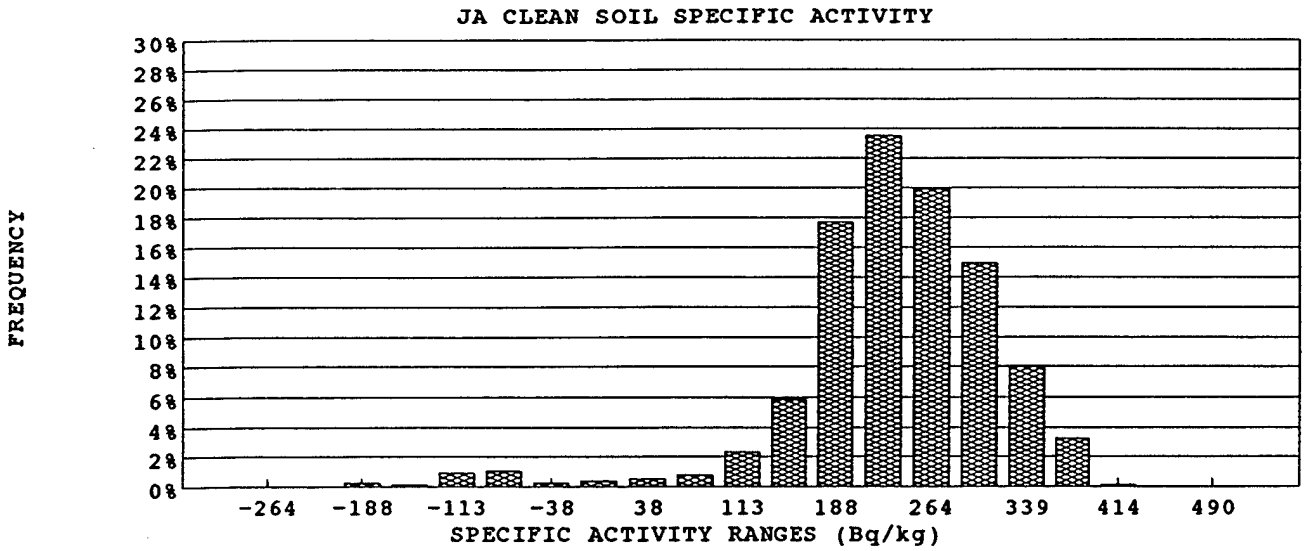
1 DET	6,104	61.25%	5 DET	78	0.78%
2 DET	2,646	26.55%	6 DET	0	0.00%
3 DET	894	8.97%	7 DET	3	0.03%
4 DET	243	2.44%	8 DET	0	0.00%

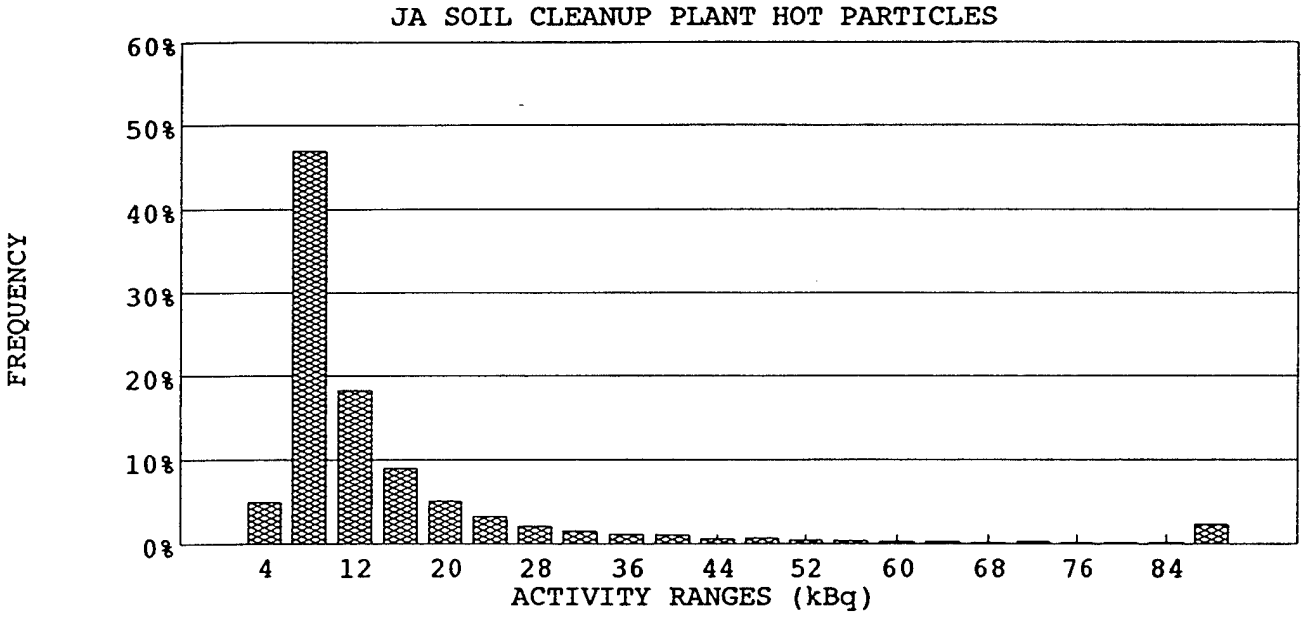
AVERAGE TIME BETWEEN 2-SEC SORTS 4.8 sec

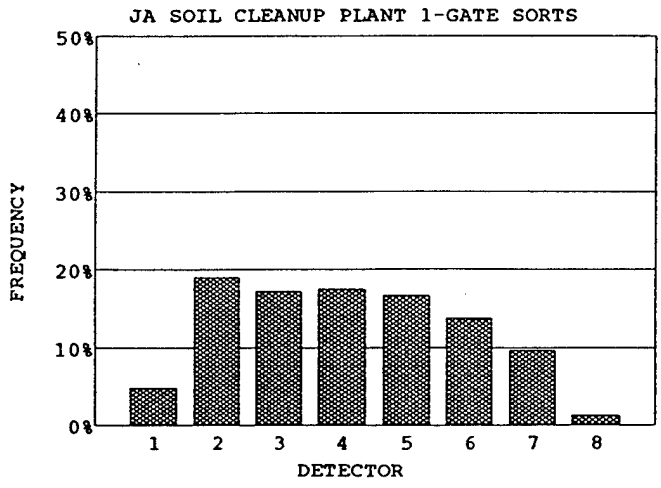
FREQUENCY DISTRIBUTIONS

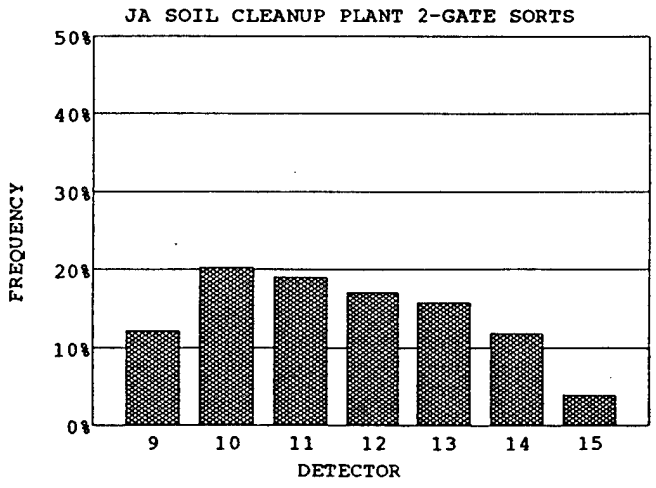
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	246	4.9%	-14000	0	-264	0.0%	4	496	5.0%
2	956	19.0%	-12000	0	-226	0.0%	8	4,674	46.9%
3	870	17.3%	-10000	2	-188	0.3%	12	1,826	18.3%
4	882	17.5%	-8000	1	-151	0.1%	16	899	9.0%
5	839	16.7%	-6000	7	-113	0.9%	20	509	5.1%
6	692	13.8%	-4000	8	-75	1.0%	24	322	3.2%
7	485	9.6%	-2000	2	-38	0.3%	28	212	2.1%
8	62	1.2%	0	3	0	0.4%	32	161	1.6%
TOTAL	5,032		2000	4	38	0.5%	36	118	1.2%
			4000	6	75	0.8%	40	111	1.1%
2-GATE DET	SORTS	FREQ%	6000	18	113	2.3%	44	65	0.7%
			8000	45	151	5.9%	48	73	0.7%
9	599	12.1%	10000	136	188	17.7%	52	50	0.5%
10	1,000	20.3%	12000	181	226	23.5%	56	41	0.4%
11	938	19.0%	14000	153	264	19.9%	60	35	0.4%
12	845	17.1%	16000	115	301	15.0%	64	34	0.3%
13	776	15.7%	18000	62	339	8.1%	68	20	0.2%
14	581	11.8%	20000	25	377	3.3%	72	32	0.3%
15	194	3.9%	22000	1	414	0.1%	76	19	0.2%
TOTAL	4,933		24000	0	452	0.0%	80	20	0.2%
			26000	0	490	0.0%	84	16	0.2%
			>28000	0	0	0.0%	>84	232	2.3%
			TOTAL	769			TOTAL	9,965	

EVENT TYPES		HPE	8,530	MPE	8,112	DISE	39,337


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-264 -188 -113 -38 38 113 188 264 339 414 490
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–Aug–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	9.3 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	06:38	06:38	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	16:09	16:10	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	8.3 hr	8.2 hr	0.0 hr	0.0 hr	16.5 hr
DOWN–TIME	1.0 hr	1.1 hr	0.0 hr	0.0 hr	2.1 hr
SYSTEM PAUSE	1.2 hr	1.3 hr	0.0 hr	0.0 hr	2.6 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					88.6%
PRODUCTIVTY					41.3%

PRODUCTIVITY

Date	17–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	285	Excused delays for contract (sorter–hrs)	5,132 hr
Current Contract week	48	Excused delay days (plant–days)	128 days
		Excused delay months (plant–month)	4.94 months
Soil production for Day	159 MT		
Cumlative Soil Production for Week	446 MT	Percent of contract completed	56.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,722 MT
Since 6 Sep 93	55,140 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	56,731 MT		
Total Soil production for project	83,018 MT		

MT = metric tons

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SORTER 1

17–Aug–94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.70 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	24.4 tons	55.2 tons	79.6 tons
MAXIMUM/SORT	53.1 kg	53.1 kg	
MINIMUM/SORT	0.7 kg	43.1 kg	
VOLUME IN–GROUND	19.3 yd³	43.8 yd³	63.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	69.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	96,010 kBq	32,228 kBq	13,811 kBq
MAXIMUM/SORT	3,652 kBq	1,264 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	–3 kBq
SPECIFIC ACTIVITY		1,324 Bq/kg	250 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,499		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	423		06:40	06:35
NONE (AD=0 & MD=0 & MND>0)	299		07:36	10:48
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	777		07:47	13:16
UNEXPLAINED RECORDS	0		08:51	15:11
0<AD<1kBq & MD>0	5		13:54	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2–SEC COUNT PERIODS		14,990		
2–SEC RECORDS WITH SORTS	4,435			
2–SEC RECORDS WITHOUT SORTS	10,555			
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		5,934		
NONPROCESSING RECORDS (Test, calibration, etc)		15		

2–SEC SORT DETECTORS

1 DET	3,049	68.75%	5 DET	17	0.38%
2 DET	1,034	23.31%	6 DET	0	0.00%
3 DET	273	6.16%	7 DET	1	0.02%
4 DET	62	1.40%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2–SEC SORTS 9.8 sec

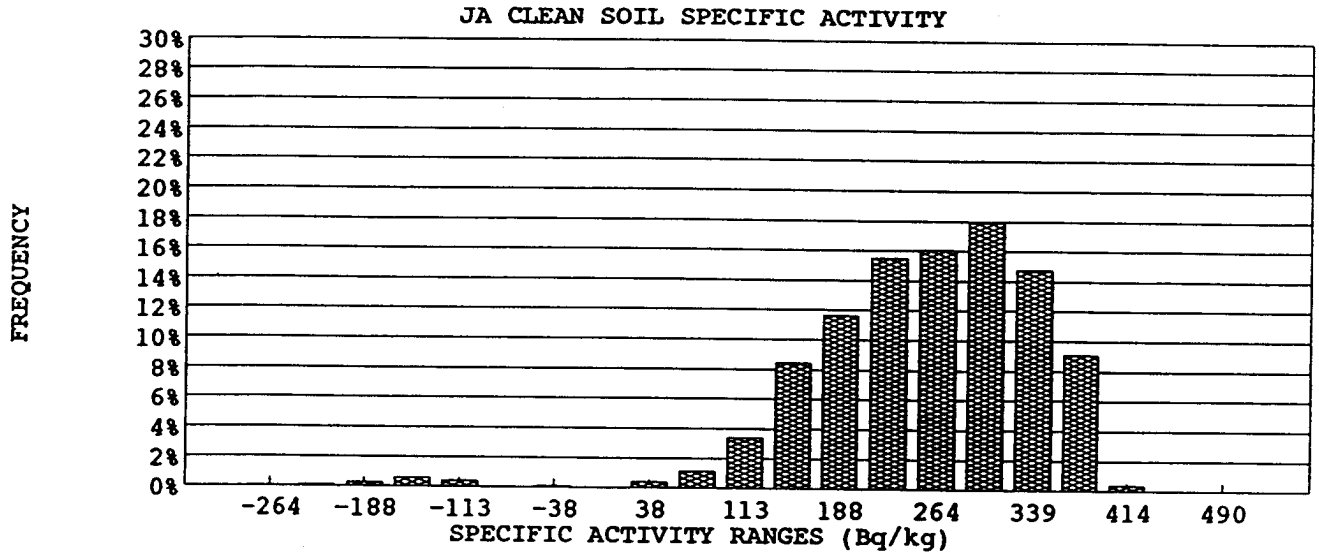
FREQUENCY DISTRIBUTIONS

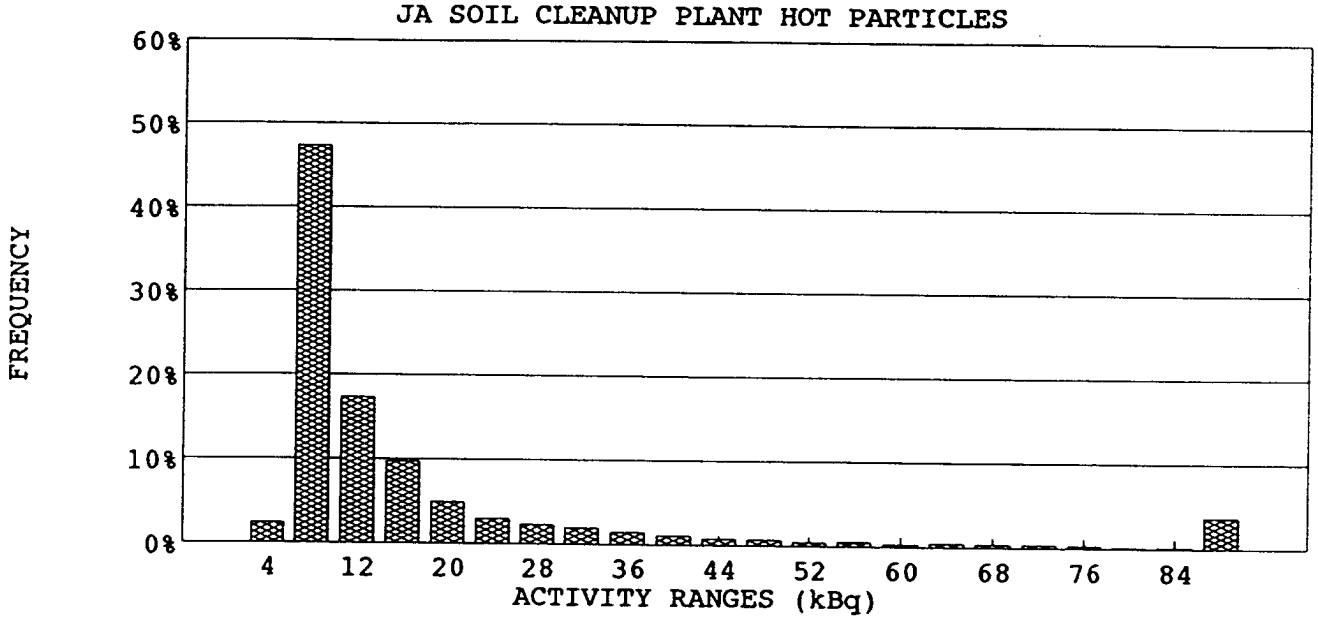
1–GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	65	2.9%	–14000	0	–264	0.0%	4	106	2.4%
2	293	13.2%	–12000	1	–226	0.1%	8	2,100	47.4%
3	367	16.5%	–10000	3	–188	0.3%	12	770	17.4%
4	378	17.0%	–8000	6	–151	0.6%	16	431	9.7%
5	421	18.9%	–6000	4	–113	0.4%	20	219	4.9%
6	267	12.0%	–4000	0	–75	0.0%	24	134	3.0%
7	331	14.9%	–2000	1	–38	0.1%	28	102	2.3%
8	102	4.6%	0	0	0	0.0%	32	85	1.9%
TOTAL	2,224		2000	4	38	0.4%	36	64	1.4%
			4000	12	75	1.1%	40	49	1.1%
2–GATE DET	SORTS	FREQ%	6000	37	113	3.4%	44	33	0.7%
			8000	92	151	8.4%	48	32	0.7%
9	182	8.2%	10000	127	188	11.7%	52	22	0.5%
10	334	15.1%	12000	169	226	15.5%	56	26	0.6%
11	383	17.3%	14000	175	264	16.1%	60	13	0.3%
12	378	17.1%	16000	195	301	17.9%	64	21	0.5%
13	387	17.5%	18000	161	339	14.8%	68	16	0.4%
14	311	14.1%	20000	99	377	9.1%	72	16	0.4%
15	236	10.7%	22000	4	414	0.4%	76	14	0.3%
TOTAL	2,211		24000	0	452	0.0%	80	8	0.2%
			26000	0	490	0.0%	84	9	0.2%
			>28000	0	0	0.0%	>84	165	3.7%
			TOTAL	1,090			TOTAL	4,435	

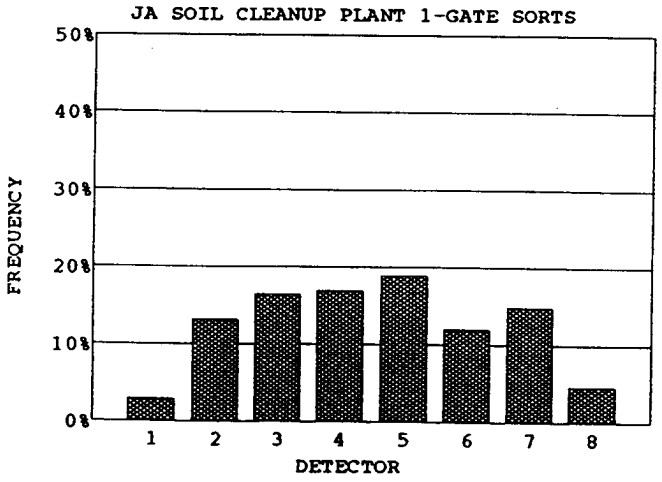
EVENT TYPES HPE 4,283 MPE 1,468 DISE 30,931

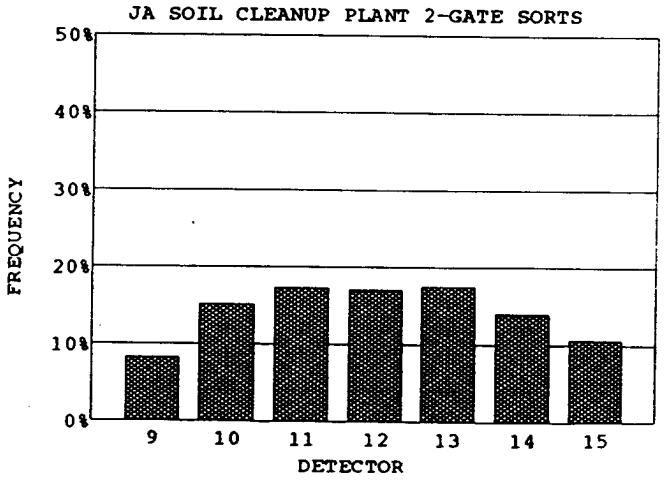
SORTER 1

17-Aug-94









SORTER 2

17-Aug-94

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

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	34.3 tons	44.8 tons	79.1 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	27.2 yd³	35.5 yd³	62.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	56.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	114,101 kBq	41,941 kBq	12,634 kBq
MAXIMUM/SORT	2,690 kBq	1,062 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	-10 kBq
SPECIFIC ACTIVITY		1,223 Bq/kg	282 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,477		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	609			
NONE (AD=0 & MD=0 & MND>0)	239		08:04	06:35
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,119		08:25	10:47
UNEXPLAINED RECORDS	(490)		09:42	13:16
0<AD<1kBq & MD>0	4		09:48	15:05
AD=0 & MD>0	1		10:02	
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,770		
2-SEC RECORDS WITH SORTS	5,011			
2-SEC RECORDS WITHOUT SORTS	9,759			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		6,488		
NONPROCESSING RECORDS (Test, calibration, etc)		16		

2-SEC SORT DETECTORS

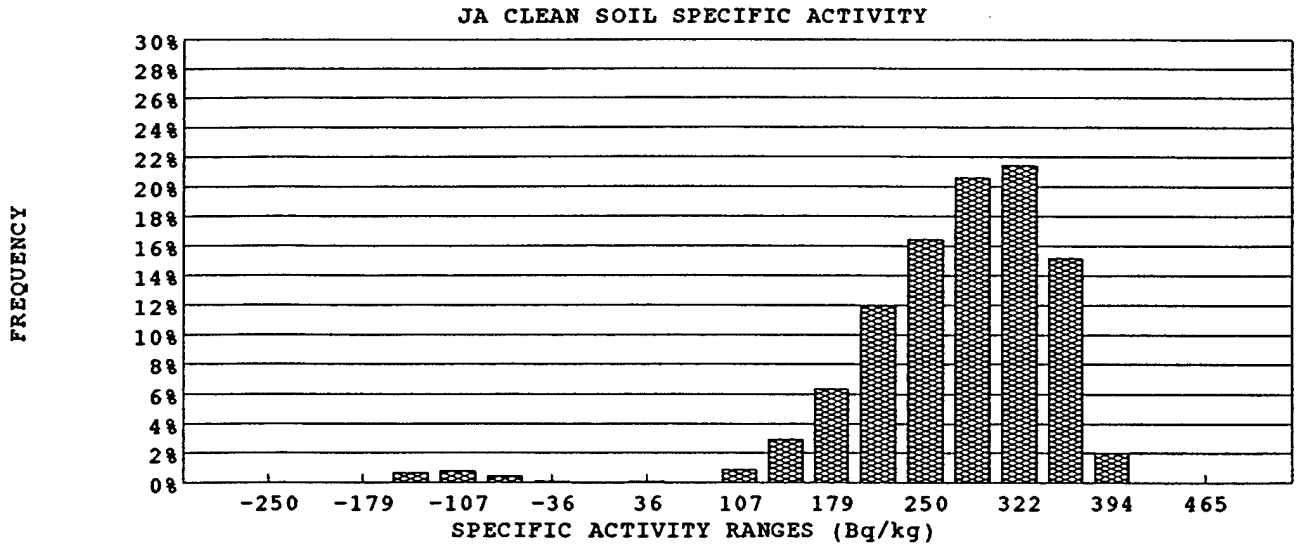
1 DET	3,467	69.19%	5 DET	19	0.38%
2 DET	1,179	23.53%	6 DET	0	0.00%
3 DET	285	5.69%	7 DET	0	0.00%
4 DET	61	1.22%	8 DET	0	0.00%

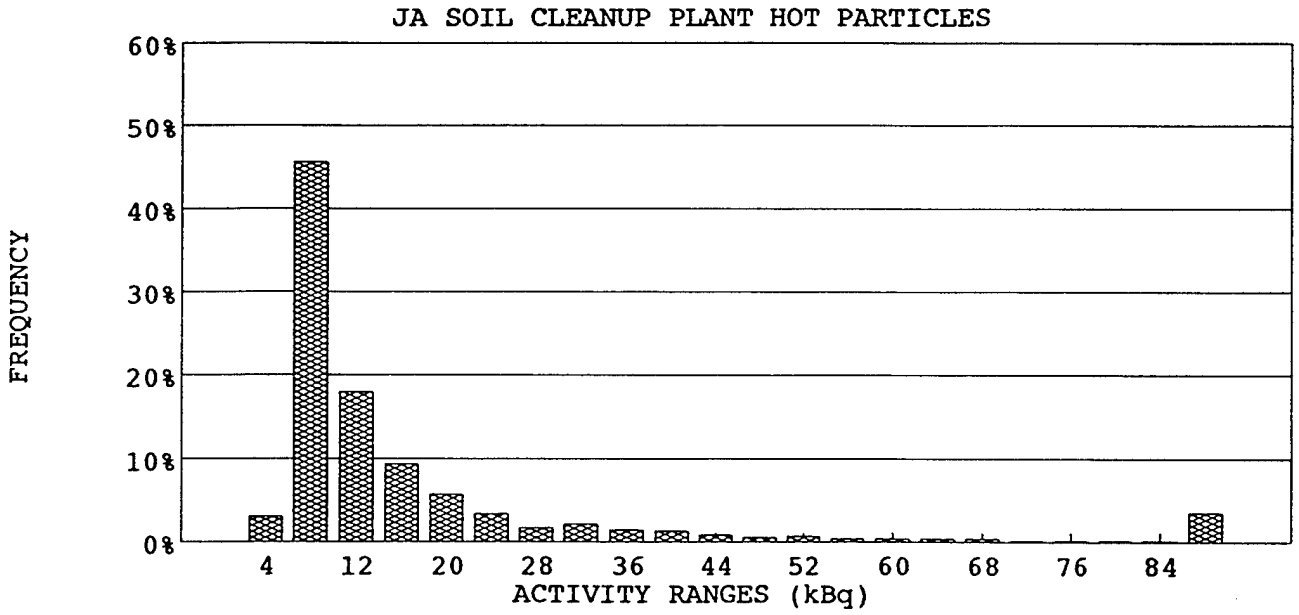
AVERAGE TIME BETWEEN 2-SEC SORTS 8.5 sec

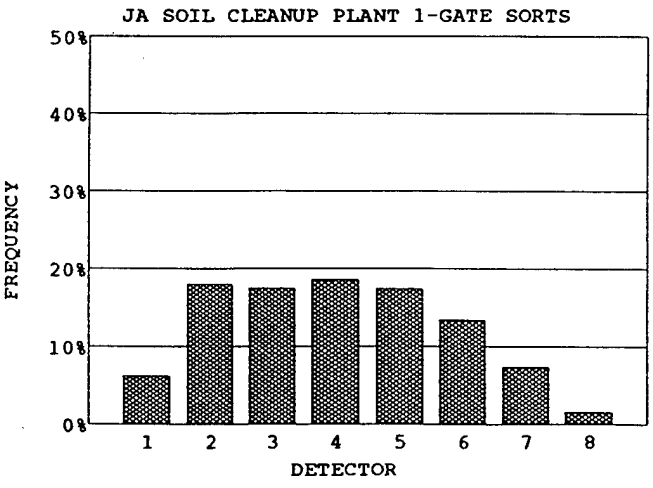
FREQUENCY DISTRIBUTIONS

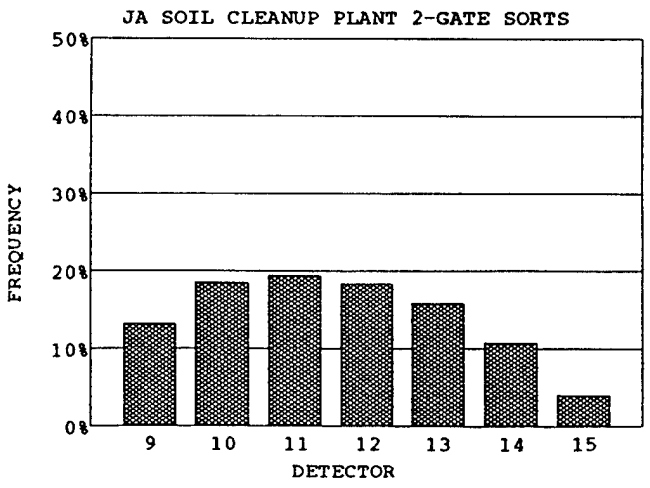
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	154	6.2%	-14000	0	-250	0.0%	4	157	3.1%
2	443	18.0%	-12000	0	-215	0.0%	8	2,287	45.6%
3	432	17.5%	-10000	0	-179	0.0%	12	899	17.9%
4	458	18.6%	-8000	6	-143	0.7%	16	470	9.4%
5	429	17.4%	-6000	7	-107	0.8%	20	286	5.7%
6	330	13.4%	-4000	4	-72	0.5%	24	172	3.4%
7	181	7.3%	-2000	1	-36	0.1%	28	86	1.7%
8	39	1.6%	0	0	0	0.0%	32	111	2.2%
TOTAL	2,466		2000	1	36	0.1%	36	76	1.5%
			4000	0	72	0.0%	40	65	1.3%
2-GATE SORTS			6000	8	107	0.9%	44	43	0.9%
DET	SORTS	FREQ%	8000	26	143	2.9%	48	27	0.5%
9	334	13.1%	10000	56	179	6.3%	52	37	0.7%
10	472	18.5%	12000	106	215	12.0%	56	19	0.4%
11	495	19.4%	14000	145	250	16.4%	60	19	0.4%
12	466	18.3%	16000	182	286	20.6%	64	21	0.4%
13	403	15.8%	18000	189	322	21.4%	68	21	0.4%
14	273	10.7%	20000	134	358	15.2%	72	8	0.2%
15	102	4.0%	22000	18	394	2.0%	76	7	0.1%
TOTAL	2,545		24000	0	429	0.0%	80	11	0.2%
			26000	0	465	0.0%	84	9	0.2%
			>28000	0	0	0.0%	>84	180	3.6%
			TOTAL	883			TOTAL	5,011	

EVENT TYPES	HPE	4,747	MPE	1,919	DISE	44,460


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–Aug–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	06:15	06:15	NA	NA	
START SOIL PROCESSING	06:35	06:35	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	16:25	16:25	NA	NA	
END SOIL PROCESSING	16:19	16:19	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	7.7 hr	7.7 hr	0.0 hr	0.0 hr	15.4 hr
DOWN–TIME	2.0 hr	2.0 hr	0.0 hr	0.0 hr	4.0 hr
SYSTEM PAUSE	1.9 hr	1.9 hr	0.0 hr	0.0 hr	3.7 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					79.5%
PRODUCTIVTY					38.4%

PRODUCTIVITY

Date	18–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	286	Excused delays for contract (sorter–hrs)	5,152 hr
Current Contract week	48	Excused delay days (plant–days)	129 days
		Excused delay months (plant–month)	4.95 months
Soil production for Day	155 MT		
Cumlative Soil Production for Week	601 MT	Percent of contract completed	56.9%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,719 MT
Since 6 Sep 93	55,295 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	56,886 MT		
Total Soil production for project	83,172 MT		

MT = metric tons

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SORTER 1

18–Aug–94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.75 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	66.0 tons	11.1 tons	77.1 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	17.5 kg	
VOLUME IN–GROUND	52.3 yd³	8.8 yd³	61.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	14.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	353,618 kBq	152,262 kBq	3,304 kBq
MAXIMUM/SORT	5,593 kBq	2,348 kBq	21 kBq
MINIMUM/SORT	2 kBq	0 Bq	–12 kBq
SPECIFIC ACTIVITY		2,306 Bq/kg	297 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20–SEC PROCESS PERIODS		1,381		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1,166			
NONE (AD=0 & MD=0 & MND>0)	12		None	07:50
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	211			09:19
UNEXPLAINED RECORDS	(8)			10:10
0<AD<1kBq & MD>0	0			11:00
AD=0 & MD>0	0			12:41
AD<0 & MD >0	0			13:31
2–SEC COUNT PERIODS		13,810		14:52
2–SEC RECORDS WITH SORTS	18,212			14:54
2–SEC RECORDS WITHOUT SORTS	(4,402)			14:55
TOTAL PROCESS RECORDS (2–s SORTS and 20–s PERIODS)		19,593		15:11
NONPROCESSING RECORDS (Test, calibration, etc)		47		16:04

2–SEC SORT DETECTORS

1 DET	10,704	58.77%	5 DET	214	1.18%
2 DET	4,973	27.31%	6 DET	0	0.00%
3 DET	1,753	9.63%	7 DET	4	0.02%
4 DET	568	3.12%	8 DET	1	0.01%

AVERAGE TIME BETWEEN 2–SEC SORTS 2.5 sec

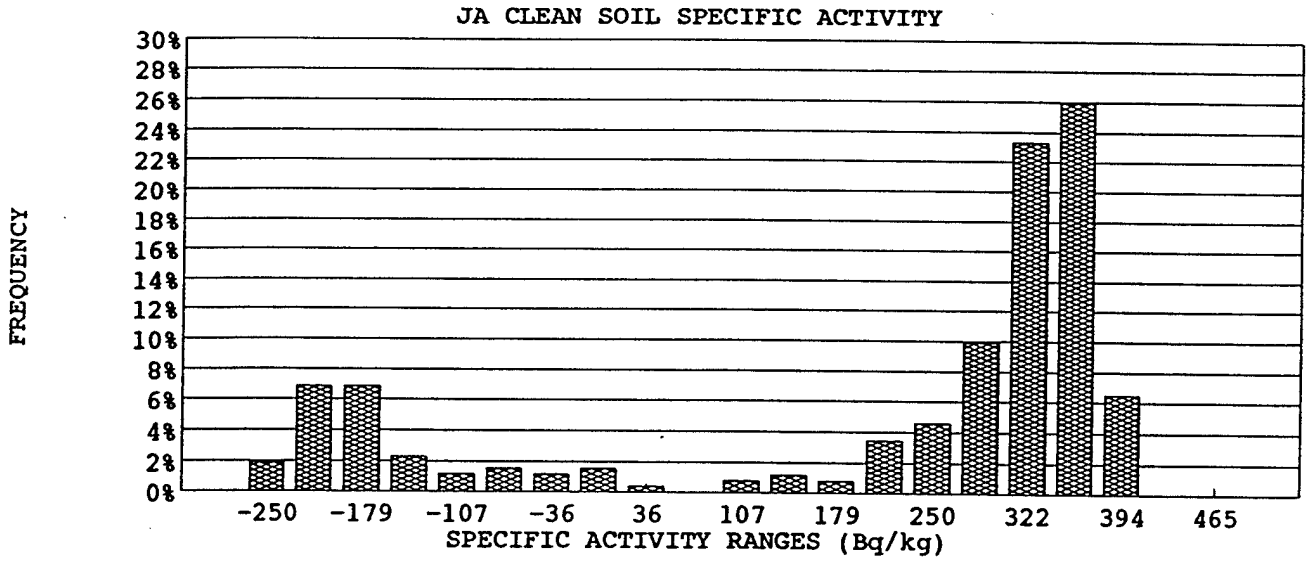
FREQUENCY DISTRIBUTIONS

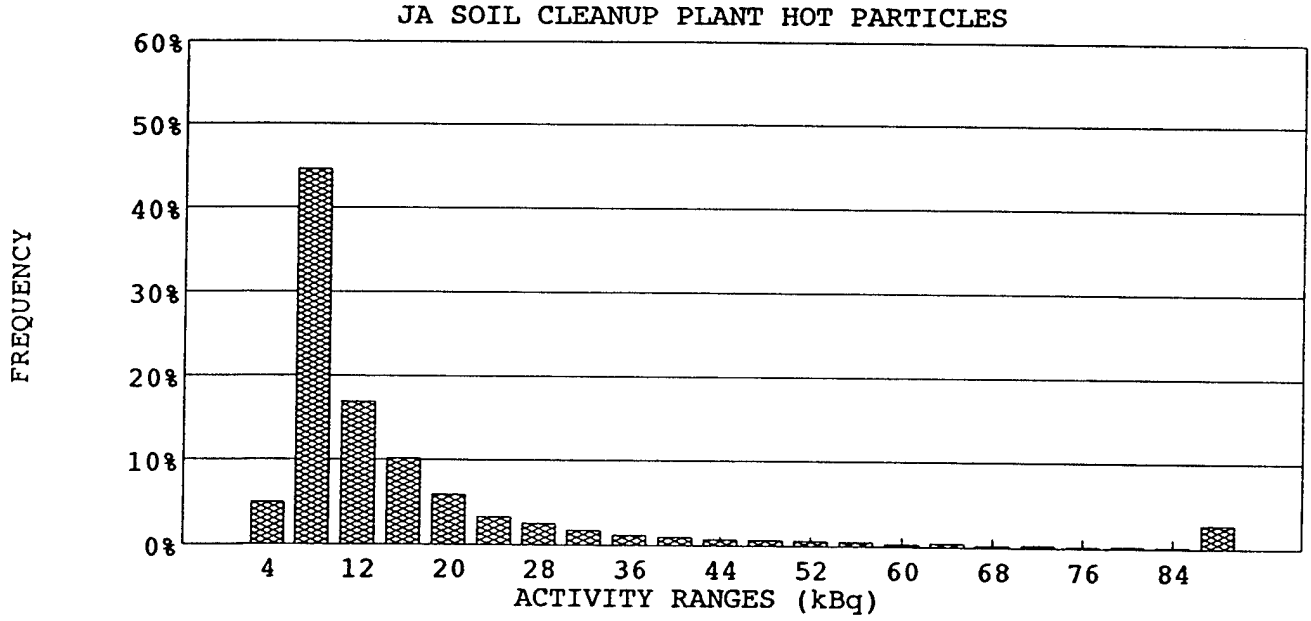
1–GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	205	2.2%	–14000	5	–250	1.9%	4	920	5.1%
2	1,049	11.4%	–12000	18	–215	6.9%	8	8,131	44.6%
3	1,523	16.6%	–10000	18	–179	6.9%	12	3,072	16.9%
4	1,599	17.4%	–8000	6	–143	2.3%	16	1,850	10.2%
5	1,645	17.9%	–6000	3	–107	1.1%	20	1,082	5.9%
6	1,309	14.2%	–4000	4	–72	1.5%	24	602	3.3%
7	1,588	17.3%	–2000	3	–36	1.1%	28	463	2.5%
8	272	3.0%	0	4	0	1.5%	32	325	1.8%
TOTAL	9,190		2000	1	36	0.4%	36	230	1.3%
			4000	0	72	0.0%	40	179	1.0%
2–GATE SORTS			6000	2	107	0.8%	44	148	0.8%
DET	SORTS	FREQ%	8000	3	143	1.1%	48	125	0.7%
9	576	6.4%	10000	2	179	0.8%	52	111	0.6%
10	1,299	14.4%	12000	9	215	3.4%	56	104	0.6%
11	1,570	17.4%	14000	12	250	4.6%	60	61	0.3%
12	1,551	17.2%	16000	26	286	9.9%	64	79	0.4%
13	1,686	18.7%	18000	61	322	23.3%	68	50	0.3%
14	1,444	16.0%	20000	68	358	26.0%	72	55	0.3%
15	896	9.9%	22000	17	394	6.5%	76	36	0.2%
TOTAL	9,022		24000	0	429	0.0%	80	44	0.2%
			26000	0	465	0.0%	84	37	0.2%
			>28000	0	0	0.0%	>84	508	2.8%
			TOTAL	262			TOTAL	18,212	

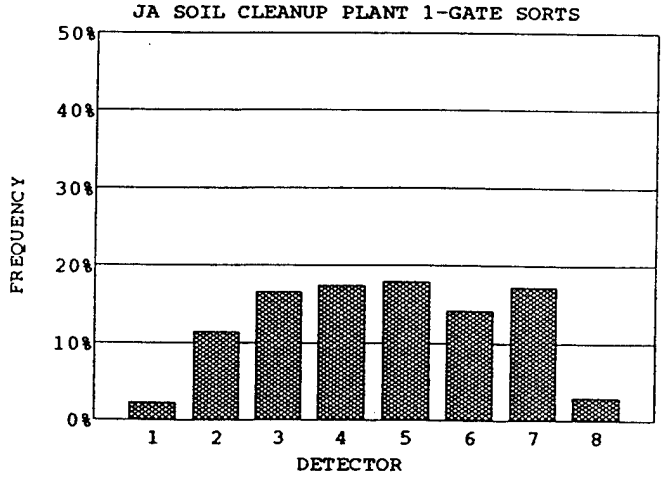
EVENT TYPES HPE 15,607 MPE 19,079 DISE 59,843

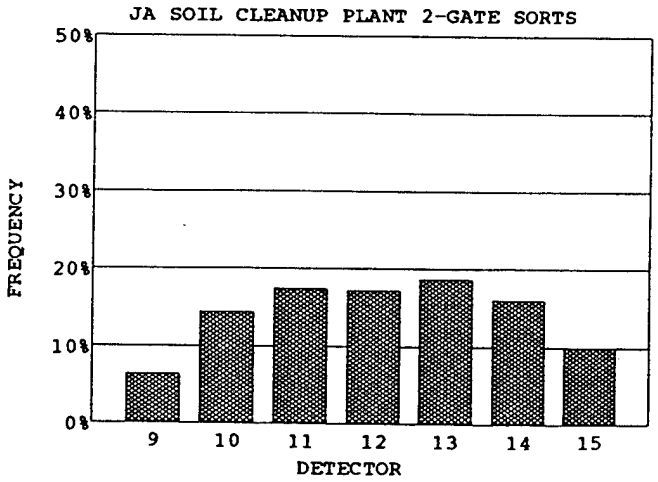
SORTER 1

18-Aug-94









SORTER 2

18-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.84 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	68.1 tons	9.5 tons	77.5 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	31.4 kg	
VOLUME IN-GROUND	54.0 yd³	7.5 yd³	61.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	12.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	459,799 kBq	184,300 kBq	2,882 kBq
MAXIMUM/SORT	18,166 kBq	7,681 kBq	22 kBq
MINIMUM/SORT	2 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		2,707 Bq/kg	305 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,387		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1,203			
NONE (AD=0 & MD=0 & MND>0)	11		None	07:49
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	172			08:18
UNEXPLAINED RECORDS	1			09:18
0<AD<1kBq & MD>0	0			10:10
AD=0 & MD>0	0			11:00
AD<0 & MD >0	0			12:41
2-SEC COUNT PERIODS		13,870		13:31
2-SEC RECORDS WITH SORTS	20,082			15:11
2-SEC RECORDS WITHOUT SORTS	(6,212)			15:12
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		21,469		16:07
NONPROCESSING RECORDS (Test, calibration, etc)		36		

2-SEC SORT DETECTORS

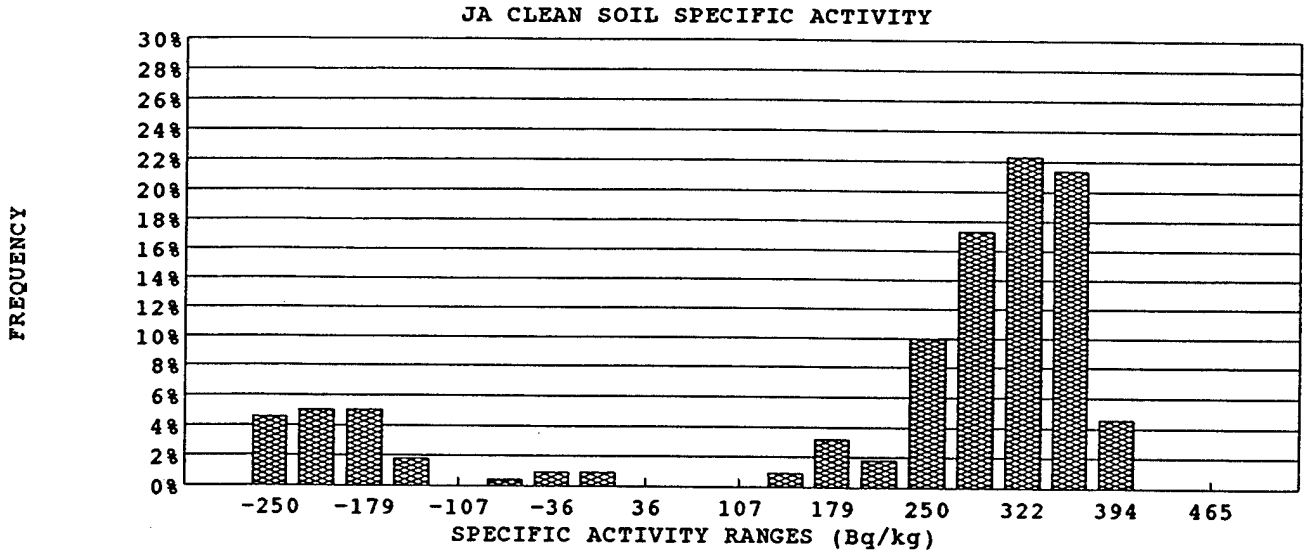
1 DET	11,712	58.32%	5 DET	227	1.13%
2 DET	5,539	27.58%	6 DET	0	0.00%
3 DET	1,994	9.93%	7 DET	7	0.03%
4 DET	610	3.04%	8 DET	0	0.00%

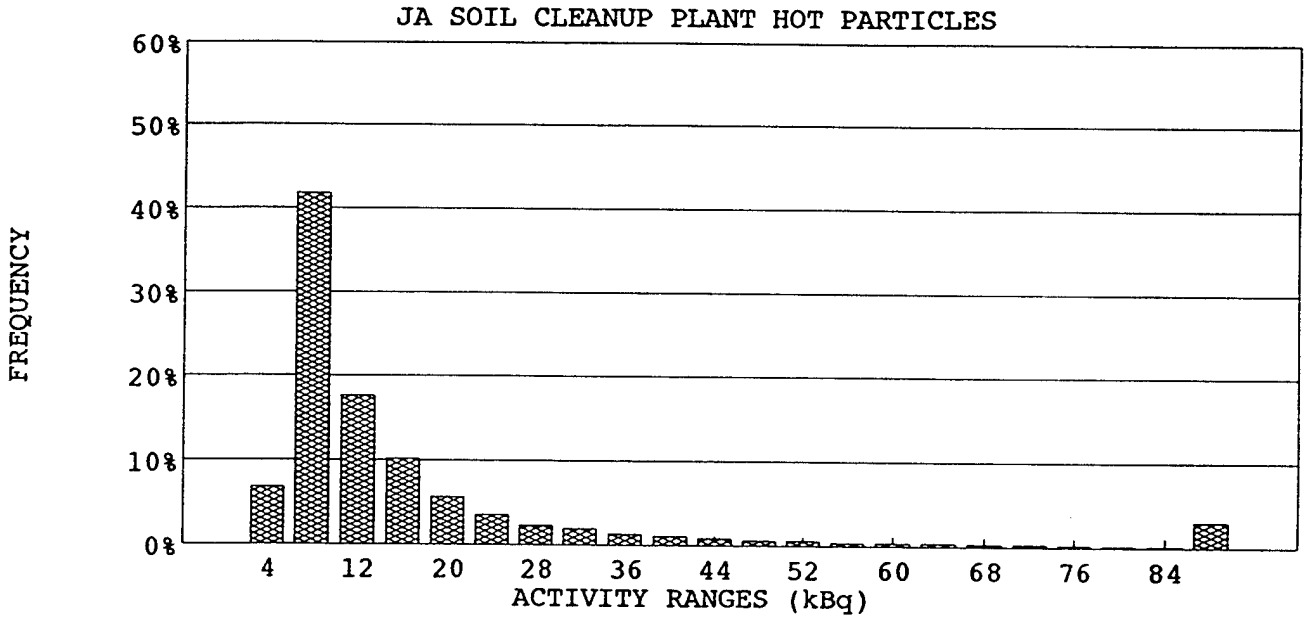
AVERAGE TIME BETWEEN 2-SEC SORTS 2.3 sec

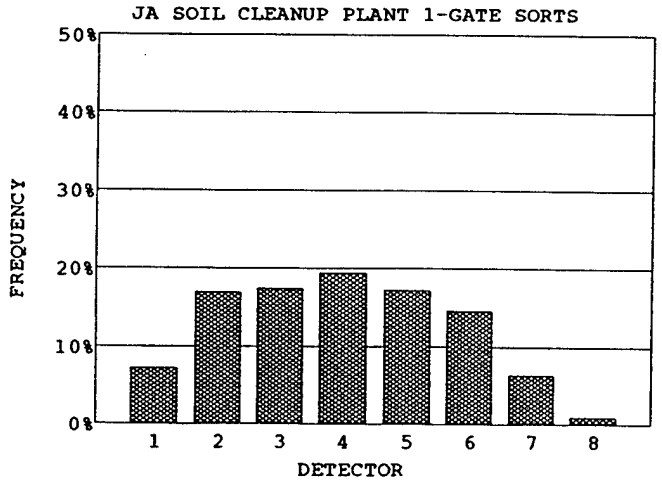
FREQUENCY DISTRIBUTIONS

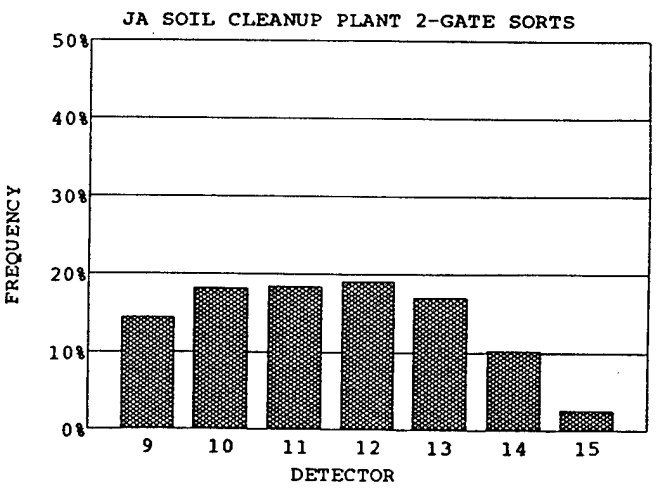
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	726	7.2%	-14000	10	-250	4.5%	4	1,367	6.8%
2	1,704	16.9%	-12000	11	-215	5.0%	8	8,377	41.7%
3	1,756	17.4%	-10000	11	-179	5.0%	12	3,529	17.6%
4	1,953	19.4%	-8000	4	-143	1.8%	16	2,034	10.1%
5	1,728	17.2%	-6000	0	-107	0.0%	20	1,138	5.7%
6	1,467	14.6%	-4000	1	-72	0.5%	24	725	3.6%
7	643	6.4%	-2000	2	-36	0.9%	28	475	2.4%
8	90	0.9%	0	2	0	0.9%	32	388	1.9%
TOTAL	10,067		2000	0	36	0.0%	36	267	1.3%
			4000	0	72	0.0%	40	224	1.1%
2-GATE SORTS			6000	0	107	0.0%	44	179	0.9%
DET	SORTS	FREQ%	8000	2	143	0.9%	48	136	0.7%
9	1,444	14.4%	10000	7	179	3.2%	52	130	0.6%
10	1,822	18.2%	12000	4	215	1.8%	56	82	0.4%
11	1,849	18.5%	14000	22	250	10.0%	60	80	0.4%
12	1,910	19.1%	16000	38	286	17.3%	64	79	0.4%
13	1,700	17.0%	18000	49	322	22.3%	68	69	0.3%
14	1,027	10.3%	20000	47	358	21.4%	72	69	0.3%
15	263	2.6%	22000	10	394	4.5%	76	47	0.2%
TOTAL	10,015		24000	0	429	0.0%	80	44	0.2%
			26000	0	465	0.0%	84	38	0.2%
			>28000	0	0	0.0%	>84	605	3.0%
			TOTAL	220			TOTAL	20,082	

EVENT TYPES HPE 17,223 MPE 23,344 DISE 56,860


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–Aug–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	06:20	06:20	NA	NA	
START SOIL PROCESSING	06:53	06:54	NA	NA	
TIME REQUIRED TO START–UP	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
SORTER SHUT–DOWN	16:20	16:20	NA	NA	
END SOIL PROCESSING	16:12	16:12	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	8.8 hr	8.7 hr	0.0 hr	0.0 hr	17.5 hr
DOWN–TIME	1.2 hr	1.3 hr	0.0 hr	0.0 hr	2.5 hr
SYSTEM PAUSE	0.4 hr	0.5 hr	0.0 hr	0.0 hr	0.8 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					87.5%
PRODUCTIVTY					41.7%

PRODUCTIVITY

Date	19–Aug–94	Excused Delays for day (sorter–hrs)	20 hr
Contract day (from 6 Sep)	287	Excused delays for contract (sorter–hrs)	5,172 hr
Current Contract week	48	Excused delay days (plant–days)	129 days
		Excused delay months (plant–month)	4.97 months
Soil production for Day	176 MT		
Cumlative Soil Production for Week	777 MT	Percent of contract completed	57.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,736 MT
Since 6 Sep 93	55,471 MT	Days ahead or behind schedule	5.5 days
Since 6 Aug 93	57,062 MT		
Total Soil production for project	83,349 MT		

MT = metric tons

File Report1 Printed on 23-Aug-94 at 08:43:57 AM

SORTER 1

19-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.72 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	36.5 tons	52.0 tons	88.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.7 kg	
VOLUME IN-GROUND	29.0 yd³	41.2 yd³	70.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	58.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	189,209 kBq	70,598 kBq	11,222 kBq
MAXIMUM/SORT	4,154 kBq	1,816 kBq	22 kBq
MINIMUM/SORT	2 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		1,932 Bq/kg	216 Bq/kg

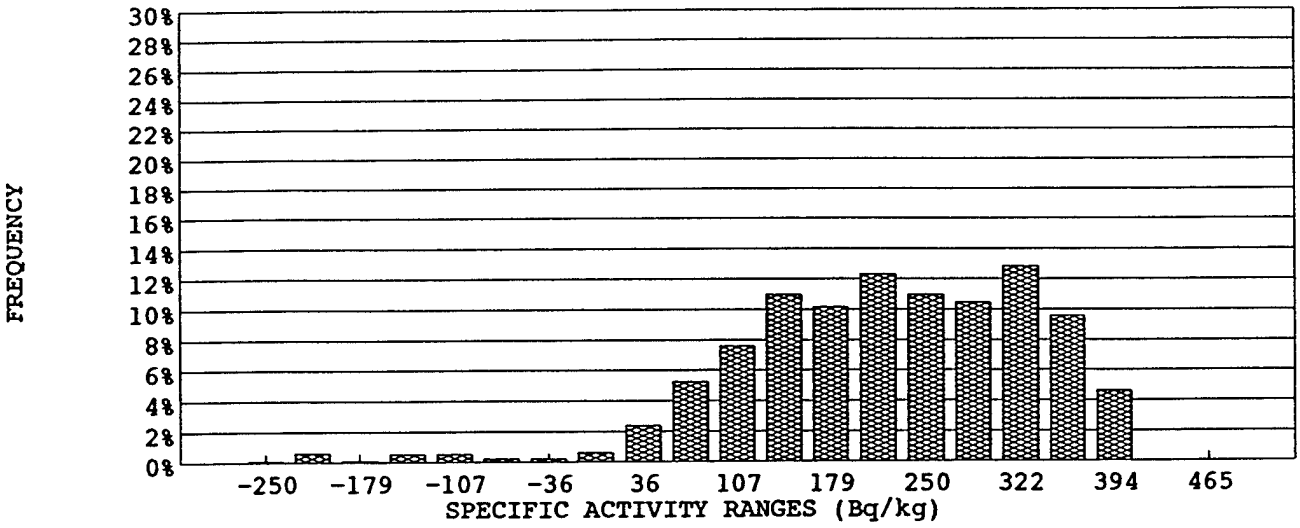
SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,584			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			624			06:59	07:56
NONE (AD=0 & MD=0 & MND>0)			305				
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			655				
UNEXPLAINED RECORDS			0				
0<AD<1kBq & MD>0			1				
AD=0 & MD>0			0				
AD<0 & MD >0			0				
2-SEC COUNT PERIODS				15,840			
2-SEC RECORDS WITH SORTS			8,013				
2-SEC RECORDS WITHOUT SORTS			7,827				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				9,597			
NONPROCESSING RECORDS (Test, calibration, etc)				14			
2-SEC SORT DETECTORS							
1 DET	4,968	62.00%	5 DET	64	0.80%		
2 DET	2,125	26.52%	6 DET	0	0.00%		
3 DET	670	8.36%	7 DET	3	0.04%		
4 DET	186	2.32%	8 DET	0	0.00%		
AVERAGE TIME BETWEEN 2-SEC SORTS			6.6 sec				

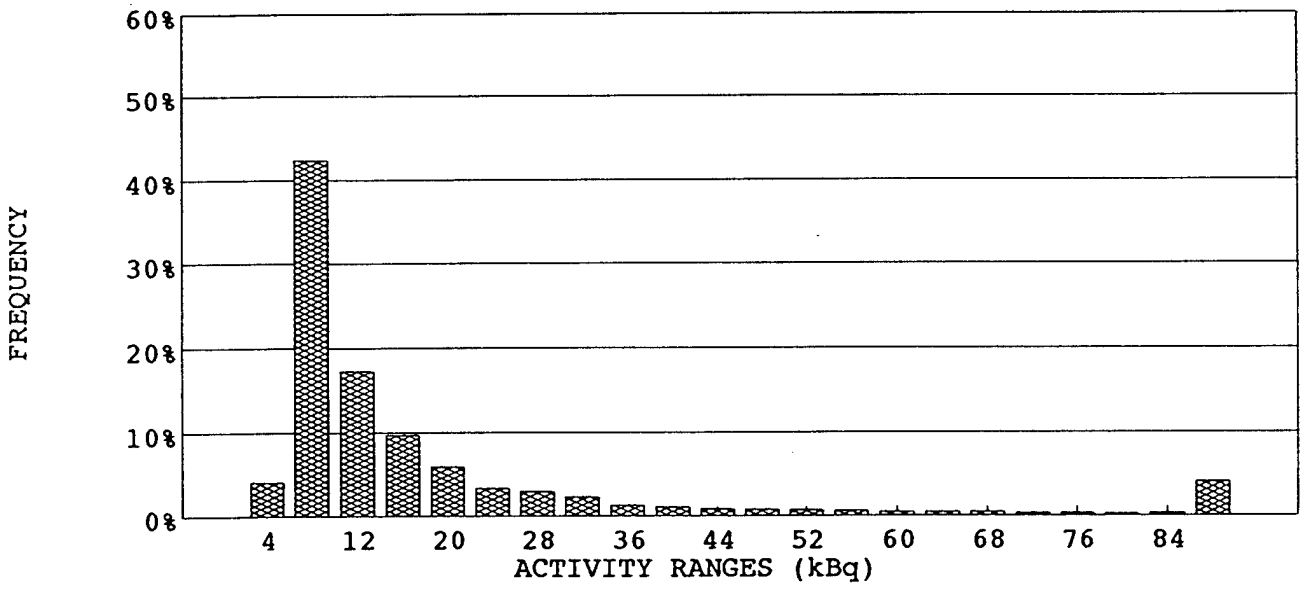
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	85	2.1%	-14000	1	-250	0.1%	4	328	4.1%
2	465	11.7%	-12000	6	-215	0.6%	8	3,400	42.4%
3	681	17.2%	-10000	1	-179	0.1%	12	1,383	17.3%
4	724	18.3%	-8000	5	-143	0.5%	16	777	9.7%
5	749	18.9%	-6000	5	-107	0.5%	20	474	5.9%
6	584	14.8%	-4000	2	-72	0.2%	24	266	3.3%
7	558	14.1%	-2000	2	-36	0.2%	28	234	2.9%
8	112	2.8%	0	6	0	0.6%	32	188	2.3%
TOTAL	3,958		2000	23	36	2.4%	36	109	1.4%
			4000	51	72	5.2%	40	90	1.1%
2-GATE SORTS			6000	74	107	7.6%	44	67	0.8%
DET	SORTS	FREQ%	8000	107	143	11.0%	48	62	0.8%
9	270	6.7%	10000	99	179	10.2%	52	56	0.7%
10	592	14.6%	12000	120	215	12.3%	56	51	0.6%
11	731	18.0%	14000	107	250	11.0%	60	35	0.4%
12	783	19.3%	16000	102	286	10.5%	64	36	0.4%
13	760	18.7%	18000	125	322	12.8%	68	36	0.4%
14	617	15.2%	20000	93	358	9.5%	72	24	0.3%
15	302	7.4%	22000	45	394	4.6%	76	23	0.3%
TOTAL	4,055		24000	0	429	0.0%	80	19	0.2%
			26000	0	465	0.0%	84	24	0.3%
			>28000	0	0	0.0%	>84	331	4.1%
			TOTAL	974			TOTAL	8,013	
EVENT TYPES		HPE	7,176	MPE	6,784	DISE	38,325		

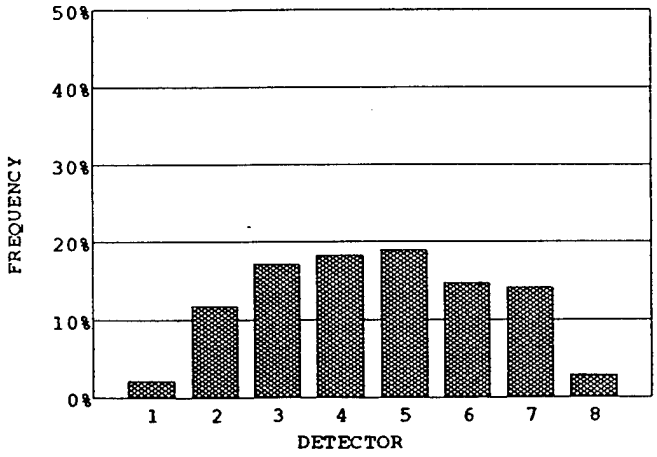
JA CLEAN SOIL SPECIFIC ACTIVITY



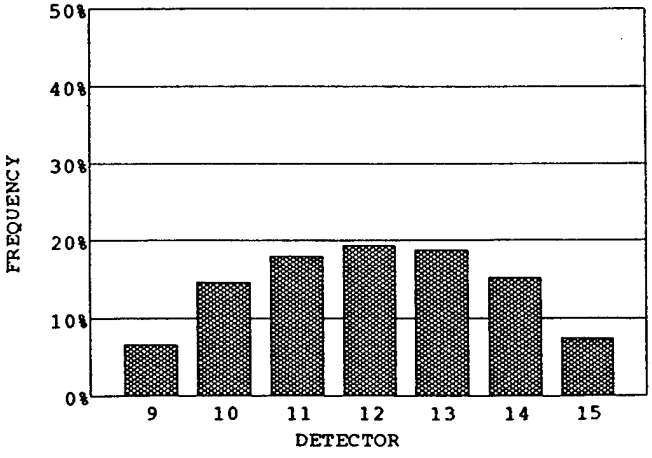
JA SOIL CLEANUP PLANT HOT PARTICLES



JA SOIL CLEANUP PLANT 1-GATE SORTS



JA SOIL CLEANUP PLANT 2-GATE SORTS



SORTER 2

19-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.81 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	41.0 tons	46.6 tons	87.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	44.0 kg	
VOLUME IN-GROUND	32.5 yd³	37.0 yd³	69.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	53.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	210,747 kBq	80,926 kBq	8,783 kBq
MAXIMUM/SORT	5,694 kBq	2,494 kBq	21 kBq
MINIMUM/SORT	2 kBq	(24,804)Bq	-14 kBq
SPECIFIC ACTIVITY		1,976 Bq/kg	188 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,567		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	701			
NONE (AD=0 & MD=0 & MND>0)	246		13:47	07:56
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	620		13:49	13:47
UNEXPLAINED RECORDS	0		14:32	12:07
0<AD<1kBq & MD>0	3		16:12	12:50
AD=0 & MD>0	0			16:11
AD<0 & MD >0	1			
2-SEC COUNT PERIODS		15,670		
2-SEC RECORDS WITH SORTS	9,525			
2-SEC RECORDS WITHOUT SORTS	6,145			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		11,092		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

1 DET	5,812	61.02%	5 DET	91	0.96%
2 DET	2,547	26.74%	6 DET	0	0.00%
3 DET	820	8.61%	7 DET	6	0.06%
4 DET	255	2.68%	8 DET	1	0.01%

AVERAGE TIME BETWEEN 2-SEC SORTS 5.4 sec

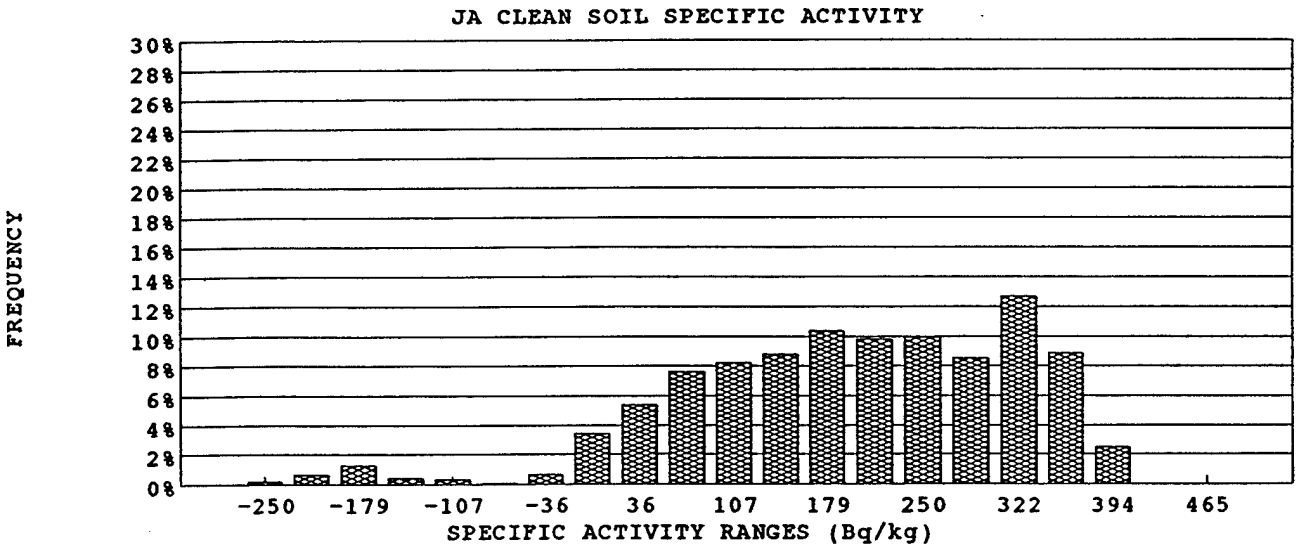
FREQUENCY DISTRIBUTIONS

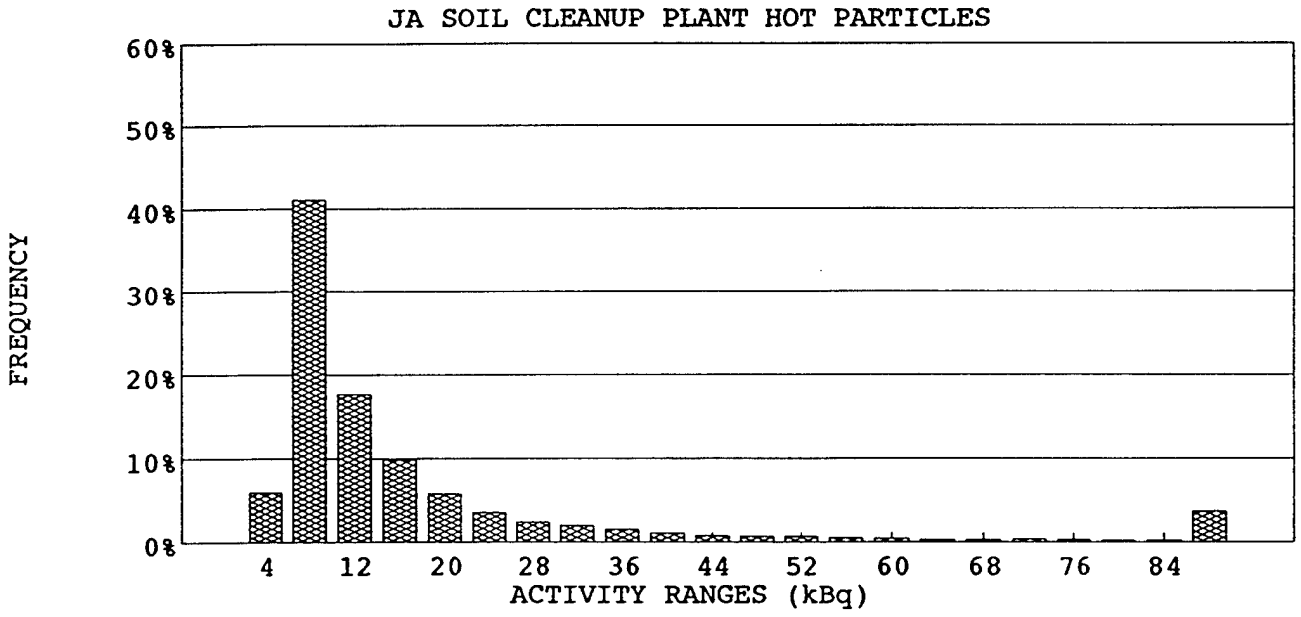
1-GATE DET	SORTS	FREQ%
1	326	6.8%
2	842	17.6%
3	826	17.3%
4	843	17.6%
5	801	16.8%
6	696	14.6%
7	384	8.0%
8	60	1.3%
TOTAL	4,778	

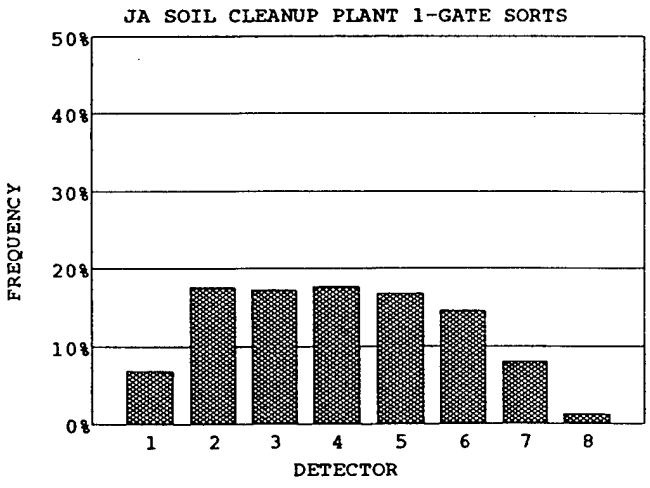
2-GATE DET	SORTS	FREQ%
9	674	14.2%
10	879	18.5%
11	877	18.5%
12	832	17.5%
13	800	16.9%
14	538	11.3%
15	147	3.1%
TOTAL	4,747	

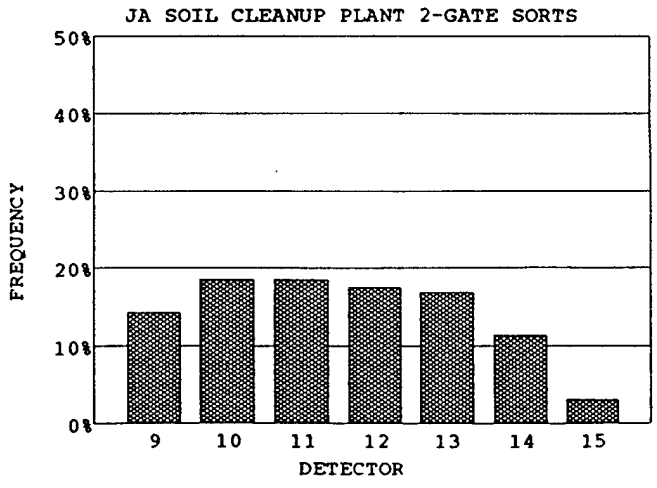
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-250	0.2%	4	571	6.0%
-12000	6	-215	0.7%	8	3,909	41.0%
-10000	11	-179	1.3%	12	1,684	17.7%
-8000	4	-143	0.5%	16	940	9.9%
-6000	3	-107	0.3%	20	554	5.8%
-4000	1	-72	0.1%	24	341	3.6%
-2000	6	-36	0.7%	28	228	2.4%
0	30	0	3.4%	32	193	2.0%
2000	47	36	5.4%	36	154	1.6%
4000	67	72	7.6%	40	108	1.1%
6000	72	107	8.2%	44	74	0.8%
8000	77	143	8.8%	48	73	0.8%
10000	91	179	10.4%	52	65	0.7%
12000	86	215	9.8%	56	52	0.5%
14000	87	250	9.9%	60	44	0.5%
16000	75	286	8.6%	64	32	0.3%
18000	111	322	12.7%	68	30	0.3%
20000	78	358	8.9%	72	37	0.4%
22000	22	394	2.5%	76	30	0.3%
24000	0	429	0.0%	80	24	0.3%
26000	0	465	0.0%	84	24	0.3%
>28000	0	0	0.0%	>84	358	3.8%
TOTAL	876			TOTAL	9,525	

EVENT TYPES HPE 8,498 MPE 7,981 DISE 42,122


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 20–Aug–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	7.7 hr	7.7 hr	1.0 hr	1.0 hr	17.3 hr
SORTER START–UP	06:20	06:20	08:10	08:10	
START SOIL PROCESSING	06:26	06:26	08:19	08:19	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.2 hr	0.2 hr	0.5 hr
SORTER SHUT–DOWN	14:30	14:30	09:10	09:10	
END SOIL PROCESSING	14:15	14:11	09:06	09:02	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.3 hr	0.1 hr	0.1 hr	0.7 hr
ACTUAL PROCESS HOURS	6.9 hr	6.8 hr	0.8 hr	0.7 hr	15.3 hr
DOWN–TIME	0.7 hr	0.9 hr	0.2 hr	0.3 hr	2.1 hr
SYSTEM PAUSE	0.9 hr	0.9 hr	0.0 hr	0.0 hr	1.8 hr
SORTER NONAVAILABLE TIME	2.3 hr	2.3 hr	9.0 hr	9.0 hr	22.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	9.0 hr	9.0 hr	18.0 hr
PLANT PERFORMANCE					88.1%
PRODUCTIVTY					38.2%

PRODUCTIVITY

Date	20–Aug–94	Excused Delays for day (sorter–hrs)	18 hr
Contract day (from 6 Sep)	288	Excused delays for contract (sorter–hrs)	5,190 hr
Current Contract week	48	Excused delay days (plant–days)	130 days
		Excused delay months (plant–month)	4.99 months
Soil production for Day	155 MT		
Cumlative Soil Production for Week	932 MT	Percent of contract completed	57.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,717 MT
Since 6 Sep 93	55,626 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	57,217 MT		
Total Soil production for project	83,503 MT		

MT = metric tons

File Report1 Printed on 23-Aug-94 at 12:44:13 PM

SORTER 1

20-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.70 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	69.0 tons	69.8 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.7 yd³	54.7 yd³	55.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	31,461 kBq	6,549 kBq	4,542 kBq
MAXIMUM/SORT	6,039 kBq	2,426 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		7,904 Bq/kg	66 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,249		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	3			
NONE (AD=0 & MD=0 & MND>0)	871		10:05	11:03
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	375		10:43	
UNEXPLAINED RECORDS	0		12:48	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,490		
2-SEC RECORDS WITH SORTS	825			
2-SEC RECORDS WITHOUT SORTS	11,665			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,074		
NONPROCESSING RECORDS (Test, calibration, etc)		13		

2-SEC SORT DETECTORS

1 DET	580	70.30%	5 DET	3	0.36%
2 DET	191	23.15%	6 DET	0	0.00%
3 DET	39	4.73%	7 DET	0	0.00%
4 DET	12	1.45%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 43.1 sec

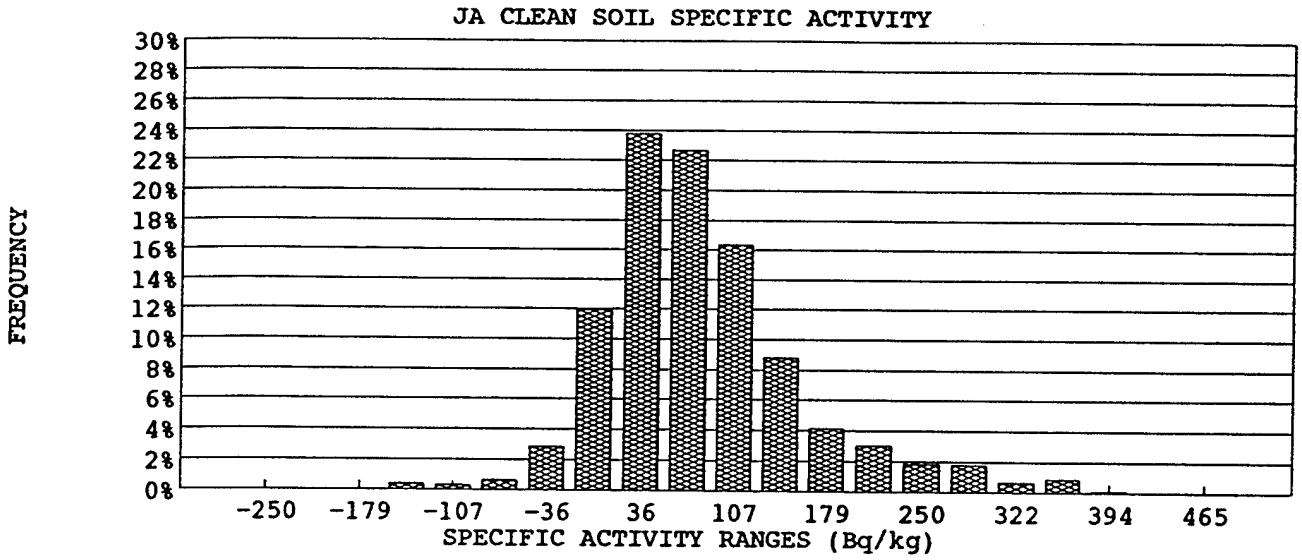
FREQUENCY DISTRIBUTIONS

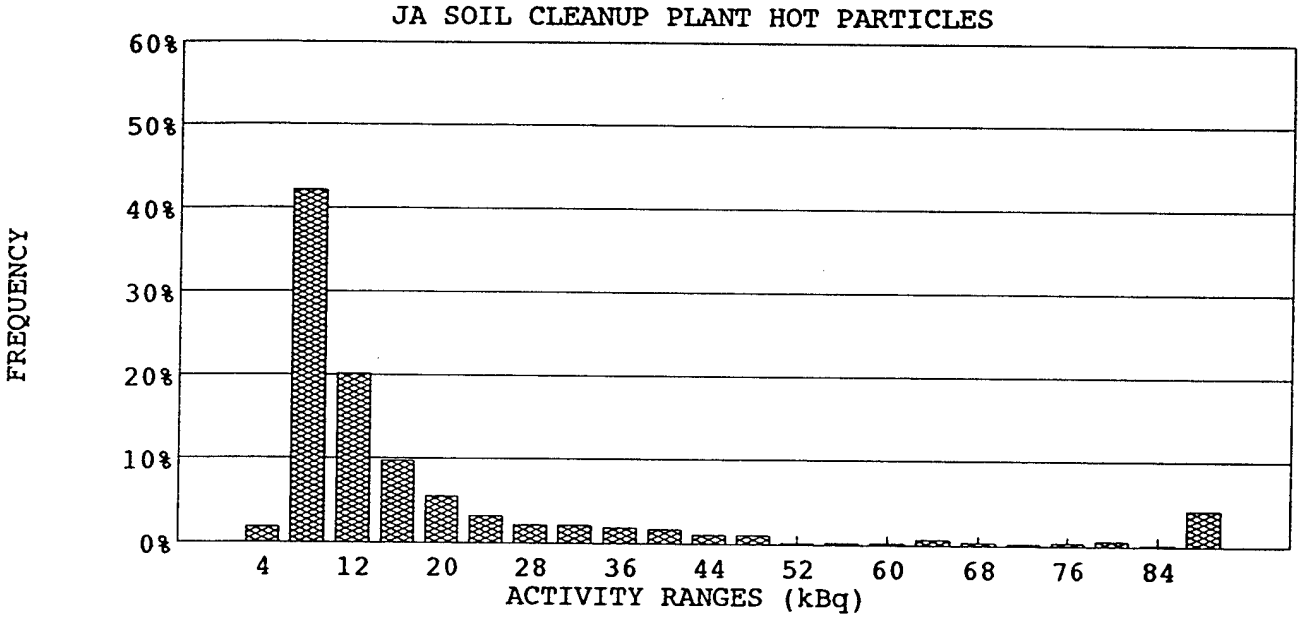
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	16	3.9%	-14000	0	-250	0.0%	4	15	1.8%
2	49	12.0%	-12000	0	-215	0.0%	8	348	42.2%
3	71	17.4%	-10000	0	-179	0.0%	12	166	20.1%
4	61	15.0%	-8000	5	-143	0.4%	16	80	9.7%
5	86	21.1%	-6000	4	-107	0.3%	20	46	5.6%
6	53	13.0%	-4000	8	-72	0.6%	24	27	3.3%
7	56	13.8%	-2000	36	-36	2.9%	28	18	2.2%
8	15	3.7%	0	150	0	11.9%	32	18	2.2%
TOTAL	407		2000	299	36	23.7%	36	15	1.8%
			4000	285	72	22.6%	40	14	1.7%
2-GATE SORTS			6000	206	107	16.4%	44	9	1.1%
DET	SORTS	FREQ%	8000	111	143	8.8%	48	9	1.1%
9	30	7.2%	10000	52	179	4.1%	52	1	0.1%
10	67	16.0%	12000	38	215	3.0%	56	2	0.2%
11	70	16.7%	14000	23	250	1.8%	60	2	0.2%
12	82	19.6%	16000	22	286	1.7%	64	6	0.7%
13	72	17.2%	18000	8	322	0.6%	68	3	0.4%
14	58	13.9%	20000	11	358	0.9%	72	2	0.2%
15	39	9.3%	22000	1	394	0.1%	76	3	0.4%
TOTAL	418		24000	0	429	0.0%	80	5	0.6%
			26000	0	465	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	35	4.2%
			TOTAL	1,259			TOTAL	825	

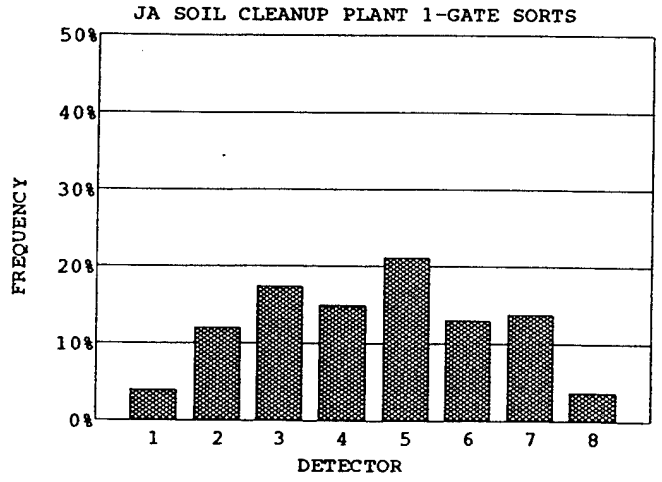
EVENT TYPES	HPE	MPE	DISE
	831	124	229

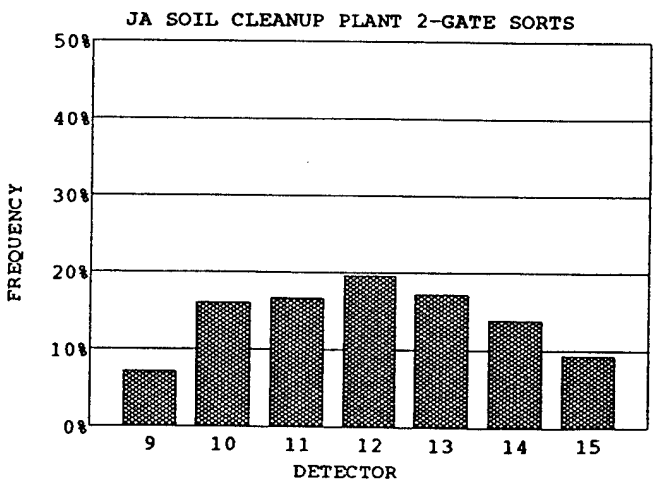
SORTER 1

20-Aug-94









SORTER 2

20-Aug-94

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

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.8 tons	67.7 tons	68.5 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	48.9 kg	
VOLUME IN-GROUND	0.6 yd³	53.7 yd³	54.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	19,770 kBq	4,272 kBq	4,558 kBq
MAXIMUM/SORT	1,236 kBq	633 kBq	20 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		5,525 Bq/kg	67 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,225		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2			
NONE (AD=0 & MD=0 & MND>0)	842		06:45	06:32
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	381		08:54	11:02
UNEXPLAINED RECORDS	0		09:26	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		12,250		
2-SEC RECORDS WITH SORTS	790			
2-SEC RECORDS WITHOUT SORTS	11,460			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,015		
NONPROCESSING RECORDS (Test, calibration, etc)		20		

2-SEC SORT DETECTORS

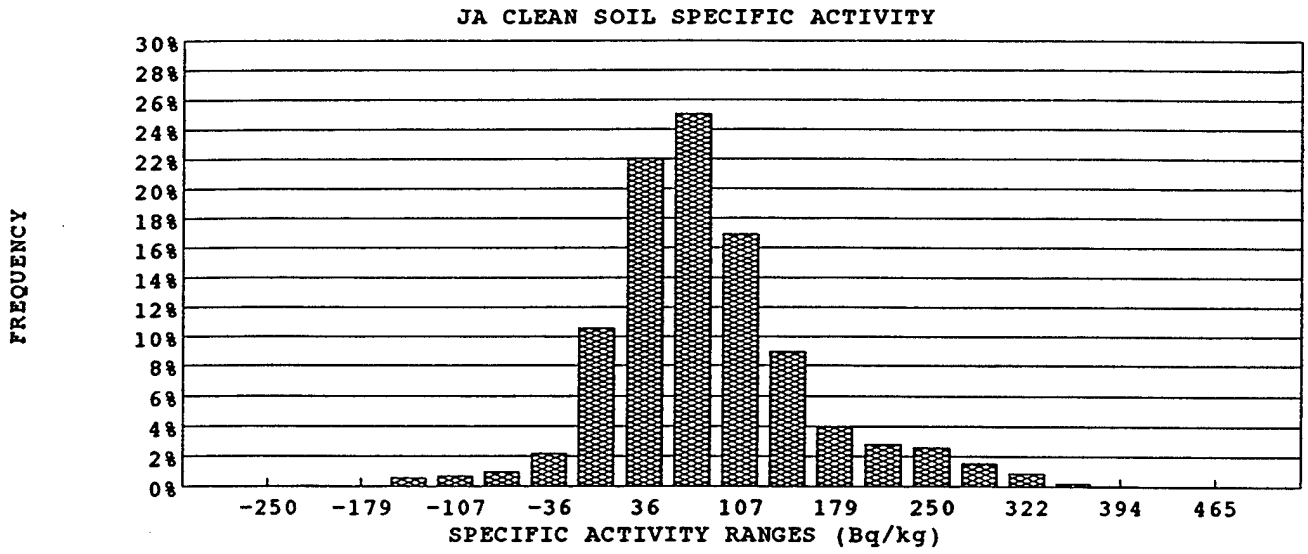
1 DET	589	74.56%	5 DET	3	0.38%
2 DET	169	21.39%	6 DET	0	0.00%
3 DET	26	3.29%	7 DET	1	0.13%
4 DET	3	0.38%	8 DET	0	0.00%

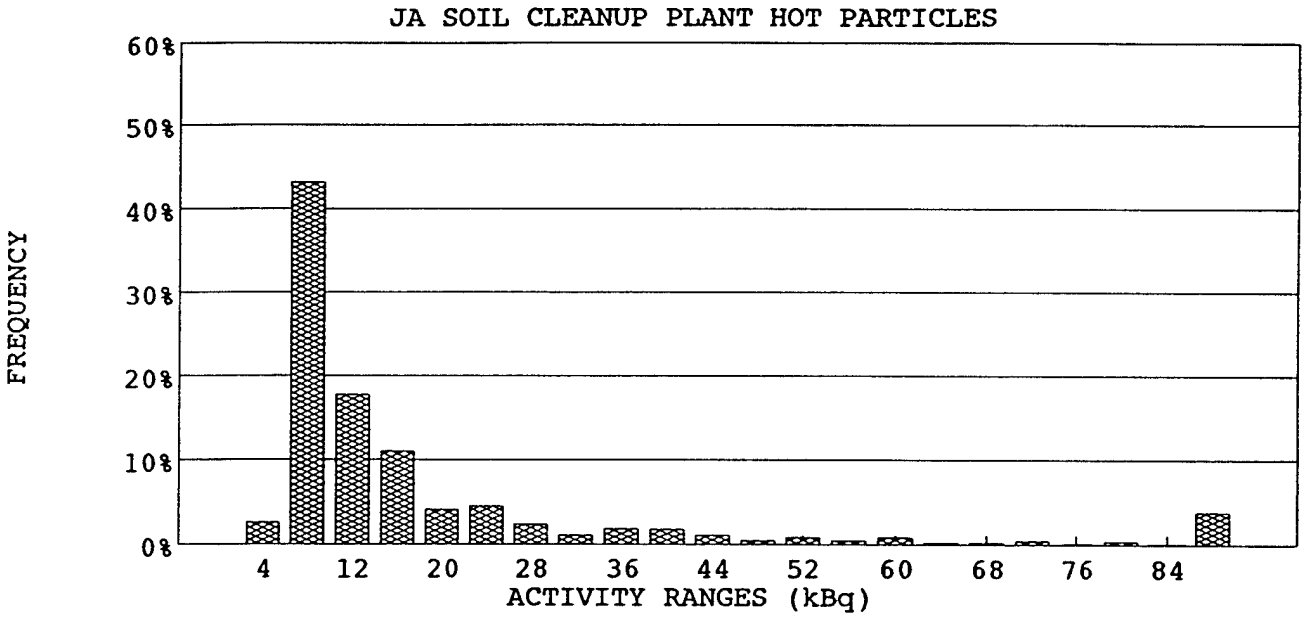
AVERAGE TIME BETWEEN 2-SEC SORTS 41.6 sec

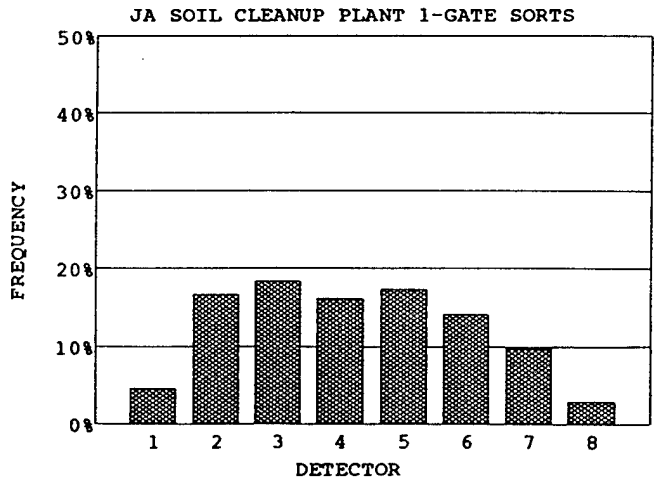
FREQUENCY DISTRIBUTIONS

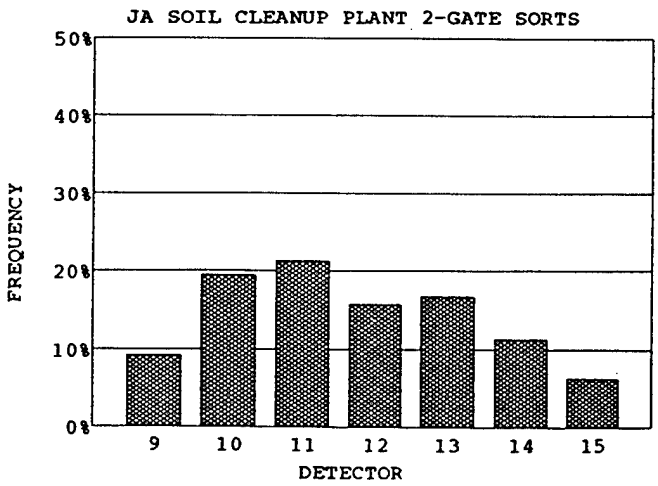
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	19	4.6%	-14000	0	-250	0.0%	4	21	2.7%
2	68	16.6%	-12000	1	-215	0.1%	8	341	43.2%
3	75	18.3%	-10000	0	-179	0.0%	12	140	17.7%
4	66	16.1%	-8000	7	-143	0.6%	16	87	11.0%
5	71	17.4%	-6000	9	-107	0.7%	20	33	4.2%
6	58	14.2%	-4000	12	-72	1.0%	24	36	4.6%
7	40	9.8%	-2000	27	-36	2.2%	28	19	2.4%
8	12	2.9%	0	131	0	10.5%	32	9	1.1%
TOTAL	409		2000	274	36	22.0%	36	15	1.9%
			4000	311	72	25.0%	40	14	1.8%
2-GATE SORTS			6000	210	107	16.9%	44	9	1.1%
DET	SORTS	FREQ%	8000	111	143	8.9%	48	4	0.5%
9	35	9.2%	10000	49	179	3.9%	52	7	0.9%
10	74	19.4%	12000	35	215	2.8%	56	4	0.5%
11	81	21.3%	14000	32	250	2.6%	60	7	0.9%
12	60	15.7%	16000	19	286	1.5%	64	2	0.3%
13	64	16.8%	18000	11	322	0.9%	68	2	0.3%
14	43	11.3%	20000	3	358	0.2%	72	4	0.5%
15	24	6.3%	22000	1	394	0.1%	76	1	0.1%
TOTAL	381		24000	0	429	0.0%	80	3	0.4%
			26000	0	465	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	31	3.9%
			TOTAL	1,243			TOTAL	790	

EVENT TYPES	HPE	792	MPE	155	DISE	158


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

20-Aug-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.66 ± 0.11 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	8.1 tons	8.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	50.7 kg	
VOLUME IN-GROUND	0.4 yd³	6.4 yd³	6.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	68,526 kBq	13,295 kBq	1,905 kBq
MAXIMUM/SORT	6,985 kBq	3,224 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		25,353 Bq/kg	236 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		142		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2		None	None
NONE (AD=0 & MD=0 & MND>0)	27			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	113			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		1,420		
2-SEC RECORDS WITH SORTS	536			
2-SEC RECORDS WITHOUT SORTS	884			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		678		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

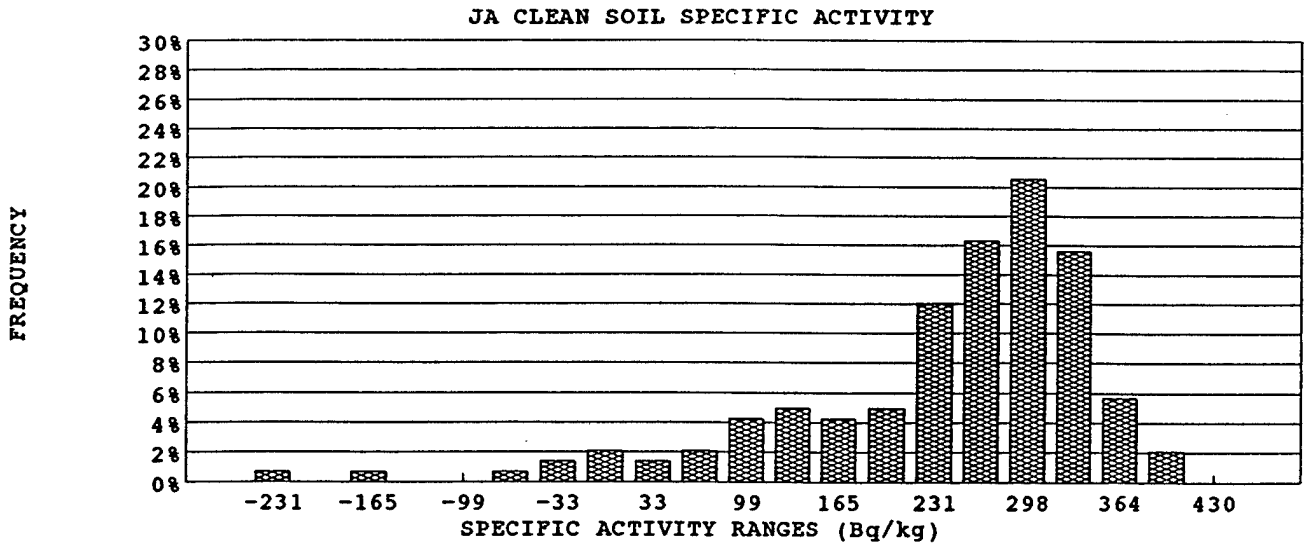
2-SEC SORT DETECTORS

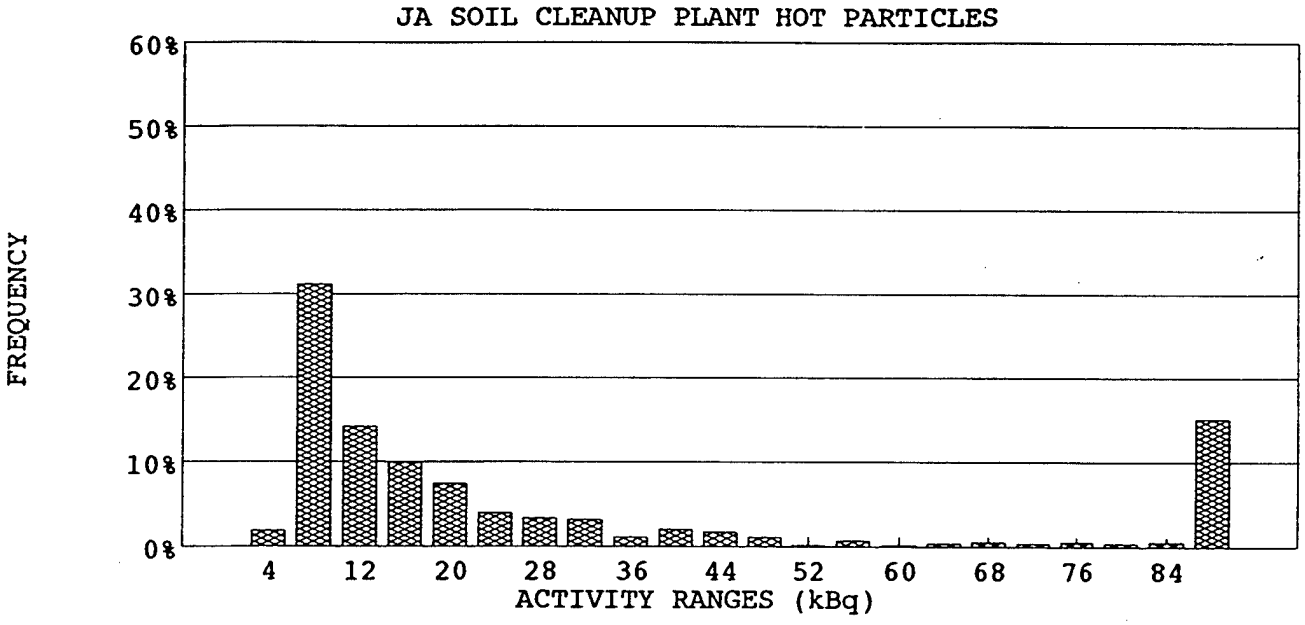
1 DET	312	58.21%	5 DET	17	3.17%
2 DET	135	25.19%	6 DET	0	0.00%
3 DET	50	9.33%	7 DET	0	0.00%
4 DET	22	4.10%	8 DET	0	0.00%

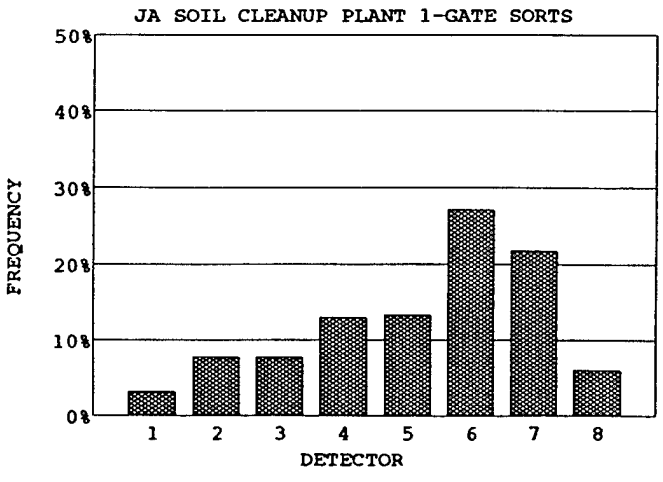
AVERAGE TIME BETWEEN 2-SEC SORTS 9.1 sec

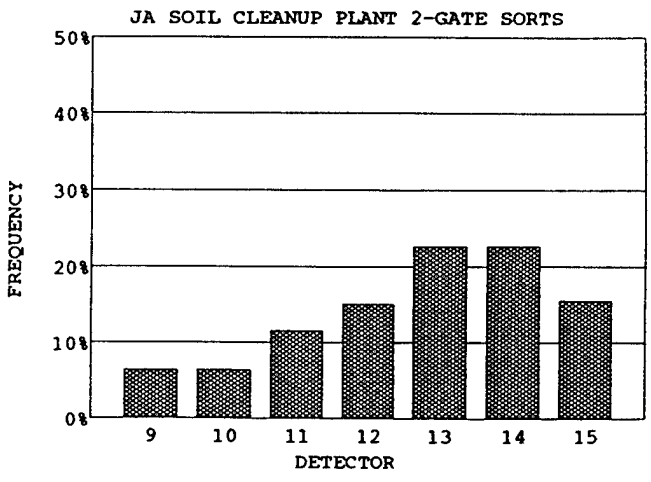
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	9	3.2%	-14000	1	-231	0.7%	4	10	1.9%
2	22	7.7%	-12000	0	-198	0.0%	8	167	31.2%
3	22	7.7%	-10000	1	-165	0.7%	12	76	14.2%
4	37	13.0%	-8000	0	-132	0.0%	16	53	9.9%
5	38	13.4%	-6000	0	-99	0.0%	20	40	7.5%
6	77	27.1%	-4000	1	-66	0.7%	24	21	3.9%
7	62	21.8%	-2000	2	-33	1.4%	28	18	3.4%
8	17	6.0%	0	3	0	2.1%	32	17	3.2%
TOTAL	284		2000	2	33	1.4%	36	6	1.1%
			4000	3	66	2.1%	40	11	2.1%
2-GATE SORTS			6000	6	99	4.3%	44	9	1.7%
DET	SORTS	FREQ%	8000	7	132	5.0%	48	6	1.1%
9	16	6.3%	10000	6	165	4.3%	52	1	0.2%
10	16	6.3%	12000	7	198	5.0%	56	4	0.7%
11	29	11.5%	14000	17	231	12.1%	60	1	0.2%
12	38	15.1%	16000	23	264	16.3%	64	2	0.4%
13	57	22.6%	18000	29	298	20.6%	68	3	0.6%
14	57	22.6%	20000	22	331	15.6%	72	2	0.4%
15	39	15.5%	22000	8	364	5.7%	76	3	0.6%
TOTAL	252		24000	3	397	2.1%	80	2	0.4%
			26000	0	430	0.0%	84	3	0.6%
			>28000	0	0	0.0%	>84	81	15.1%
			TOTAL	141			TOTAL	536	
EVENT TYPES		HPE	464	MPE	90	DISE	139		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

20-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.2 tons	6.8 tons	8.0 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	47.7 kg	
VOLUME IN-GROUND	0.9 yd³	5.4 yd³	6.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	85.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	79,713 kBq	15,944 kBq	2,093 kBq
MAXIMUM/SORT	16,385 kBq	7,203 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	0 kBq
SPECIFIC ACTIVITY		13,761 Bq/kg	306 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				132		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			12		None	None
NONE (AD=0 & MD=0 & MND>0)			15			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			105			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				1,320		
2-SEC RECORDS WITH SORTS			651			
2-SEC RECORDS WITHOUT SORTS			669			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				783		
NONPROCESSING RECORDS (Test, calibration, etc)				11		

2-SEC SORT DETECTORS

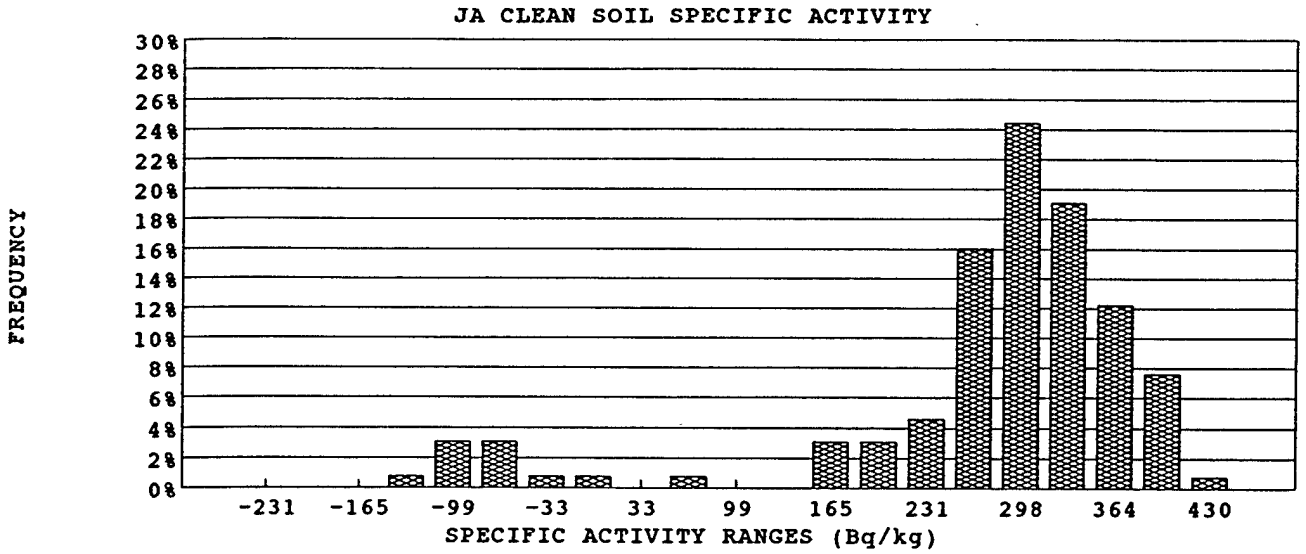
1 DET	423	64.98%	5 DET	11	1.69%
2 DET	152	23.35%	6 DET	0	0.00%
3 DET	50	7.68%	7 DET	1	0.15%
4 DET	15	2.30%	8 DET	1	0.15%

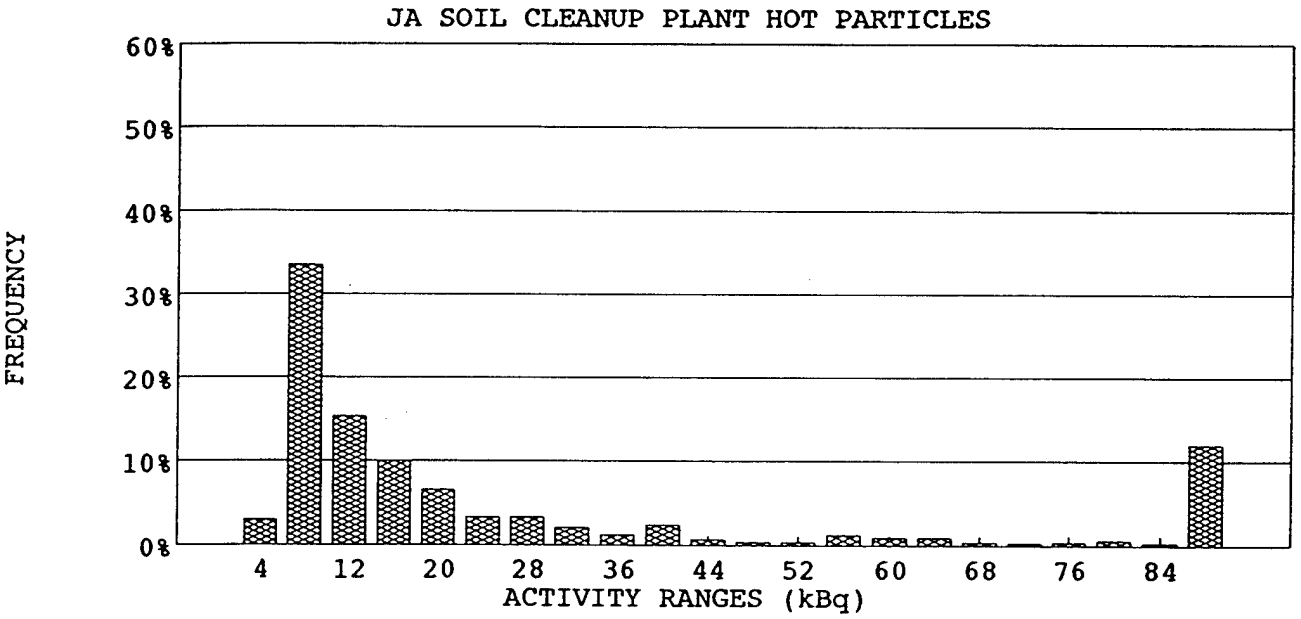
AVERAGE TIME BETWEEN 2-SEC SORTS 6.2 sec

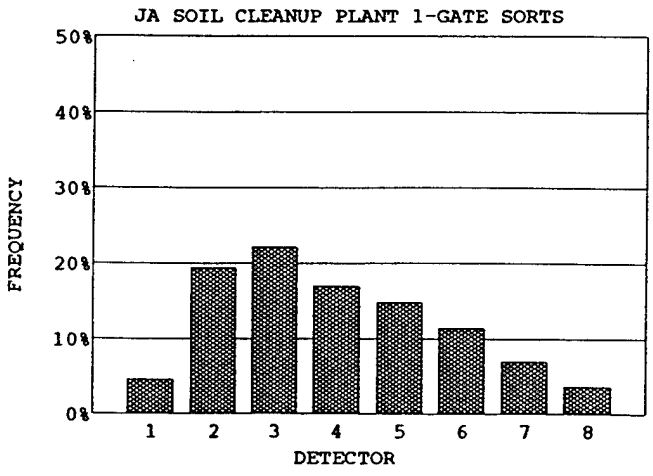
FREQUENCY DISTRIBUTIONS

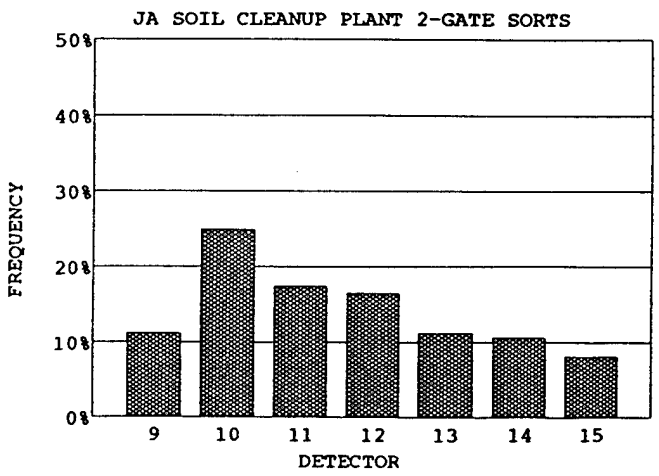
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	15	4.5%	-14000	0	-231	0.0%	4	20	3.1%
2	64	19.4%	-12000	0	-198	0.0%	8	218	33.5%
3	73	22.1%	-10000	0	-165	0.0%	12	100	15.4%
4	56	17.0%	-8000	1	-132	0.8%	16	65	10.0%
5	49	14.8%	-6000	4	-99	3.1%	20	43	6.6%
6	38	11.5%	-4000	4	-66	3.1%	24	22	3.4%
7	23	7.0%	-2000	1	-33	0.8%	28	22	3.4%
8	12	3.6%	0	1	0	0.8%	32	14	2.2%
TOTAL	330		2000	0	33	0.0%	36	8	1.2%
			4000	1	66	0.8%	40	16	2.5%
2-GATE SORTS			6000	0	99	0.0%	44	5	0.8%
DET	SORTS	FREQ%	8000	0	132	0.0%	48	3	0.5%
9	36	11.2%	10000	4	165	3.1%	52	3	0.5%
10	80	24.9%	12000	4	198	3.1%	56	8	1.2%
11	56	17.4%	14000	6	231	4.6%	60	6	0.9%
12	53	16.5%	16000	21	264	16.0%	64	6	0.9%
13	36	11.2%	18000	32	298	24.4%	68	3	0.5%
14	34	10.6%	20000	25	331	19.1%	72	2	0.3%
15	26	8.1%	22000	16	364	12.2%	76	3	0.5%
TOTAL	321		24000	10	397	7.6%	80	4	0.6%
			26000	1	430	0.8%	84	2	0.3%
			>28000	0	0	0.0%	>84	78	12.0%
			TOTAL	131			TOTAL	651	

EVENT TYPES	HPE	577	MPE	107	DISE	848


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Aug–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	1.0 hr	0.0 hr	0.0 hr	1.0 hr
SORTER START–UP	NA	07:30	NA	NA	
START SOIL PROCESSING	NA	07:47	NA	NA	
TIME REQUIRED TO START–UP	0.0 hr	0.3 hr	0.0 hr	0.0 hr	0.3 hr
SORTER SHUT–DOWN	NA	08:32	NA	NA	
END SOIL PROCESSING	NA	08:31	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	0.7 hr	0.0 hr	0.0 hr	0.7 hr
DOWN–TIME	0.0 hr	0.3 hr	0.0 hr	0.0 hr	0.3 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	10.0 hr	9.0 hr	10.0 hr	10.0 hr	39.0 hr
AUTHORIZED DELAY TIME	7.5 hr	7.5 hr	10.0 hr	10.0 hr	35.0 hr
PLANT PERFORMANCE					70.4%
PRODUCTIVTY					1.8%

PRODUCTIVITY

Date	22–Aug–94	Excused Delays for day (sorter–hrs)	35 hr
Contract day (from 6 Sep)	289	Excused delays for contract (sorter–hrs)	5,225 hr
Current Contract week	49	Excused delay days (plant–days)	131 days
		Excused delay months (plant–month)	5.02 months
Soil production for Day	7 MT		
Cumlative Soil Production for Week	7 MT	Percent of contract completed	57.2%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,685 MT
Since 6 Sep 93	55,633 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,224 MT		
Total Soil production for project	83,511 MT		

MT = metric tons

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SORTER 2

22-Aug-94

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

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	6.4 tons	0.9 tons	7.3 tons
MAXIMUM/SORT	55.9 kg	55.2 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	5.1 yd³	0.7 yd³	5.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	12.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	20,134 kBq	7,731 kBq	270 kBq
MAXIMUM/SORT	1,995 kBq	771 kBq	20 kBq
MINIMUM/SORT	3 kBq	1,505 Bq	-3 kBq
SPECIFIC ACTIVITY		1,210 Bq/kg	290 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		131		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	113			
NONE (AD=0 & MD=0 & MND>0)	0		None	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	16			
UNEXPLAINED RECORDS	2			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		1,310		
2-SEC RECORDS WITH SORTS	735			
2-SEC RECORDS WITHOUT SORTS	575			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		866		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

1 DET	483	65.71%	5 DET	3	0.41%
2 DET	189	25.71%	6 DET	0	0.00%
3 DET	48	6.53%	7 DET	0	0.00%
4 DET	12	1.63%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 5.4 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

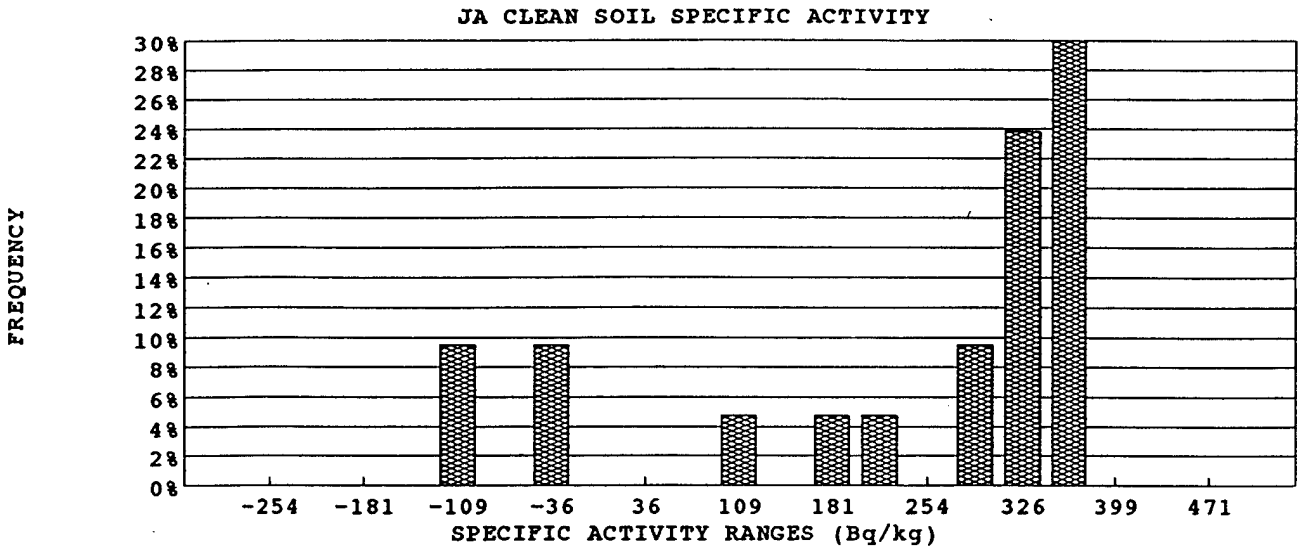
DET	SORTS	FREQ%
1	18	5.1%
2	68	19.3%
3	70	19.9%
4	77	21.9%
5	57	16.2%
6	37	10.5%
7	19	5.4%
8	6	1.7%
TOTAL	352	

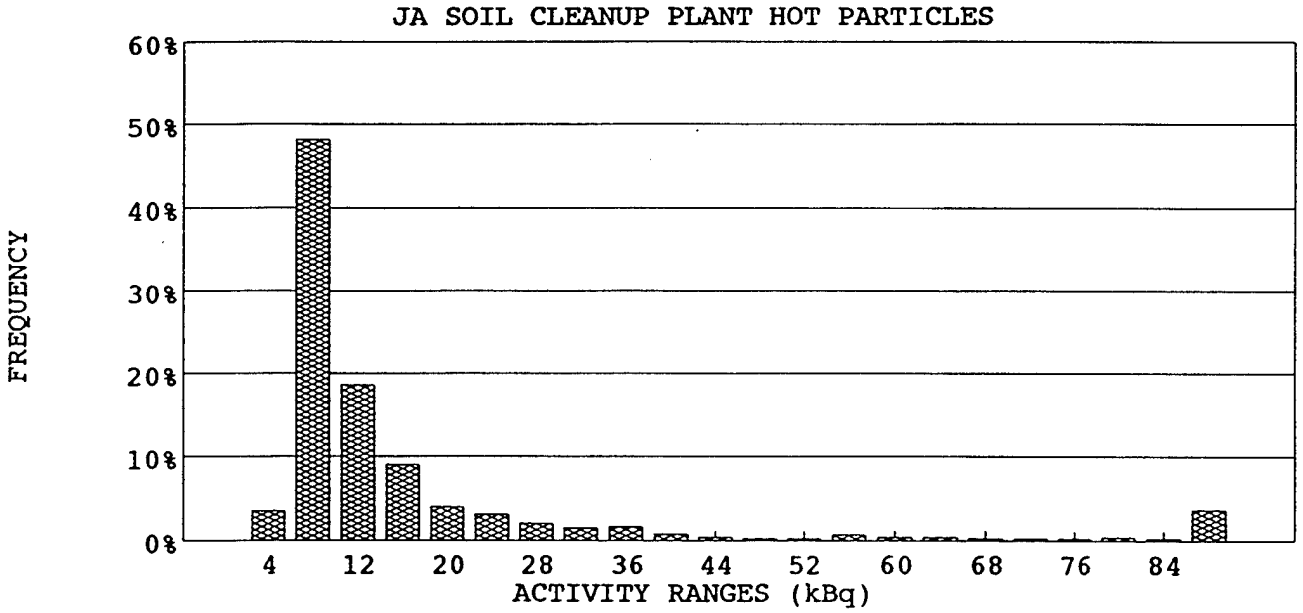
2-GATE SORTS

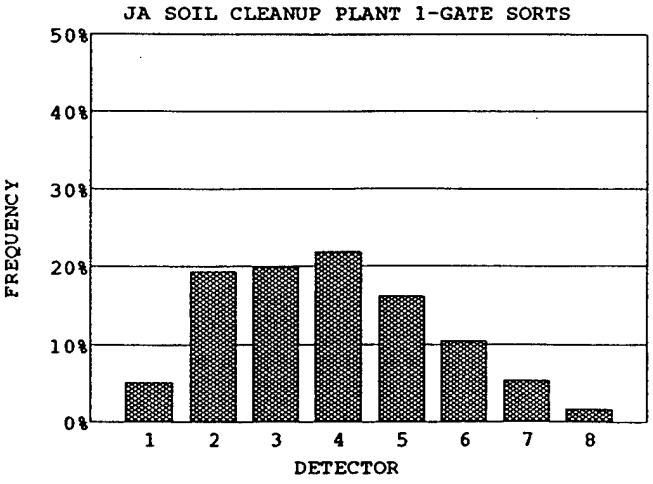
DET	SORTS	FREQ%
9	43	11.2%
10	86	22.5%
11	96	25.1%
12	72	18.8%
13	50	13.1%
14	25	6.5%
15	11	2.9%
TOTAL	383	

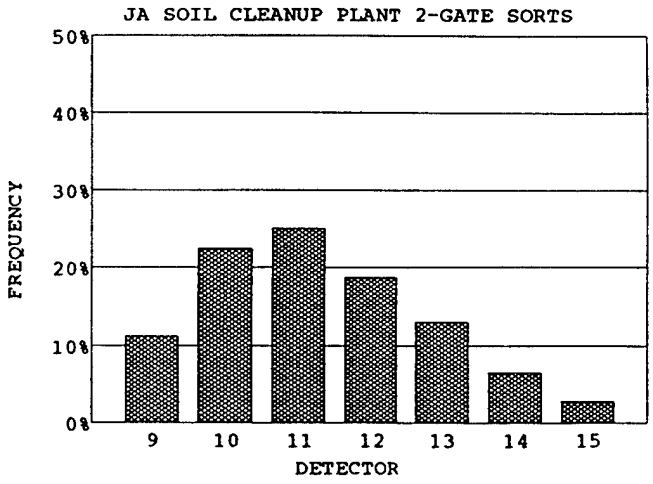
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-254	0.0%	4	26	3.5%
-12000	0	-217	0.0%	8	354	48.2%
-10000	0	-181	0.0%	12	137	18.6%
-8000	0	-145	0.0%	16	66	9.0%
-6000	2	-109	9.5%	20	29	3.9%
-4000	0	-72	0.0%	24	23	3.1%
-2000	2	-36	9.5%	28	15	2.0%
0	0	0	0.0%	32	11	1.5%
2000	0	36	0.0%	36	12	1.6%
4000	0	72	0.0%	40	6	0.8%
6000	1	109	4.8%	44	3	0.4%
8000	0	145	0.0%	48	2	0.3%
10000	1	181	4.8%	52	2	0.3%
12000	1	217	4.8%	56	5	0.7%
14000	0	254	0.0%	60	3	0.4%
16000	2	290	9.5%	64	3	0.4%
18000	5	326	23.8%	68	2	0.3%
20000	7	362	33.3%	72	2	0.3%
22000	0	399	0.0%	76	2	0.3%
24000	0	435	0.0%	80	3	0.4%
26000	0	471	0.0%	84	2	0.3%
>28000	0	0	0.0%	>84	27	3.7%
TOTAL	21			TOTAL	735	

EVENT TYPES HPE 688 MPE 279 DISE 8,177


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-254 -181 -109 -36 36 109 181 254 326 399 471
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–Aug–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	3.3 hr	3.3 hr	0.0 hr	0.0 hr	6.5 hr
SORTER START–UP	06:00	06:00	NA	NA	
START SOIL PROCESSING	07:01	07:01	NA	NA	
TIME REQUIRED TO START–UP	1.0 hr	1.0 hr	0.0 hr	0.0 hr	2.1 hr
SORTER SHUT–DOWN	09:15	09:15	NA	NA	
END SOIL PROCESSING	09:10	09:11	NA	NA	
TIME REQUIRED TO SHUT DOWN	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.1 hr
ACTUAL PROCESS HOURS	2.1 hr	2.1 hr	0.0 hr	0.0 hr	4.3 hr
DOWN–TIME	1.1 hr	1.1 hr	0.0 hr	0.0 hr	2.2 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
SORTER NONAVAILABLE TIME	6.8 hr	6.8 hr	10.0 hr	10.0 hr	33.5 hr
AUTHORIZED DELAY TIME	6.8 hr	6.8 hr	10.0 hr	10.0 hr	33.5 hr
PLANT PERFORMANCE					66.0%
PRODUCTIVTY					10.7%

PRODUCTIVITY

Date	23–Aug–94	Excused Delays for day (sorter–hrs)	33.5 hr
Contract day (from 6 Sep)	290	Excused delays for contract (sorter–hrs)	5,259 hr
Current Contract week	49	Excused delay days (plant–days)	131 days
		Excused delay months (plant–month)	5.06 months
Soil production for Day	43 MT		
Cumlative Soil Production for Week	50 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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SORTER 1

23-Aug-94

SORTER SOIL DENSITY 1.20 tons/m³ BACKGROUND 0.67 ± 0.07 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	5.6 tons	16.0 tons	21.6 tons
MAXIMUM/SORT	55.9 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	46.1 kg	
VOLUME IN-GROUND	4.4 yd³	12.7 yd³	17.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	74.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	16,231 kBq	6,051 kBq	3,024 kBq
MAXIMUM/SORT	1,249 kBq	541 kBq	22 kBq
MINIMUM/SORT	3 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,085 Bq/kg	189 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				386		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			92		None	None
NONE (AD=0 & MD=0 & MND>0)			137			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			157			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		0				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				3,860		
2-SEC RECORDS WITH SORTS			866			
2-SEC RECORDS WITHOUT SORTS			2,994			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,252		
NONPROCESSING RECORDS (Test, calibration, etc)				2		

2-SEC SORT DETECTORS

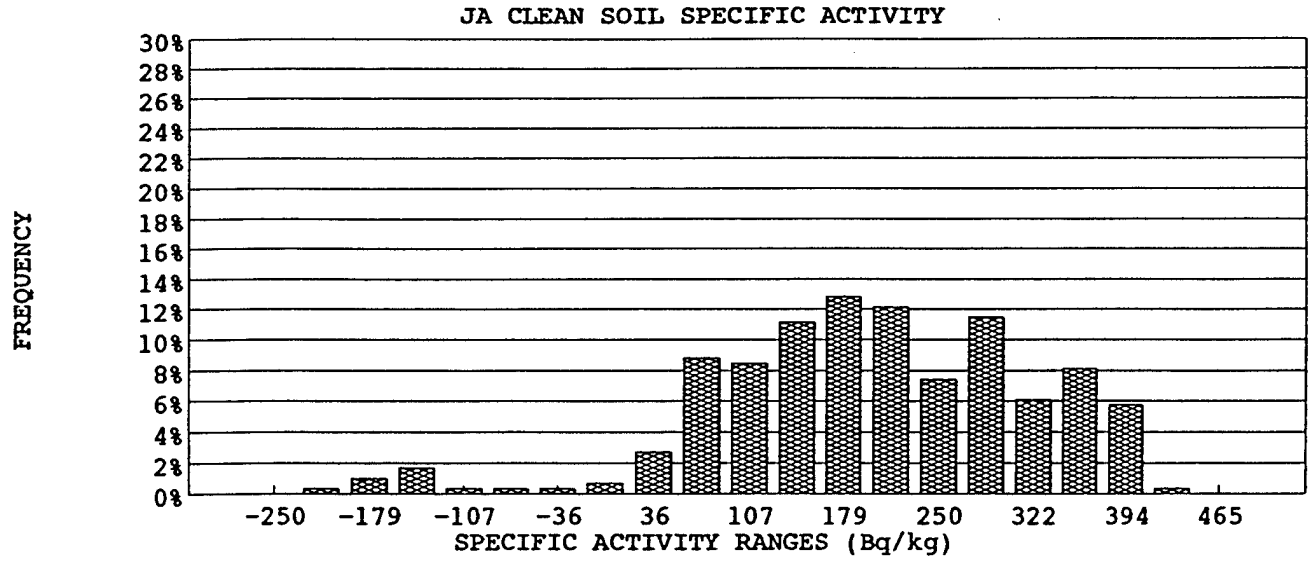
1 DET	607	70.09%	5 DET	4	0.46%
2 DET	207	23.90%	6 DET	0	0.00%
3 DET	40	4.62%	7 DET	0	0.00%
4 DET	8	0.92%	8 DET	0	0.00%

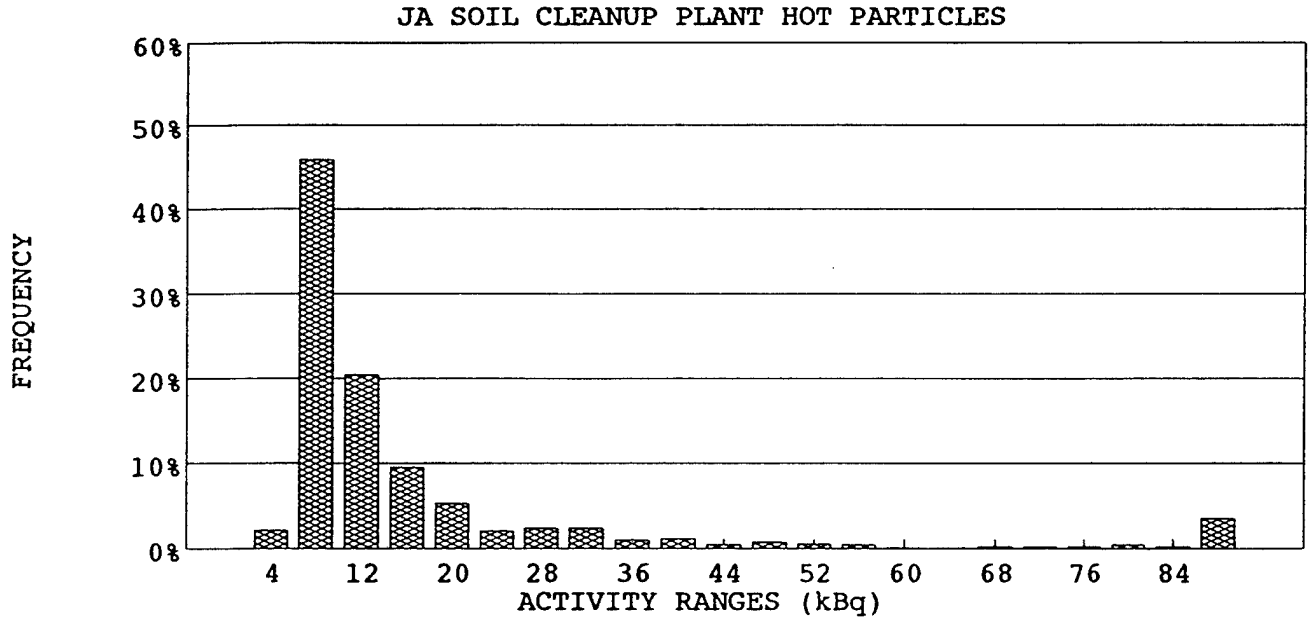
AVERAGE TIME BETWEEN 2-SEC SORTS 12.7 sec

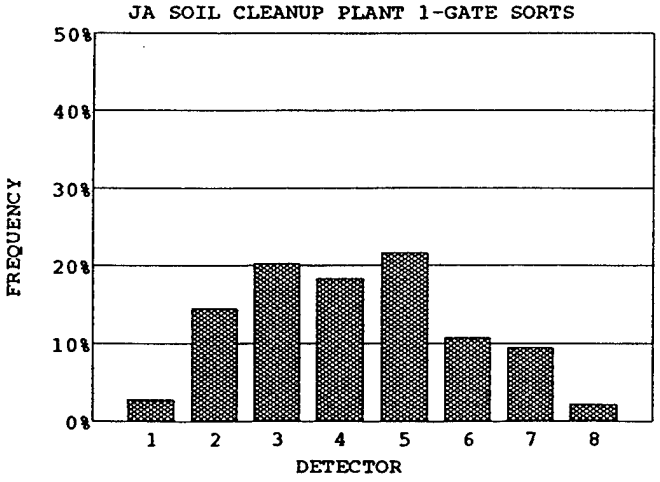
FREQUENCY DISTRIBUTIONS

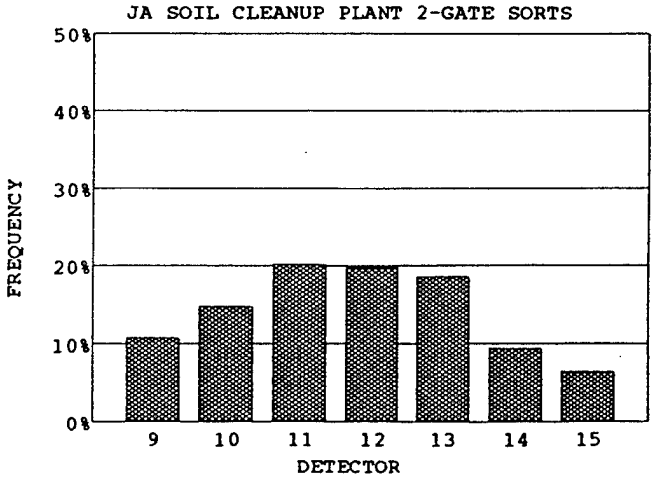
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	12	2.9%	-14000	0	-250	0.0%	4	19	2.2%
2	61	14.5%	-12000	1	-215	0.3%	8	397	45.8%
3	85	20.2%	-10000	3	-179	1.0%	12	177	20.4%
4	77	18.3%	-8000	5	-143	1.7%	16	83	9.6%
5	91	21.7%	-6000	1	-107	0.3%	20	46	5.3%
6	45	10.7%	-4000	1	-72	0.3%	24	18	2.1%
7	40	9.5%	-2000	1	-36	0.3%	28	21	2.4%
8	9	2.1%	0	2	0	0.7%	32	21	2.4%
TOTAL	420		2000	8	36	2.7%	36	9	1.0%
			4000	26	72	8.8%	40	10	1.2%
2-GATE DET	SORTS	FREQ%	6000	25	107	8.4%	44	4	0.5%
			8000	33	143	11.1%	48	7	0.8%
9	48	10.8%	10000	38	179	12.8%	52	5	0.6%
10	66	14.8%	12000	36	215	12.2%	56	4	0.5%
11	90	20.2%	14000	22	250	7.4%	60	1	0.1%
12	88	19.7%	16000	34	286	11.5%	64	1	0.1%
13	83	18.6%	18000	18	322	6.1%	68	2	0.2%
14	42	9.4%	20000	24	358	8.1%	72	2	0.2%
15	29	6.5%	22000	17	394	5.7%	76	2	0.2%
TOTAL	446		24000	1	429	0.3%	80	4	0.5%
			26000	0	465	0.0%	84	2	0.2%
			>28000	0	0	0.0%	>84	31	3.6%
			TOTAL	296			TOTAL	866	

EVENT TYPES	HPE	MPE	DISE
	853	258	6,866


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

23-Aug-94

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

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.0 tons	17.6 tons	21.6 tons
MAXIMUM/SORT	58.1 kg	55.9 kg	
MINIMUM/SORT	0.7 kg	43.3 kg	
VOLUME IN-GROUND	3.1 yd³	14.0 yd³	17.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	81.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	17,614 kBq	5,459 kBq	2,242 kBq
MAXIMUM/SORT	834 kBq	262 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-16 kBq
SPECIFIC ACTIVITY		1,381 Bq/kg	127 Bq/kg

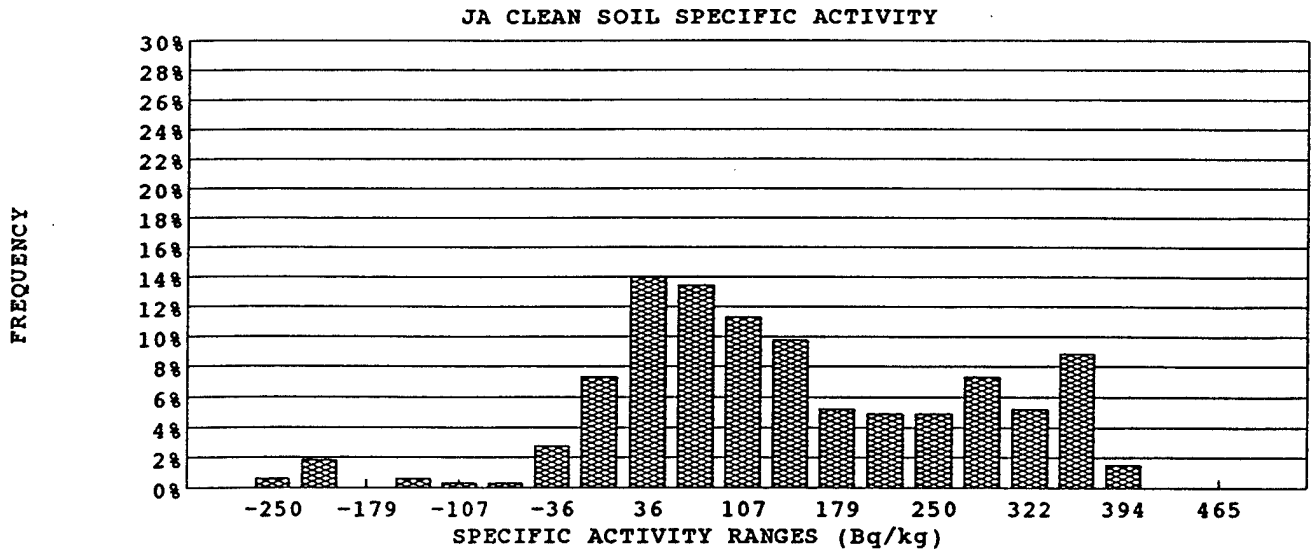
SORTS

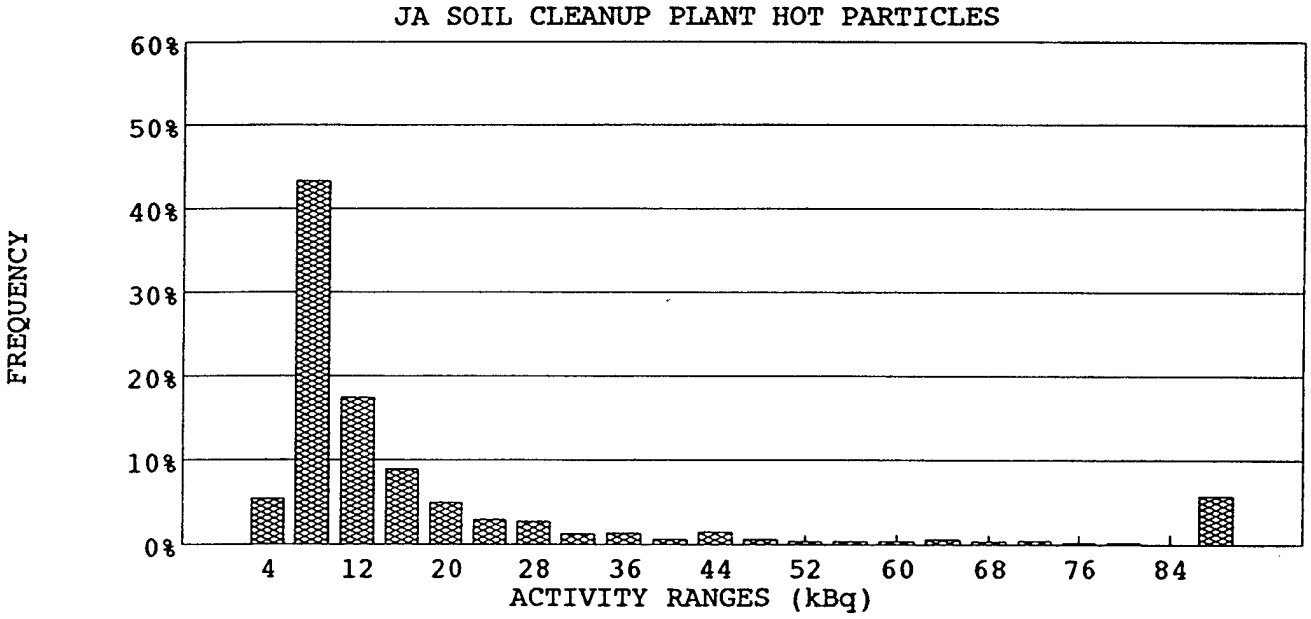
20-SEC PROCESS PERIODS						386	UNEXP TIME	PAUSE TIME
ALL 80 ELEMENTS SORT (MD>0&MND=0)				61			07:11	09:08
NONE (AD=0 & MD=0 & MND>0)				133				
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)				192				
UNEXPLAINED RECORDS				0				
0<AD<1kBq & MD>0				1				
AD=0 & MD>0				0				
AD<0 & MD >0				0				
2-SEC COUNT PERIODS						3,860		
2-SEC RECORDS WITH SORTS				804				
2-SEC RECORDS WITHOUT SORTS				3,056				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)						1,190		
NONPROCESSING RECORDS (Test, calibration, etc)						3		
2-SEC SORT DETECTORS								
1 DET	566	70.40%		5 DET		2	0.25%	
2 DET	186	23.13%		6 DET		0	0.00%	
3 DET	41	5.10%		7 DET		0	0.00%	
4 DET	9	1.12%		8 DET		0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS			13.6 sec					

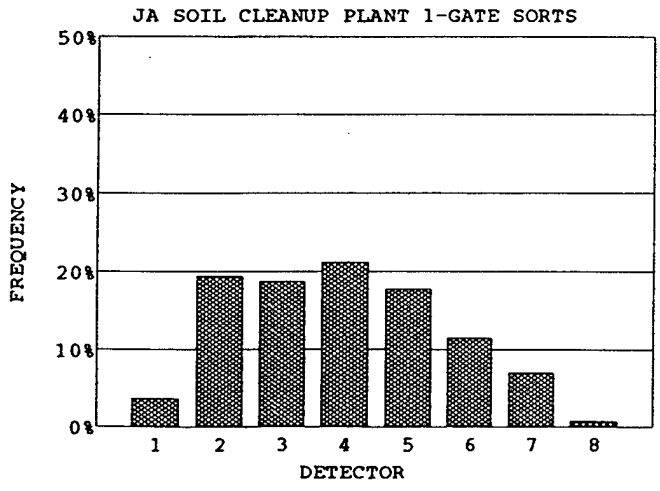
FREQUENCY DISTRIBUTIONS

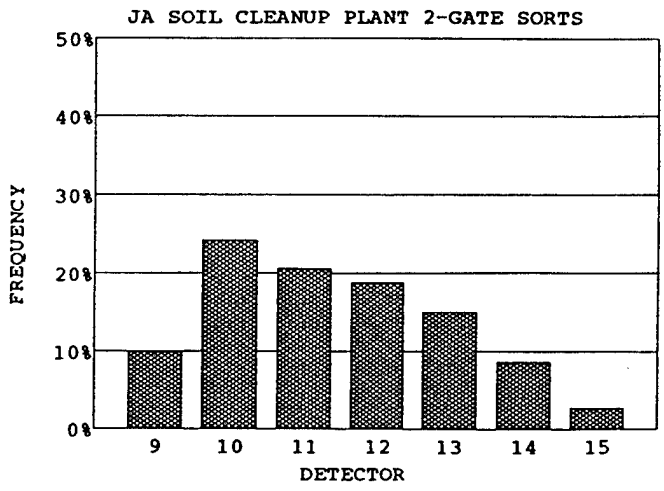
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	15	3.6%	-14000	2	-250	0.6%	4	44	5.5%
2	80	19.5%	-12000	6	-215	1.8%	8	348	43.3%
3	77	18.7%	-10000	0	-179	0.0%	12	140	17.4%
4	87	21.2%	-8000	2	-143	0.6%	16	72	9.0%
5	73	17.8%	-6000	1	-107	0.3%	20	40	5.0%
6	47	11.4%	-4000	1	-72	0.3%	24	24	3.0%
7	29	7.1%	-2000	9	-36	2.7%	28	22	2.7%
8	3	0.7%	0	24	0	7.3%	32	10	1.2%
TOTAL	411		2000	46	36	14.0%	36	11	1.4%
			4000	44	72	13.4%	40	5	0.6%
2-GATE DET	SORTS	FREQ%	6000	37	107	11.3%	44	12	1.5%
			8000	32	143	9.8%	48	5	0.6%
9	39	9.9%	10000	17	179	5.2%	52	3	0.4%
10	95	24.2%	12000	16	215	4.9%	56	3	0.4%
11	81	20.6%	14000	16	250	4.9%	60	3	0.4%
12	74	18.8%	16000	24	286	7.3%	64	5	0.6%
13	59	15.0%	18000	17	322	5.2%	68	3	0.4%
14	34	8.7%	20000	29	358	8.8%	72	4	0.5%
15	11	2.8%	22000	5	394	1.5%	76	2	0.2%
TOTAL	393		24000	0	429	0.0%	80	2	0.2%
			26000	0	465	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	46	5.7%
			TOTAL	328			TOTAL	804	

EVENT TYPES HPE 779 MPE 287 DISE 4,590


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–Aug–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	24–Aug–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	291	Excused delays for contract (sorter–hrs)	5,299 hr
Current Contract week	49	Excused delay days (plant–days)	132 days
		Excused delay months (plant–month)	5.10 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	50 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	25–Aug–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	292	Excused delays for contract (sorter–hrs)	5,339 hr
Current Contract week	49	Excused delay days (plant–days)	133 days
		Excused delay months (plant–month)	5.13 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	50 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 26–Aug–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	26–Aug–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	293	Excused delays for contract (sorter–hrs)	5,379 hr
Current Contract week	49	Excused delay days (plant–days)	134 days
		Excused delay months (plant–month)	5.17 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	50 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 27–Aug–94

WORK DAY START	00:00 AM		WORK DAY END	00:00 PM	
LUNCH START	00:00 AM		TIME LOST DURING LUNCH	0.0 HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	27–Aug–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	294	Excused delays for contract (sorter–hrs)	5,419 hr
Current Contract week	49	Excused delay days (plant–days)	135 days
		Excused delay months (plant–month)	5.21 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	50 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 29–Aug–94

WORK DAY START	00:00 AM	WORK DAY END	00:00 PM	
LUNCH START	00:00 AM	TIME LOST DURING LUNCH	0.0 HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	29–Aug–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	295	Excused delays for contract (sorter–hrs)	5,459 hr
Current Contract week	50	Excused delay days (plant–days)	136 days
		Excused delay months (plant–month)	5.25 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 30–Aug–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	30–Aug–94
Contract day (from 6 Sep)	296
Current Contract week	50
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	55,676 MT
Since 6 Aug 93	57,267 MT
Total Soil production for project	83,554 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	5,499 hr
Excused delay days (plant–days)	137 days
Excused delay months (plant–month)	5.29 months
Percent of contract completed	57.3%
Tons Ahead or Behind Schedule	1,677 MT
Days ahead or behind schedule	5.3 days

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 31–Aug–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	31–Aug–94
Contract day (from 6 Sep)	297
Current Contract week	50
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	55,676 MT
Since 6 Aug 93	57,267 MT
Total Soil production for project	83,554 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	5,539 hr
Excused delay days (plant–days)	138 days
Excused delay months (plant–month)	5.33 months
Percent of contract completed	57.3%
Tons Ahead or Behind Schedule	1,677 MT
Days ahead or behind schedule	5.3 days

MT = metric tons

File Report1 Printed on 19-Oct-94 at 04:00:55 PM

WORK HISTORY – JA SOIL CLEANUP PLANT 01–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	01–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	298	Excused delays for contract (sorter–hrs)	5,579 hr
Current Contract week	50	Excused delay days (plant–days)	139 days
		Excused delay months (plant–month)	5.36 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

File Report1 Printed on 19-Oct-94 at 04:05:42 PM

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	02–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	299	Excused delays for contract (sorter–hrs)	5,619 hr
Current Contract week	50	Excused delay days (plant–days)	140 days
		Excused delay months (plant–month)	5.40 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00 AM	WORK DAY END	00:00 PM		
LUNCH START	00:00 AM	TIME LOST DURING LUNCH	0.0 HR		

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	03–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	300	Excused delays for contract (sorter–hrs)	5,659 hr
Current Contract week	50	Excused delay days (plant–days)	141 days
		Excused delay months (plant–month)	5.44 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	05–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	301	Excused delays for contract (sorter–hrs)	5,699 hr
Current Contract week	51	Excused delay days (plant–days)	142 days
		Excused delay months (plant–month)	5.48 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 06–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	06–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	302	Excused delays for contract (sorter–hrs)	5,739 hr
Current Contract week	51	Excused delay days (plant–days)	143 days
		Excused delay months (plant–month)	5.52 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	07–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	303	Excused delays for contract (sorter–hrs)	5,779 hr
Current Contract week	51	Excused delay days (plant–days)	144 days
		Excused delay months (plant–month)	5.56 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	08–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	304	Excused delays for contract (sorter–hrs)	5,819 hr
Current Contract week	51	Excused delay days (plant–days)	145 days
		Excused delay months (plant–month)	5.60 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 09–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	09–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	305	Excused delays for contract (sorter–hrs)	5,859 hr
Current Contract week	51	Excused delay days (plant–days)	146 days
		Excused delay months (plant–month)	5.63 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	10–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	306	Excused delays for contract (sorter–hrs)	5,899 hr
Current Contract week	51	Excused delay days (plant–days)	147 days
		Excused delay months (plant–month)	5.67 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

File Report1 Printed on 20–Oct–94 at 06:54:05 AM

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	12–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	307	Excused delays for contract (sorter–hrs)	5,939 hr
Current Contract week	52	Excused delay days (plant–days)	148 days
		Excused delay months (plant–month)	5.71 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 13–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	13–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	308	Excused delays for contract (sorter–hrs)	5,979 hr
Current Contract week	52	Excused delay days (plant–days)	149 days
		Excused delay months (plant–month)	5.75 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	14–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	309	Excused delays for contract (sorter–hrs)	6,019 hr
Current Contract week	52	Excused delay days (plant–days)	150 days
		Excused delay months (plant–month)	5.79 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 15–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	15–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	310	Excused delays for contract (sorter–hrs)	6,059 hr
Current Contract week	52	Excused delay days (plant–days)	151 days
		Excused delay months (plant–month)	5.83 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	16–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	311	Excused delays for contract (sorter–hrs)	6,099 hr
Current Contract week	52	Excused delay days (plant–days)	152 days
		Excused delay months (plant–month)	5.86 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	17–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	312	Excused delays for contract (sorter–hrs)	6,139 hr
Current Contract week	52	Excused delay days (plant–days)	153 days
		Excused delay months (plant–month)	5.90 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	19–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	313	Excused delays for contract (sorter–hrs)	6,179 hr
Current Contract week	53	Excused delay days (plant–days)	154 days
		Excused delay months (plant–month)	5.94 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 20–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	20–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	314	Excused delays for contract (sorter–hrs)	6,219 hr
Current Contract week	53	Excused delay days (plant–days)	155 days
		Excused delay months (plant–month)	5.98 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	21–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	315	Excused delays for contract (sorter–hrs)	6,259 hr
Current Contract week	53	Excused delay days (plant–days)	156 days
		Excused delay months (plant–month)	6.02 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	22–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	316	Excused delays for contract (sorter–hrs)	6,299 hr
Current Contract week	53	Excused delay days (plant–days)	157 days
		Excused delay months (plant–month)	6.06 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 23-Sep-94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	23-Sep-94	Excused Delays for day (sorter-hrs)	40 hr
Contract day (from 6 Sep)	317	Excused delays for contract (sorter-hrs)	6,339 hr
Current Contract week	53	Excused delay days (plant-days)	158 days
		Excused delay months (plant-month)	6.10 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	24–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	318	Excused delays for contract (sorter–hrs)	6,379 hr
Current Contract week	53	Excused delay days (plant–days)	159 days
		Excused delay months (plant–month)	6.13 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 26–Sep–94

WORK DAY START	00:00 AM	WORK DAY END	00:00 PM	
LUNCH START	00:00 AM	TIME LOST DURING LUNCH	0.0 HR	

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	26–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	319	Excused delays for contract (sorter–hrs)	6,419 hr
Current Contract week	54	Excused delay days (plant–days)	160 days
		Excused delay months (plant–month)	6.17 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 27–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	27–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	320	Excused delays for contract (sorter–hrs)	6,459 hr
Current Contract week	54	Excused delay days (plant–days)	161 days
		Excused delay months (plant–month)	6.21 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 28–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	28–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	321	Excused delays for contract (sorter–hrs)	6,499 hr
Current Contract week	54	Excused delay days (plant–days)	162 days
		Excused delay months (plant–month)	6.25 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 29–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	29–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	322	Excused delays for contract (sorter–hrs)	6,539 hr
Current Contract week	54	Excused delay days (plant–days)	163 days
		Excused delay months (plant–month)	6.29 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 30–Sep–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	30–Sep–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	323	Excused delays for contract (sorter–hrs)	6,579 hr
Current Contract week	54	Excused delay days (plant–days)	164 days
		Excused delay months (plant–month)	6.33 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 01–Oct–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	01–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	324	Excused delays for contract (sorter–hrs)	6,619 hr
Current Contract week	54	Excused delay days (plant–days)	165 days
		Excused delay months (plant–month)	6.36 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00 AM	WORK DAY END	00:00 PM		
LUNCH START	00:00 AM	TIME LOST DURING LUNCH	0.0 HR		

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	03–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	325	Excused delays for contract (sorter–hrs)	6,659 hr
Current Contract week	55	Excused delay days (plant–days)	166 days
		Excused delay months (plant–month)	6.40 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 04-Oct-94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	04-Oct-94	Excused Delays for day (sorter-hrs)	40 hr
Contract day (from 6 Sep)	326	Excused delays for contract (sorter-hrs)	6,699 hr
Current Contract week	55	Excused delay days (plant-days)	167 days
		Excused delay months (plant-month)	6.44 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	05–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	327	Excused delays for contract (sorter–hrs)	6,739 hr
Current Contract week	55	Excused delay days (plant–days)	168 days
		Excused delay months (plant–month)	6.48 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 06–Oct–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	06–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	328	Excused delays for contract (sorter–hrs)	6,779 hr
Current Contract week	55	Excused delay days (plant–days)	169 days
		Excused delay months (plant–month)	6.52 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	07–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	329	Excused delays for contract (sorter–hrs)	6,819 hr
Current Contract week	55	Excused delay days (plant–days)	170 days
		Excused delay months (plant–month)	6.56 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	08–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	330	Excused delays for contract (sorter–hrs)	6,859 hr
Current Contract week	55	Excused delay days (plant–days)	171 days
		Excused delay months (plant–month)	6.60 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	10–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	331	Excused delays for contract (sorter–hrs)	6,899 hr
Current Contract week	56	Excused delay days (plant–days)	172 days
		Excused delay months (plant–month)	6.63 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

File Report1 Printed on 20-Oct-94 at 10:39:58 AM

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

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	11–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	332	Excused delays for contract (sorter–hrs)	6,939 hr
Current Contract week	56	Excused delay days (plant–days)	173 days
		Excused delay months (plant–month)	6.67 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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

WORK DAY START	00:00 AM	WORK DAY END	00:00 PM		
LUNCH START	00:00 AM	TIME LOST DURING LUNCH	0.0 HR		

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	12–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	333	Excused delays for contract (sorter–hrs)	6,979 hr
Current Contract week	56	Excused delay days (plant–days)	174 days
		Excused delay months (plant–month)	6.71 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 13–Oct–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	13–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	334	Excused delays for contract (sorter–hrs)	7,019 hr
Current Contract week	56	Excused delay days (plant–days)	175 days
		Excused delay months (plant–month)	6.75 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

File Report1 Printed on 20-Oct-94 at 10:58:17 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 14-Oct-94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0.0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	14-Oct-94
Contract day (from 6 Sep)	335
Current Contract week	56
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	55,676 MT
Since 6 Aug 93	57,267 MT
Total Soil production for project	83,554 MT

Excused Delays for day (sorter-hrs)	40 hr
Excused delays for contract (sorter-hrs)	7,059 hr
Excused delay days (plant-days)	176 days
Excused delay months (plant-month)	6.79 months
Percent of contract completed	57.3%
Tons Ahead or Behind Schedule	1,677 MT
Days ahead or behind schedule	5.3 days

MT = metric tons

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WORK HISTORY – JA SOIL CLEANUP PLANT 15–Oct–94

WORK DAY START	00:00	AM	WORK DAY END	00:00	PM
LUNCH START	00:00	AM	TIME LOST DURING LUNCH	0	HR

	SORTER 1	SORTER 2	SORTER 3	SORTER 4	TOTAL (sorter hours)
WORK HOURS	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 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					NA

PRODUCTIVITY

Date	15–Oct–94	Excused Delays for day (sorter–hrs)	40 hr
Contract day (from 6 Sep)	336	Excused delays for contract (sorter–hrs)	7,099 hr
Current Contract week	56	Excused delay days (plant–days)	177 days
		Excused delay months (plant–month)	6.83 months
Soil production for Day	0 MT		
Cumlative Soil Production for Week	0 MT	Percent of contract completed	57.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,677 MT
Since 6 Sep 93	55,676 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,267 MT		
Total Soil production for project	83,554 MT		

MT = metric tons

File Report1 Printed on 20-Oct-94 at 11:09:57 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 17–Oct–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	17–Oct–94
Contract day (from 6 Sep)	337
Current Contract week	57
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	55,676 MT
Since 6 Aug 93	57,267 MT
Total Soil production for project	83,554 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	7,139 hr
Excused delay days (plant–days)	178 days
Excused delay months (plant–month)	6.86 months
Percent of contract completed	57.3%
Tons Ahead or Behind Schedule	1,677 MT
Days ahead or behind schedule	5.3 days

MT = metric tons

File Report1 Printed on 20-Oct-94 at 11:20:53 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 18–Oct–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	18–Oct–94
Contract day (from 6 Sep)	338
Current Contract week	57
Soil production for Day	0 MT
Cumlative Soil Production for Week	0 MT
Total Soil production for contract	
Since 6 Sep 93	55,676 MT
Since 6 Aug 93	57,267 MT
Total Soil production for project	83,554 MT

Excused Delays for day (sorter–hrs)	40 hr
Excused delays for contract (sorter–hrs)	7,179 hr
Excused delay days (plant–days)	179 days
Excused delay months (plant–month)	6.90 months
Percent of contract completed	57.3%
Tons Ahead or Behind Schedule	1,677 MT
Days ahead or behind schedule	5.3 days

MT = metric tons

File Report1 Printed on 20-Oct-94 at 11:26:48 AM

WORK HISTORY – JA SOIL CLEANUP PLANT 19–Oct–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	6.8 hr	6.8 hr	0.0 hr	0.0 hr	13.7 hr
SORTER START–UP	09:30	09:30	NA	NA	
START SOIL PROCESSING	09:43	09:43	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	16:09	16:10	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	6.3 hr	6.3 hr	0.0 hr	0.0 hr	12.5 hr
DOWN–TIME	0.6 hr	0.6 hr	0.0 hr	0.0 hr	1.1 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	3.7 hr	3.7 hr	10.0 hr	10.0 hr	27.3 hr
AUTHORIZED DELAY TIME	3.5 hr	3.5 hr	10.0 hr	10.0 hr	27.0 hr
PLANT PERFORMANCE					91.7%
PRODUCTIVTY					29.9%

PRODUCTIVITY

Date	19–Oct–94	Excused Delays for day (sorter–hrs)	27 hr
Contract day (from 6 Sep)	339	Excused delays for contract (sorter–hrs)	7,206 hr
Current Contract week	57	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	137 MT		
Cumlative Soil Production for Week	137 MT	Percent of contract completed	57.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,710 MT
Since 6 Sep 93	55,813 MT	Days ahead or behind schedule	5.4 days
Since 6 Aug 93	57,404 MT		
Total Soil production for project	83,691 MT		

MT = metric tons

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SORTER 1

19-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.69 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	11.0 tons	57.3 tons	68.3 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	47.7 kg	
VOLUME IN-GROUND	8.7 yd³	45.4 yd³	54.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	83.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	74,468 kBq	20,273 kBq	15,847 kBq
MAXIMUM/SORT	6,569 kBq	2,640 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		1,840 Bq/kg	277 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,128		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			152		12:59	14:43
NONE (AD=0 & MD=0 & MND>0)			287			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			689			
UNEXPLAINED RECORDS		0				
0<AD<1kBq & MD>0		1				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				11,280		
2-SEC RECORDS WITH SORTS			2,577			
2-SEC RECORDS WITHOUT SORTS			8,703			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				3,705		
NONPROCESSING RECORDS (Test, calibration, etc)				26		

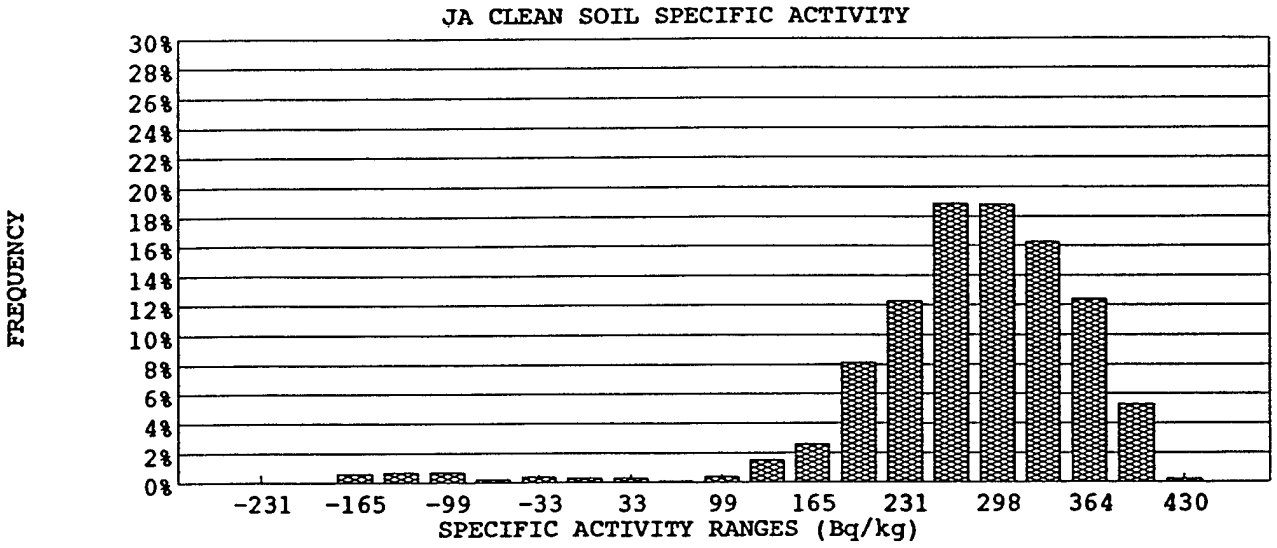
2-SEC SORT DETECTORS

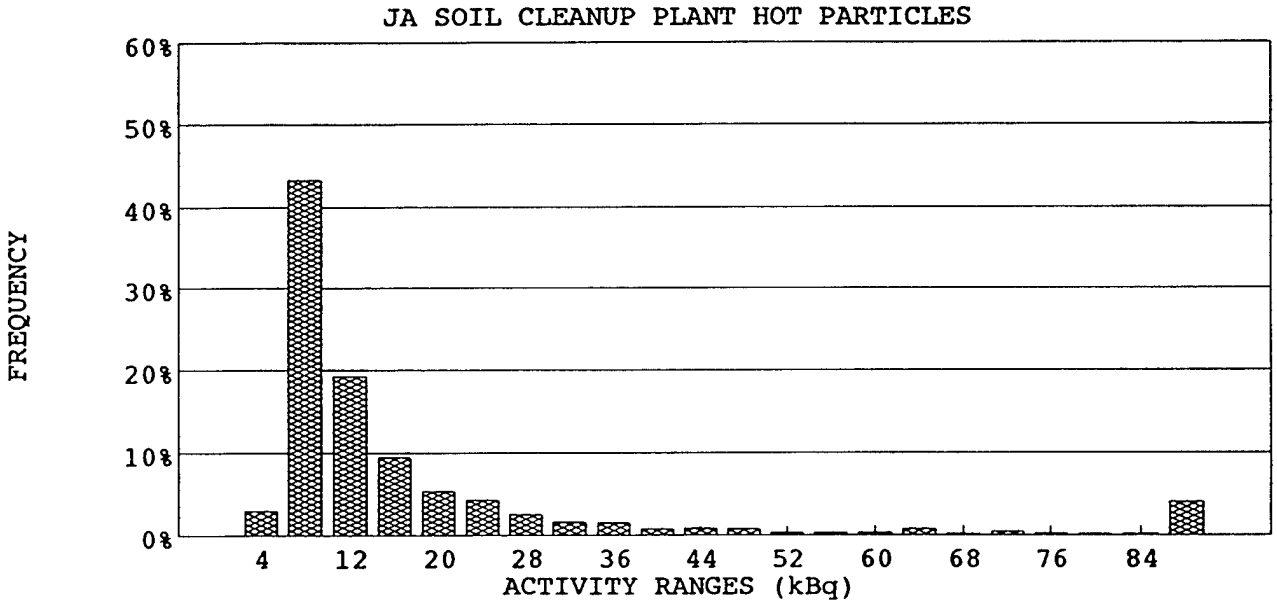
1 DET	1,832	71.09%	5 DET	5	0.19%
2 DET	588	22.82%	6 DET	0	0.00%
3 DET	129	5.01%	7 DET	0	0.00%
4 DET	23	0.89%	8 DET	0	0.00%

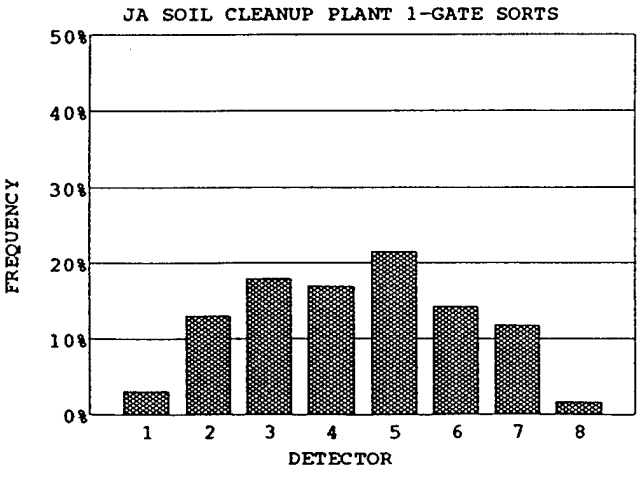
AVERAGE TIME BETWEEN 2-SEC SORTS 12.3 sec

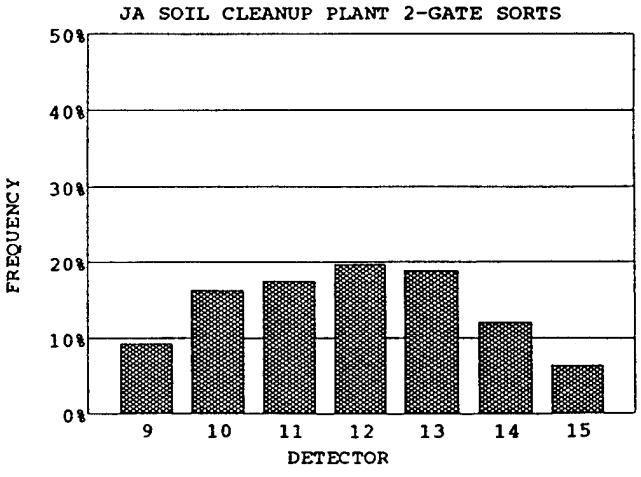
FREQUENCY DISTRIBUTIONS

1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	40	3.1%	-14000	0	-231	0.0%	4	77	3.0%
2	168	13.0%	-12000	0	-198	0.0%	8	1,116	43.3%
3	231	17.9%	-10000	6	-165	0.6%	12	494	19.2%
4	218	16.9%	-8000	7	-132	0.7%	16	244	9.5%
5	278	21.5%	-6000	7	-99	0.7%	20	139	5.4%
6	183	14.2%	-4000	2	-66	0.2%	24	111	4.3%
7	152	11.8%	-2000	4	-33	0.4%	28	66	2.6%
8	22	1.7%	0	3	0	0.3%	32	41	1.6%
TOTAL	1,292		2000	3	33	0.3%	36	40	1.6%
			4000	1	66	0.1%	40	20	0.8%
2-GATE DET	SORTS	FREQ%	6000	4	99	0.4%	44	23	0.9%
9	119	9.3%	8000	15	132	1.5%	48	19	0.7%
10	209	16.3%	10000	26	165	2.6%	52	9	0.3%
11	225	17.5%	12000	81	198	8.1%	56	9	0.3%
12	253	19.7%	14000	123	231	12.3%	60	9	0.3%
13	242	18.8%	16000	189	264	18.9%	64	21	0.8%
14	155	12.1%	18000	188	298	18.8%	68	5	0.2%
15	82	6.4%	20000	163	331	16.3%	72	13	0.5%
TOTAL	1,285		22000	124	364	12.4%	76	7	0.3%
			24000	53	397	5.3%	80	5	0.2%
			26000	2	430	0.2%	84	4	0.2%
			>28000	0	0	0.0%	>84	105	4.1%
			TOTAL	1,001			TOTAL	2,577	
EVENT TYPES		HPE	2,529	MPE	415	DISE	11,620		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.78 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	19.7 tons	48.6 tons	68.3 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
VOLUME IN-GROUND	15.7 yd³	38.5 yd³	54.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	71.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	53,254 kBq	23,015 kBq	13,909 kBq
MAXIMUM/SORT	1,160 kBq	557 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		1,165 Bq/kg	286 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,129		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	299			
NONE (AD=0 & MD=0 & MND>0)	193		11:25	09:43
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	637		16:02	14:43
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,290		
2-SEC RECORDS WITH SORTS	2,407			
2-SEC RECORDS WITHOUT SORTS	8,883			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,536		
NONPROCESSING RECORDS (Test, calibration, etc)		20		

2-SEC SORT DETECTORS

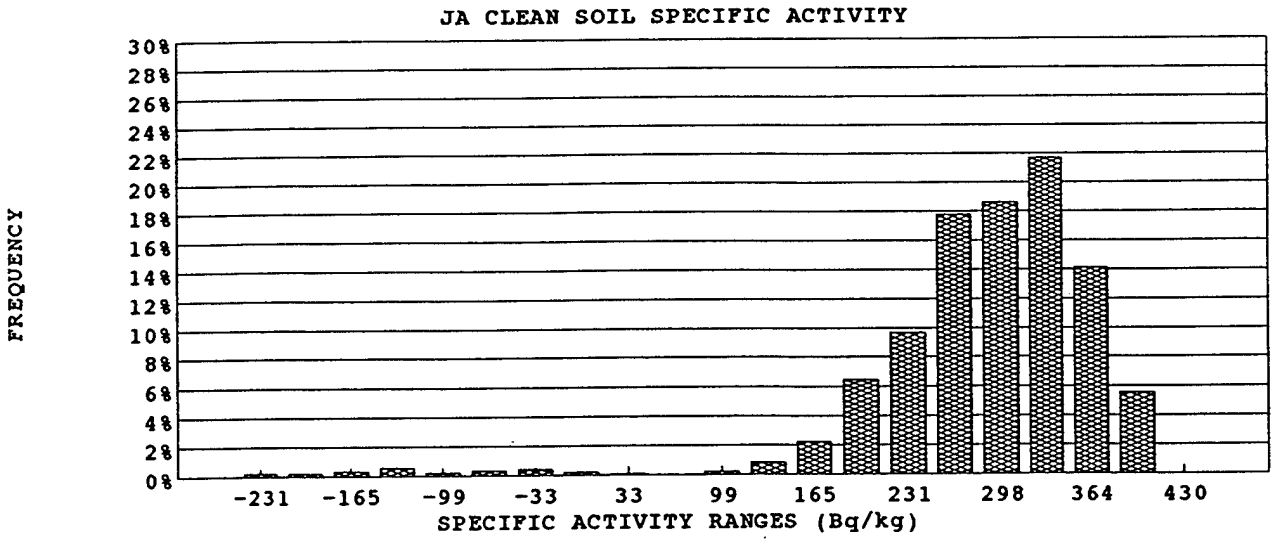
1 DET	1,706	70.88%	5 DET	5	0.21%
2 DET	564	23.43%	6 DET	0	0.00%
3 DET	110	4.57%	7 DET	0	0.00%
4 DET	22	0.91%	8 DET	0	0.00%

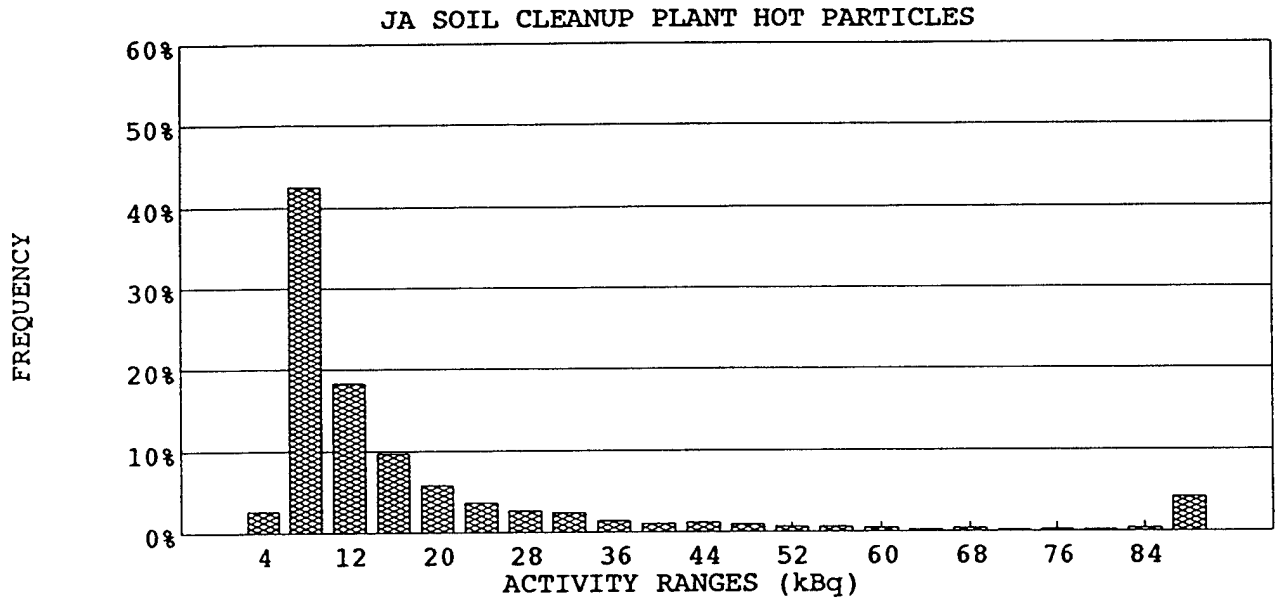
AVERAGE TIME BETWEEN 2-SEC SORTS 13.2 sec

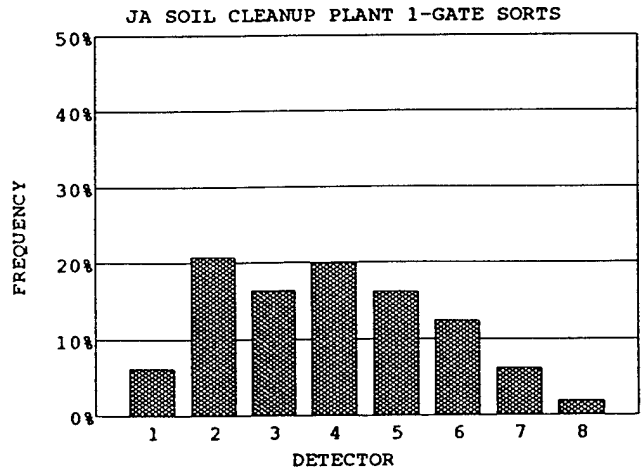
FREQUENCY DISTRIBUTIONS

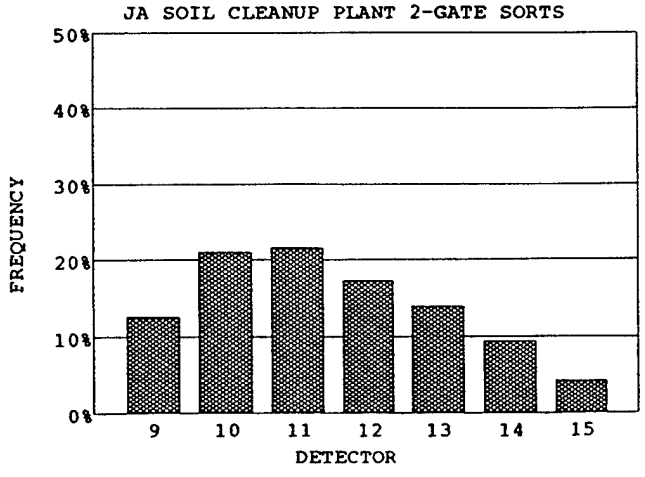
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	72	6.2%	-14000	2	-231	0.2%	4	64	2.7%
2	240	20.8%	-12000	2	-198	0.2%	8	1,023	42.5%
3	189	16.4%	-10000	3	-165	0.4%	12	441	18.3%
4	230	19.9%	-8000	5	-132	0.6%	16	233	9.7%
5	187	16.2%	-6000	2	-99	0.2%	20	140	5.8%
6	143	12.4%	-4000	3	-66	0.4%	24	88	3.7%
7	72	6.2%	-2000	4	-33	0.5%	28	63	2.6%
8	22	1.9%	0	2	0	0.2%	32	58	2.4%
TOTAL	1,155		2000	1	33	0.1%	36	35	1.5%
			4000	0	66	0.0%	40	24	1.0%
2-GATE SORTS			6000	2	99	0.2%	44	29	1.2%
DET	SORTS	FREQ%	8000	7	132	0.8%	48	22	0.9%
9	157	12.5%	10000	19	165	2.2%	52	16	0.7%
10	263	21.0%	12000	55	198	6.5%	56	15	0.6%
11	270	21.6%	14000	82	231	9.7%	60	12	0.5%
12	216	17.3%	16000	151	264	17.8%	64	7	0.3%
13	174	13.9%	18000	158	298	18.6%	68	9	0.4%
14	118	9.4%	20000	184	331	21.7%	72	5	0.2%
15	54	4.3%	22000	120	364	14.1%	76	7	0.3%
TOTAL	1,252		24000	47	397	5.5%	80	5	0.2%
			26000	0	430	0.0%	84	9	0.4%
			>28000	0	0	0.0%	>84	102	4.2%
			TOTAL	849			TOTAL	2,407	

EVENT TYPES HPE 2,418 MPE 960 DISE 22,727


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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 20–Oct–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	9.9 hr	9.9 hr	9.1 hr	9.1 hr	38.0 hr
SORTER START–UP	06:25	06:25	07:15	07:15	
START SOIL PROCESSING	07:41	07:41	07:37	07:37	
TIME REQUIRED TO START–UP	1.3 hr	1.3 hr	0.4 hr	0.4 hr	3.3 hr
SORTER SHUT–DOWN	16:20	16:20	16:20	16:20	
END SOIL PROCESSING	16:05	16:07	15:43	16:10	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.6 hr	0.2 hr	1.2 hr
ACTUAL PROCESS HOURS	3.1 hr	3.2 hr	7.4 hr	8.3 hr	22.0 hr
DOWN–TIME	6.8 hr	6.8 hr	1.7 hr	0.8 hr	16.0 hr
SYSTEM PAUSE	5.3 hr	5.3 hr	0.7 hr	0.3 hr	11.6 hr
SORTER NONAVAILABLE TIME	0.6 hr	0.6 hr	1.4 hr	1.4 hr	4.0 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	2.9 hr	2.9 hr	5.8 hr
PLANT PERFORMANCE					57.9%
PRODUCTIVTY					52.3%

PRODUCTIVITY

Date	20–Oct–94	Excused Delays for day (sorter–hrs)	5.8 hr
Contract day (from 6 Sep)	340	Excused delays for contract (sorter–hrs)	7,212 hr
Current Contract week	57	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	239 MT		
Cumlative Soil Production for Week	376 MT	Percent of contract completed	57.6%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,679 MT
Since 6 Sep 93	56,052 MT	Days ahead or behind schedule	5.3 days
Since 6 Aug 93	57,643 MT		
Total Soil production for project	83,930 MT		

MT = metric tons

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SORTER 1

20-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.70 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	11.7 tons	22.3 tons	34.0 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	49.2 kg	
VOLUME IN-GROUND	9.3 yd³	17.7 yd³	27.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	65.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	26,650 kBq	11,073 kBq	6,908 kBq
MAXIMUM/SORT	1,675 kBq	572 kBq	25 kBq
MINIMUM/SORT	2 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		946 Bq/kg	309 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		562		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	182			
NONE (AD=0 & MD=0 & MND>0)	120		15:45	07:42
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	260			09:06
UNEXPLAINED RECORDS	0			12:32
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		5,620		
2-SEC RECORDS WITH SORTS	1,213			
2-SEC RECORDS WITHOUT SORTS	4,407			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,775		
NONPROCESSING RECORDS (Test, calibration, etc)		9		

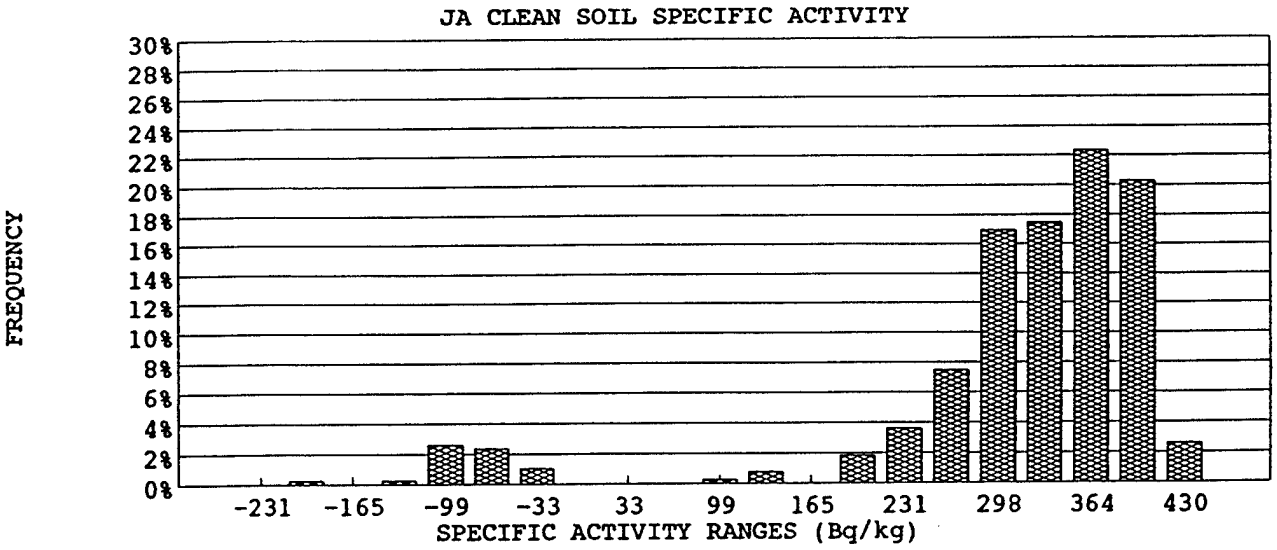
2-SEC SORT DETECTORS

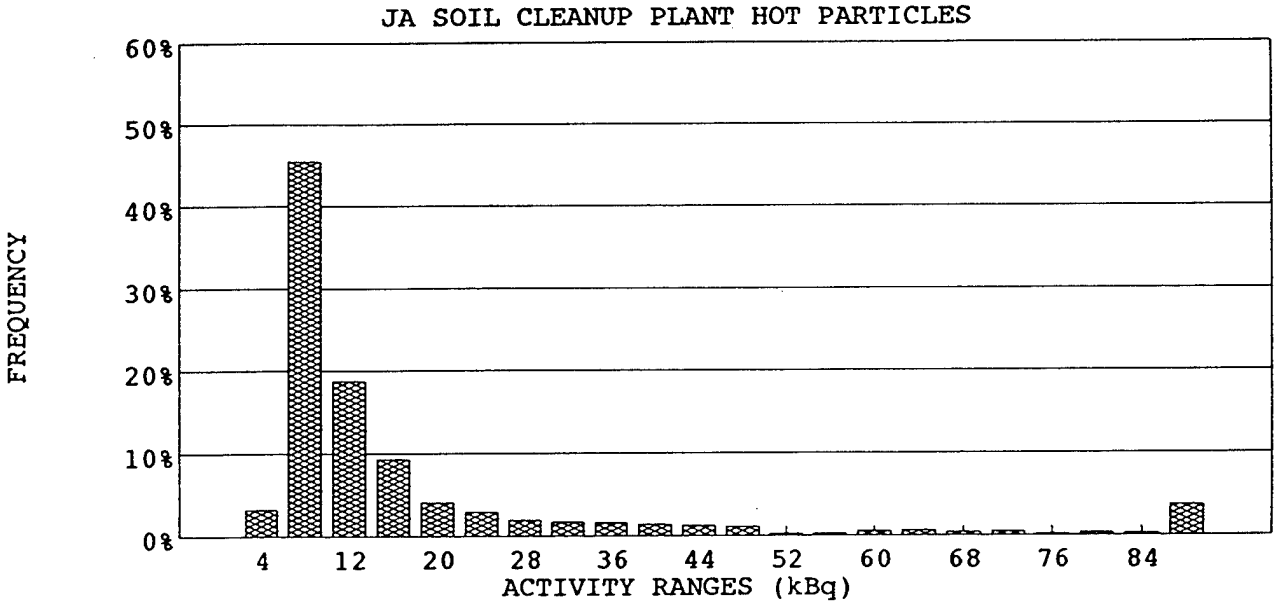
1 DET	844	69.58%	5 DET	2	0.16%
2 DET	294	24.24%	6 DET	0	0.00%
3 DET	60	4.95%	7 DET	0	0.00%
4 DET	13	1.07%	8 DET	0	0.00%

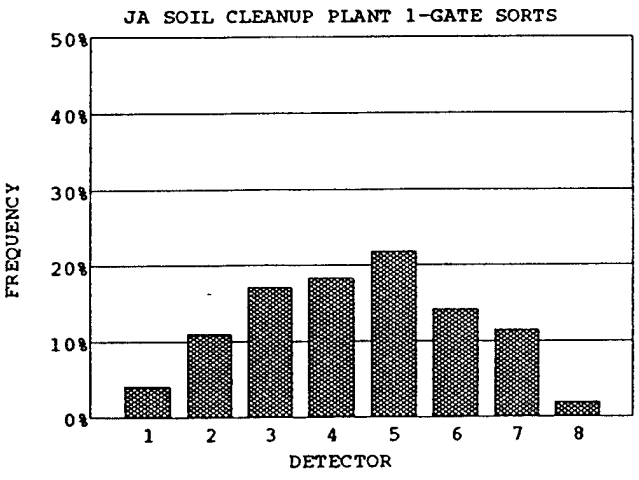
AVERAGE TIME BETWEEN 2-SEC SORTS 13.3 sec

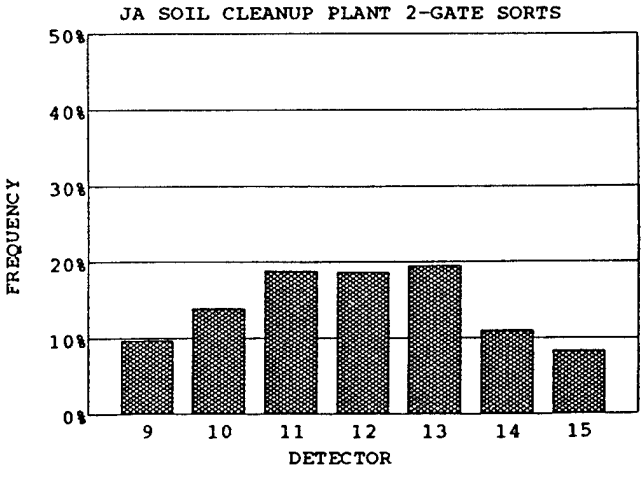
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	26	4.1%	-14000	0	-231	0.0%	4	39	3.2%
2	70	11.0%	-12000	1	-198	0.3%	8	552	45.5%
3	109	17.2%	-10000	0	-165	0.0%	12	227	18.7%
4	116	18.3%	-8000	1	-132	0.3%	16	113	9.3%
5	138	21.8%	-6000	10	-99	2.6%	20	50	4.1%
6	90	14.2%	-4000	9	-66	2.3%	24	36	3.0%
7	73	11.5%	-2000	4	-33	1.0%	28	24	2.0%
8	12	1.9%	0	0	0	0.0%	32	21	1.7%
TOTAL	634		2000	0	33	0.0%	36	20	1.6%
			4000	0	66	0.0%	40	17	1.4%
2-GATE SORTS			6000	1	99	0.3%	44	15	1.2%
DET	SORTS	FREQ%	8000	3	132	0.8%	48	13	1.1%
9	56	9.7%	10000	0	165	0.0%	52	3	0.2%
10	81	14.0%	12000	7	198	1.8%	56	3	0.2%
11	109	18.8%	14000	14	231	3.6%	60	7	0.6%
12	108	18.7%	16000	29	264	7.5%	64	8	0.7%
13	113	19.5%	18000	66	298	17.0%	68	5	0.4%
14	64	11.1%	20000	68	331	17.5%	72	6	0.5%
15	48	8.3%	22000	87	364	22.4%	76	2	0.2%
TOTAL	579		24000	79	397	20.3%	80	4	0.3%
			26000	10	430	2.6%	84	3	0.2%
			>28000	0	0	0.0%	>84	45	3.7%
			TOTAL	389			TOTAL	1,213	
EVENT TYPES		HPE	1,168	MPE	261	DISE	14,037		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

20-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.77 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.3 tons	25.0 tons	34.3 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
VOLUME IN-GROUND	7.3 yd³	19.8 yd³	27.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	73.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	30,351 kBq	12,303 kBq	7,502 kBq
MAXIMUM/SORT	1,196 kBq	562 kBq	26 kBq
MINIMUM/SORT	3 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,329 Bq/kg	300 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		568		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	140			
NONE (AD=0 & MD=0 & MND>0)	100		None	09:06
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	328			12:30
UNEXPLAINED RECORDS	0			15:28
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		5,680		
2-SEC RECORDS WITH SORTS	1,330			
2-SEC RECORDS WITHOUT SORTS	4,350			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,898		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	935	70.30%	5 DET	4	0.30%
2 DET	312	23.46%	6 DET	0	0.00%
3 DET	64	4.81%	7 DET	0	0.00%
4 DET	15	1.13%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 12.1 sec

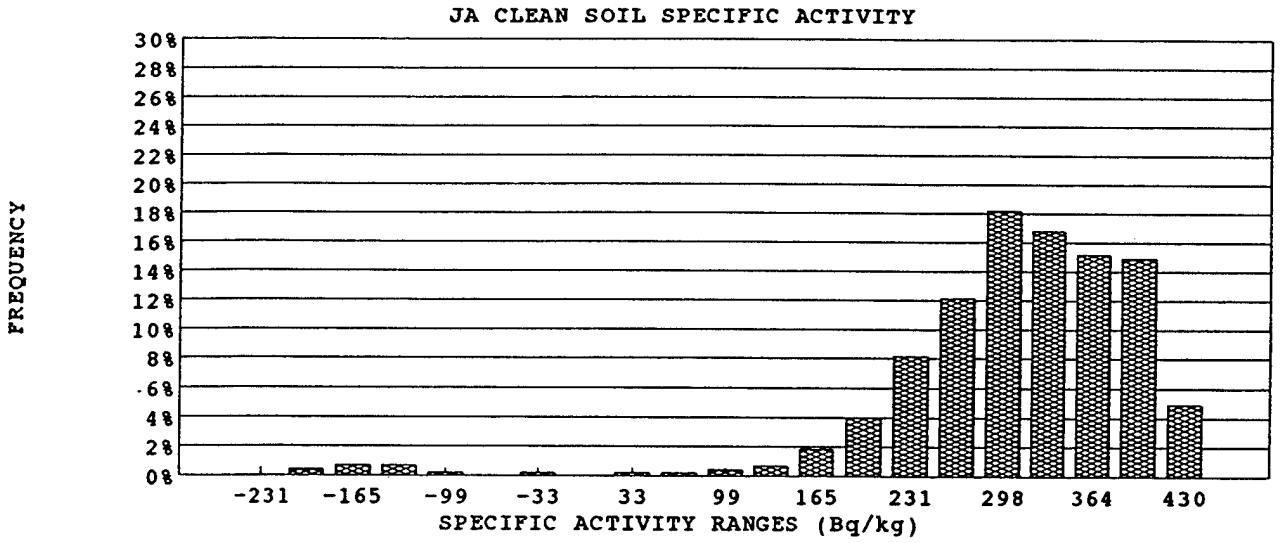
FREQUENCY DISTRIBUTIONS

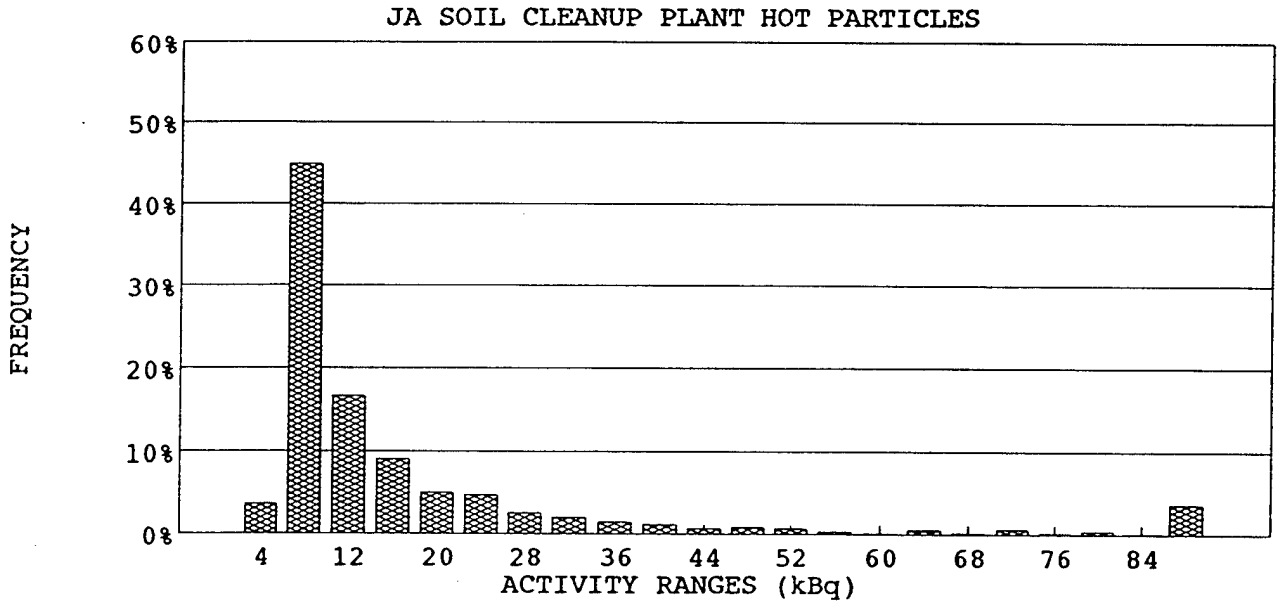
1-GATE DET	SORTS	FREQ%
1	37	5.7%
2	119	18.3%
3	102	15.7%
4	118	18.2%
5	119	18.3%
6	85	13.1%
7	52	8.0%
8	18	2.8%
TOTAL	650	

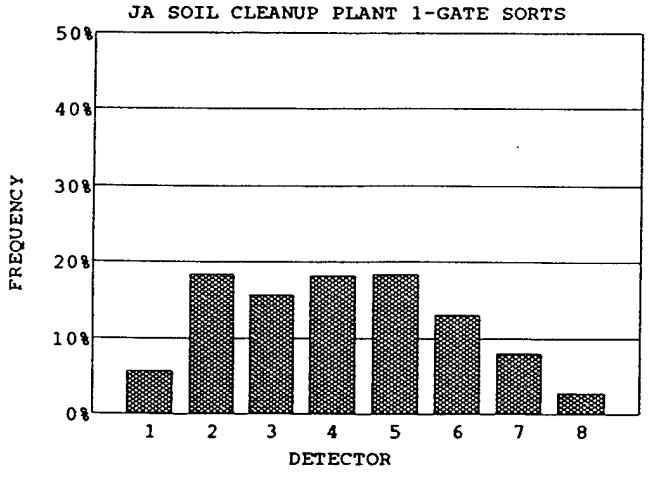
2-GATE DET	SORTS	FREQ%
9	82	12.1%
10	135	19.9%
11	141	20.7%
12	124	18.2%
13	92	13.5%
14	77	11.3%
15	29	4.3%
TOTAL	680	

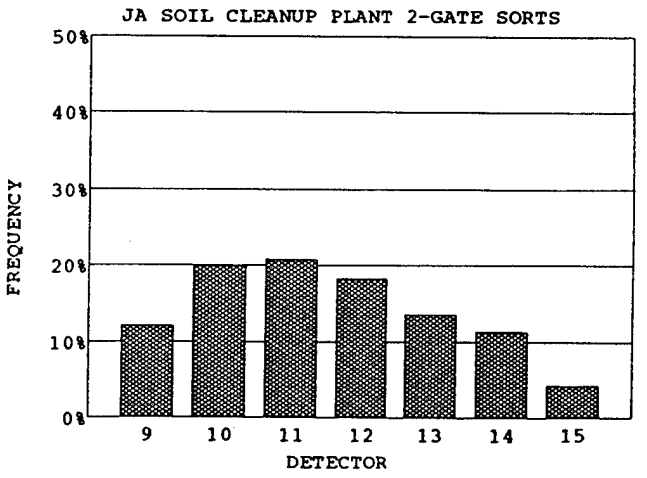
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	49	3.7%
-12000	2	-198	0.5%	8	596	44.8%
-10000	3	-165	0.7%	12	222	16.7%
-8000	3	-132	0.7%	16	121	9.1%
-6000	1	-99	0.2%	20	67	5.0%
-4000	0	-66	0.0%	24	63	4.7%
-2000	1	-33	0.2%	28	34	2.6%
0	0	0	0.0%	32	27	2.0%
2000	1	33	0.2%	36	20	1.5%
4000	1	66	0.2%	40	16	1.2%
6000	2	99	0.5%	44	10	0.8%
8000	3	132	0.7%	48	12	0.9%
10000	8	165	1.9%	52	10	0.8%
12000	17	198	4.0%	56	4	0.3%
14000	35	231	8.2%	60	1	0.1%
16000	52	264	12.1%	64	8	0.6%
18000	78	298	18.2%	68	3	0.2%
20000	72	331	16.8%	72	9	0.7%
22000	65	364	15.2%	76	3	0.2%
24000	64	397	14.9%	80	5	0.4%
26000	21	430	4.9%	84	1	0.1%
>28000	0	0	0.0%	>84	49	3.7%
TOTAL	429			TOTAL	1,330	

EVENT TYPES HPE 1,312 MPE 388 DISE 10,654


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

20-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.13 ± 0.59 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	2.8 tons	78.1 tons	80.9 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	54.5 kg	
VOLUME IN-GROUND	2.2 yd³	61.9 yd³	64.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	5,751 kBq	2,798 kBq	10,610 kBq
MAXIMUM/SORT	296 kBq	148 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-19 kBq
SPECIFIC ACTIVITY		1,006 Bq/kg	136 Bq/kg

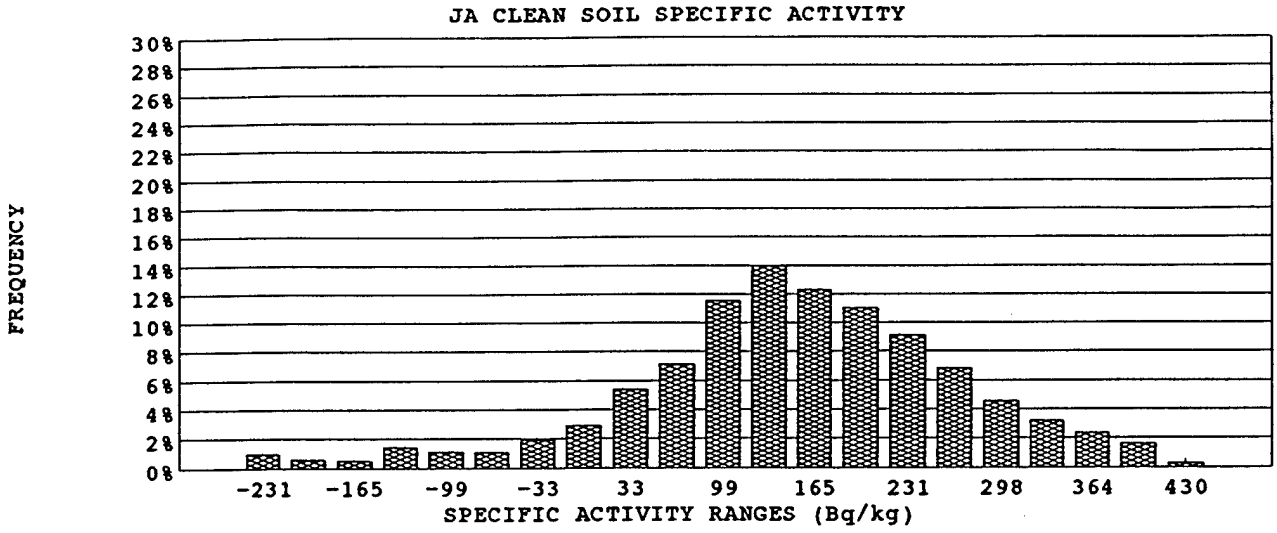
SORTS

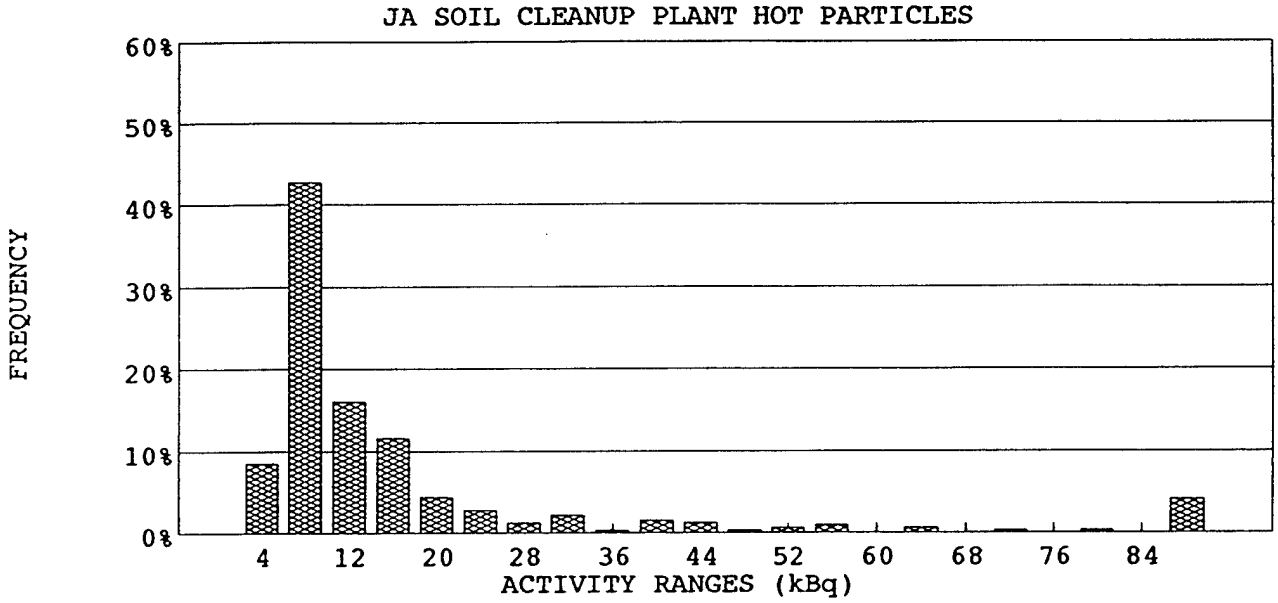
					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,337			
ALL 80 ELEMENTS SORT (MD>0&MND=0)		40				
NONE (AD=0 & MD=0 & MND>0)		1,106			11:53	09:20
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		191			12:23	09:30
UNEXPLAINED RECORDS	0				14:20	10:01
0<AD<1kBq & MD>0	2				14:28	10:21
AD=0 & MD>0	3				15:38	10:35
AD<0 & MD >0	0					10:58
2-SEC COUNT PERIODS			13,370			11:05
2-SEC RECORDS WITH SORTS		318				11:18
2-SEC RECORDS WITHOUT SORTS		13,052				11:26
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			1,655			11:29
NONPROCESSING RECORDS (Test, calibration, etc)			10			11:33
2-SEC SORT DETECTORS						11:42
1 DET	248	77.99%	5 DET	0	0.00%	12:06
2 DET	54	16.98%	6 DET	0	0.00%	12:15
3 DET	12	3.77%	7 DET	0	0.00%	12:27
4 DET	4	1.26%	8 DET	0	0.00%	More
AVERAGE TIME BETWEEN 2-SEC SORTS	107.8 sec					

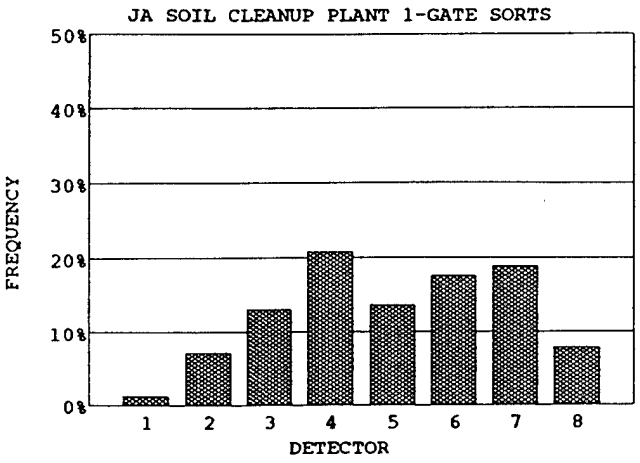
FREQUENCY DISTRIBUTIONS

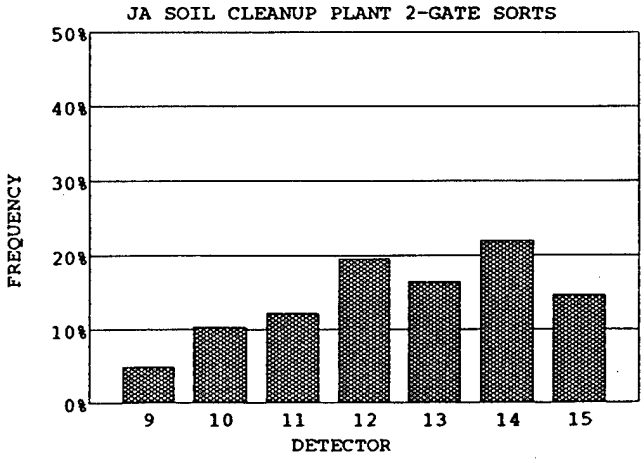
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	2	1.3%	-14000	13	-231	1.0%	4	27	8.5%
2	11	7.1%	-12000	8	-198	0.6%	8	136	42.8%
3	20	13.0%	-10000	7	-165	0.5%	12	51	16.0%
4	32	20.8%	-8000	19	-132	1.5%	16	37	11.6%
5	21	13.6%	-6000	15	-99	1.1%	20	14	4.4%
6	27	17.5%	-4000	14	-66	1.1%	24	9	2.8%
7	29	18.8%	-2000	25	-33	1.9%	28	4	1.3%
8	12	7.8%	0	38	0	2.9%	32	7	2.2%
TOTAL	154		2000	71	33	5.4%	36	1	0.3%
			4000	93	66	7.1%	40	5	1.6%
2-GATE DET	SORTS	FREQ%	6000	151	99	11.6%	44	4	1.3%
9	8	4.9%	8000	182	132	13.9%	48	1	0.3%
10	17	10.4%	10000	161	165	12.3%	52	2	0.6%
11	20	12.2%	12000	144	198	11.0%	56	3	0.9%
12	32	19.5%	14000	119	231	9.1%	60	0	0.0%
13	27	16.5%	16000	89	264	6.8%	64	2	0.6%
14	36	22.0%	18000	60	298	4.6%	68	0	0.0%
15	24	14.6%	20000	42	331	3.2%	72	1	0.3%
TOTAL	164		22000	31	364	2.4%	76	0	0.0%
			24000	21	397	1.6%	80	1	0.3%
			26000	4	430	0.3%	84	0	0.0%
			>28000	0	0	0.0%	>84	13	4.1%
			TOTAL	1,307			TOTAL	318	

EVENT TYPES HPE 333 MPE 63 DISE 3,277


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

20-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.62 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	89.6 tons	90.2 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.5 yd³	71.0 yd³	71.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	6,583 kBq	1,618 kBq	12,416 kBq
MAXIMUM/SORT	310 kBq	107 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		2,769 Bq/kg	139 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,490		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	3			
NONE (AD=0 & MD=0 & MND>0)	1,236		10:05	11:49
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	251		11:55	12:14
UNEXPLAINED RECORDS	0		12:33	14:11
0<AD<1kBq & MD>0	4		16:03	14:45
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,900		
2-SEC RECORDS WITH SORTS	469			
2-SEC RECORDS WITHOUT SORTS	14,431			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,959		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

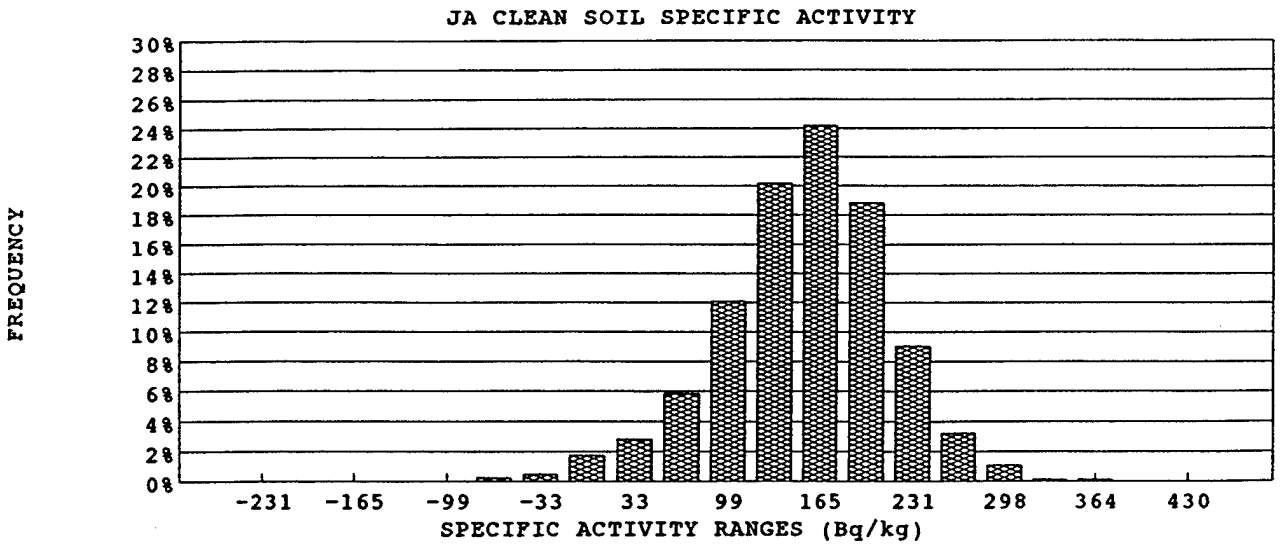
2-SEC SORT DETECTORS

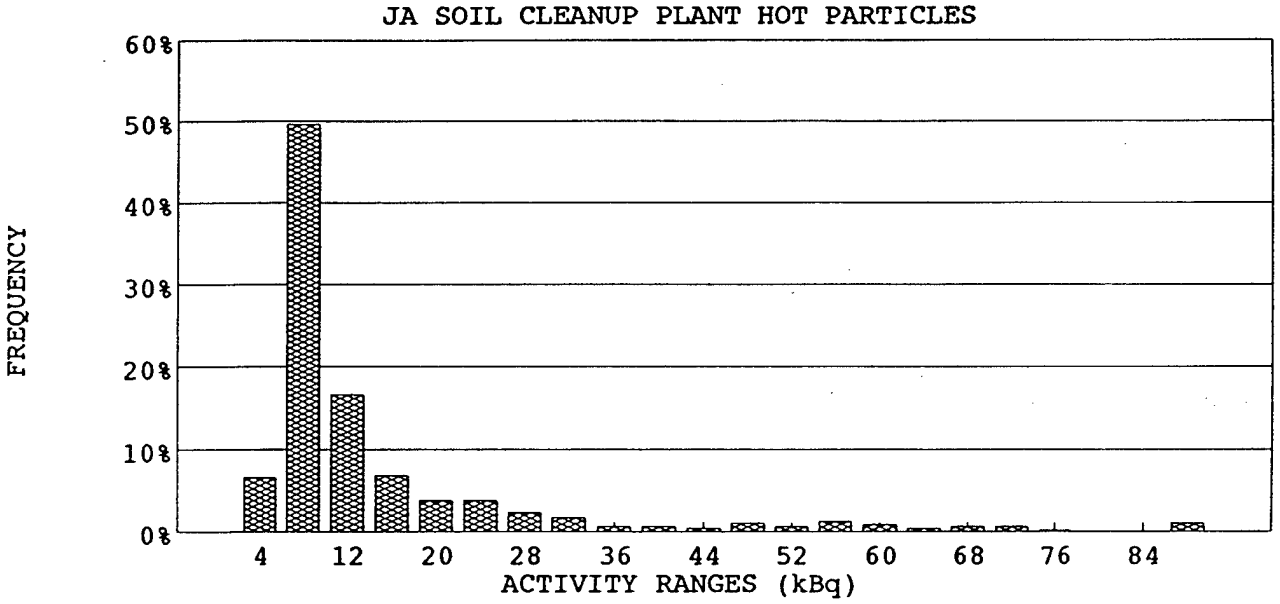
1 DET	342	72.92%	5 DET	0	0.00%
2 DET	111	23.67%	6 DET	0	0.00%
3 DET	16	3.41%	7 DET	0	0.00%
4 DET	0	0.00%	8 DET	0	0.00%

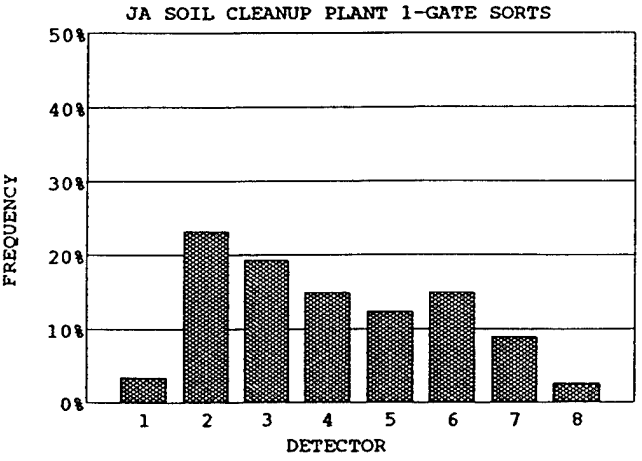
AVERAGE TIME BETWEEN 2-SEC SORTS 87.1 sec

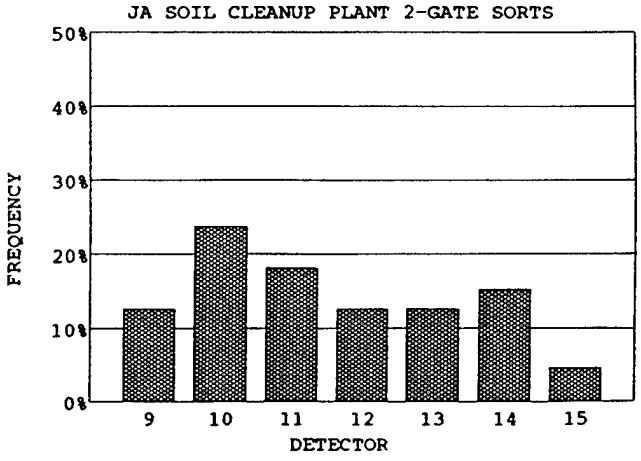
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	8	3.4%	-14000	0	-231	0.0%	4	31	6.6%
2	54	23.2%	-12000	0	-198	0.0%	8	233	49.7%
3	45	19.3%	-10000	0	-165	0.0%	12	78	16.6%
4	35	15.0%	-8000	0	-132	0.0%	16	32	6.8%
5	29	12.4%	-6000	0	-99	0.0%	20	18	3.8%
6	35	15.0%	-4000	4	-66	0.3%	24	18	3.8%
7	21	9.0%	-2000	7	-33	0.5%	28	11	2.3%
8	6	2.6%	0	26	0	1.7%	32	8	1.7%
TOTAL	233		2000	42	33	2.8%	36	3	0.6%
			4000	87	66	5.8%	40	3	0.6%
2-GATE SORTS			6000	180	99	12.1%	44	2	0.4%
DET	SORTS	FREQ%	8000	301	132	20.2%	48	5	1.1%
9	30	12.7%	10000	360	165	24.1%	52	3	0.6%
10	56	23.7%	12000	281	198	18.8%	56	6	1.3%
11	43	18.2%	14000	135	231	9.1%	60	4	0.9%
12	30	12.7%	16000	48	264	3.2%	64	2	0.4%
13	30	12.7%	18000	16	298	1.1%	68	3	0.6%
14	36	15.3%	20000	2	331	0.1%	72	3	0.6%
15	11	4.7%	22000	2	364	0.1%	76	1	0.2%
TOTAL	236		24000	0	397	0.0%	80	0	0.0%
			26000	0	430	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	5	1.1%
			TOTAL	1,491			TOTAL	469	
EVENT TYPES		HPE	482	MPE	39	DISE	249		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	9.9 hr	9.9 hr	40.2 hr
SORTER START–UP	06:20	06:20	06:20	06:20	
START SOIL PROCESSING	06:31	06:31	06:32	06:31	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.2 hr	0.2 hr	0.8 hr
SORTER SHUT–DOWN	16:30	16:30	16:15	16:15	
END SOIL PROCESSING	16:19	16:21	15:58	15:54	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.1 hr	0.3 hr	0.3 hr	0.9 hr
ACTUAL PROCESS HOURS	9.8 hr	9.8 hr	9.4 hr	9.4 hr	38.4 hr
DOWN–TIME	0.4 hr	0.3 hr	0.5 hr	0.5 hr	1.7 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	0.6 hr	0.6 hr	1.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					95.7%
PRODUCTIVTY					91.5%

PRODUCTIVITY

Date	21–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	341	Excused delays for contract (sorter–hrs)	7,212 hr
Current Contract week	57	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	418 MT		
Cumlative Soil Production for Week	794 MT	Percent of contract completed	58.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,781 MT
Since 6 Sep 93	56,471 MT	Days ahead or behind schedule	5.6 days
Since 6 Aug 93	58,062 MT		
Total Soil production for project	84,348 MT		

MT = metric tons

File Report1 Printed on 24-Oct-94 at 02:23:16 PM

SORTER 1

21-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.70 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.1 tons	97.6 tons	106.7 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	48.4 kg	
VOLUME IN-GROUND	7.2 yd³	77.3 yd³	84.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	91.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	112,723 kBq	26,201 kBq	28,233 kBq
MAXIMUM/SORT	7,549 kBq	2,849 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	0 kBq
SPECIFIC ACTIVITY		2,865 Bq/kg	289 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,763		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	104			
NONE (AD=0 & MD=0 & MND>0)	467		09:28	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	1,192		09:34	
UNEXPLAINED RECORDS	0		13:50	
0<AD<1kBq & MD>0	4		14:17	
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		17,630		
2-SEC RECORDS WITH SORTS	3,507			
2-SEC RECORDS WITHOUT SORTS	14,123			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		5,270		
NONPROCESSING RECORDS (Test, calibration, etc)		5		

2-SEC SORT DETECTORS

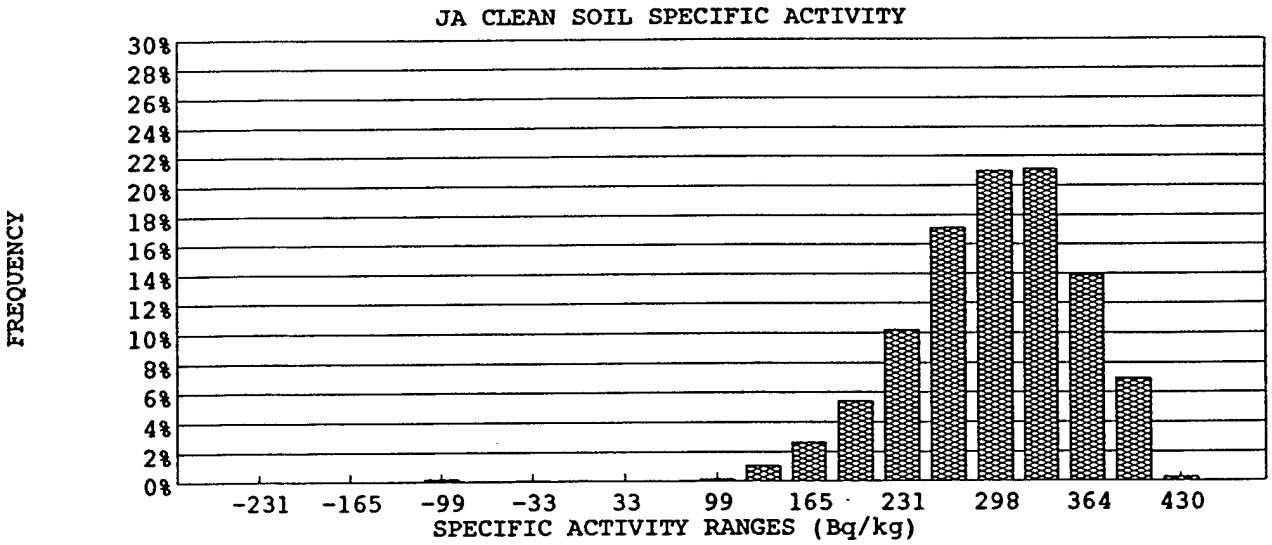
1 DET	2,465	70.29%	5 DET	7	0.20%
2 DET	807	23.01%	6 DET	0	0.00%
3 DET	185	5.28%	7 DET	0	0.00%
4 DET	43	1.23%	8 DET	0	0.00%

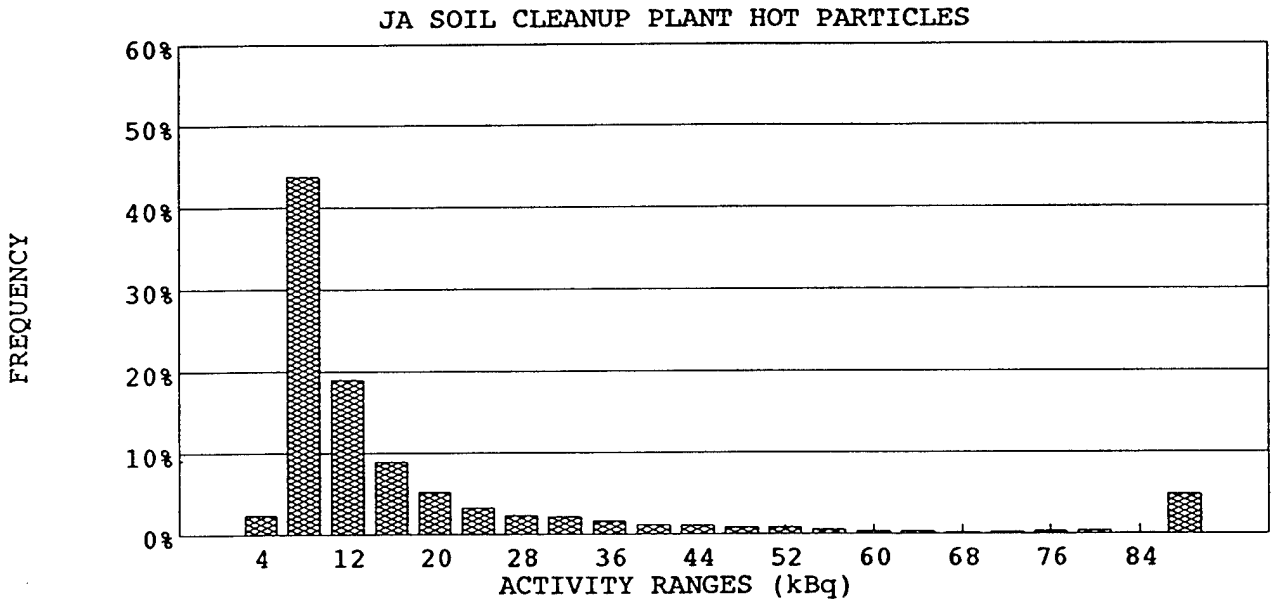
AVERAGE TIME BETWEEN 2-SEC SORTS 14.3 sec

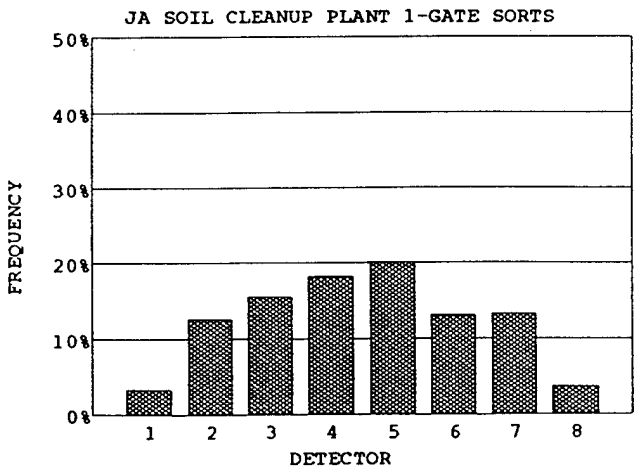
FREQUENCY DISTRIBUTIONS

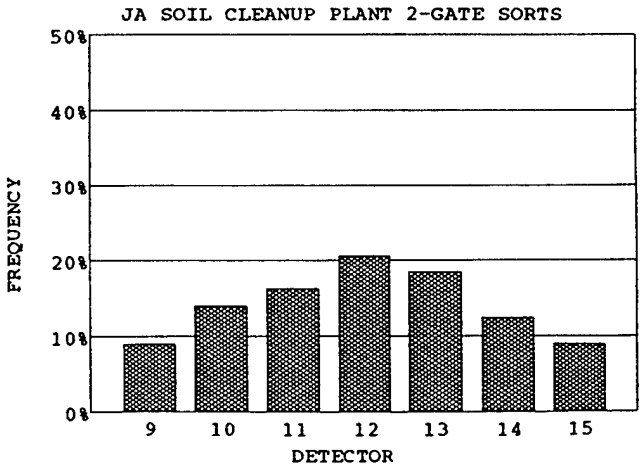
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	59	3.3%	-14000	0	-231	0.0%	4	83	2.4%
2	222	12.6%	-12000	0	-198	0.0%	8	1,536	43.8%
3	275	15.6%	-10000	0	-165	0.0%	12	666	19.0%
4	322	18.3%	-8000	0	-132	0.0%	16	314	9.0%
5	355	20.1%	-6000	3	-99	0.2%	20	185	5.3%
6	232	13.2%	-4000	0	-66	0.0%	24	115	3.3%
7	234	13.3%	-2000	1	-33	0.1%	28	82	2.3%
8	65	3.7%	0	1	0	0.1%	32	77	2.2%
TOTAL	1,764		2000	0	33	0.0%	36	58	1.7%
			4000	0	66	0.0%	40	40	1.1%
2-GATE SORTS			6000	2	99	0.1%	44	37	1.1%
DET	SORTS	FREQ%	8000	17	132	1.0%	48	29	0.8%
9	157	9.0%	10000	44	165	2.6%	52	31	0.9%
10	245	14.1%	12000	90	198	5.4%	56	19	0.5%
11	285	16.4%	14000	170	231	10.2%	60	11	0.3%
12	360	20.7%	16000	285	264	17.1%	64	12	0.3%
13	322	18.5%	18000	349	298	21.0%	68	7	0.2%
14	217	12.4%	20000	351	331	21.1%	72	8	0.2%
15	157	9.0%	22000	231	364	13.9%	76	10	0.3%
TOTAL	1,743		24000	116	397	7.0%	80	13	0.4%
			26000	4	430	0.2%	84	3	0.1%
			>28000	0	0	0.0%	>84	171	4.9%
			TOTAL	1,664			TOTAL	3,507	

EVENT TYPES HPE 3,458 MPE 569 DISE 8,054


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

21-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.78 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	13.1 tons	93.7 tons	106.9 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	50.7 kg	
VOLUME IN-GROUND	10.4 yd³	74.3 yd³	84.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	87.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	138,244 kBq	27,590 kBq	28,440 kBq
MAXIMUM/SORT	3,464 kBq	1,626 kBq	26 kBq
MINIMUM/SORT	3 kBq	(101)Bq	−7 kBq
SPECIFIC ACTIVITY		2,099 Bq/kg	303 Bq/kg

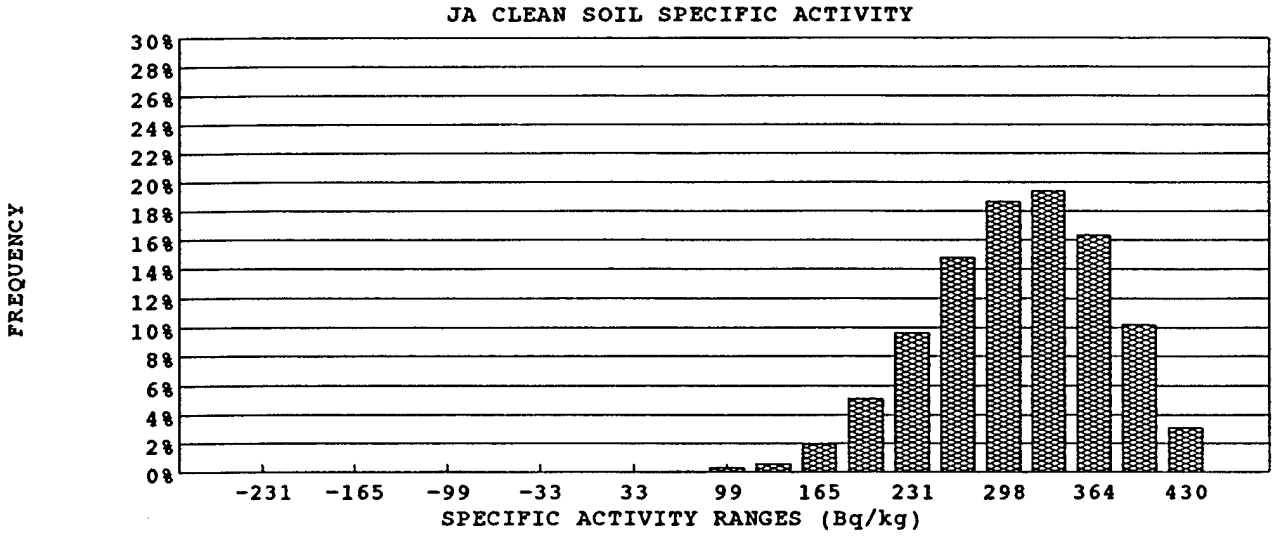
SORTS

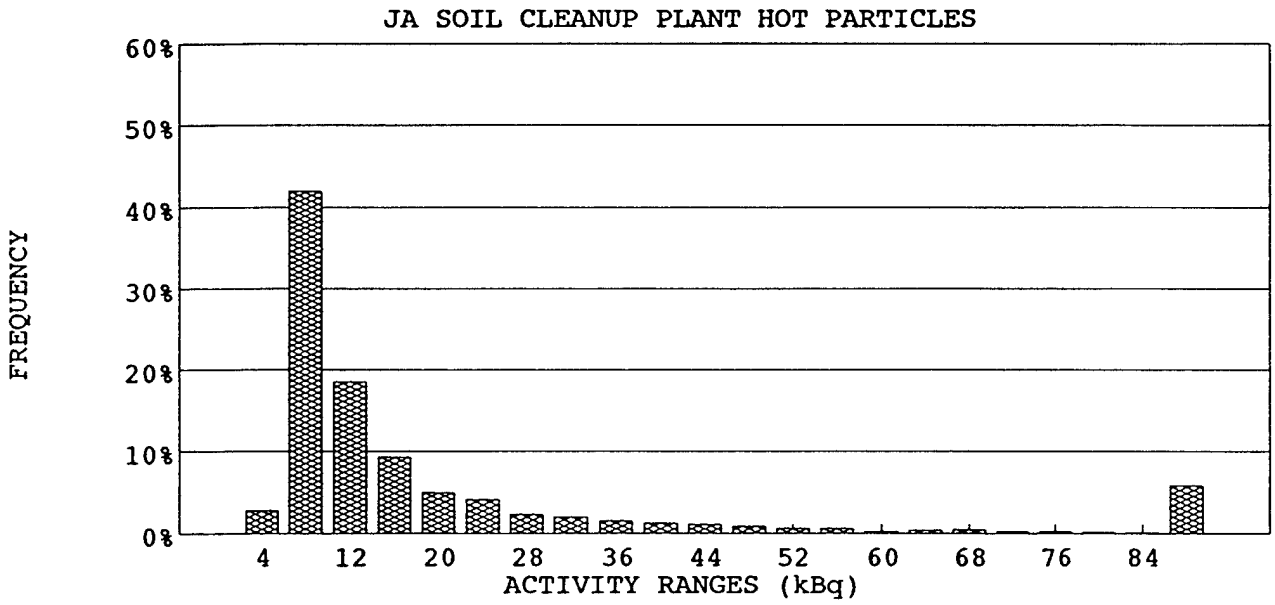
							UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,771			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			160					
NONE (AD=0 & MD=0 & MND>0)			315				06:59	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			1,295				07:32	
UNEXPLAINED RECORDS			1				07:33	
0<AD<1kBq & MD>0			19				07:36	
AD=0 & MD>0			0				07:47	
AD<0 & MD >0			1				07:48	
2-SEC COUNT PERIODS					17,710		07:48	
2-SEC RECORDS WITH SORTS			4,147				07:51	
2-SEC RECORDS WITHOUT SORTS			13,563				08:23	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					5,918		09:49	
NONPROCESSING RECORDS (Test, calibration, etc)					0		09:55	
2-SEC SORT DETECTORS							10:45	
1 DET	3,086	74.42%		5 DET	13	0.31%	10:46	
2 DET	846	20.40%		6 DET	0	0.00%	10:56	
3 DET	172	4.15%		7 DET	3	0.07%	10:57	
4 DET	30	0.72%		8 DET	0	0.00%	More	
AVERAGE TIME BETWEEN 2-SEC SORTS			11.5 sec					

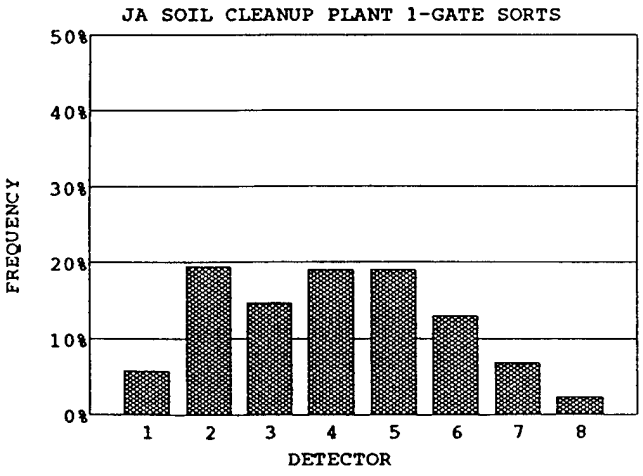
FREQUENCY DISTRIBUTIONS

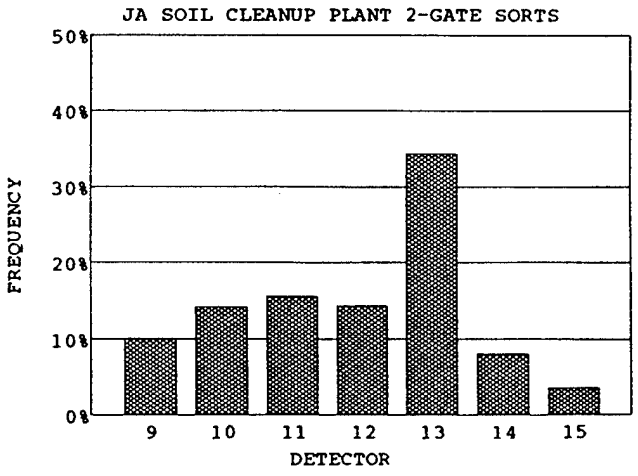
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	100	5.8%	−14000	0	−231	0.0%	4	116	2.8%
2	335	19.4%	−12000	0	−198	0.0%	8	1,741	42.0%
3	253	14.6%	−10000	0	−165	0.0%	12	769	18.5%
4	329	19.1%	−8000	0	−132	0.0%	16	385	9.3%
5	328	19.0%	−6000	1	−99	0.1%	20	206	5.0%
6	224	13.0%	−4000	0	−66	0.0%	24	170	4.1%
7	118	6.8%	−2000	0	−33	0.0%	28	97	2.3%
8	40	2.3%	0	0	0	0.0%	32	83	2.0%
TOTAL	1,727		2000	0	33	0.0%	36	66	1.6%
			4000	1	66	0.1%	40	52	1.3%
2-GATE DET	SORTS	FREQ%	6000	5	99	0.3%	44	47	1.1%
9	244	10.1%	8000	9	132	0.6%	48	37	0.9%
10	342	14.1%	10000	31	165	1.9%	52	26	0.6%
11	376	15.5%	12000	82	198	5.1%	56	28	0.7%
12	346	14.3%	14000	155	231	9.6%	60	12	0.3%
13	831	34.3%	16000	238	264	14.8%	64	16	0.4%
14	194	8.0%	18000	300	298	18.6%	68	22	0.5%
15	87	3.6%	20000	312	331	19.4%	72	10	0.2%
TOTAL	2,420		22000	263	364	16.3%	76	11	0.3%
			24000	164	397	10.2%	80	8	0.2%
			26000	50	430	3.1%	84	4	0.1%
			>28000	0	0	0.0%	>84	241	5.8%
			TOTAL	1,611			TOTAL	4,147	

EVENT TYPES	HPE	4,593	MPE	944	DISE	12,273


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

21-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.16 ± 0.27 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	102.0 tons	102.7 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
VOLUME IN-GROUND	0.6 yd³	80.8 yd³	81.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,749 kBq	3,077 kBq	17,701 kBq
MAXIMUM/SORT	745 kBq	285 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		4,416 Bq/kg	174 Bq/kg

SORTS

						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,697		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			1				
NONE (AD=0 & MD=0 & MND>0)			1,279			09:30	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			417			15:08	
UNEXPLAINED RECORDS		0					
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			671				
2-SEC RECORDS WITHOUT SORTS			16,299				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					2,368		
NONPROCESSING RECORDS (Test, calibration, etc)					5		

2-SEC SORT DETECTORS

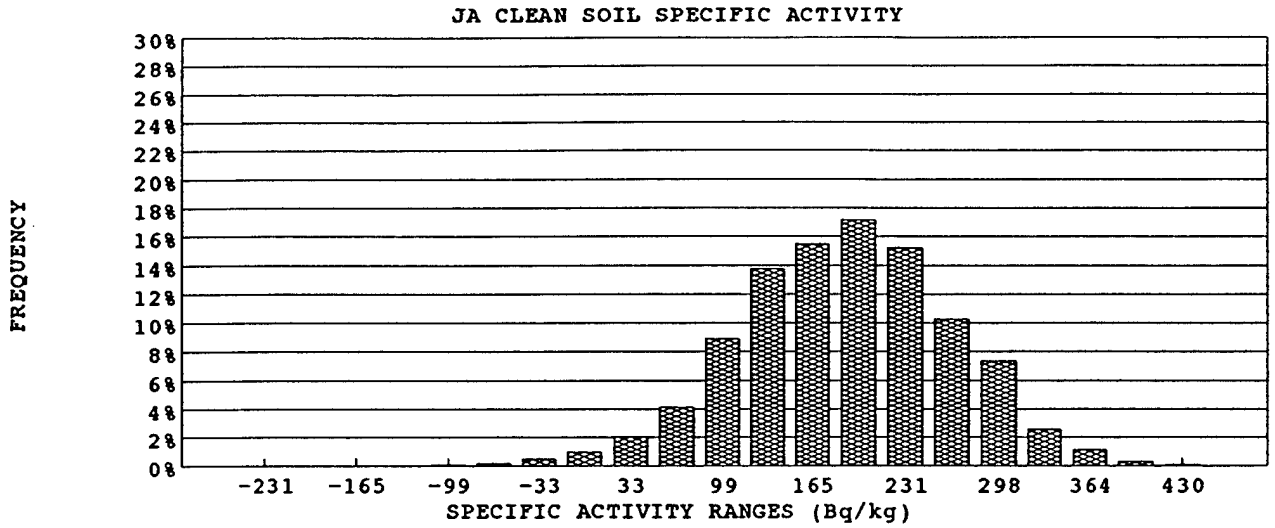
1 DET	520	77.50%	5 DET	0	0.00%
2 DET	130	19.37%	6 DET	0	0.00%
3 DET	18	2.68%	7 DET	0	0.00%
4 DET	3	0.45%	8 DET	0	0.00%

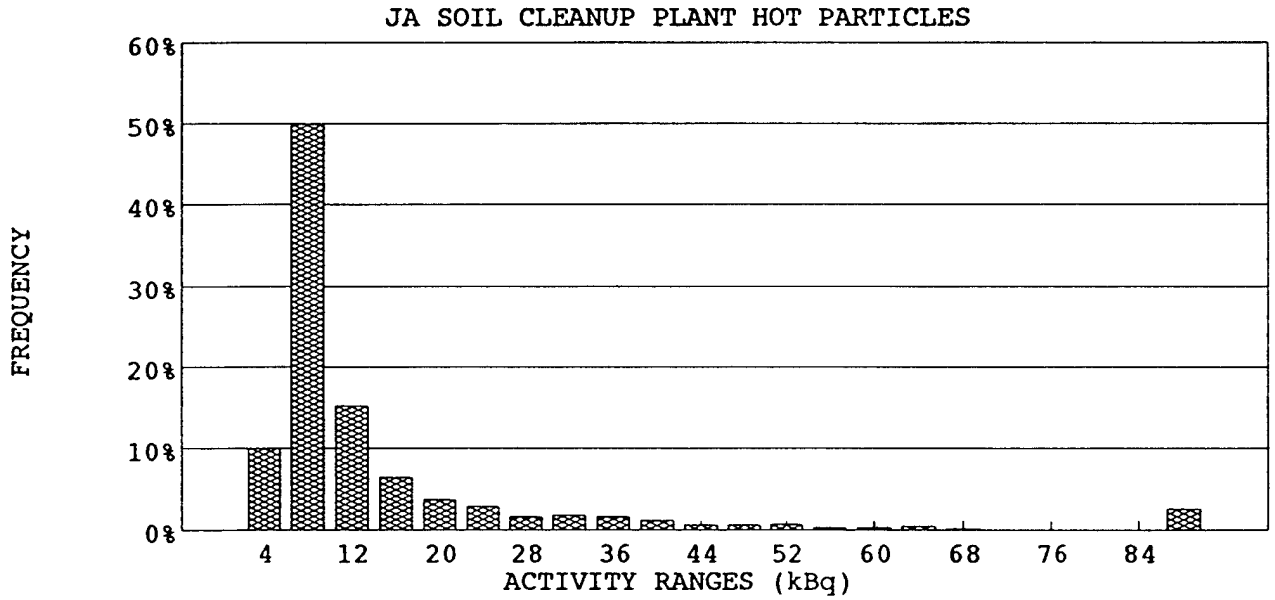
AVERAGE TIME BETWEEN 2-SEC SORTS 65.3 sec

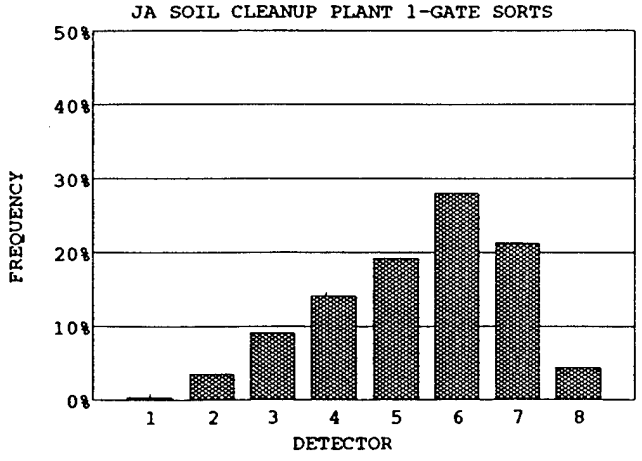
FREQUENCY DISTRIBUTIONS

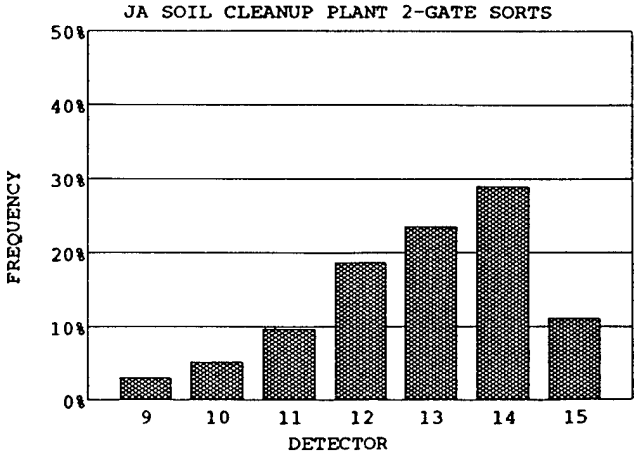
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	1	0.3%	-14000	0	-231	0.0%	4	67	10.0%
2	12	3.5%	-12000	0	-198	0.0%	8	335	49.9%
3	31	9.1%	-10000	0	-165	0.0%	12	102	15.2%
4	48	14.2%	-8000	0	-132	0.0%	16	43	6.4%
5	65	19.2%	-6000	1	-99	0.1%	20	25	3.7%
6	95	28.0%	-4000	3	-66	0.2%	24	19	2.8%
7	72	21.2%	-2000	8	-33	0.5%	28	11	1.6%
8	15	4.4%	0	16	0	0.9%	32	12	1.8%
TOTAL	339		2000	35	33	2.1%	36	11	1.6%
			4000	70	66	4.1%	40	8	1.2%
2-GATE SORTS			6000	151	99	8.9%	44	4	0.6%
DET	SORTS	FREQ%	8000	234	132	13.8%	48	4	0.6%
9	10	3.0%	10000	263	165	15.5%	52	5	0.7%
10	17	5.1%	12000	292	198	17.2%	56	2	0.3%
11	32	9.6%	14000	259	231	15.2%	60	2	0.3%
12	62	18.7%	16000	175	264	10.3%	64	3	0.4%
13	78	23.5%	18000	125	298	7.3%	68	1	0.1%
14	96	28.9%	20000	44	331	2.6%	72	0	0.0%
15	37	11.1%	22000	19	364	1.1%	76	0	0.0%
TOTAL	332		24000	5	397	0.3%	80	0	0.0%
			26000	1	430	0.1%	84	0	0.0%
			>28000	0	0	0.0%	>84	17	2.5%
			TOTAL	1,701			TOTAL	671	

EVENT TYPES	HPE	702	MPE	138	DISE	76


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

21-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.63 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	101.5 tons	102.2 tons
MAXIMUM/SORT	6.1 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	54.5 kg	
VOLUME IN-GROUND	0.6 yd³	80.4 yd³	81.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	10,492 kBq	2,657 kBq	16,243 kBq
MAXIMUM/SORT	284 kBq	136 kBq	20 kBq
MINIMUM/SORT	2 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		3,813 Bq/kg	160 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,689		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,249		09:05	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	440		11:03	
UNEXPLAINED RECORDS	0		12:32	
0<AD<1kBq & MD>0	7		13:36	
AD=0 & MD>0	0		14:19	
AD<0 & MD >0	0		14:48	
2-SEC COUNT PERIODS		16,890	15:11	
2-SEC RECORDS WITH SORTS	799			
2-SEC RECORDS WITHOUT SORTS	16,091			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,488		
NONPROCESSING RECORDS (Test, calibration, etc)		13		

2-SEC SORT DETECTORS

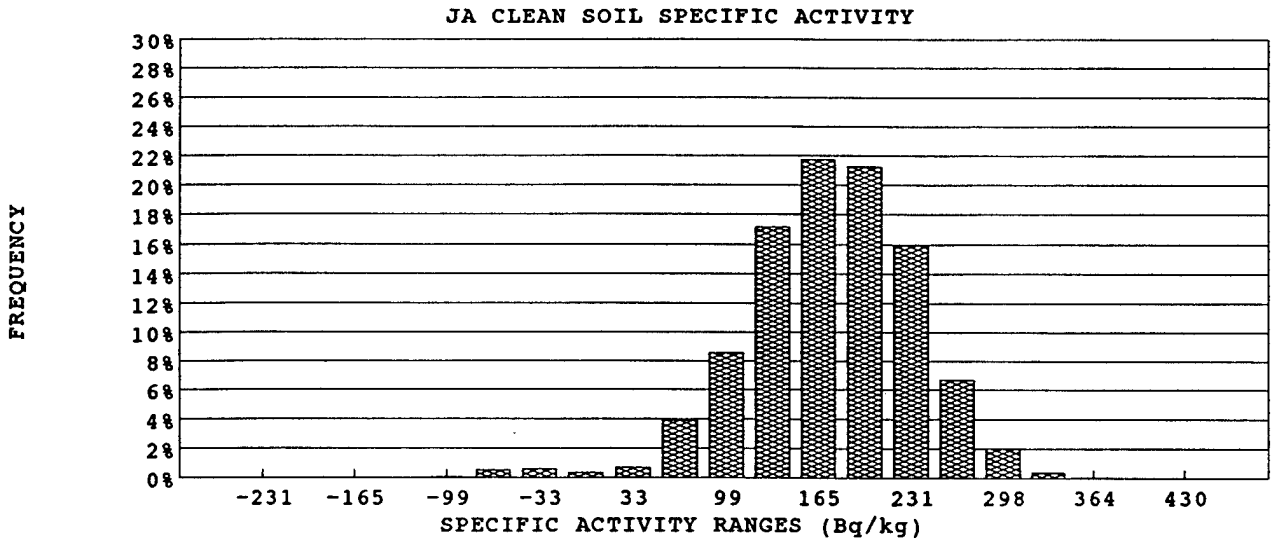
1 DET	593	74.22%	5 DET	1	0.13%
2 DET	176	22.03%	6 DET	0	0.00%
3 DET	26	3.25%	7 DET	0	0.00%
4 DET	3	0.38%	8 DET	0	0.00%

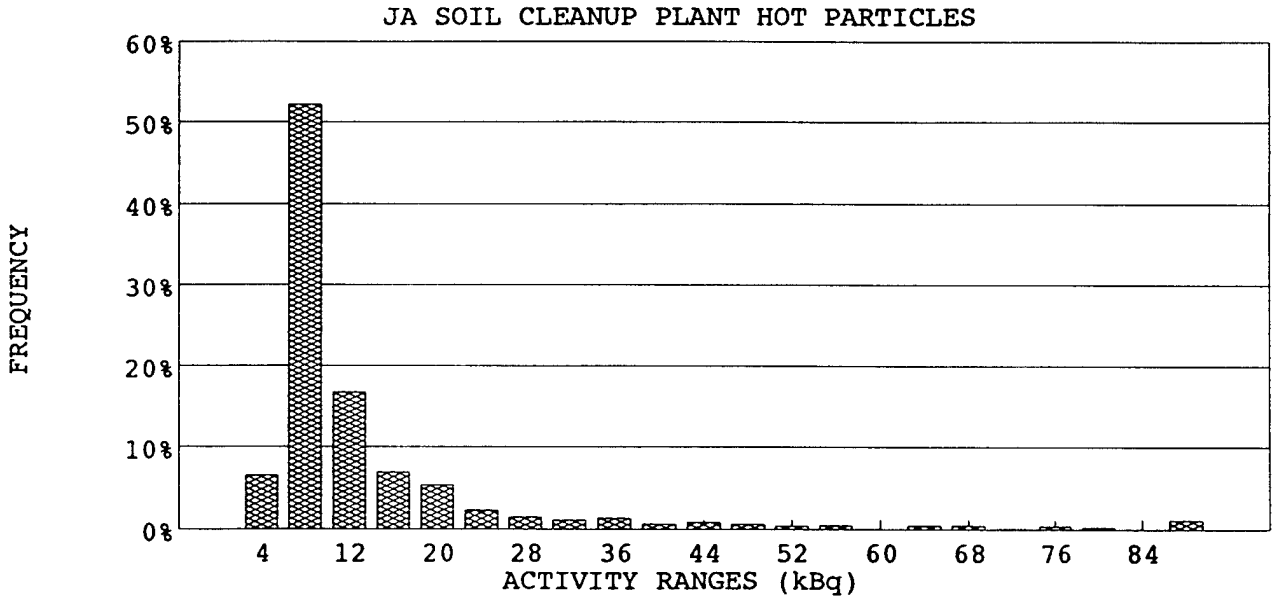
AVERAGE TIME BETWEEN 2-SEC SORTS 57.0 sec

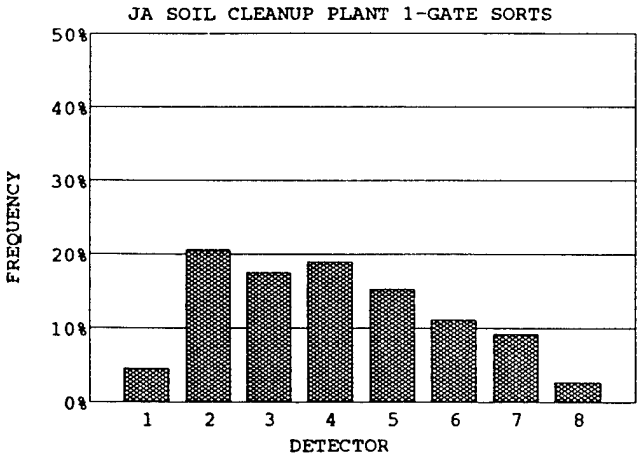
FREQUENCY DISTRIBUTIONS

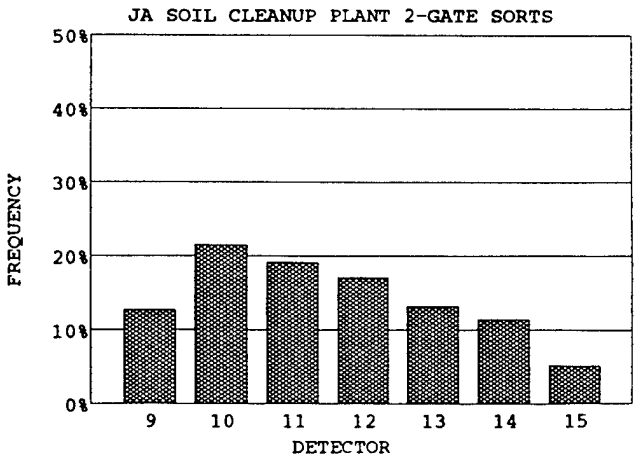
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	19	4.6%	-14000	0	-231	0.0%	4	52	6.5%
2	85	20.6%	-12000	0	-198	0.0%	8	417	52.2%
3	72	17.5%	-10000	0	-165	0.0%	12	134	16.8%
4	78	18.9%	-8000	0	-132	0.0%	16	55	6.9%
5	63	15.3%	-6000	1	-99	0.1%	20	43	5.4%
6	46	11.2%	-4000	9	-66	0.5%	24	19	2.4%
7	38	9.2%	-2000	10	-33	0.6%	28	12	1.5%
8	11	2.7%	0	6	0	0.4%	32	9	1.1%
TOTAL	412		2000	12	33	0.7%	36	11	1.4%
			4000	66	66	3.9%	40	5	0.6%
2-GATE SORTS			6000	146	99	8.6%	44	7	0.9%
DET	SORTS	FREQ%	8000	292	132	17.2%	48	5	0.6%
9	49	12.7%	10000	370	165	21.7%	52	3	0.4%
10	83	21.4%	12000	362	198	21.3%	56	4	0.5%
11	74	19.1%	14000	271	231	15.9%	60	0	0.0%
12	66	17.1%	16000	114	264	6.7%	64	4	0.5%
13	51	13.2%	18000	35	298	2.1%	68	4	0.5%
14	44	11.4%	20000	7	331	0.4%	72	1	0.1%
15	20	5.2%	22000	1	364	0.1%	76	3	0.4%
TOTAL	387		24000	0	397	0.0%	80	2	0.3%
			26000	0	430	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	9	1.1%
			TOTAL	1,702			TOTAL	799	

EVENT TYPES	HPE	MPE	DISE
	826	90	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	8.2 hr	8.2 hr	8.0 hr	8.0 hr	32.5 hr
SORTER START–UP	06:15	06:15	06:15	06:15	
START SOIL PROCESSING	06:32	06:33	06:36	06:36	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.4 hr	0.4 hr	1.3 hr
SORTER SHUT–DOWN	14:30	14:30	14:15	14:15	
END SOIL PROCESSING	14:20	14:22	14:05	14:05	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.1 hr	0.2 hr	0.2 hr	0.6 hr
ACTUAL PROCESS HOURS	7.7 hr	7.7 hr	7.5 hr	7.5 hr	30.4 hr
DOWN–TIME	0.6 hr	0.5 hr	0.5 hr	0.5 hr	2.1 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.0 hr	0.0 hr	0.2 hr
SORTER NONAVAILABLE TIME	2.3 hr	2.3 hr	2.5 hr	2.5 hr	9.5 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					93.4%
PRODUCTIVTY					72.3%

PRODUCTIVITY

Date	22–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	342	Excused delays for contract (sorter–hrs)	7,212 hr
Current Contract week	57	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	330 MT		
Cumlative Soil Production for Week	1,125 MT	Percent of contract completed	58.4%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,794 MT
Since 6 Sep 93	56,801 MT	Days ahead or behind schedule	5.7 days
Since 6 Aug 93	58,392 MT		
Total Soil production for project	84,679 MT		

MT = metric tons

File Report1 Printed on 25-Oct-94 at 11:54:33 AM

SORTER 1

22-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.32 ± 0.11 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	13.7 tons	69.9 tons	83.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
VOLUME IN-GROUND	10.9 yd³	55.4 yd³	66.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	83.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	48,189 kBq	16,547 kBq	17,526 kBq
MAXIMUM/SORT	5,498 kBq	2,277 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		1,205 Bq/kg	251 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,382		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	210		10:59	12:24
NONE (AD=0 & MD=0 & MND>0)	664		12:09	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	508			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,820		
2-SEC RECORDS WITH SORTS	1,654			
2-SEC RECORDS WITHOUT SORTS	12,166			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,036		
NONPROCESSING RECORDS (Test, calibration, etc)		8		

2-SEC SORT DETECTORS

1 DET	1,186	71.70%	5 DET	3	0.18%
2 DET	378	22.85%	6 DET	0	0.00%
3 DET	76	4.59%	7 DET	0	0.00%
4 DET	11	0.67%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 23.3 sec

FREQUENCY DISTRIBUTIONS

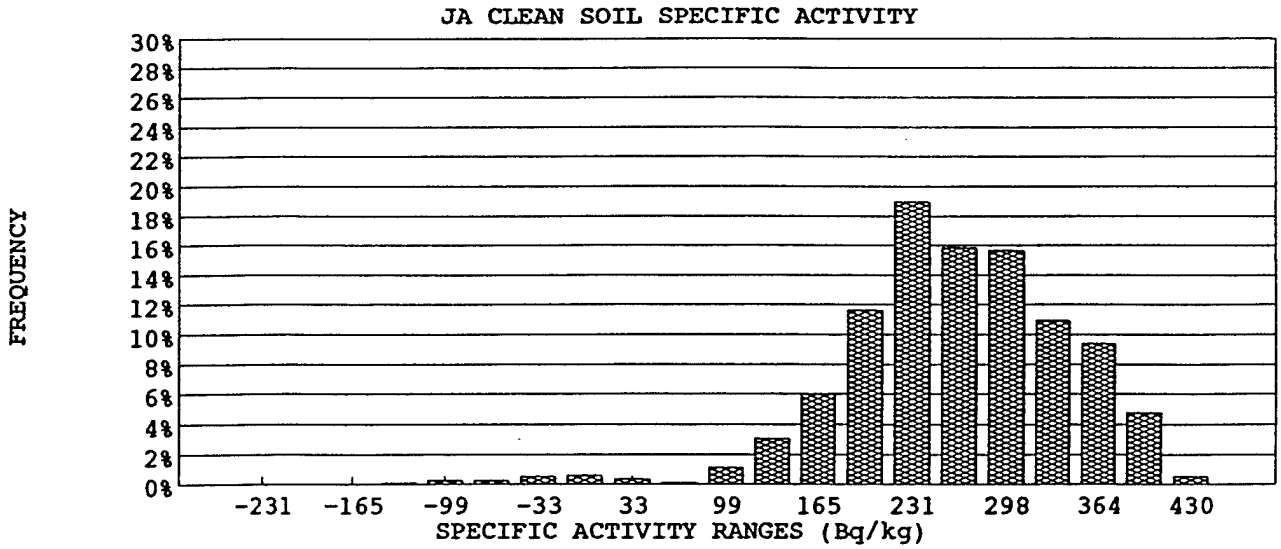
1-GATE SORTS DET	SORTS	FREQ%
1	39	4.6%
2	97	11.6%
3	136	16.2%
4	147	17.5%
5	169	20.1%
6	118	14.1%
7	99	11.8%
8	34	4.1%
TOTAL	839	

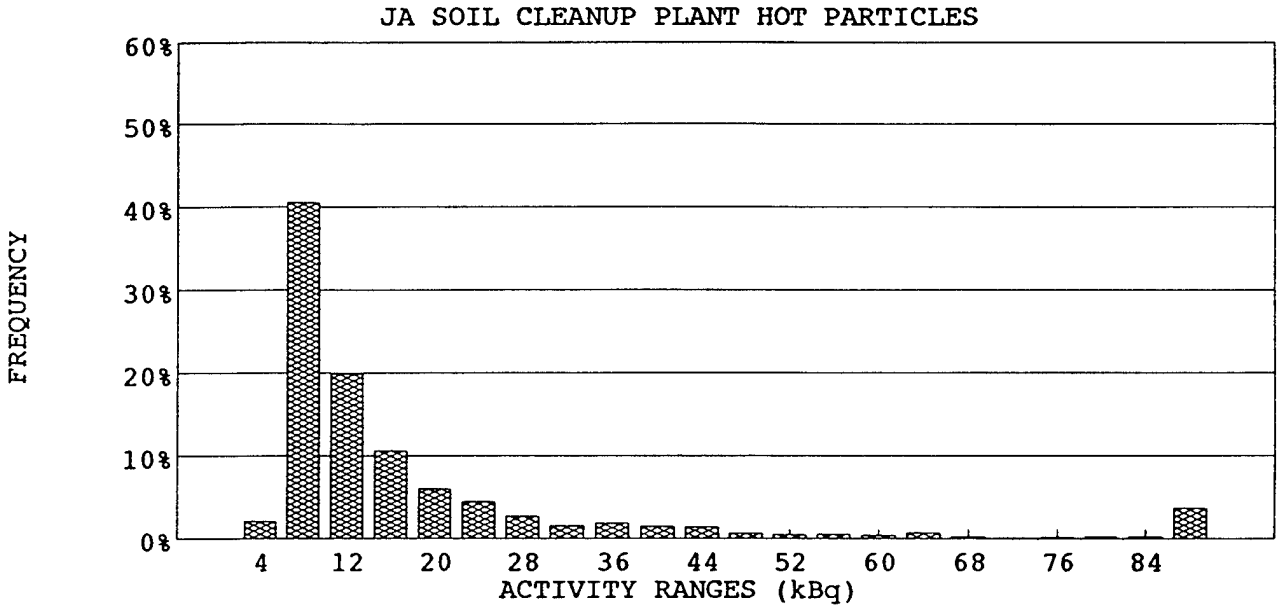
2-GATE SORTS DET	SORTS	FREQ%
9	75	9.2%
10	117	14.4%
11	149	18.3%
12	151	18.5%
13	162	19.9%
14	84	10.3%
15	77	9.4%
TOTAL	815	

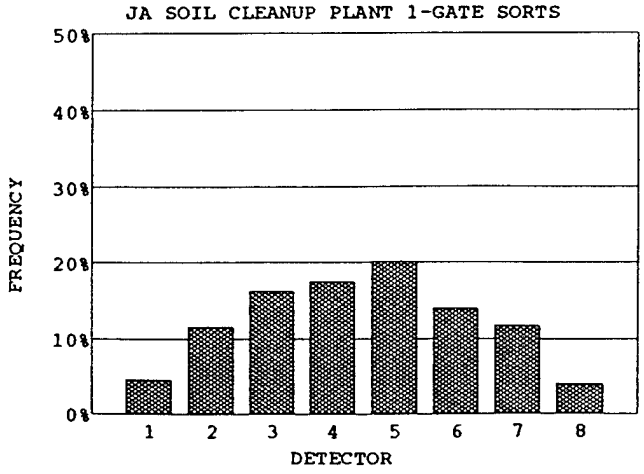
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%
-14000	0	-231	0.0%
-12000	0	-198	0.0%
-10000	0	-165	0.0%
-8000	1	-132	0.1%
-6000	3	-99	0.3%
-4000	3	-66	0.3%
-2000	6	-33	0.5%
0	7	0	0.6%
2000	4	33	0.3%
4000	1	66	0.1%
6000	13	99	1.1%
8000	36	132	3.1%
10000	71	165	6.0%
12000	137	198	11.6%
14000	224	231	19.0%
16000	187	264	15.8%
18000	185	298	15.7%
20000	129	331	10.9%
22000	111	364	9.4%
24000	56	397	4.7%
26000	6	430	0.5%
>28000	0	0	0.0%
TOTAL	1,180		

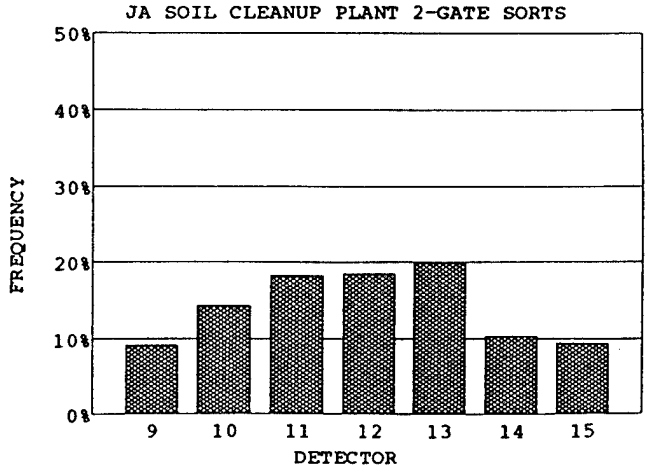
ACT_P (kBq)	NUM (#)	FREQ%
4	35	2.1%
8	671	40.6%
12	328	19.8%
16	176	10.6%
20	100	6.0%
24	74	4.5%
28	45	2.7%
32	25	1.5%
36	31	1.9%
40	24	1.5%
44	23	1.4%
48	10	0.6%
52	8	0.5%
56	9	0.5%
60	7	0.4%
64	11	0.7%
68	4	0.2%
72	1	0.1%
76	3	0.2%
80	4	0.2%
84	4	0.2%
>84	61	3.7%
TOTAL	1,654	

EVENT TYPES HPE 1,609 MPE 368 DISE 16,168


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.77 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	5.8 tons	77.9 tons	83.8 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.2 kg	
VOLUME IN-GROUND	4.6 yd³	61.8 yd³	66.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	33,798 kBq	11,375 kBq	15,856 kBq
MAXIMUM/SORT	1,319 kBq	667 kBq	26 kBq
MINIMUM/SORT	3 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		1,947 Bq/kg	204 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,386		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	76			
NONE (AD=0 & MD=0 & MND>0)	678		08:31	12:24
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	632		10:27	
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,860		
2-SEC RECORDS WITH SORTS	1,655			
2-SEC RECORDS WITHOUT SORTS	12,205			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,041		
NONPROCESSING RECORDS (Test, calibration, etc)		4		

2-SEC SORT DETECTORS

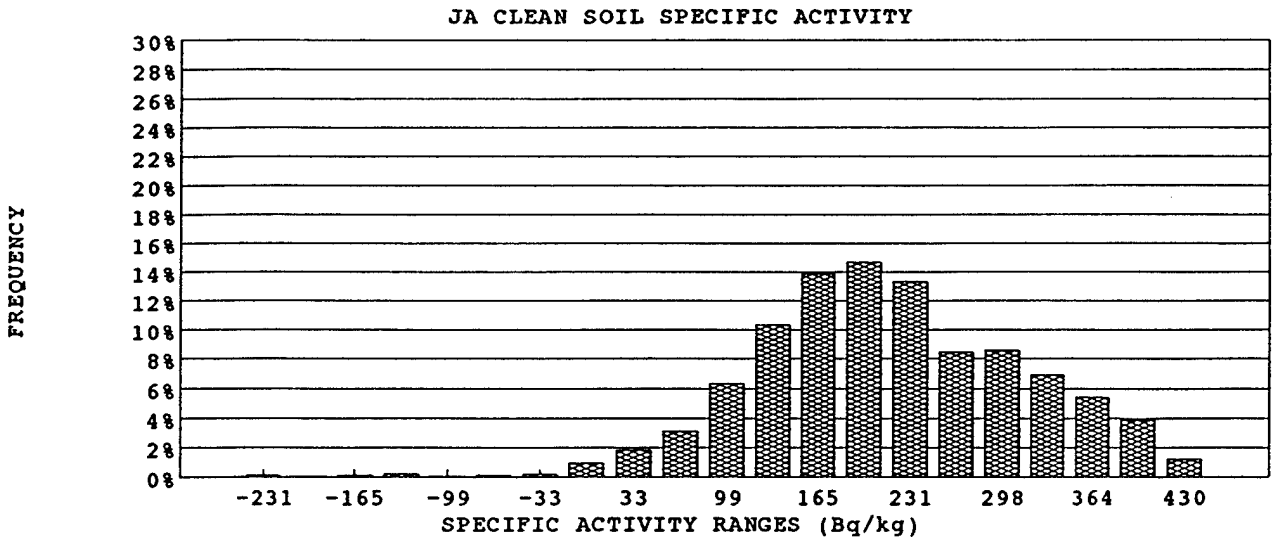
1 DET	1,230	74.32%	5 DET	1	0.06%
2 DET	351	21.21%	6 DET	0	0.00%
3 DET	64	3.87%	7 DET	0	0.00%
4 DET	9	0.54%	8 DET	0	0.00%

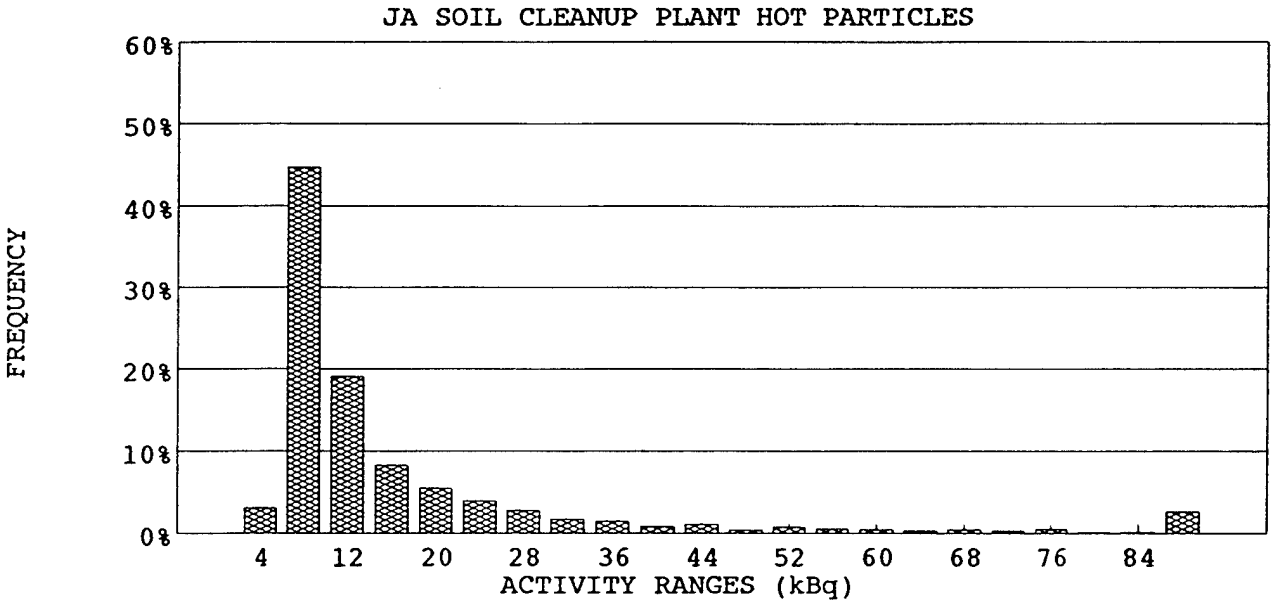
AVERAGE TIME BETWEEN 2-SEC SORTS 22.5 sec

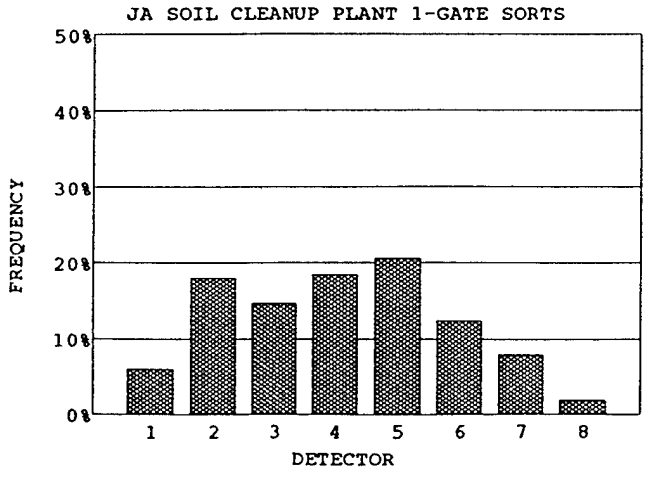
FREQUENCY DISTRIBUTIONS

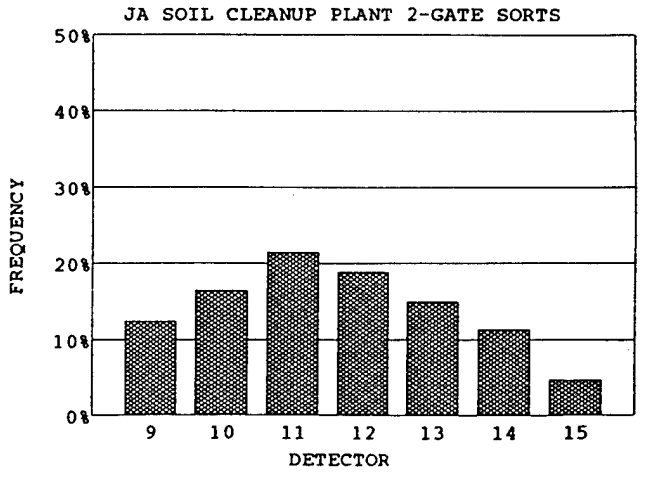
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	50	6.0%	-14000	2	-231	0.2%	4	52	3.1%
2	150	18.1%	-12000	1	-198	0.1%	8	740	44.7%
3	122	14.7%	-10000	2	-165	0.2%	12	316	19.1%
4	153	18.4%	-8000	3	-132	0.2%	16	137	8.3%
5	171	20.6%	-6000	1	-99	0.1%	20	91	5.5%
6	103	12.4%	-4000	2	-66	0.2%	24	66	4.0%
7	66	7.9%	-2000	3	-33	0.2%	28	47	2.8%
8	16	1.9%	0	13	0	1.0%	32	29	1.8%
TOTAL	831		2000	24	33	1.8%	36	25	1.5%
			4000	41	66	3.1%	40	15	0.9%
2-GATE DET	SORTS	FREQ%	6000	83	99	6.3%	44	19	1.1%
9	102	12.4%	8000	136	132	10.4%	48	7	0.4%
10	135	16.4%	10000	182	165	13.9%	52	13	0.8%
11	177	21.5%	12000	193	198	14.7%	56	10	0.6%
12	155	18.8%	14000	175	231	13.3%	60	8	0.5%
13	123	14.9%	16000	111	264	8.4%	64	6	0.4%
14	93	11.3%	18000	113	298	8.6%	68	8	0.5%
15	39	4.7%	20000	91	331	6.9%	72	6	0.4%
TOTAL	824		22000	71	364	5.4%	76	10	0.6%
			24000	51	397	3.9%	80	3	0.2%
			26000	16	430	1.2%	84	3	0.2%
			>28000	0	0	0.0%	>84	44	2.7%
			TOTAL	1,314			TOTAL	1,655	

EVENT TYPES HPE 1,668 MPE 434 DISE 5,783


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

22-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.16 ± 0.27 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	80.9 tons	81.6 tons
MAXIMUM/SORT	7.6 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.9 kg	
VOLUME IN-GROUND	0.5 yd³	64.2 yd³	64.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	9,599 kBq	2,814 kBq	14,891 kBq
MAXIMUM/SORT	361 kBq	154 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-4 kBq
SPECIFIC ACTIVITY		4,648 Bq/kg	184 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,348		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	980		09:06	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	368		10:31	
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,480		
2-SEC RECORDS WITH SORTS	646			
2-SEC RECORDS WITHOUT SORTS	12,834			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,994		
NONPROCESSING RECORDS (Test, calibration, etc)		0		

2-SEC SORT DETECTORS

1 DET	486	75.23%	5 DET	0	0.00%
2 DET	138	21.36%	6 DET	0	0.00%
3 DET	21	3.25%	7 DET	0	0.00%
4 DET	1	0.15%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 55.5 sec

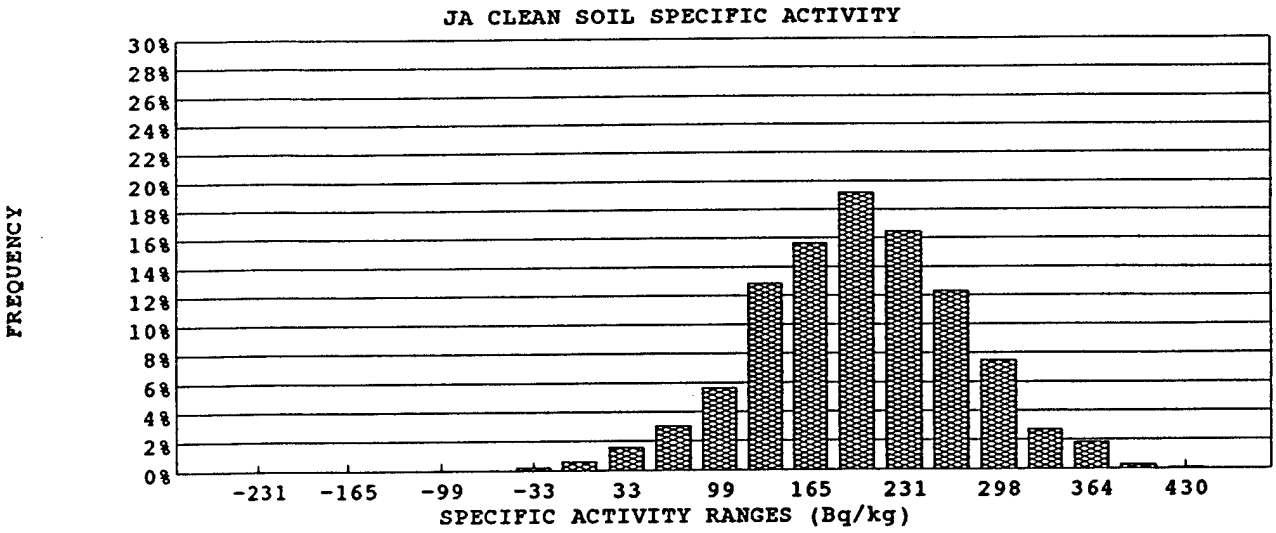
FREQUENCY DISTRIBUTIONS

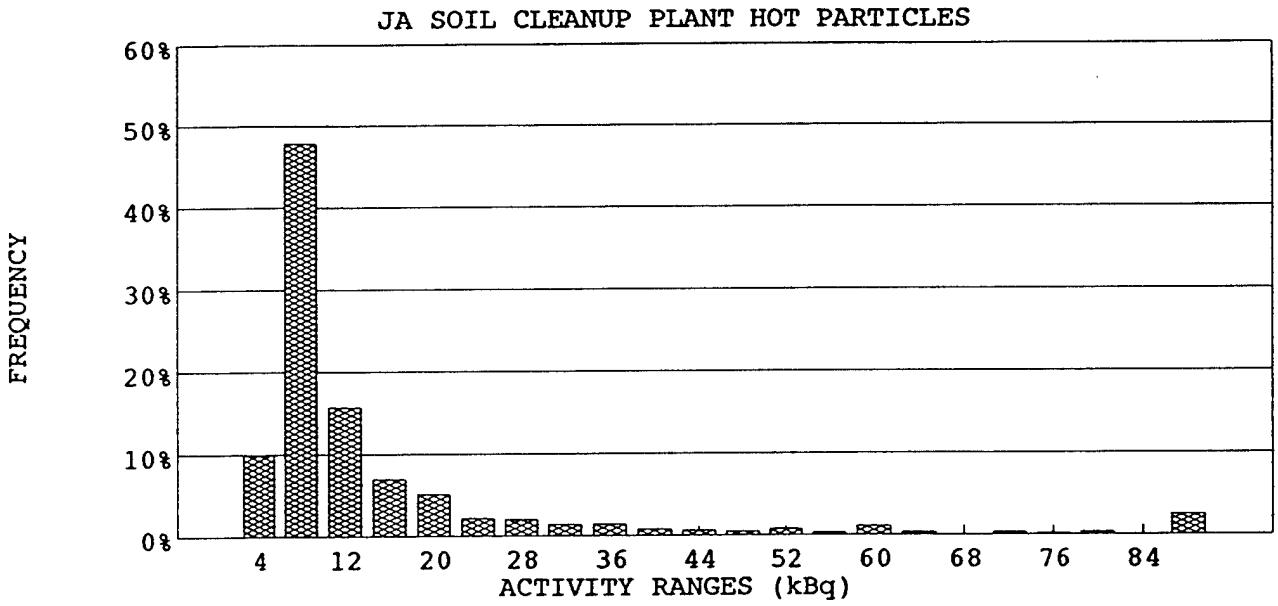
1-GATE SORTS DET	SORTS	FREQ%
1	3	0.9%
2	18	5.6%
3	34	10.7%
4	50	15.7%
5	56	17.6%
6	77	24.1%
7	65	20.4%
8	16	5.0%
TOTAL	319	

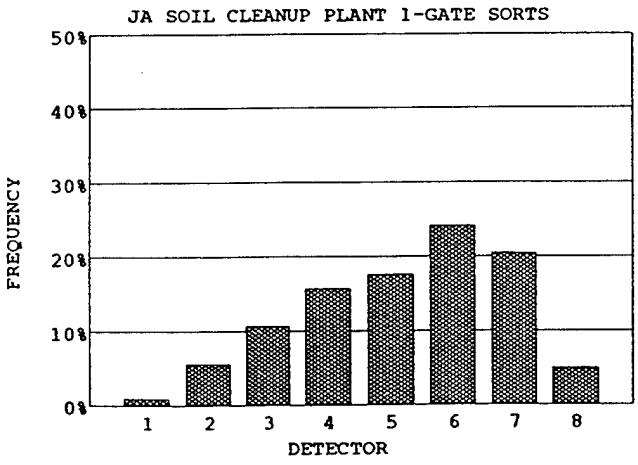
2-GATE SORTS DET	SORTS	FREQ%
9	7	2.1%
10	26	8.0%
11	29	8.9%
12	62	19.0%
13	65	19.9%
14	87	26.6%
15	51	15.6%
TOTAL	327	

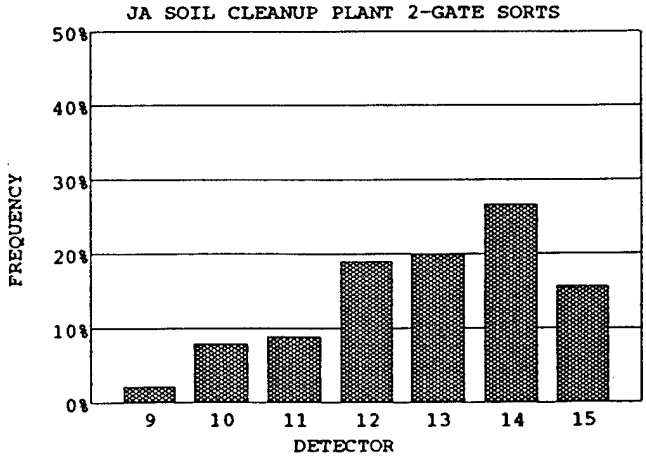
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	64	9.9%
-12000	0	-198	0.0%	8	309	47.8%
-10000	0	-165	0.0%	12	101	15.6%
-8000	0	-132	0.0%	16	45	7.0%
-6000	0	-99	0.0%	20	33	5.1%
-4000	0	-66	0.0%	24	14	2.2%
-2000	3	-33	0.2%	28	13	2.0%
0	8	0	0.6%	32	9	1.4%
2000	21	33	1.6%	36	9	1.4%
4000	41	66	3.0%	40	5	0.8%
6000	76	99	5.6%	44	4	0.6%
8000	173	132	12.8%	48	3	0.5%
10000	211	165	15.7%	52	5	0.8%
12000	259	198	19.2%	56	2	0.3%
14000	222	231	16.5%	60	7	1.1%
16000	166	264	12.3%	64	2	0.3%
18000	101	298	7.5%	68	0	0.0%
20000	37	331	2.7%	72	2	0.3%
22000	25	364	1.9%	76	1	0.2%
24000	4	397	0.3%	80	2	0.3%
26000	1	430	0.1%	84	0	0.0%
>28000	0	0	0.0%	>84	16	2.5%
TOTAL	1,348			TOTAL	646	

EVENT TYPES HPE 682 MPE 110 DISE 5


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

22-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.63 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	80.8 tons	81.5 tons
MAXIMUM/SORT	6.8 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
VOLUME IN-GROUND	0.6 yd³	64.0 yd³	64.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	15,381 kBq	3,704 kBq	15,471 kBq
MAXIMUM/SORT	582 kBq	285 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	1 kBq
SPECIFIC ACTIVITY		5,314 Bq/kg	191 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,347		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	943		08:46	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	404		08:59	
UNEXPLAINED RECORDS	0		11:44	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		13,470		
2-SEC RECORDS WITH SORTS	828			
2-SEC RECORDS WITHOUT SORTS	12,642			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,175		
NONPROCESSING RECORDS (Test, calibration, etc)		1		

2-SEC SORT DETECTORS

1 DET	623	75.24%	5 DET	2	0.24%
2 DET	171	20.65%	6 DET	0	0.00%
3 DET	28	3.38%	7 DET	0	0.00%
4 DET	4	0.48%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 43.2 sec

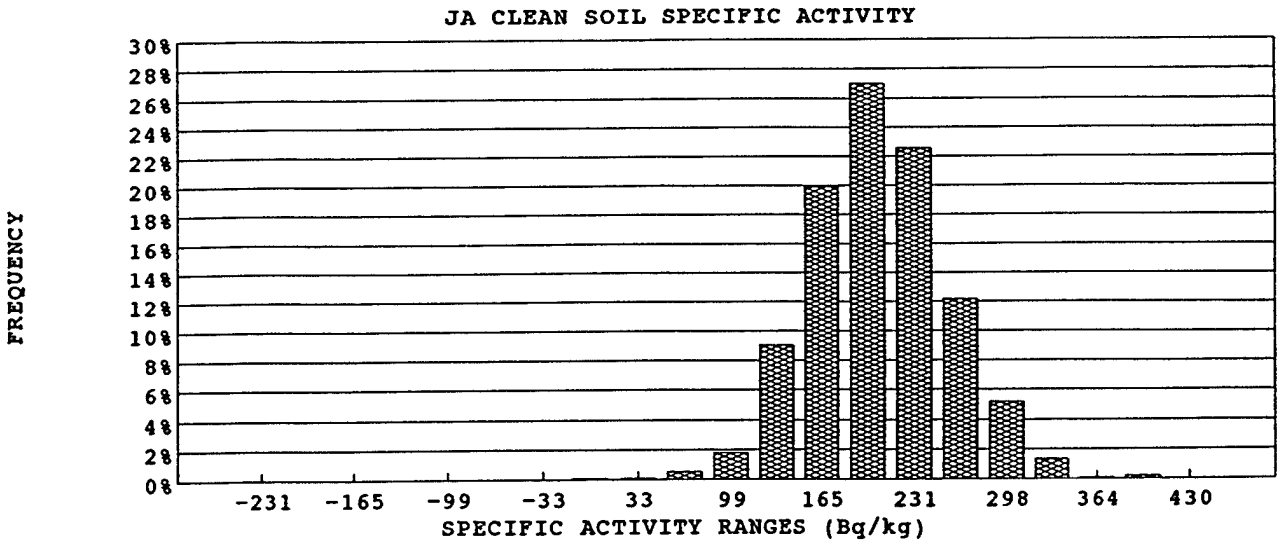
FREQUENCY DISTRIBUTIONS

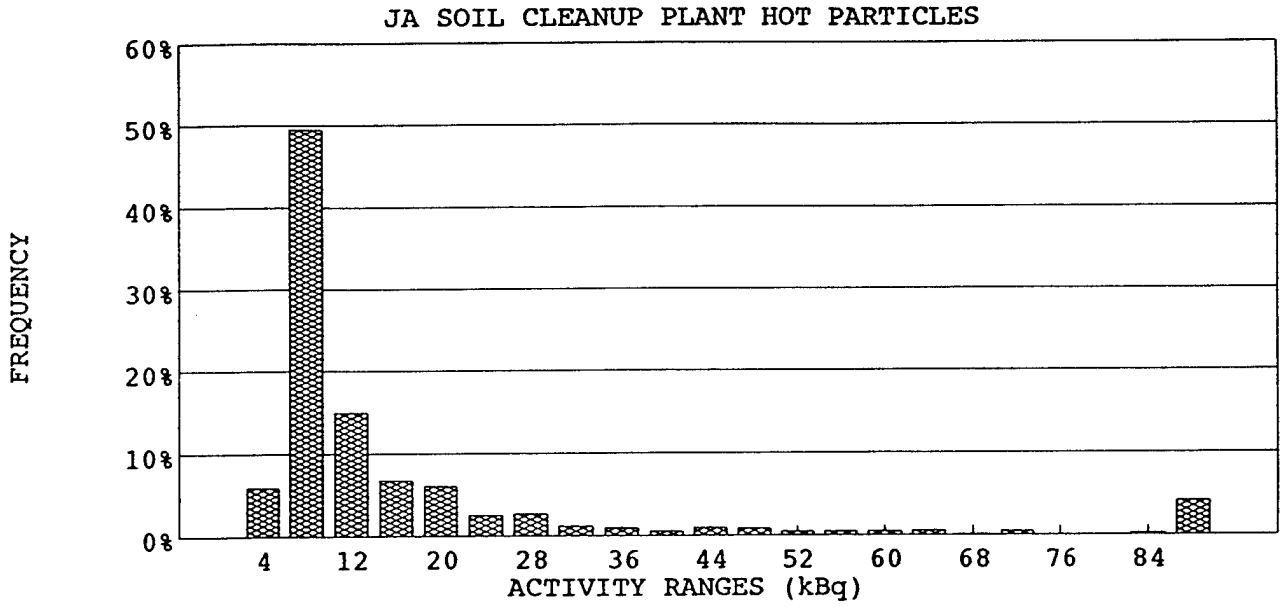
1-GATE DET	SORTS	FREQ%
1	25	5.7%
2	80	18.3%
3	108	24.8%
4	94	21.6%
5	57	13.1%
6	36	8.3%
7	27	6.2%
8	9	2.1%
TOTAL	436	

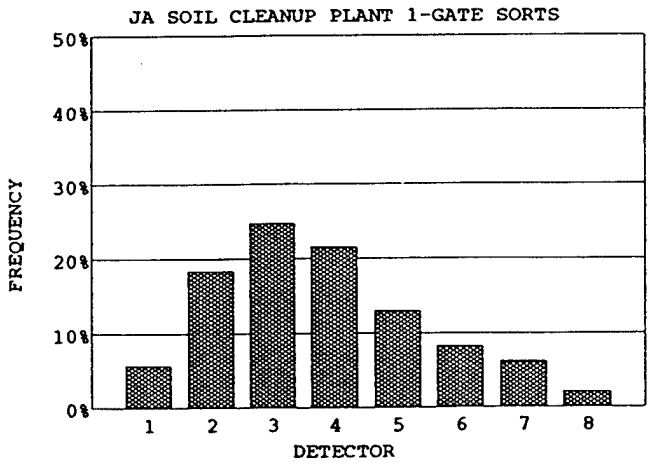
2-GATE DET	SORTS	FREQ%
9	58	14.8%
10	100	25.5%
11	86	21.9%
12	65	16.6%
13	42	10.7%
14	27	6.9%
15	14	3.6%
TOTAL	392	

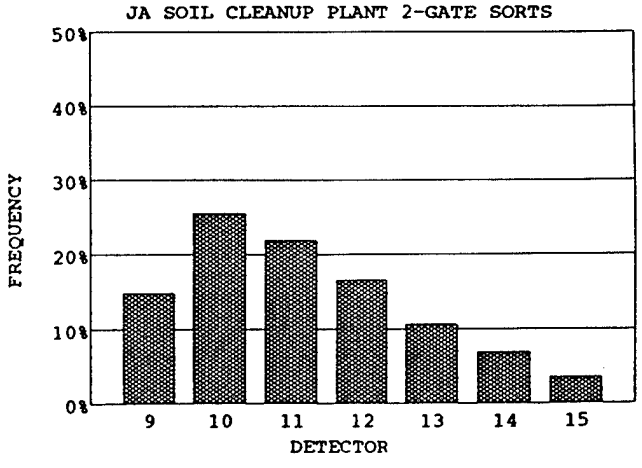
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	49	5.9%
-12000	0	-198	0.0%	8	410	49.5%
-10000	0	-165	0.0%	12	124	15.0%
-8000	0	-132	0.0%	16	56	6.8%
-6000	0	-99	0.0%	20	50	6.0%
-4000	0	-66	0.0%	24	21	2.5%
-2000	0	-33	0.0%	28	22	2.7%
0	1	0	0.1%	32	10	1.2%
2000	1	33	0.1%	36	8	1.0%
4000	7	66	0.5%	40	5	0.6%
6000	24	99	1.8%	44	8	1.0%
8000	122	132	9.1%	48	7	0.8%
10000	269	165	20.0%	52	4	0.5%
12000	364	198	27.0%	56	4	0.5%
14000	304	231	22.6%	60	4	0.5%
16000	164	264	12.2%	64	5	0.6%
18000	70	298	5.2%	68	1	0.1%
20000	18	331	1.3%	72	4	0.5%
22000	1	364	0.1%	76	0	0.0%
24000	3	397	0.2%	80	0	0.0%
26000	0	430	0.0%	84	2	0.2%
>28000	0	0	0.0%	>84	34	4.1%
TOTAL	1,348			TOTAL	828	

EVENT TYPES HPE 829 MPE 89 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	9.6 hr	9.6 hr	9.8 hr	9.8 hr	38.7 hr
SORTER START–UP	06:45	06:45	06:30	06:30	
START SOIL PROCESSING	06:59	06:59	06:47	06:47	
TIME REQUIRED TO START–UP	0.2 hr	0.2 hr	0.3 hr	0.3 hr	1.0 hr
SORTER SHUT–DOWN	16:20	16:20	16:15	16:15	
END SOIL PROCESSING	16:18	16:19	13:30	13:25	
TIME REQUIRED TO SHUT DOWN	0.0 hr	0.0 hr	2.7 hr	2.8 hr	5.6 hr
ACTUAL PROCESS HOURS	9.3 hr	9.3 hr	6.4 hr	6.6 hr	31.7 hr
DOWN–TIME	0.3 hr	0.2 hr	3.4 hr	3.1 hr	7.0 hr
SYSTEM PAUSE	0.0 hr	0.0 hr	0.4 hr	0.3 hr	0.7 hr
SORTER NONAVAILABLE TIME	0.9 hr	0.9 hr	0.7 hr	0.7 hr	3.3 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					81.9%
PRODUCTIVTY					75.4%

PRODUCTIVITY

Date	24–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	343	Excused delays for contract (sorter–hrs)	7,212 hr
Current Contract week	58	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	345 MT		
Cumlative Soil Production for Week	345 MT	Percent of contract completed	58.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,823 MT
Since 6 Sep 93	57,146 MT	Days ahead or behind schedule	5.8 days
Since 6 Aug 93	58,737 MT		
Total Soil production for project	85,024 MT		

MT = metric tons

File Report1 Printed on 26-Oct-94 at 11:06:13 AM

SORTER 1

24-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.38 ± 0.06 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	24.7 tons	76.9 tons	101.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.2 kg	
VOLUME IN-GROUND	19.6 yd³	60.9 yd³	80.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	75.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	86,639 kBq	30,095 kBq	21,931 kBq
MAXIMUM/SORT	10,647 kBq	5,635 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-3 kBq
SPECIFIC ACTIVITY		1,219 Bq/kg	285 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,678		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	379			
NONE (AD=0 & MD=0 & MND>0)	536		08:15	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	763		14:53	
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,780		
2-SEC RECORDS WITH SORTS	3,018			
2-SEC RECORDS WITHOUT SORTS	13,762			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,696		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

1 DET	2,145	71.07%	5 DET	8	0.27%
2 DET	683	22.63%	6 DET	0	0.00%
3 DET	154	5.10%	7 DET	0	0.00%
4 DET	28	0.93%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 15.6 sec

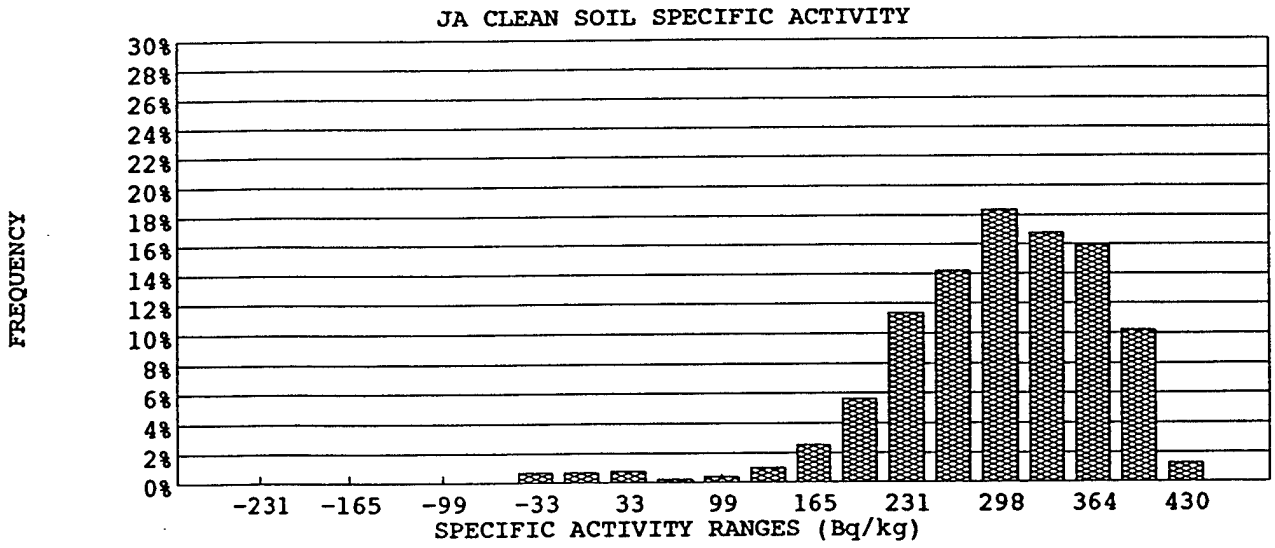
FREQUENCY DISTRIBUTIONS

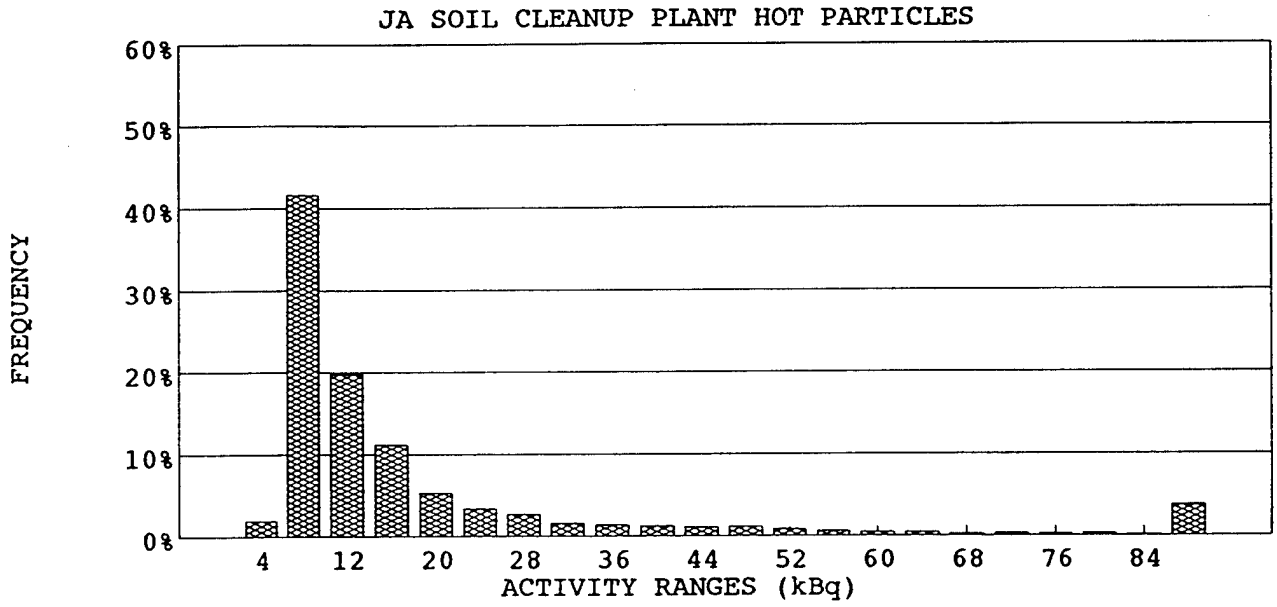
1-GATE DET	SORTS	FREQ%
1	59	3.9%
2	207	13.7%
3	263	17.5%
4	272	18.0%
5	303	20.1%
6	202	13.4%
7	160	10.6%
8	41	2.7%
TOTAL	1,507	

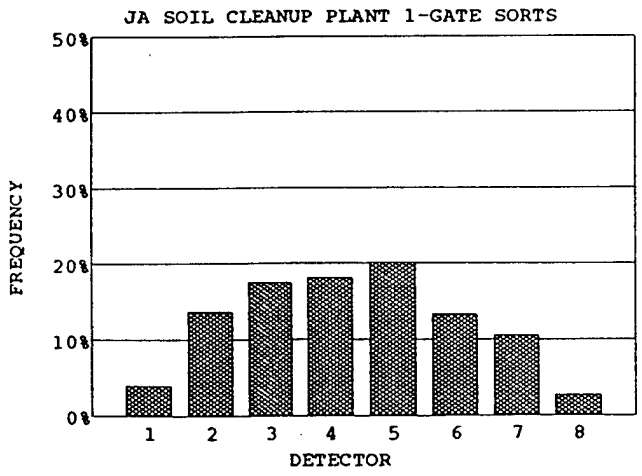
2-GATE DET	SORTS	FREQ%
9	142	9.4%
10	249	16.5%
11	257	17.0%
12	281	18.6%
13	303	20.1%
14	175	11.6%
15	104	6.9%
TOTAL	1,511	

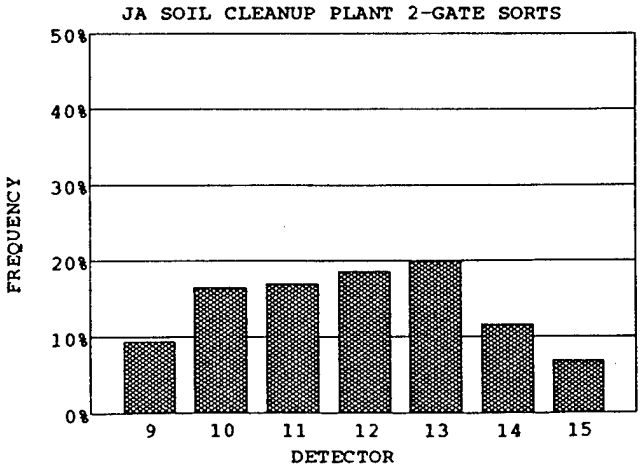
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	58	1.9%
-12000	0	-198	0.0%	8	1,256	41.6%
-10000	0	-165	0.0%	12	596	19.7%
-8000	0	-132	0.0%	16	337	11.2%
-6000	0	-99	0.0%	20	161	5.3%
-4000	0	-66	0.0%	24	102	3.4%
-2000	9	-33	0.7%	28	82	2.7%
0	9	0	0.7%	32	50	1.7%
2000	10	33	0.8%	36	42	1.4%
4000	3	66	0.2%	40	38	1.3%
6000	5	99	0.4%	44	34	1.1%
8000	13	132	1.0%	48	35	1.2%
10000	33	165	2.5%	52	25	0.8%
12000	73	198	5.6%	56	19	0.6%
14000	148	231	11.4%	60	15	0.5%
16000	185	264	14.2%	64	15	0.5%
18000	239	298	18.4%	68	7	0.2%
20000	218	331	16.8%	72	10	0.3%
22000	207	364	15.9%	76	8	0.3%
24000	133	397	10.2%	80	10	0.3%
26000	16	430	1.2%	84	3	0.1%
>28000	0	0	0.0%	>84	115	3.8%
TOTAL	1,301			TOTAL	3,018	

EVENT TYPES HPE 2,942 MPE 744 DISE 28,965


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.79 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	10.8 tons	90.7 tons	101.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	50.7 kg	
VOLUME IN-GROUND	8.6 yd³	71.9 yd³	80.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	89.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	91,854 kBq	27,091 kBq	21,500 kBq
MAXIMUM/SORT	4,248 kBq	1,999 kBq	26 kBq
MINIMUM/SORT	3 kBq	0 Bq	-12 kBq
SPECIFIC ACTIVITY		2,501 Bq/kg	237 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,681		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	143		07:15	None
NONE (AD=0 & MD=0 & MND>0)	572		11:28	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	966		11:29	
UNEXPLAINED RECORDS	0		12:10	
0<AD<1kBq & MD>0	4			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,810		
2-SEC RECORDS WITH SORTS	3,065			
2-SEC RECORDS WITHOUT SORTS	13,745			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,746		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

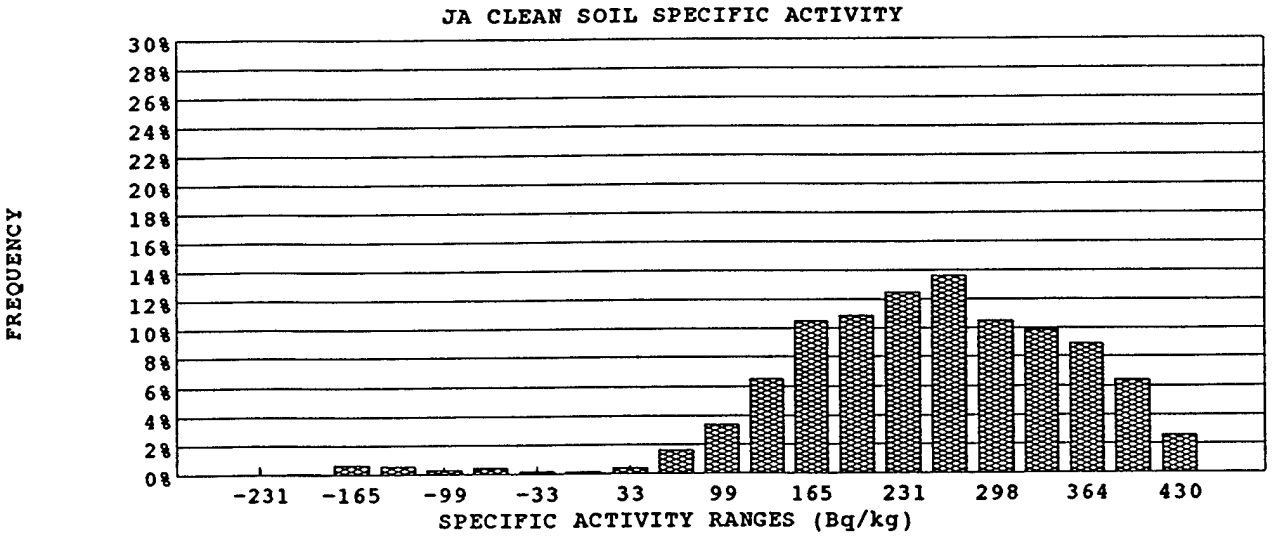
1 DET	2,159	70.44%	5 DET	19	0.62%
2 DET	710	23.16%	6 DET	0	0.00%
3 DET	143	4.67%	7 DET	1	0.03%
4 DET	34	1.11%	8 DET	0	0.00%

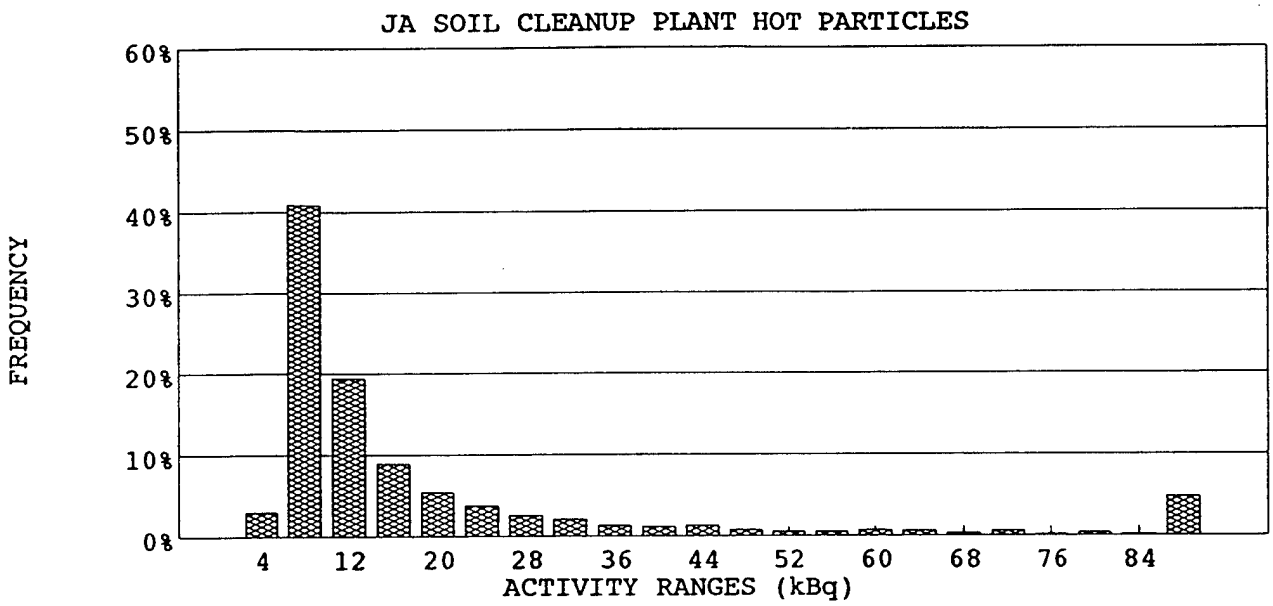
AVERAGE TIME BETWEEN 2-SEC SORTS 15.6 sec

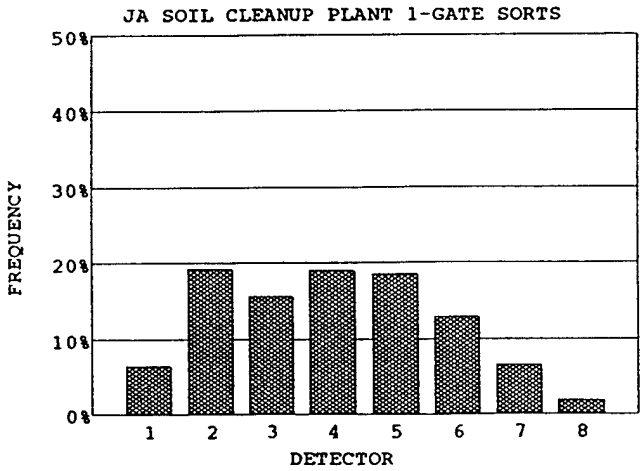
FREQUENCY DISTRIBUTIONS

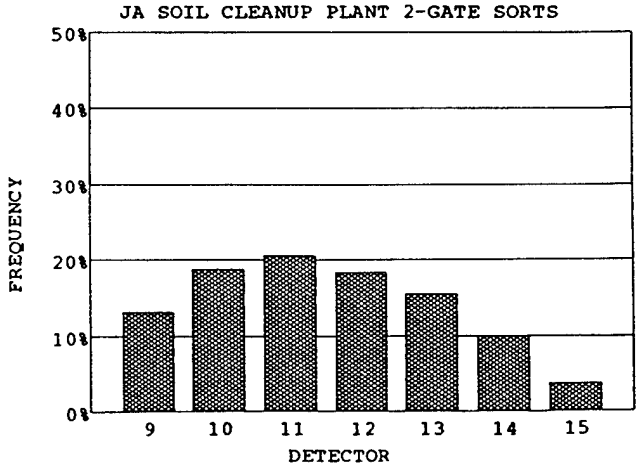
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	99	6.5%	-14000	0	-231	0.0%	4	94	3.1%
2	294	19.2%	-12000	1	-198	0.1%	8	1,252	40.8%
3	239	15.6%	-10000	10	-165	0.6%	12	595	19.4%
4	292	19.0%	-8000	9	-132	0.6%	16	273	8.9%
5	284	18.5%	-6000	5	-99	0.3%	20	166	5.4%
6	197	12.9%	-4000	7	-66	0.5%	24	117	3.8%
7	100	6.5%	-2000	3	-33	0.2%	28	80	2.6%
8	28	1.8%	0	2	0	0.1%	32	65	2.1%
TOTAL	1,533		2000	6	33	0.4%	36	42	1.4%
			4000	25	66	1.6%	40	37	1.2%
2-GATE SORTS			6000	52	99	3.4%	44	40	1.3%
DET	SORTS	FREQ%	8000	100	132	6.5%	48	24	0.8%
9	202	13.2%	10000	162	165	10.5%	52	18	0.6%
10	287	18.7%	12000	167	198	10.8%	56	18	0.6%
11	316	20.6%	14000	192	231	12.5%	60	22	0.7%
12	281	18.3%	16000	209	264	13.6%	64	20	0.7%
13	237	15.5%	18000	162	298	10.5%	68	11	0.4%
14	153	10.0%	20000	152	331	9.9%	72	19	0.6%
15	56	3.7%	22000	137	364	8.9%	76	6	0.2%
TOTAL	1,532		24000	99	397	6.4%	80	13	0.4%
			26000	40	430	2.6%	84	6	0.2%
			>28000	0	0	0.0%	>84	147	4.8%
			TOTAL	1,540			TOTAL	3,065	

EVENT TYPES HPE 3,004 MPE 809 DISE 10,743


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

24-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.15 ± 0.80 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.3 tons	65.0 tons	69.3 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.7 kg	
VOLUME IN-GROUND	3.4 yd³	51.5 yd³	55.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	93.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	15,627 kBq	7,479 kBq	11,034 kBq
MAXIMUM/SORT	3,374 kBq	3,221 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-26 kBq
SPECIFIC ACTIVITY		1,719 Bq/kg	170 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,146		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	64			
NONE (AD=0 & MD=0 & MND>0)	818		07:49	07:47
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	264		07:50	07:49
UNEXPLAINED RECORDS	0		10:08	07:49
0<AD<1kBq & MD>0	2		10:58	07:50
AD=0 & MD>0	2		12:42	10:40
AD<0 & MD >0	0			10:56
2-SEC COUNT PERIODS		11,460		
2-SEC RECORDS WITH SORTS	501			
2-SEC RECORDS WITHOUT SORTS	10,959			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,647		
NONPROCESSING RECORDS (Test, calibration, etc)		0		

2-SEC SORT DETECTORS

1 DET	375	74.85%	5 DET	5	1.00%
2 DET	101	20.16%	6 DET	0	0.00%
3 DET	17	3.39%	7 DET	1	0.20%
4 DET	3	0.60%	8 DET	1	0.20%

AVERAGE TIME BETWEEN 2-SEC SORTS 61.1 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

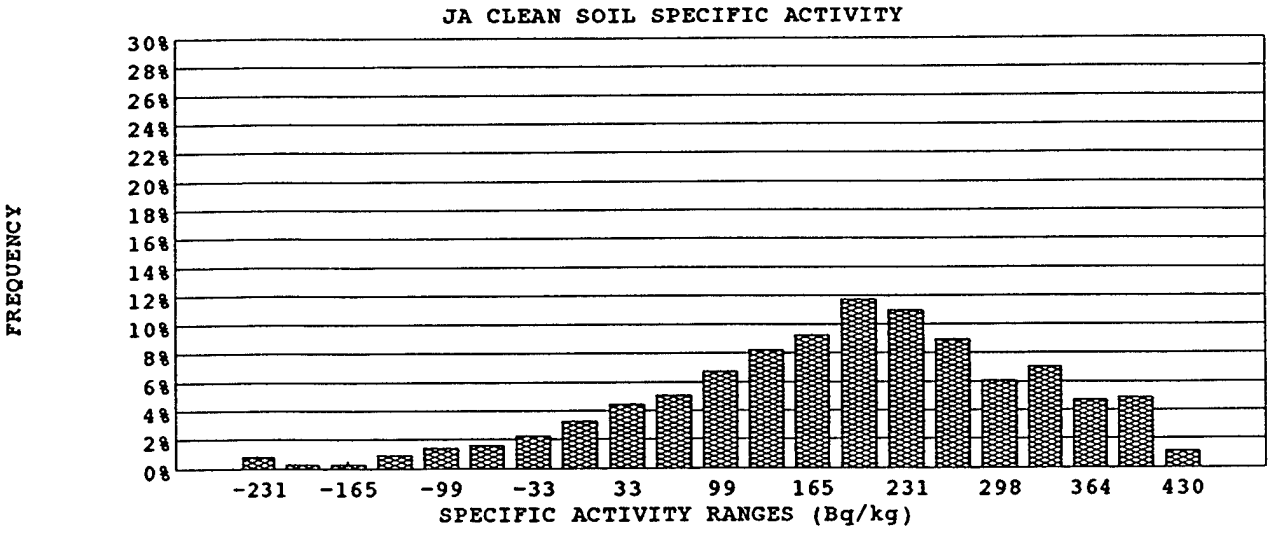
DET	SORTS	FREQ%
1	2	0.8%
2	13	5.1%
3	25	9.8%
4	39	15.4%
5	39	15.4%
6	73	28.7%
7	52	20.5%
8	11	4.3%
TOTAL	254	

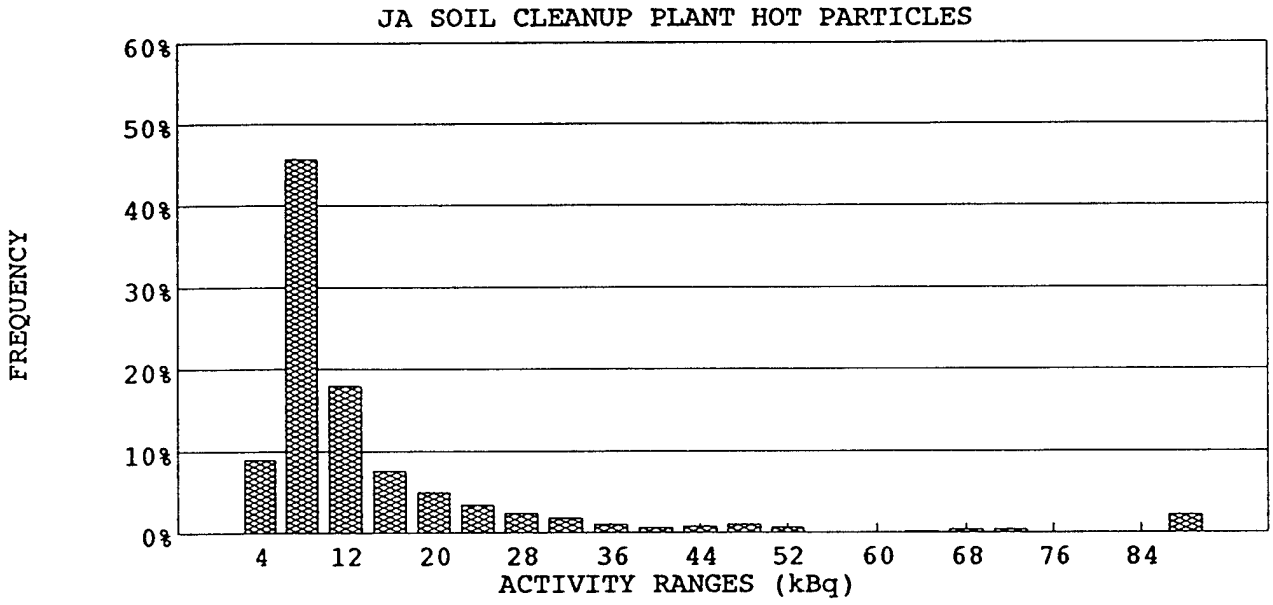
2-GATE SORTS

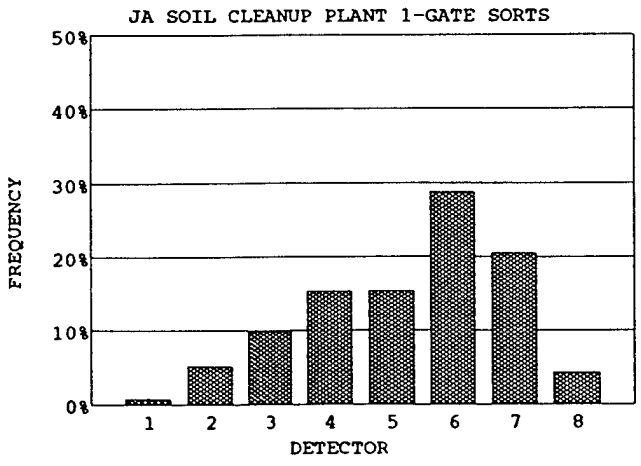
DET	SORTS	FREQ%
9	8	3.3%
10	23	9.3%
11	28	11.4%
12	35	14.2%
13	56	22.8%
14	58	23.6%
15	38	15.4%
TOTAL	246	

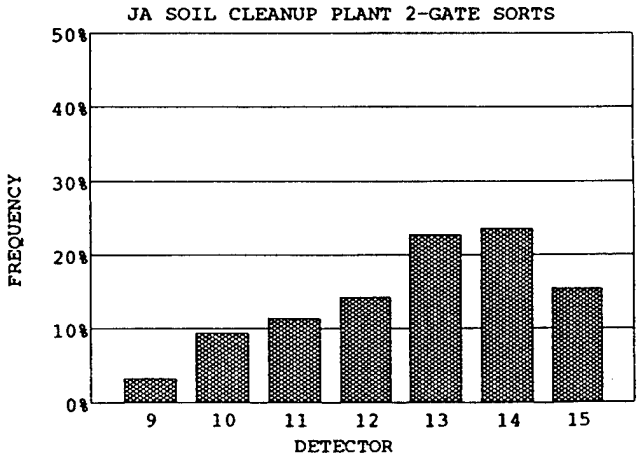
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	9	-231	0.8%	4	45	9.0%
-12000	3	-198	0.3%	8	229	45.7%
-10000	3	-165	0.3%	12	90	18.0%
-8000	10	-132	0.9%	16	38	7.6%
-6000	15	-99	1.4%	20	25	5.0%
-4000	17	-66	1.6%	24	17	3.4%
-2000	24	-33	2.2%	28	12	2.4%
0	35	0	3.2%	32	9	1.8%
2000	48	33	4.4%	36	5	1.0%
4000	55	66	5.1%	40	3	0.6%
6000	73	99	6.7%	44	4	0.8%
8000	89	132	8.2%	48	5	1.0%
10000	100	165	9.2%	52	3	0.6%
12000	127	198	11.7%	56	0	0.0%
14000	119	231	11.0%	60	0	0.0%
16000	97	264	9.0%	64	1	0.2%
18000	66	298	6.1%	68	2	0.4%
20000	76	331	7.0%	72	2	0.4%
22000	51	364	4.7%	76	0	0.0%
24000	53	397	4.9%	80	0	0.0%
26000	12	430	1.1%	84	0	0.0%
>28000	0	0	0.0%	>84	11	2.2%
TOTAL	1,082			TOTAL	501	

EVENT TYPES HPE 500 MPE 87 DISE 5,160


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

24-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.62 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	71.8 tons	72.3 tons
MAXIMUM/SORT	4.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.4 yd³	56.9 yd³	57.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	8,256 kBq	2,140 kBq	11,093 kBq
MAXIMUM/SORT	230 kBq	117 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		3,929 Bq/kg	155 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,195		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0			
NONE (AD=0 & MD=0 & MND>0)			865		07:04	13:26
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			330		09:06	
UNEXPLAINED RECORDS			0		09:22	
0<AD<1kBq & MD>0			4		12:01	
AD=0 & MD>0			0			
AD<0 & MD >0			0			
2-SEC COUNT PERIODS				11,950		
2-SEC RECORDS WITH SORTS			616			
2-SEC RECORDS WITHOUT SORTS			11,334			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,811		
NONPROCESSING RECORDS (Test, calibration, etc)				5		

2-SEC SORT DETECTORS

1 DET	471	76.46%	5 DET	0	0.00%
2 DET	125	20.29%	6 DET	0	0.00%
3 DET	18	2.92%	7 DET	0	0.00%
4 DET	2	0.32%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 50.7 sec

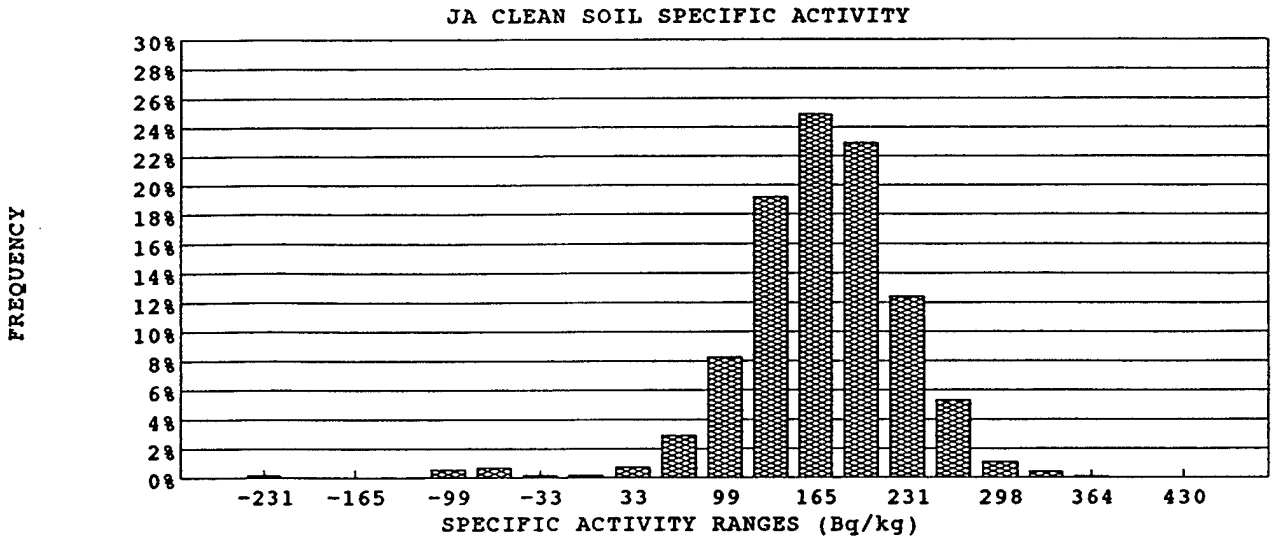
FREQUENCY DISTRIBUTIONS

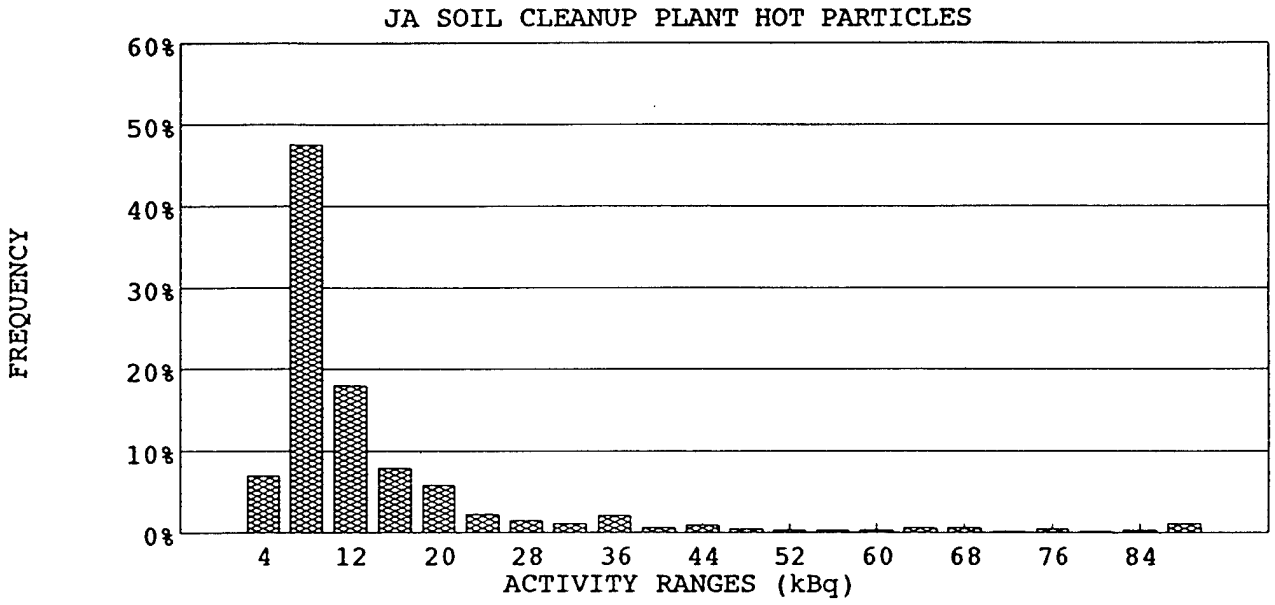
1-GATE DET	SORTS	FREQ%
1	12	3.8%
2	52	16.5%
3	87	27.6%
4	75	23.8%
5	39	12.4%
6	30	9.5%
7	15	4.8%
8	5	1.6%
TOTAL	315	

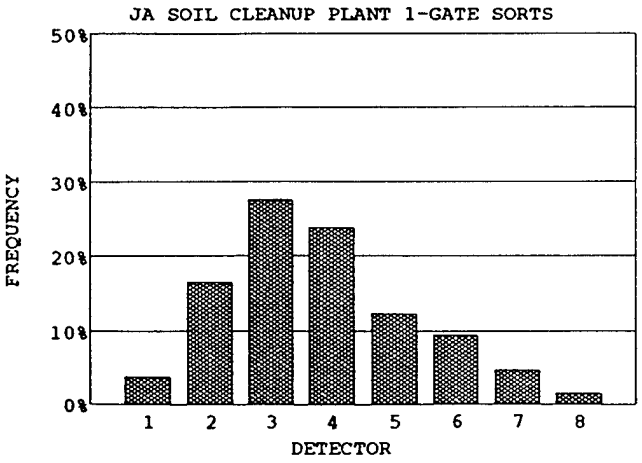
2-GATE DET	SORTS	FREQ%
9	33	11.0%
10	79	26.2%
11	69	22.9%
12	52	17.3%
13	36	12.0%
14	23	7.6%
15	9	3.0%
TOTAL	301	

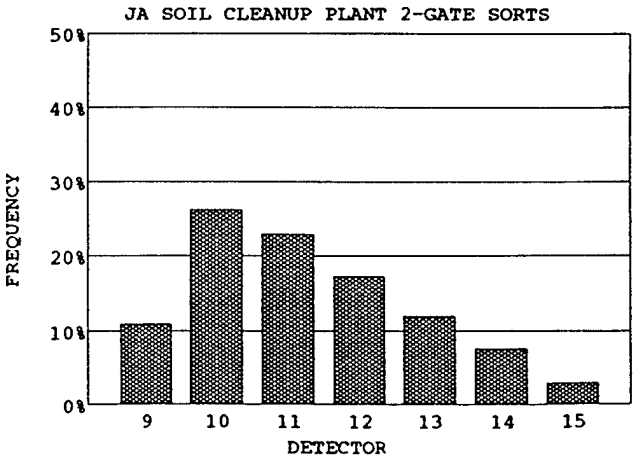
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	2	-231	0.2%	4	43	7.0%
-12000	0	-198	0.0%	8	293	47.6%
-10000	0	-165	0.0%	12	111	18.0%
-8000	0	-132	0.0%	16	49	8.0%
-6000	7	-99	0.6%	20	36	5.8%
-4000	8	-66	0.7%	24	14	2.3%
-2000	2	-33	0.2%	28	9	1.5%
0	2	0	0.2%	32	7	1.1%
2000	9	33	0.8%	36	13	2.1%
4000	35	66	2.9%	40	4	0.6%
6000	99	99	8.3%	44	6	1.0%
8000	230	132	19.2%	48	3	0.5%
10000	299	165	24.9%	52	2	0.3%
12000	275	198	22.9%	56	2	0.3%
14000	149	231	12.4%	60	2	0.3%
16000	64	264	5.3%	64	4	0.6%
18000	13	298	1.1%	68	4	0.6%
20000	5	331	0.4%	72	1	0.2%
22000	1	364	0.1%	76	3	0.5%
24000	0	397	0.0%	80	1	0.2%
26000	0	430	0.0%	84	2	0.3%
>28000	0	0	0.0%	>84	7	1.1%
TOTAL	1,200			TOTAL	616	

EVENT TYPES						
	HPE	632	MPE	85	DISE	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	9.7 hr	9.7 hr	9.5 hr	9.5 hr	38.3 hr
SORTER START–UP	06:35	06:35	06:40	06:40	
START SOIL PROCESSING	06:43	06:43	06:47	06:47	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.1 hr	0.1 hr	0.5 hr
SORTER SHUT–DOWN	16:15	16:15	16:10	16:10	
END SOIL PROCESSING	16:09	16:12	16:01	16:01	
TIME REQUIRED TO SHUT DOWN	0.1 hr	0.0 hr	0.1 hr	0.1 hr	0.4 hr
ACTUAL PROCESS HOURS	9.3 hr	9.4 hr	8.9 hr	9.0 hr	36.6 hr
DOWN–TIME	0.4 hr	0.3 hr	0.6 hr	0.5 hr	1.7 hr
SYSTEM PAUSE	0.1 hr	0.1 hr	0.3 hr	0.2 hr	0.6 hr
SORTER NONAVAILABLE TIME	0.8 hr	0.8 hr	1.0 hr	1.0 hr	3.7 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					95.6%
PRODUCTIVTY					87.2%

PRODUCTIVITY

Date	25–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	344	Excused delays for contract (sorter–hrs)	7,212 hr
Current Contract week	58	Excused delay days (plant–days)	180 days
		Excused delay months (plant–month)	6.93 months
Soil production for Day	399 MT		
Cumlative Soil Production for Week	744 MT	Percent of contract completed	59.1%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,905 MT
Since 6 Sep 93	57,545 MT	Days ahead or behind schedule	6.0 days
Since 6 Aug 93	59,136 MT		
Total Soil production for project	85,423 MT		

MT = metric tons

File Report1 Printed on 02-Nov-94 at 06:30:16 AM

SORTER 1

25-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.32 ± 0.06 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	19.8 tons	81.6 tons	101.4 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
VOLUME IN-GROUND	15.7 yd³	64.7 yd³	80.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	80.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	64,116 kBq	23,090 kBq	21,865 kBq
MAXIMUM/SORT	2,316 kBq	809 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		1,165 Bq/kg	268 Bq/kg

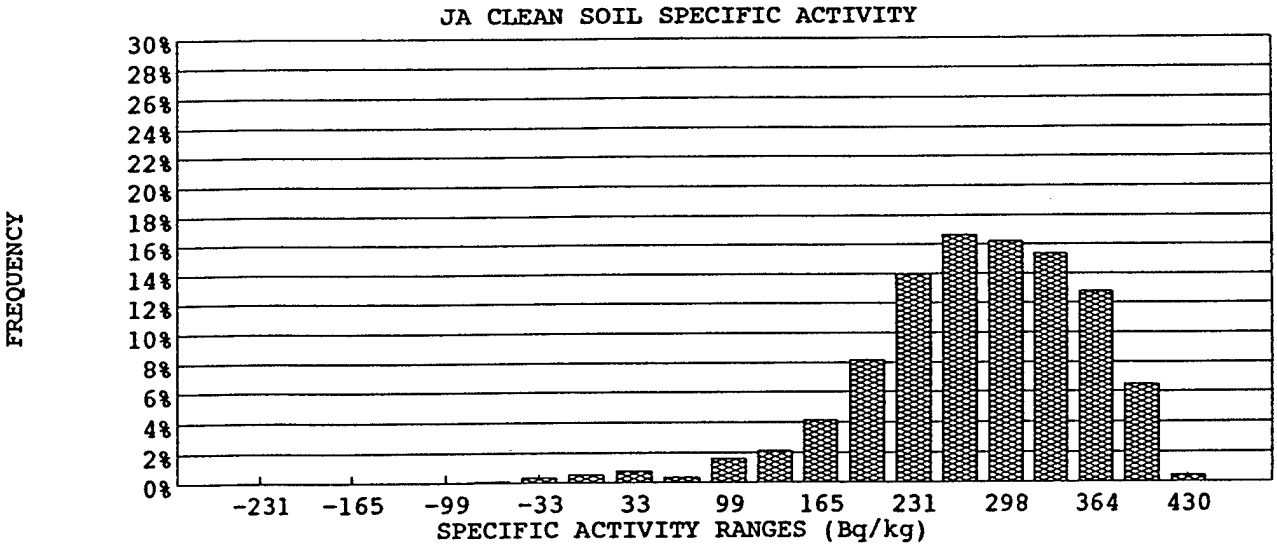
SORTS

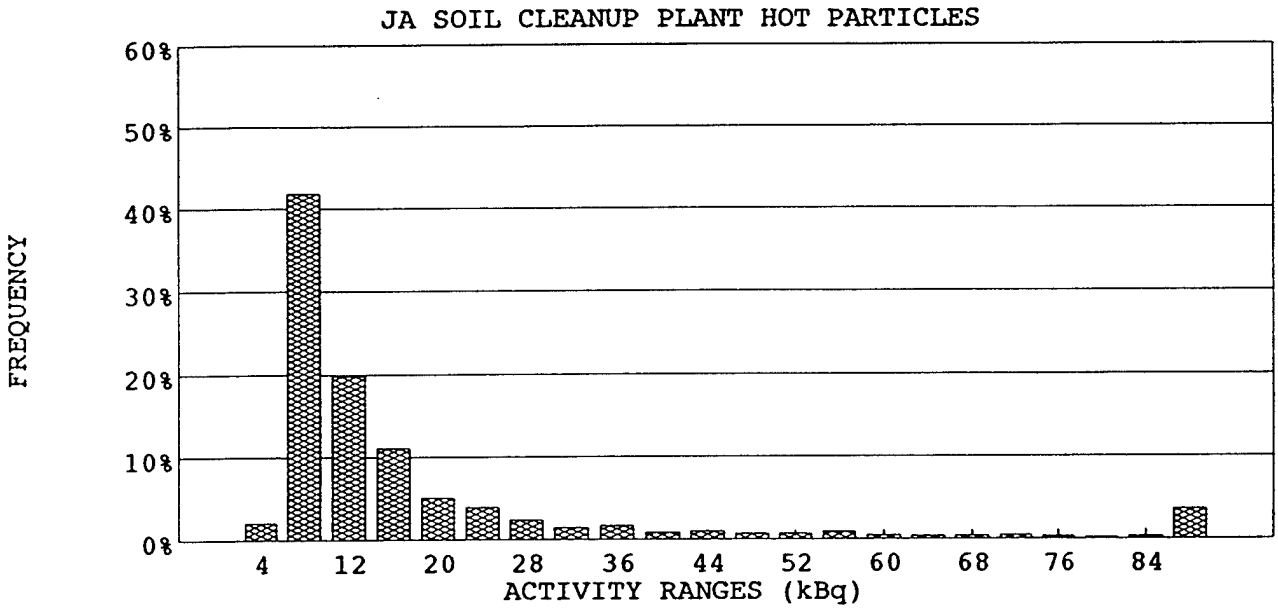
						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS					1,675		
ALL 80 ELEMENTS SORT (MD>0&MND=0)				298			
NONE (AD=0 & MD=0 & MND>0)				597		11:30	13:32
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)				780		13:50	
UNEXPLAINED RECORDS				0		15:13	
0<AD<1kBq & MD>0				3			
AD=0 & MD>0				0			
AD<0 & MD >0				0			
2-SEC COUNT PERIODS					16,750		
2-SEC RECORDS WITH SORTS				2,923			
2-SEC RECORDS WITHOUT SORTS				13,827			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					4,598		
NONPROCESSING RECORDS (Test, calibration, etc)					9		
2-SEC SORT DETECTORS							
1 DET	2,065	70.65%	5 DET		6	0.21%	
2 DET	686	23.47%	6 DET		0	0.00%	
3 DET	140	4.79%	7 DET		0	0.00%	
4 DET	26	0.89%	8 DET		0	0.00%	
AVERAGE TIME BETWEEN 2-SEC SORTS				16.2 sec			

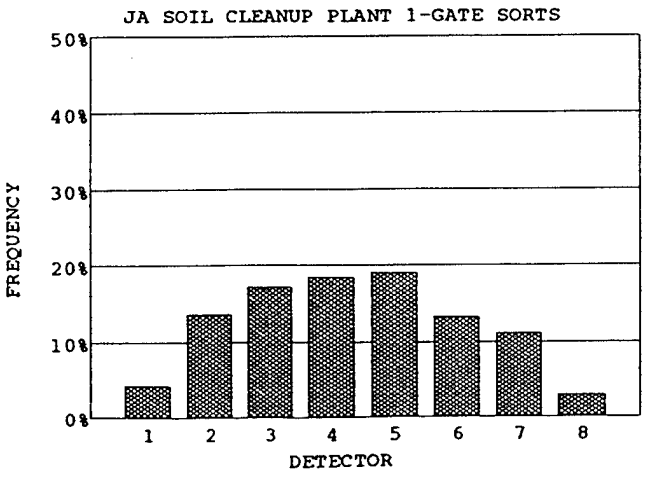
FREQUENCY DISTRIBUTIONS

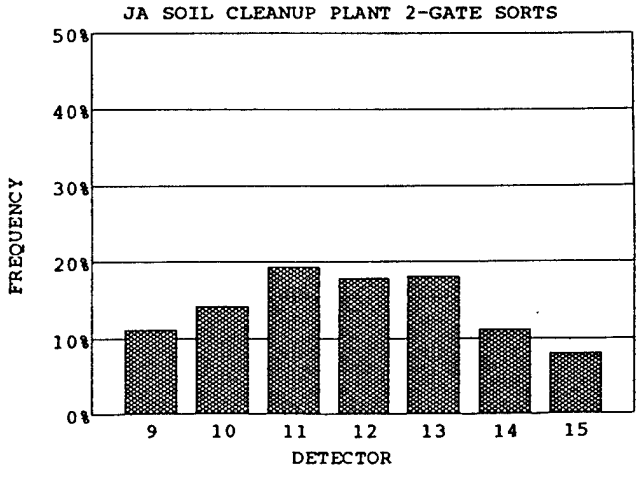
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	64	4.3%	-14000	0	-231	0.0%	4	62	2.1%
2	206	13.7%	-12000	0	-198	0.0%	8	1,223	41.8%
3	257	17.1%	-10000	0	-165	0.0%	12	579	19.8%
4	276	18.4%	-8000	0	-132	0.0%	16	324	11.1%
5	285	19.0%	-6000	0	-99	0.0%	20	148	5.1%
6	201	13.4%	-4000	1	-66	0.1%	24	114	3.9%
7	168	11.2%	-2000	5	-33	0.4%	28	71	2.4%
8	44	2.9%	0	7	0	0.5%	32	44	1.5%
TOTAL	1,501		2000	11	33	0.8%	36	51	1.7%
			4000	5	66	0.4%	40	26	0.9%
2-GATE DET	SORTS	FREQ%	6000	22	99	1.6%	44	29	1.0%
9	159	11.2%	8000	29	132	2.1%	48	20	0.7%
10	203	14.3%	10000	57	165	4.1%	52	20	0.7%
11	275	19.3%	12000	113	198	8.2%	56	27	0.9%
12	254	17.9%	14000	194	231	14.0%	60	15	0.5%
13	257	18.1%	16000	231	264	16.7%	64	12	0.4%
14	159	11.2%	18000	225	298	16.2%	68	11	0.4%
15	115	8.1%	20000	213	331	15.4%	72	15	0.5%
TOTAL	1,422		22000	177	364	12.8%	76	9	0.3%
			24000	90	397	6.5%	80	6	0.2%
			26000	6	430	0.4%	84	10	0.3%
			>28000	0	0	0.0%	>84	107	3.7%
			TOTAL	1,386			TOTAL	2,923	

EVENT TYPES HPE 2,824 MPE 686 DISE 22,686


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.76 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	9.0 tons	93.3 tons	102.3 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	49.2 kg	
VOLUME IN-GROUND	7.1 yd³	74.0 yd³	81.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	91.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	79,087 kBq	23,039 kBq	18,324 kBq
MAXIMUM/SORT	3,721 kBq	1,562 kBq	26 kBq
MINIMUM/SORT	2 kBq	0 Bq	-13 kBq
SPECIFIC ACTIVITY		2,573 Bq/kg	196 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,692			
ALL 80 ELEMENTS SORT (MD>0&MND=0)		113			08:20	13:32
NONE (AD=0 & MD=0 & MND>0)		626			10:05	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		953			12:16	
UNEXPLAINED RECORDS	0				12:42	
0<AD<1kBq & MD>0	4					
AD=0 & MD>0	0					
AD<0 & MD >0	0					
2-SEC COUNT PERIODS			16,920			
2-SEC RECORDS WITH SORTS		2,809				
2-SEC RECORDS WITHOUT SORTS		14,111				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			4,501			
NONPROCESSING RECORDS (Test, calibration, etc)			2			

2-SEC SORT DETECTORS

1 DET	1,964	69.92%	5 DET	12	0.43%
2 DET	672	23.92%	6 DET	0	0.00%
3 DET	131	4.66%	7 DET	2	0.07%
4 DET	30	1.07%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 17.2 sec

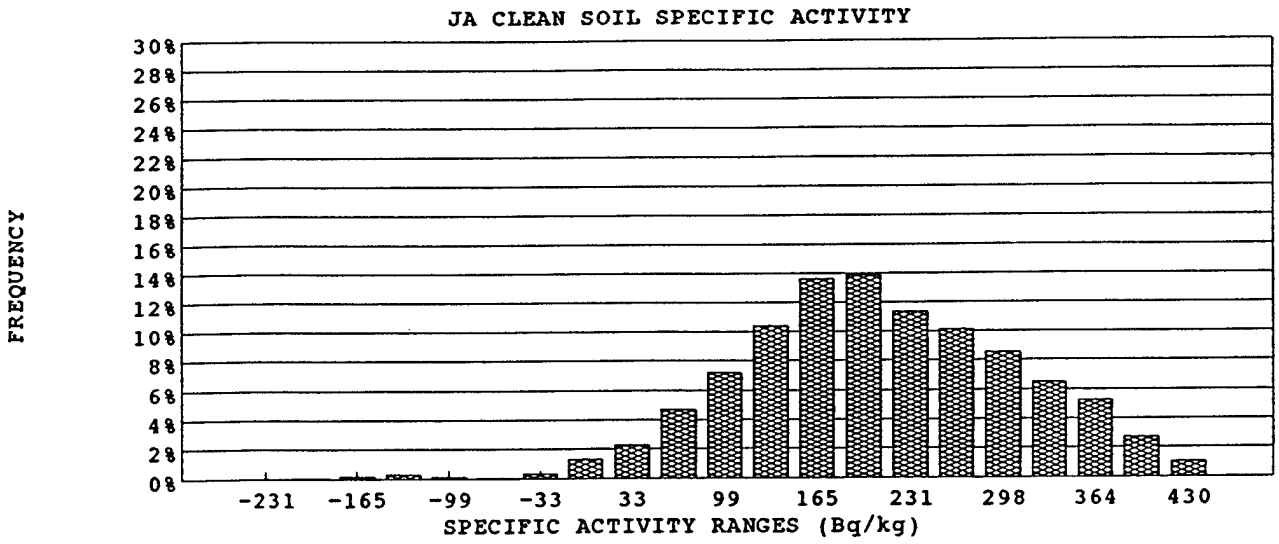
FREQUENCY DISTRIBUTIONS

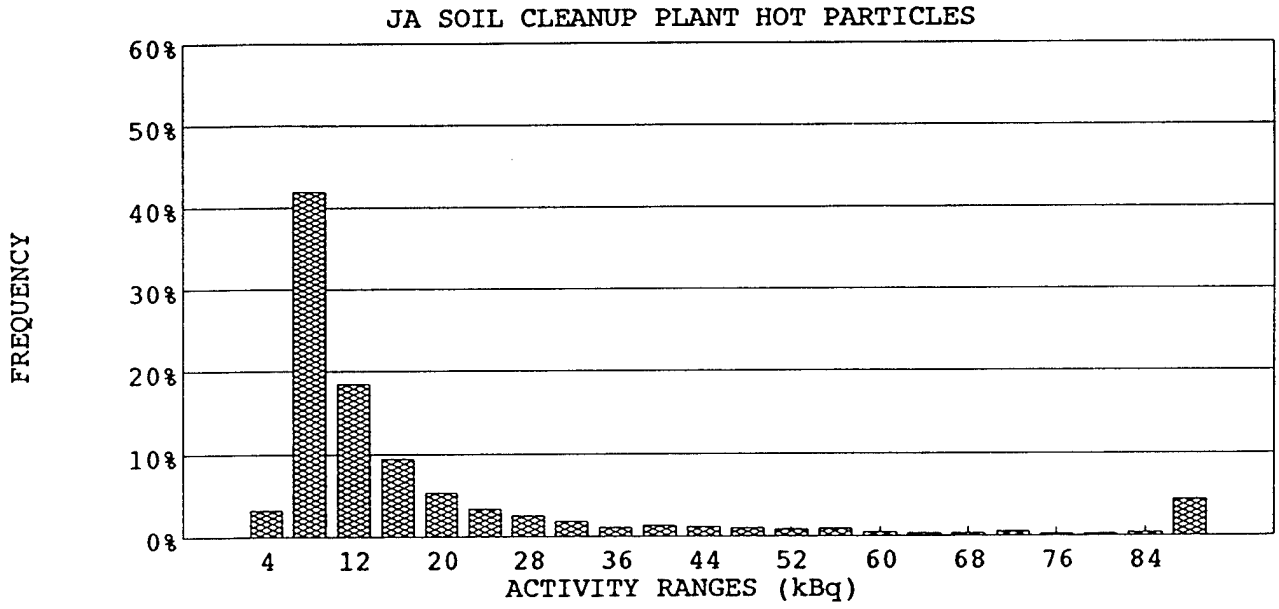
1-GATE SORTS DET	SORTS	FREQ%
1	98	7.0%
2	280	19.9%
3	208	14.8%
4	293	20.8%
5	245	17.4%
6	165	11.7%
7	94	6.7%
8	24	1.7%
TOTAL	1,407	

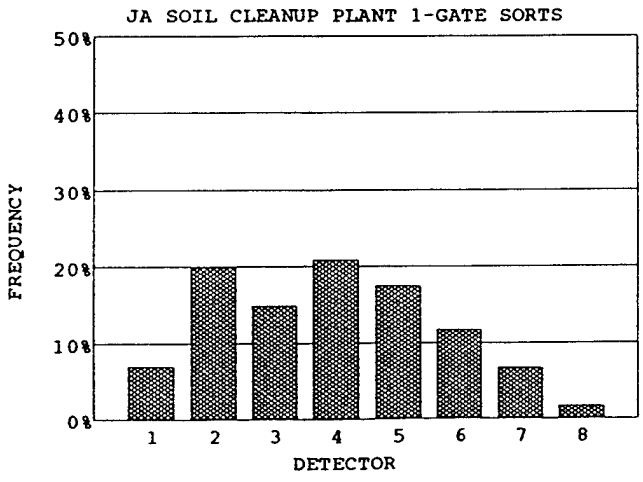
2-GATE SORTS DET	SORTS	FREQ%
9	183	13.1%
10	289	20.6%
11	313	22.3%
12	246	17.5%
13	187	13.3%
14	138	9.8%
15	46	3.3%
TOTAL	1,402	

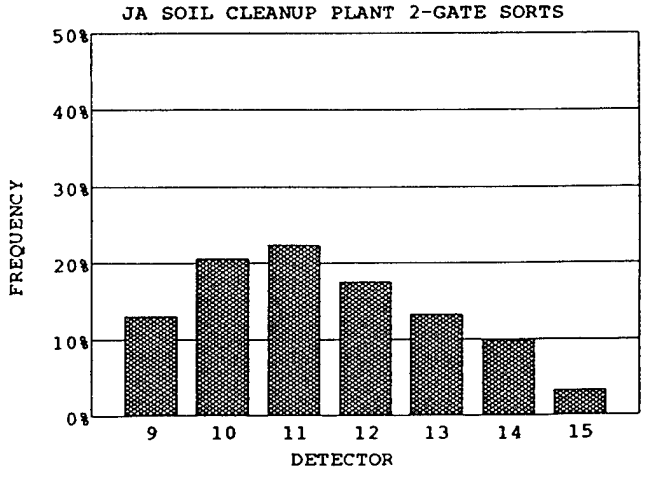
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	93	3.3%
-12000	1	-198	0.1%	8	1,178	41.9%
-10000	3	-165	0.2%	12	519	18.5%
-8000	5	-132	0.3%	16	266	9.5%
-6000	2	-99	0.1%	20	151	5.4%
-4000	1	-66	0.1%	24	96	3.4%
-2000	6	-33	0.4%	28	72	2.6%
0	21	0	1.3%	32	53	1.9%
2000	36	33	2.3%	36	31	1.1%
4000	74	66	4.7%	40	38	1.4%
6000	114	99	7.2%	44	34	1.2%
8000	164	132	10.4%	48	30	1.1%
10000	215	165	13.6%	52	24	0.9%
12000	219	198	13.9%	56	26	0.9%
14000	179	231	11.3%	60	13	0.5%
16000	160	264	10.1%	64	9	0.3%
18000	135	298	8.5%	68	10	0.4%
20000	103	331	6.5%	72	16	0.6%
22000	83	364	5.2%	76	7	0.2%
24000	43	397	2.7%	80	7	0.2%
26000	17	430	1.1%	84	11	0.4%
>28000	0	0	0.0%	>84	125	4.4%
TOTAL	1,581			TOTAL	2,809	

EVENT TYPES HPE 2,776 MPE 729 DISE 8,519


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

25-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.05 ± 0.27 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	4.1 tons	93.2 tons	97.3 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
VOLUME IN-GROUND	3.3 yd³	73.9 yd³	77.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	95.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	11,935 kBq	4,768 kBq	17,528 kBq
MAXIMUM/SORT	629 kBq	281 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		1,158 Bq/kg	188 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,608		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	57			
NONE (AD=0 & MD=0 & MND>0)	1,146		07:31	08:35
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	405		09:05	12:11
UNEXPLAINED RECORDS	0		09:07	14:57
0<AD<1kBq & MD>0	12		09:23	
AD=0 & MD>0	0		09:24	
AD<0 & MD >0	0		09:30	
2-SEC COUNT PERIODS		16,080	09:42	
2-SEC RECORDS WITH SORTS	715		10:40	
2-SEC RECORDS WITHOUT SORTS	15,365		10:49	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,323	10:59	
NONPROCESSING RECORDS (Test, calibration, etc)		14	11:41	
			11:47	

2-SEC SORT DETECTORS

1 DET	564	78.88%	5 DET	2	0.28%
2 DET	123	17.20%	6 DET	0	0.00%
3 DET	21	2.94%	7 DET	0	0.00%
4 DET	5	0.70%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 57.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

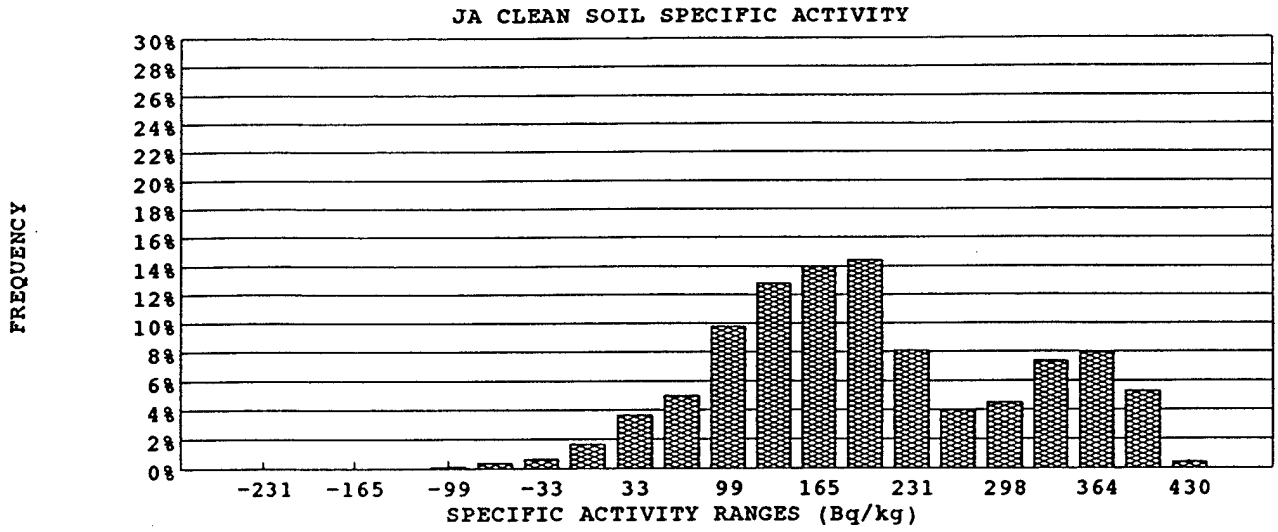
DET	SORTS	FREQ%
1	8	2.4%
2	23	6.9%
3	36	10.8%
4	12	3.6%
5	68	20.4%
6	88	26.4%
7	82	24.6%
8	16	4.8%
TOTAL	333	

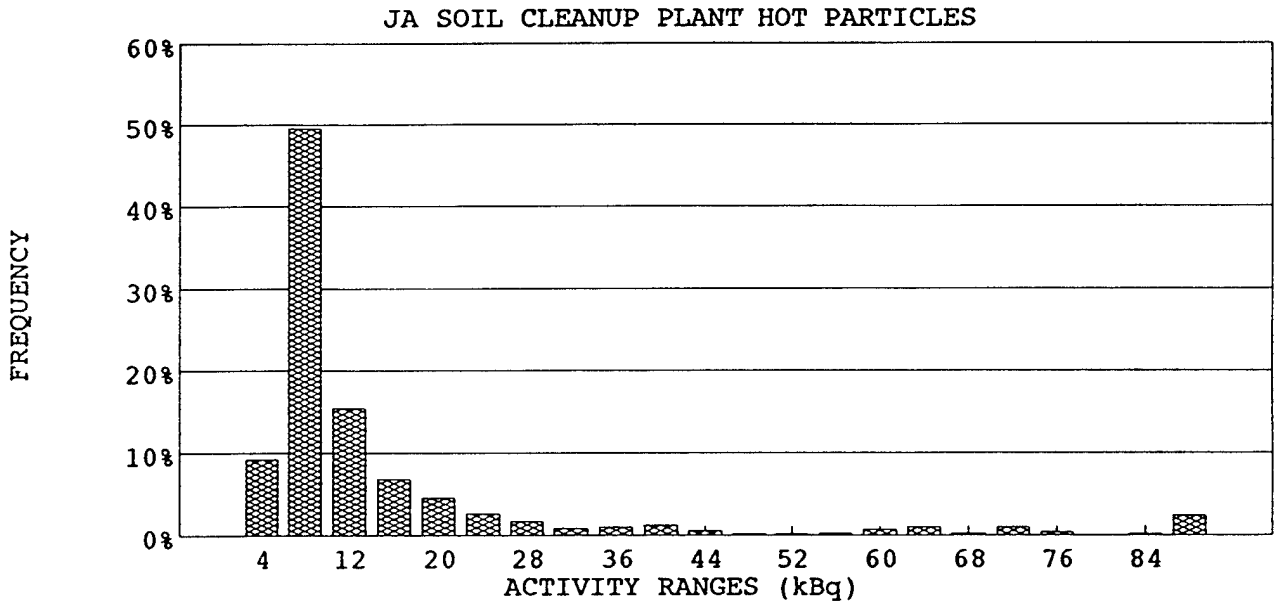
2-GATE SORTS

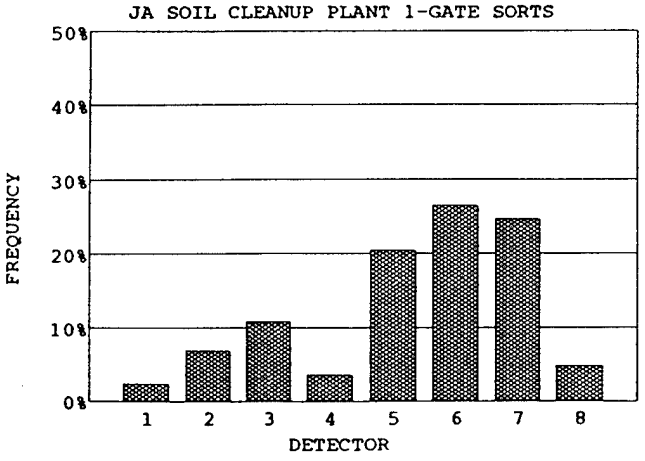
DET	SORTS	FREQ%
9	13	3.4%
10	21	5.5%
11	45	11.8%
12	67	17.5%
13	81	21.2%
14	107	28.0%
15	48	12.6%
TOTAL	382	

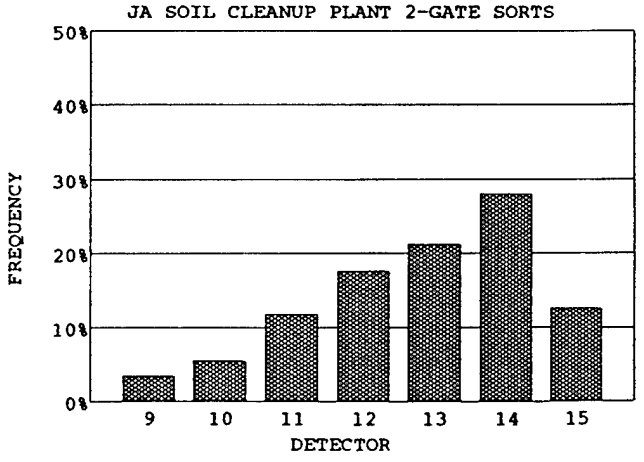
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	66	9.2%
-12000	0	-198	0.0%	8	354	49.5%
-10000	0	-165	0.0%	12	110	15.4%
-8000	0	-132	0.0%	16	49	6.9%
-6000	2	-99	0.1%	20	33	4.6%
-4000	6	-66	0.4%	24	19	2.7%
-2000	10	-33	0.6%	28	12	1.7%
0	26	0	1.7%	32	6	0.8%
2000	57	33	3.6%	36	7	1.0%
4000	78	66	5.0%	40	9	1.3%
6000	153	99	9.8%	44	4	0.6%
8000	200	132	12.8%	48	1	0.1%
10000	219	165	14.0%	52	1	0.1%
12000	226	198	14.4%	56	2	0.3%
14000	127	231	8.1%	60	5	0.7%
16000	62	264	4.0%	64	7	1.0%
18000	70	298	4.5%	68	2	0.3%
20000	115	331	7.3%	72	7	1.0%
22000	124	364	7.9%	76	3	0.4%
24000	83	397	5.3%	80	0	0.0%
26000	7	430	0.4%	84	1	0.1%
>28000	0	0	0.0%	>84	17	2.4%
TOTAL	1,565			TOTAL	715	

EVENT TYPES HPE 782 MPE 142 DISE 4,515


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

25-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.64 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.0 tons	97.1 tons	98.1 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	49.9 kg	
VOLUME IN-GROUND	0.8 yd³	77.0 yd³	77.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.0%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	44,607 kBq	11,570 kBq	14,646 kBq
MAXIMUM/SORT	12,679 kBq	7,854 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	-11 kBq
SPECIFIC ACTIVITY		12,091 Bq/kg	151 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,621		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	2			
NONE (AD=0 & MD=0 & MND>0)	1,133		08:15	12:20
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	486		09:19	13:46
UNEXPLAINED RECORDS	0		11:29	14:16
0<AD<1kBq & MD>0	8		12:30	
AD=0 & MD>0	0		12:55	
AD<0 & MD >0	0		15:15	
2-SEC COUNT PERIODS		16,210	15:25	
2-SEC RECORDS WITH SORTS	995		15:32	
2-SEC RECORDS WITHOUT SORTS	15,215			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,616		
NONPROCESSING RECORDS (Test, calibration, etc)		16		

2-SEC SORT DETECTORS

1 DET	738	74.17%	5 DET	4	0.40%
2 DET	221	22.21%	6 DET	0	0.00%
3 DET	27	2.71%	7 DET	0	0.00%
4 DET	5	0.50%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 43.9 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

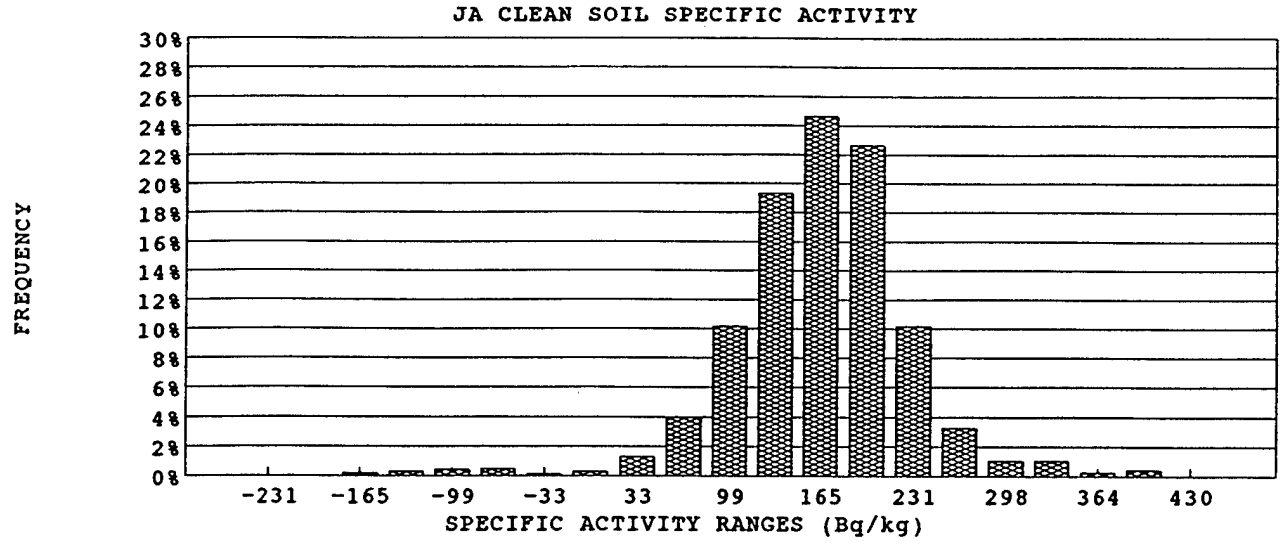
DET	SORTS	FREQ%
1	20	3.9%
2	99	19.1%
3	126	24.4%
4	84	16.2%
5	76	14.7%
6	68	13.2%
7	37	7.2%
8	7	1.4%
TOTAL	517	

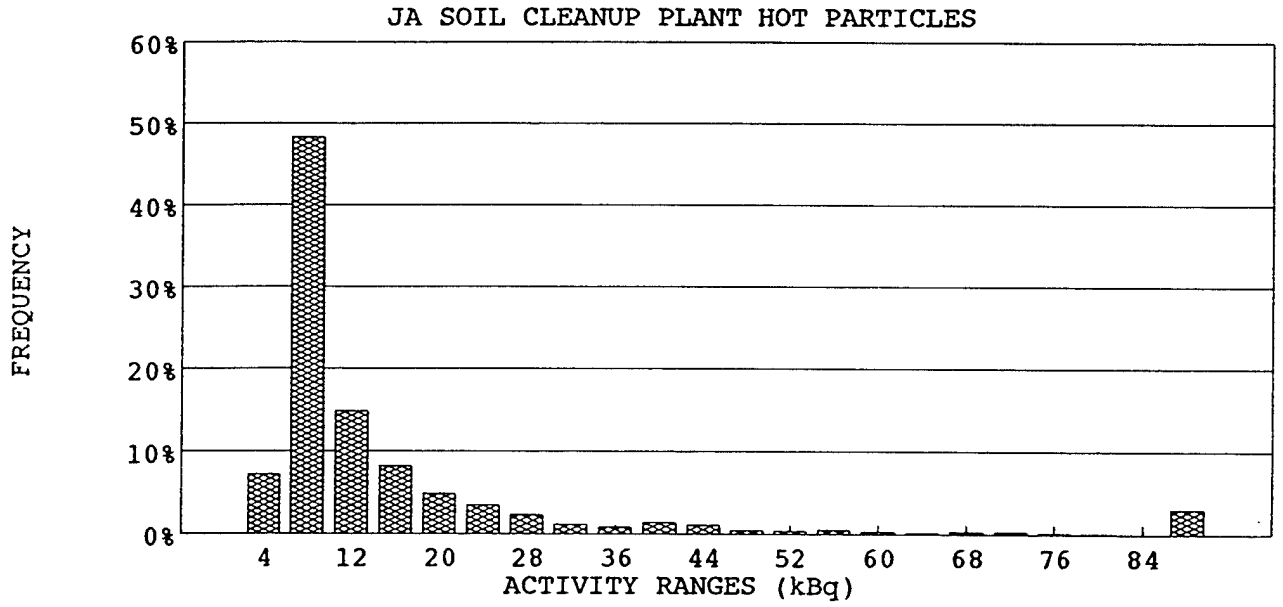
2-GATE SORTS

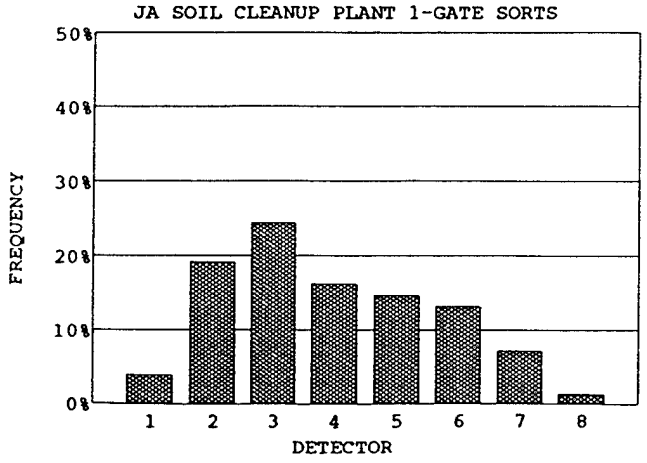
DET	SORTS	FREQ%
9	50	10.5%
10	117	24.5%
11	113	23.6%
12	67	14.0%
13	65	13.6%
14	45	9.4%
15	21	4.4%
TOTAL	478	

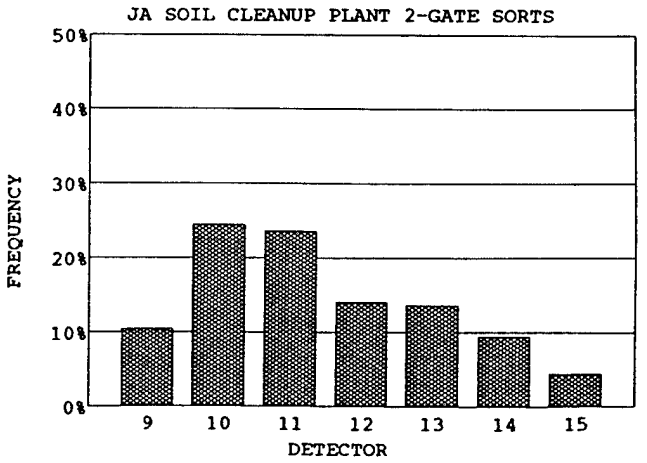
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	72	7.2%
-12000	0	-198	0.0%	8	481	48.3%
-10000	3	-165	0.2%	12	148	14.9%
-8000	5	-132	0.3%	16	82	8.2%
-6000	7	-99	0.4%	20	49	4.9%
-4000	8	-66	0.5%	24	35	3.5%
-2000	2	-33	0.1%	28	23	2.3%
0	5	0	0.3%	32	12	1.2%
2000	21	33	1.3%	36	9	0.9%
4000	65	66	4.0%	40	14	1.4%
6000	166	99	10.2%	44	11	1.1%
8000	316	132	19.3%	48	5	0.5%
10000	403	165	24.6%	52	4	0.4%
12000	370	198	22.6%	56	6	0.6%
14000	166	231	10.2%	60	3	0.3%
16000	53	264	3.2%	64	2	0.2%
18000	17	298	1.0%	68	3	0.3%
20000	17	331	1.0%	72	3	0.3%
22000	4	364	0.2%	76	2	0.2%
24000	7	397	0.4%	80	1	0.1%
26000	0	430	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	30	3.0%
TOTAL	1,635			TOTAL	995	

EVENT TYPES HPE 995 MPE 99 DISE 166


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	9.2 hr	9.2 hr	9.2 hr	9.2 hr	36.8 hr
SORTER START–UP	07:12	07:12	06:40	06:40	
START SOIL PROCESSING	07:14	07:14	06:53	06:53	
TIME REQUIRED TO START–UP	0.0 hr	0.0 hr	0.2 hr	0.2 hr	0.5 hr
SORTER SHUT–DOWN	16:25	16:25	15:50	15:50	
END SOIL PROCESSING	16:00	16:05	15:35	15:34	
TIME REQUIRED TO SHUT DOWN	0.4 hr	0.3 hr	0.2 hr	0.3 hr	1.2 hr
ACTUAL PROCESS HOURS	3.2 hr	3.3 hr	3.9 hr	3.8 hr	14.2 hr
DOWN–TIME	6.0 hr	5.9 hr	5.3 hr	5.3 hr	22.6 hr
SYSTEM PAUSE	5.6 hr	5.6 hr	4.8 hr	4.9 hr	20.9 hr
SORTER NONAVAILABLE TIME	1.3 hr	1.3 hr	1.3 hr	1.3 hr	5.2 hr
AUTHORIZED DELAY TIME	5.6 hr	5.6 hr	4.8 hr	4.8 hr	20.8 hr
PLANT PERFORMANCE					38.5%
PRODUCTIVTY					33.7%

PRODUCTIVITY

Date	26–Oct–94	Excused Delays for day (sorter–hrs)	20.8 hr
Contract day (from 6 Sep)	345	Excused delays for contract (sorter–hrs)	7,233 hr
Current Contract week	58	Excused delay days (plant–days)	181 days
		Excused delay months (plant–month)	6.95 months
Soil production for Day	154 MT		
Cumlative Soil Production for Week	898 MT	Percent of contract completed	59.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,907 MT
Since 6 Sep 93	57,699 MT	Days ahead or behind schedule	6.0 days
Since 6 Aug 93	59,290 MT		
Total Soil production for project	85,577 MT		

MT = metric tons

File Report1 Printed on 28-Oct-94 at 09:27:22 AM

SORTER 1

26-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.68 ± 0.12 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.7 tons	34.3 tons	35.0 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.0 kg	
VOLUME IN-GROUND	0.6 yd³	27.2 yd³	27.8 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	17,630 kBq	3,796 kBq	4,838 kBq
MAXIMUM/SORT	878 kBq	387 kBq	21 kBq
MINIMUM/SORT	3 kBq	0 Bq	-74 kBq
SPECIFIC ACTIVITY		5,276 Bq/kg	141 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		579		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	1			
NONE (AD=0 & MD=0 & MND>0)	276		07:16	10:09
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	302		08:25	16:02
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		5,790		
2-SEC RECORDS WITH SORTS	788			
2-SEC RECORDS WITHOUT SORTS	5,002			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,367		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

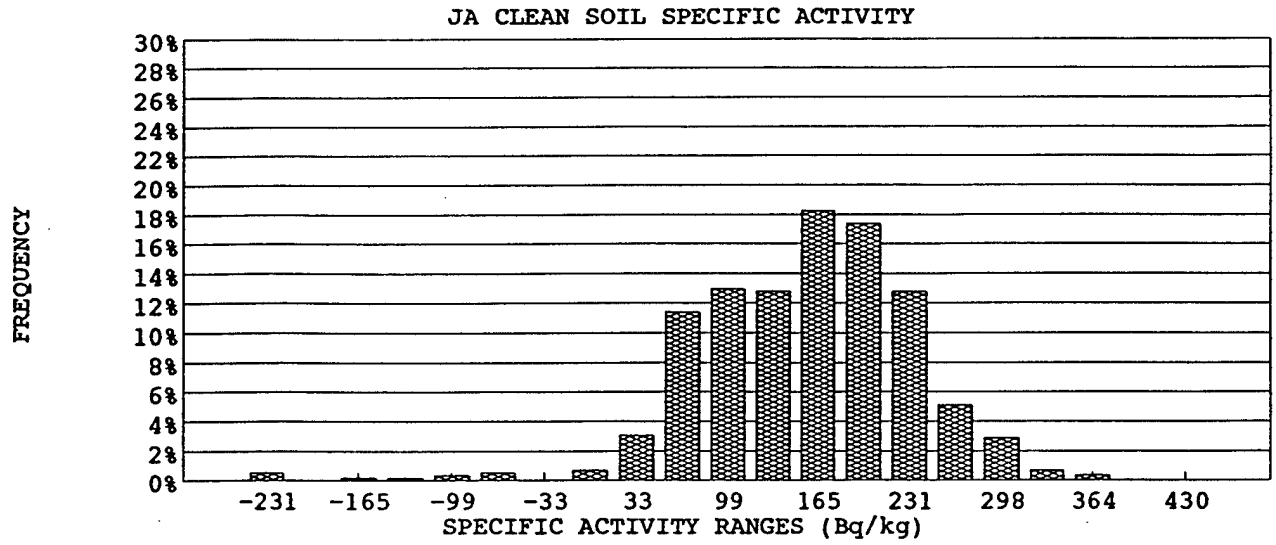
1 DET	576	73.10%	5 DET	0	0.00%
2 DET	174	22.08%	6 DET	0	0.00%
3 DET	33	4.19%	7 DET	0	0.00%
4 DET	5	0.63%	8 DET	0	0.00%

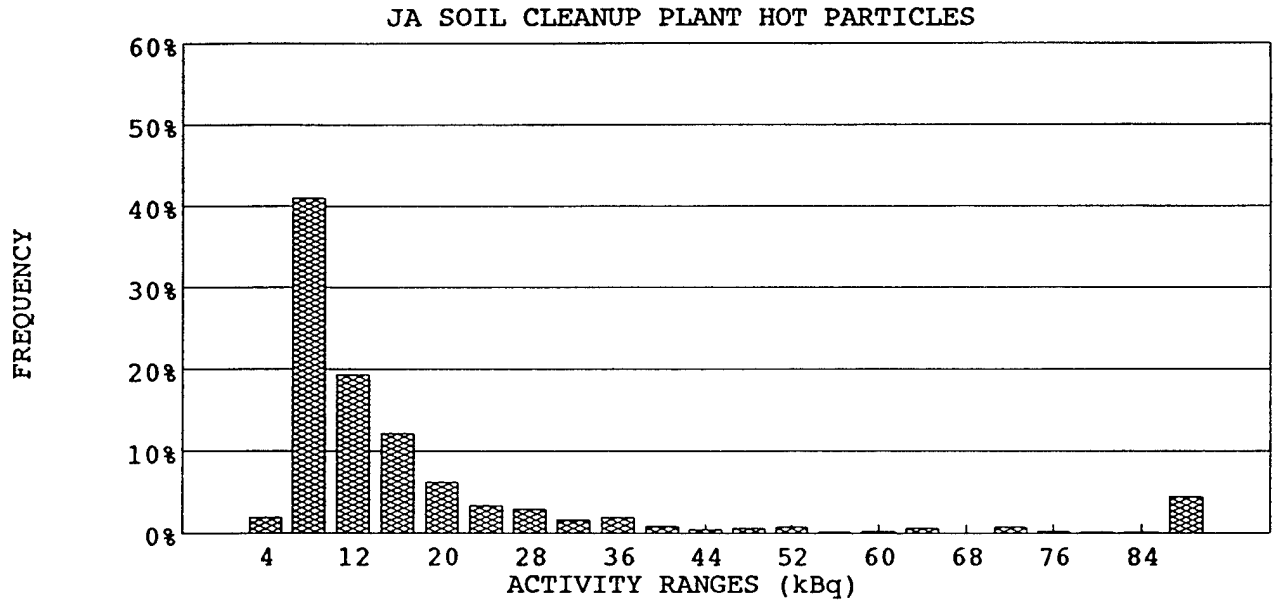
AVERAGE TIME BETWEEN 2-SEC SORTS 20.1 sec

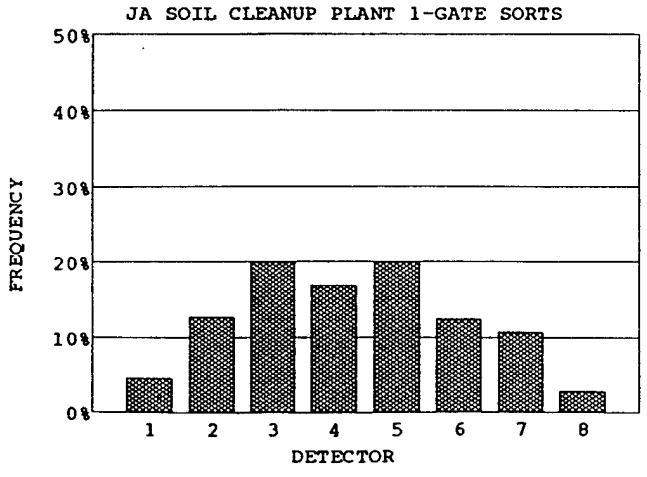
FREQUENCY DISTRIBUTIONS

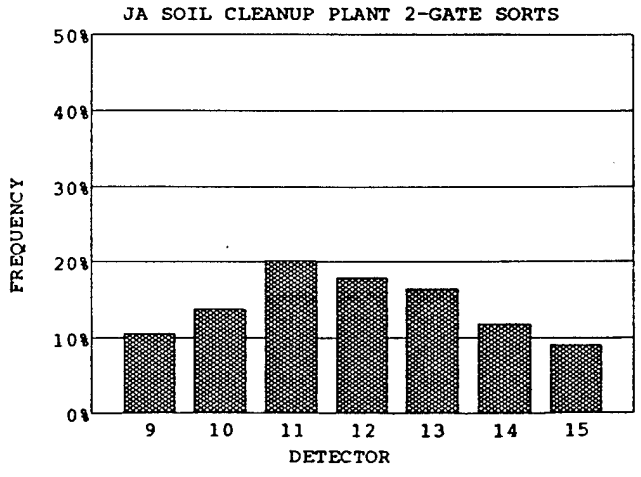
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	18	4.6%	-14000	3	-231	0.5%	4	15	1.9%
2	50	12.8%	-12000	0	-198	0.0%	8	323	41.0%
3	78	19.9%	-10000	1	-165	0.2%	12	152	19.3%
4	66	16.8%	-8000	1	-132	0.2%	16	96	12.2%
5	78	19.9%	-6000	2	-99	0.3%	20	49	6.2%
6	49	12.5%	-4000	3	-66	0.5%	24	27	3.4%
7	42	10.7%	-2000	0	-33	0.0%	28	23	2.9%
8	11	2.8%	0	4	0	0.7%	32	13	1.6%
TOTAL	392		2000	18	33	3.1%	36	15	1.9%
			4000	67	66	11.4%	40	7	0.9%
2-GATE SORTS			6000	76	99	12.9%	44	4	0.5%
DET	SORTS	FREQ%	8000	75	132	12.8%	48	5	0.6%
9	42	10.6%	10000	107	165	18.2%	52	6	0.8%
10	55	13.9%	12000	102	198	17.4%	56	1	0.1%
11	80	20.2%	14000	75	231	12.8%	60	2	0.3%
12	71	17.9%	16000	30	264	5.1%	64	5	0.6%
13	65	16.4%	18000	17	298	2.9%	68	0	0.0%
14	47	11.9%	20000	4	331	0.7%	72	6	0.8%
15	36	9.1%	22000	2	364	0.3%	76	2	0.3%
TOTAL	396		24000	0	397	0.0%	80	1	0.1%
			26000	0	430	0.0%	84	1	0.1%
			>28000	0	0	0.0%	>84	35	4.4%
			TOTAL	587			TOTAL	788	

EVENT TYPES	HPE	778	MPE	92	DISE	79


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.49 ± 0.13 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	1.3 tons	34.2 tons	35.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.0 kg	
VOLUME IN-GROUND	1.0 yd³	27.1 yd³	28.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	44,315 kBq	5,008 kBq	7,102 kBq
MAXIMUM/SORT	1,231 kBq	313 kBq	25 kBq
MINIMUM/SORT	2 kBq	(480)Bq	-1 kBq
SPECIFIC ACTIVITY		3,781 Bq/kg	207 Bq/kg

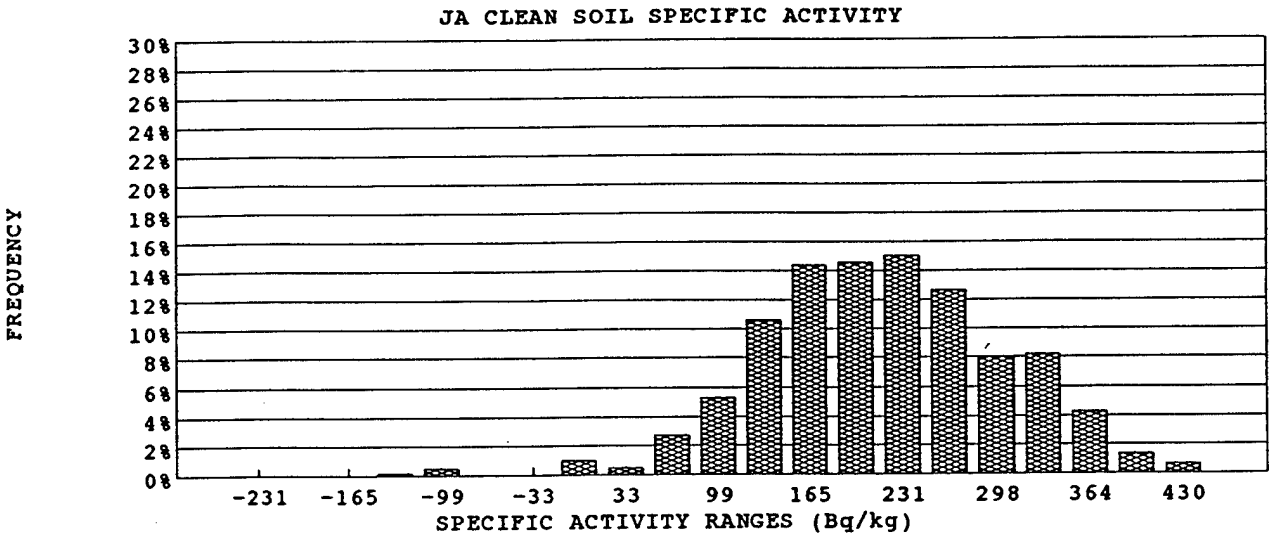
SORTS

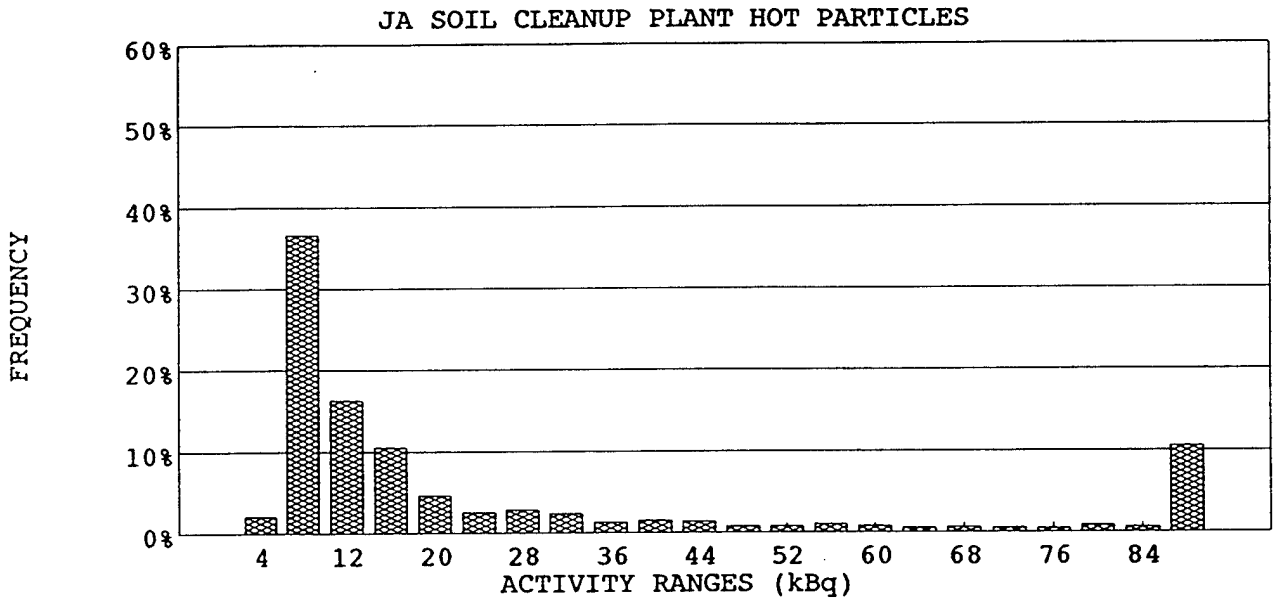
						UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				589			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			10			07:54	10:08
NONE (AD=0 & MD=0 & MND>0)			240			07:55	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			338			07:56	
UNEXPLAINED RECORDS			1			08:03	
0<AD<1kBq & MD>0			12			08:08	
AD=0 & MD>0			0			08:09	
AD<0 & MD >0			1			08:21	
2-SEC COUNT PERIODS				5,890		08:28	
2-SEC RECORDS WITH SORTS			902			08:29	
2-SEC RECORDS WITHOUT SORTS			4,988			08:29	
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,491		08:29	
NONPROCESSING RECORDS (Test, calibration, etc)				6		08:40	
2-SEC SORT DETECTORS						09:12	
1 DET	665	73.73%	5 DET	3	0.33%		
2 DET	187	20.73%	6 DET	0	0.00%		
3 DET	43	4.77%	7 DET	0	0.00%		
4 DET	4	0.44%	8 DET	0	0.00%		
AVERAGE TIME BETWEEN 2-SEC SORTS			17.7 sec				

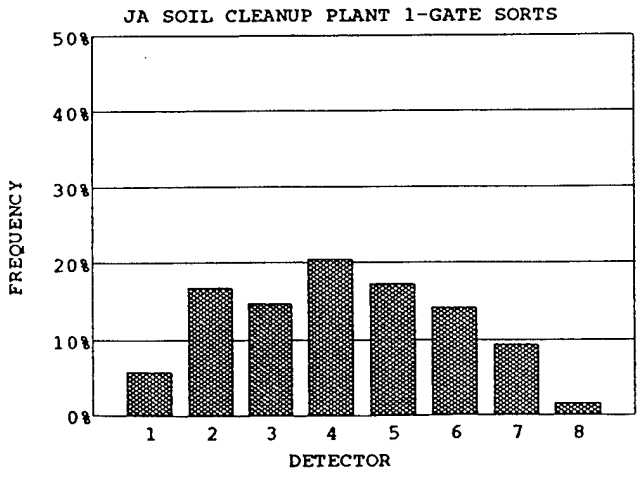
FREQUENCY DISTRIBUTIONS

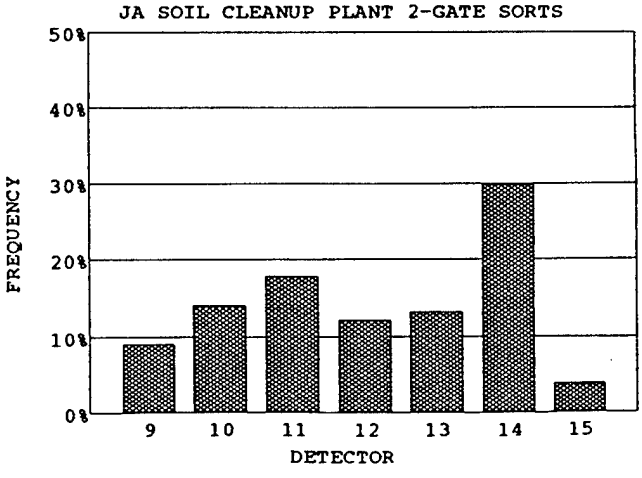
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	22	5.8%	-14000	0	-231	0.0%	4	19	2.1%
2	64	16.8%	-12000	0	-198	0.0%	8	330	36.6%
3	56	14.7%	-10000	0	-165	0.0%	12	147	16.3%
4	78	20.4%	-8000	1	-132	0.2%	16	95	10.5%
5	66	17.3%	-6000	3	-99	0.5%	20	42	4.7%
6	54	14.1%	-4000	0	-66	0.0%	24	23	2.5%
7	36	9.4%	-2000	0	-33	0.0%	28	26	2.9%
8	6	1.6%	0	6	0	1.0%	32	22	2.4%
TOTAL	382		2000	3	33	0.5%	36	12	1.3%
			4000	16	66	2.7%	40	14	1.6%
2-GATE DET	SORTS	FREQ%	6000	31	99	5.3%	44	13	1.4%
9	47	9.0%	8000	62	132	10.6%	48	7	0.8%
10	73	14.0%	10000	84	165	14.4%	52	7	0.8%
11	93	17.9%	12000	85	198	14.5%	56	9	1.0%
12	63	12.1%	14000	88	231	15.0%	60	7	0.8%
13	69	13.3%	16000	74	264	12.6%	64	5	0.6%
14	155	29.8%	18000	47	298	8.0%	68	6	0.7%
15	20	3.8%	20000	48	331	8.2%	72	5	0.6%
TOTAL	520		22000	25	364	4.3%	76	4	0.4%
			24000	8	397	1.4%	80	8	0.9%
			26000	4	430	0.7%	84	6	0.7%
			>28000	0	0	0.0%	>84	95	10.5%
			TOTAL	585			TOTAL	902	

EVENT TYPES HPE 973 MPE 139 DISE 763


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

26-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.59 ± 0.11 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	41.8 tons	42.1 tons
MAXIMUM/SORT	7.6 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.0 kg	
VOLUME IN-GROUND	0.2 yd³	33.1 yd³	33.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	19,969 kBq	4,884 kBq	3,098 kBq
MAXIMUM/SORT	7,338 kBq	3,460 kBq	14 kBq
MINIMUM/SORT	3 kBq	0 Bq	-84 kBq
SPECIFIC ACTIVITY		18,024 Bq/kg	74 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		695		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	517		07:01	10:12
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	178		09:09	
UNEXPLAINED RECORDS	0		09:28	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		6,950		
2-SEC RECORDS WITH SORTS	299			
2-SEC RECORDS WITHOUT SORTS	6,651			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		994		
NONPROCESSING RECORDS (Test, calibration, etc)		7		

2-SEC SORT DETECTORS

1 DET	225	75.25%	5 DET	3	1.00%
2 DET	62	20.74%	6 DET	0	0.00%
3 DET	7	2.34%	7 DET	1	0.33%
4 DET	2	0.67%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 61.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

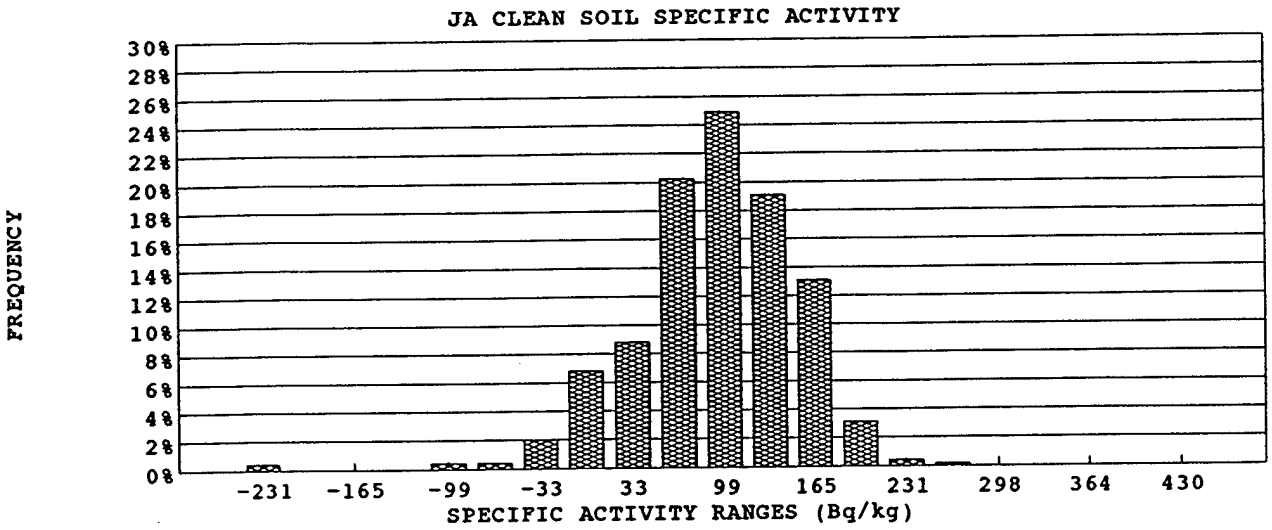
DET	SORTS	FREQ%
1	3	1.9%
2	5	3.1%
3	22	13.8%
4	32	20.0%
5	21	13.1%
6	36	22.5%
7	32	20.0%
8	9	5.6%
TOTAL	160	

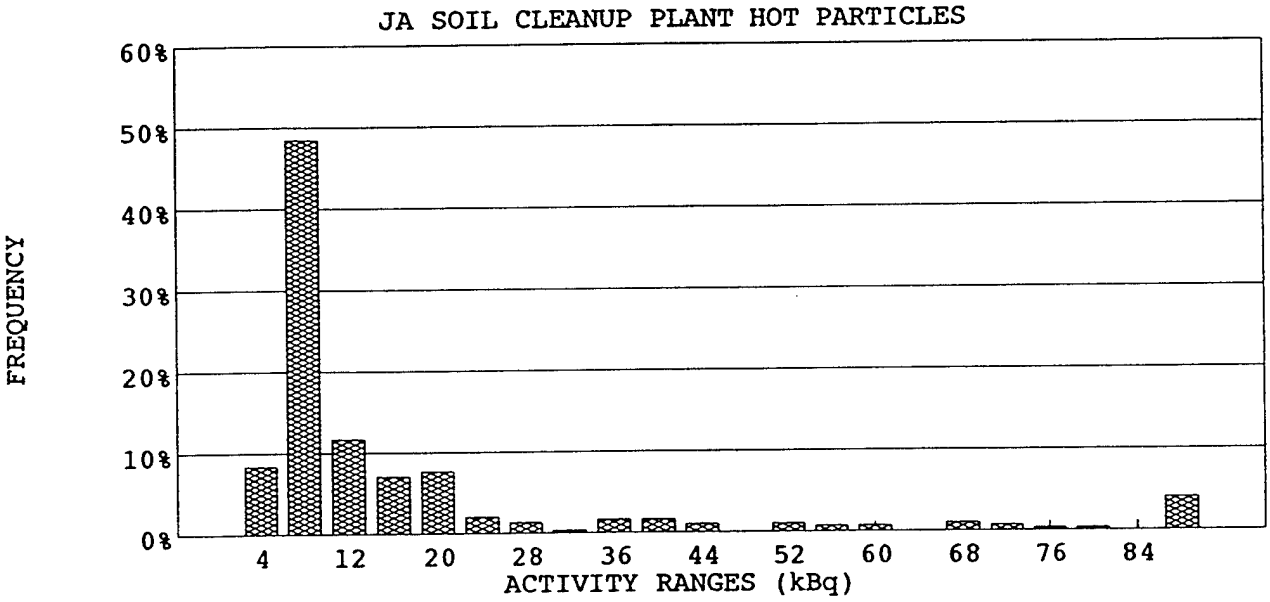
2-GATE SORTS

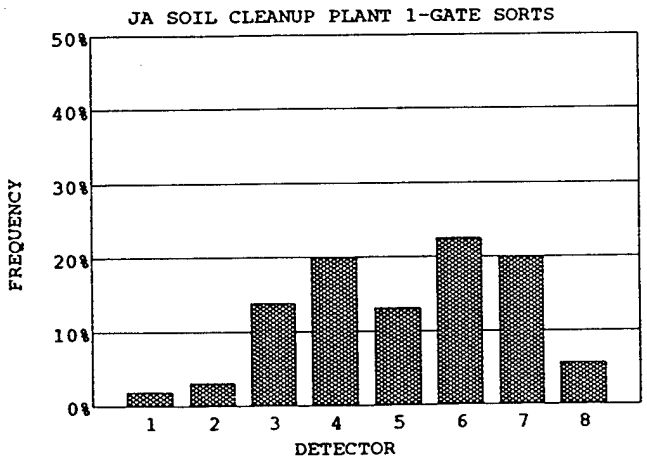
DET	SORTS	FREQ%
9	3	2.2%
10	10	7.2%
11	23	16.5%
12	29	20.9%
13	21	15.1%
14	37	26.6%
15	16	11.5%
TOTAL	139	

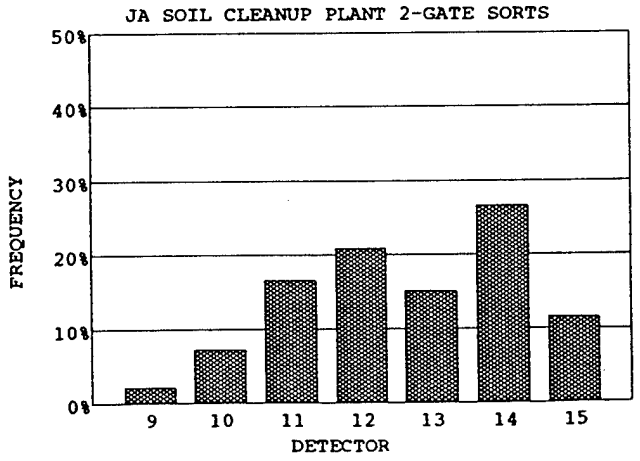
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	3	-231	0.4%	4	25	8.4%
-12000	0	-198	0.0%	8	145	48.5%
-10000	0	-165	0.0%	12	35	11.7%
-8000	0	-132	0.0%	16	21	7.0%
-6000	3	-99	0.4%	20	23	7.7%
-4000	3	-66	0.4%	24	6	2.0%
-2000	14	-33	2.0%	28	4	1.3%
0	48	0	6.8%	32	1	0.3%
2000	62	33	8.8%	36	5	1.7%
4000	142	66	20.2%	40	5	1.7%
6000	175	99	24.9%	44	3	1.0%
8000	134	132	19.1%	48	0	0.0%
10000	92	165	13.1%	52	3	1.0%
12000	22	198	3.1%	56	2	0.7%
14000	3	231	0.4%	60	2	0.7%
16000	1	264	0.1%	64	0	0.0%
18000	0	298	0.0%	68	3	1.0%
20000	0	331	0.0%	72	2	0.7%
22000	0	364	0.0%	76	1	0.3%
24000	0	397	0.0%	80	1	0.3%
26000	0	430	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	12	4.0%
TOTAL	702			TOTAL	299	

EVENT TYPES HPE 308 MPE 47 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231
-165
-99
-33
33
99
165
231
298
364
430
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

26-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.30 ± 0.17 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	41.1 tons	41.6 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.4 yd³	32.6 yd³	33.0 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	98.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,464 kBq	1,257 kBq	5,792 kBq
MAXIMUM/SORT	215 kBq	82 kBq	25 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		2,441 Bq/kg	141 Bq/kg

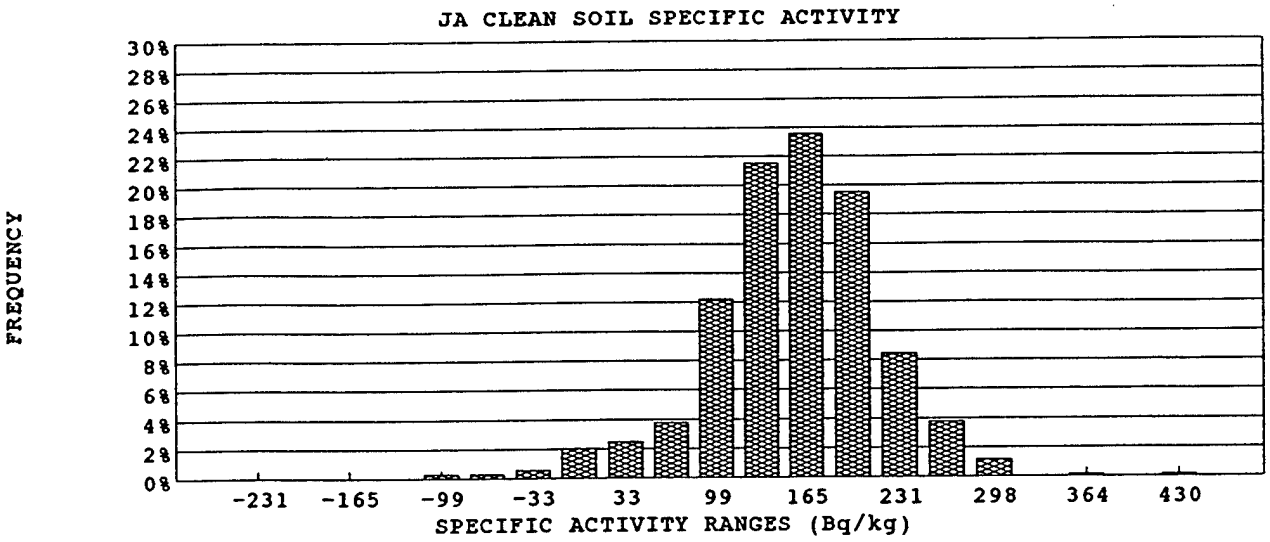
SORTS

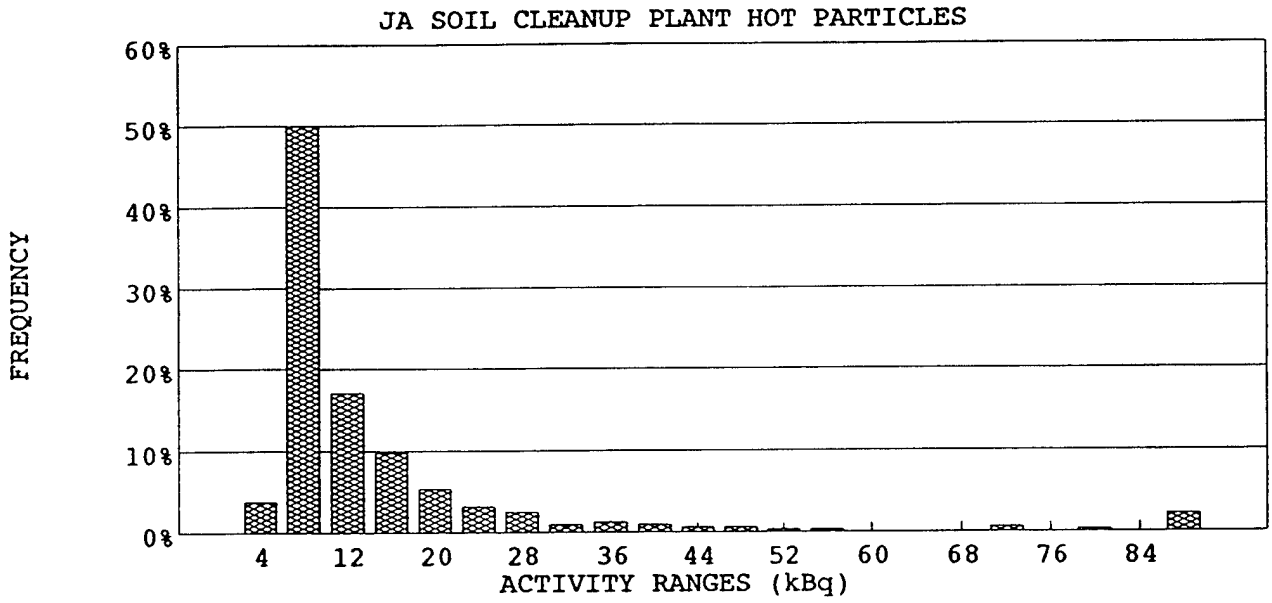
								UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS						688			
ALL 80 ELEMENTS SORT (MD>0&MND=0)			4						
NONE (AD=0 & MD=0 & MND>0)			523					None	10:10
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			161						10:12
UNEXPLAINED RECORDS		0							
0<AD<1kBq & MD>0		0							
AD=0 & MD>0		0							
AD<0 & MD >0		0							
2-SEC COUNT PERIODS						6,880			
2-SEC RECORDS WITH SORTS			316						
2-SEC RECORDS WITHOUT SORTS			6,564						
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)						1,004			
NONPROCESSING RECORDS (Test, calibration, etc)						3			
2-SEC SORT DETECTORS									
1 DET	235	74.37%		5 DET		0	0.00%		
2 DET	68	21.52%		6 DET		0	0.00%		
3 DET	13	4.11%		7 DET		0	0.00%		
4 DET	0	0.00%		8 DET		0	0.00%		
AVERAGE TIME BETWEEN 2-SEC SORTS			58.6 sec						

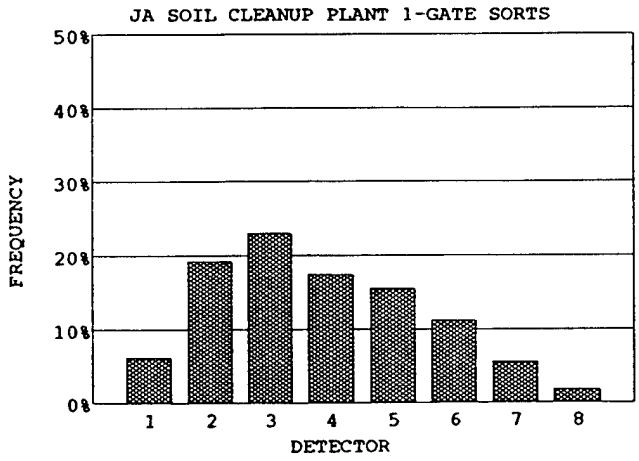
FREQUENCY DISTRIBUTIONS

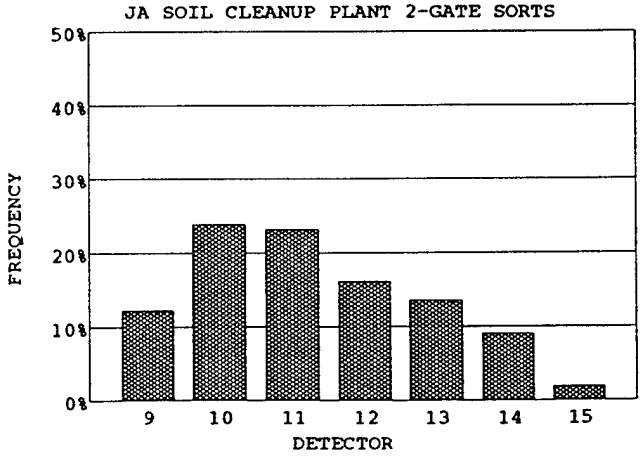
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	10	6.2%	-14000	0	-231	0.0%	4	12	3.8%
2	31	19.3%	-12000	0	-198	0.0%	8	158	50.0%
3	37	23.0%	-10000	0	-165	0.0%	12	54	17.1%
4	28	17.4%	-8000	0	-132	0.0%	16	31	9.8%
5	25	15.5%	-6000	2	-99	0.3%	20	17	5.4%
6	18	11.2%	-4000	2	-66	0.3%	24	10	3.2%
7	9	5.6%	-2000	4	-33	0.6%	28	8	2.5%
8	3	1.9%	0	14	0	2.0%	32	3	0.9%
TOTAL	161		2000	17	33	2.5%	36	4	1.3%
			4000	26	66	3.8%	40	3	0.9%
2-GATE SORTS			6000	84	99	12.2%	44	2	0.6%
DET	SORTS	FREQ%	8000	148	132	21.5%	48	2	0.6%
9	19	12.3%	10000	162	165	23.6%	52	1	0.3%
10	37	23.9%	12000	134	198	19.5%	56	1	0.3%
11	36	23.2%	14000	58	231	8.4%	60	0	0.0%
12	25	16.1%	16000	26	264	3.8%	64	0	0.0%
13	21	13.5%	18000	8	298	1.2%	68	0	0.0%
14	14	9.0%	20000	0	331	0.0%	72	2	0.6%
15	3	1.9%	22000	1	364	0.1%	76	0	0.0%
TOTAL	155		24000	0	397	0.0%	80	1	0.3%
			26000	1	430	0.1%	84	0	0.0%
			>28000	0	0	0.0%	>84	7	2.2%
			TOTAL	687			TOTAL	316	

EVENT TYPES HPE 321 MPE 39 DISE 320


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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 27–Oct–94

WORK DAY START	06:00 AM	WORK DAY END	16:45 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	10.4 hr	10.4 hr	10.4 hr	10.4 hr	41.7 hr
SORTER START–UP	06:20	06:20	06:20	06:20	
START SOIL PROCESSING	06:40	06:40	06:47	06:47	
TIME REQUIRED TO START–UP	0.3 hr	0.3 hr	0.5 hr	0.5 hr	1.6 hr
SORTER SHUT–DOWN	16:45	16:45	16:45	16:45	
END SOIL PROCESSING	16:32	16:37	16:30	16:35	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.1 hr	0.2 hr	0.2 hr	0.7 hr
ACTUAL PROCESS HOURS	9.2 hr	9.3 hr	9.0 hr	9.2 hr	36.7 hr
DOWN–TIME	1.2 hr	1.1 hr	1.4 hr	1.2 hr	5.0 hr
SYSTEM PAUSE	0.7 hr	0.7 hr	0.7 hr	0.6 hr	2.6 hr
SORTER NONAVAILABLE TIME	0.3 hr	0.3 hr	0.3 hr	0.3 hr	1.3 hr
AUTHORIZED DELAY TIME	0.6 hr	0.6 hr	0.6 hr	0.6 hr	2.4 hr
PLANT PERFORMANCE					88.0%
PRODUCTIVTY					85.2%

PRODUCTIVITY

Date	27–Oct–94	Excused Delays for day (sorter–hrs)	2.4 hr
Contract day (from 6 Sep)	346	Excused delays for contract (sorter–hrs)	7,235 hr
Current Contract week	58	Excused delay days (plant–days)	181 days
		Excused delay months (plant–month)	6.96 months
Soil production for Day	399 MT		
Cumlative Soil Production for Week	1,297 MT	Percent of contract completed	59.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	2,009 MT
Since 6 Sep 93	58,098 MT	Days ahead or behind schedule	6.3 days
Since 6 Aug 93	59,689 MT		
Total Soil production for project	85,976 MT		

MT = metric tons

File Report1 Printed on 29-Oct-94 at 08:53:51 AM

SORTER 1

27-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.70 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	8.4 tons	91.8 tons	100.3 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	47.7 kg	
VOLUME IN-GROUND	6.7 yd³	72.8 yd³	79.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	91.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	69,821 kBq	18,373 kBq	23,884 kBq
MAXIMUM/SORT	2,493 kBq	960 kBq	24 kBq
MINIMUM/SORT	2 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		2,175 Bq/kg	260 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,657		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	101		09:27	10:03
NONE (AD=0 & MD=0 & MND>0)	585		15:53	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	971			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	2			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,570		
2-SEC RECORDS WITH SORTS	3,034			
2-SEC RECORDS WITHOUT SORTS	13,536			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,691		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

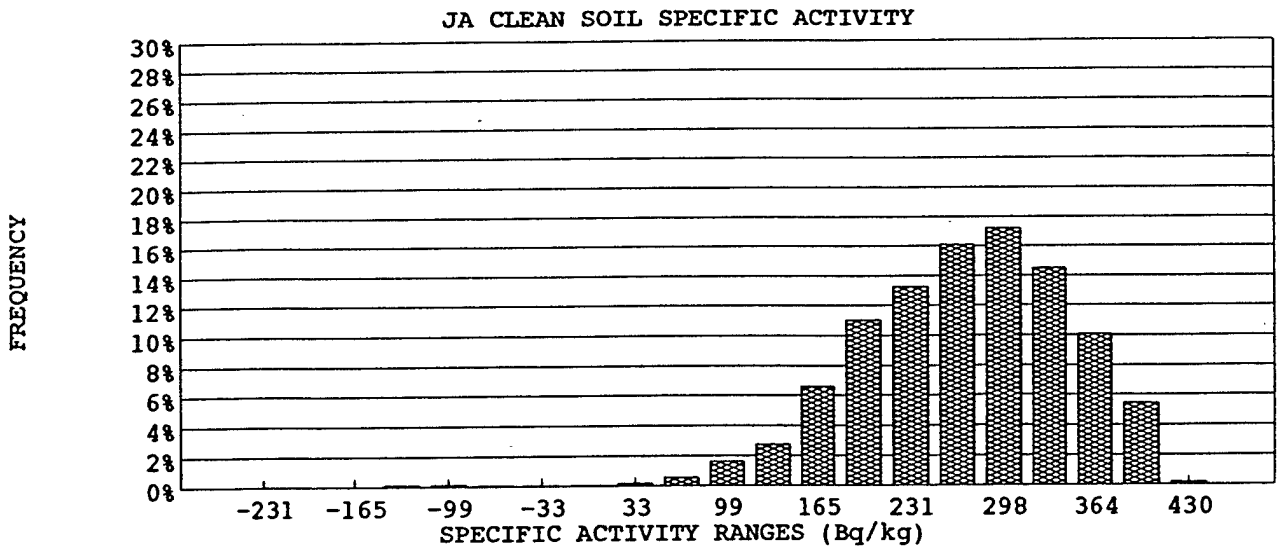
1 DET	2,112	69.61%	5 DET	11	0.36%
2 DET	687	22.64%	6 DET	0	0.00%
3 DET	186	6.13%	7 DET	1	0.03%
4 DET	38	1.25%	8 DET	1	0.03%

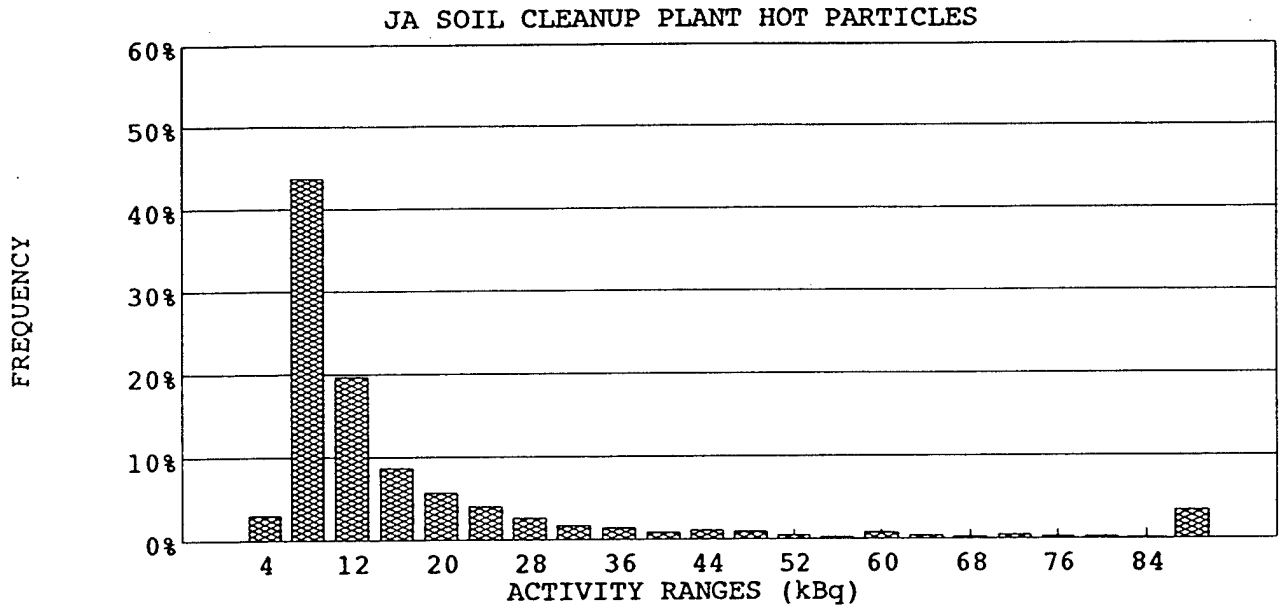
AVERAGE TIME BETWEEN 2-SEC SORTS 15.7 sec

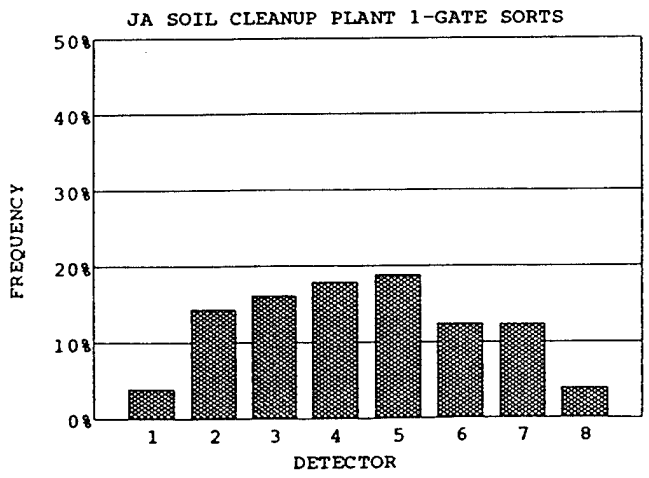
FREQUENCY DISTRIBUTIONS

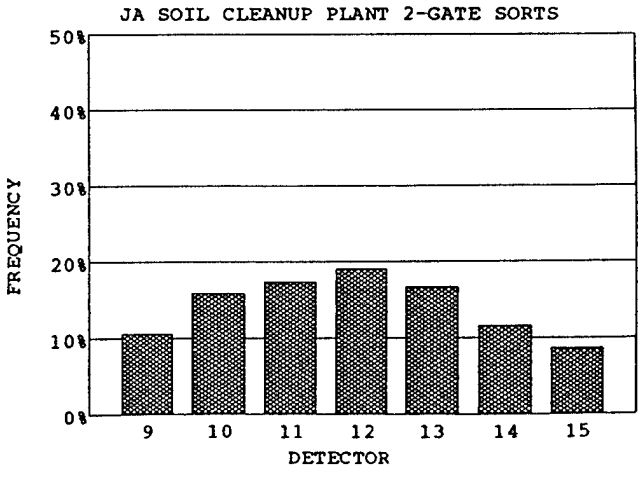
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	61	4.0%	-14000	0	-231	0.0%	4	91	3.0%
2	221	14.4%	-12000	0	-198	0.0%	8	1,327	43.7%
3	249	16.2%	-10000	0	-165	0.0%	12	597	19.7%
4	275	17.9%	-8000	2	-132	0.1%	16	265	8.7%
5	290	18.9%	-6000	2	-99	0.1%	20	174	5.7%
6	192	12.5%	-4000	1	-66	0.1%	24	122	4.0%
7	190	12.4%	-2000	1	-33	0.1%	28	80	2.6%
8	60	3.9%	0	1	0	0.1%	32	52	1.7%
TOTAL	1,538		2000	3	33	0.2%	36	43	1.4%
			4000	9	66	0.6%	40	25	0.8%
2-GATE DET	SORTS	FREQ%	6000	25	99	1.6%	44	34	1.1%
			8000	43	132	2.8%	48	28	0.9%
9	158	10.6%	10000	103	165	6.6%	52	14	0.5%
10	238	15.9%	12000	172	198	11.0%	56	8	0.3%
11	261	17.4%	14000	207	231	13.3%	60	23	0.8%
12	286	19.1%	16000	251	264	16.1%	64	11	0.4%
13	251	16.8%	18000	268	298	17.2%	68	7	0.2%
14	173	11.6%	20000	226	331	14.5%	72	14	0.5%
15	129	8.6%	22000	157	364	10.1%	76	8	0.3%
TOTAL	1,496		24000	85	397	5.5%	80	7	0.2%
			26000	3	430	0.2%	84	2	0.1%
			>28000	0	0	0.0%	>84	102	3.4%
			TOTAL	1,559			TOTAL	3,034	

EVENT TYPES HPE 2,960 MPE 511 DISE 7,694


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.56 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	38.8 tons	62.2 tons	101.1 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	53.0 kg	
VOLUME IN-GROUND	30.8 yd³	49.3 yd³	80.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	61.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	72,814 kBq	36,908 kBq	20,135 kBq
MAXIMUM/SORT	4,590 kBq	2,127 kBq	26 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		950 Bq/kg	324 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,672		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	620		13:06	10:03
NONE (AD=0 & MD=0 & MND>0)	413			
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	639			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,720		
2-SEC RECORDS WITH SORTS	3,003			
2-SEC RECORDS WITHOUT SORTS	13,717			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,675		
NONPROCESSING RECORDS (Test, calibration, etc)		2		

2-SEC SORT DETECTORS

1 DET	2,130	70.93%	5 DET	10	0.33%
2 DET	657	21.88%	6 DET	0	0.00%
3 DET	165	5.49%	7 DET	0	0.00%
4 DET	41	1.37%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 15.7 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

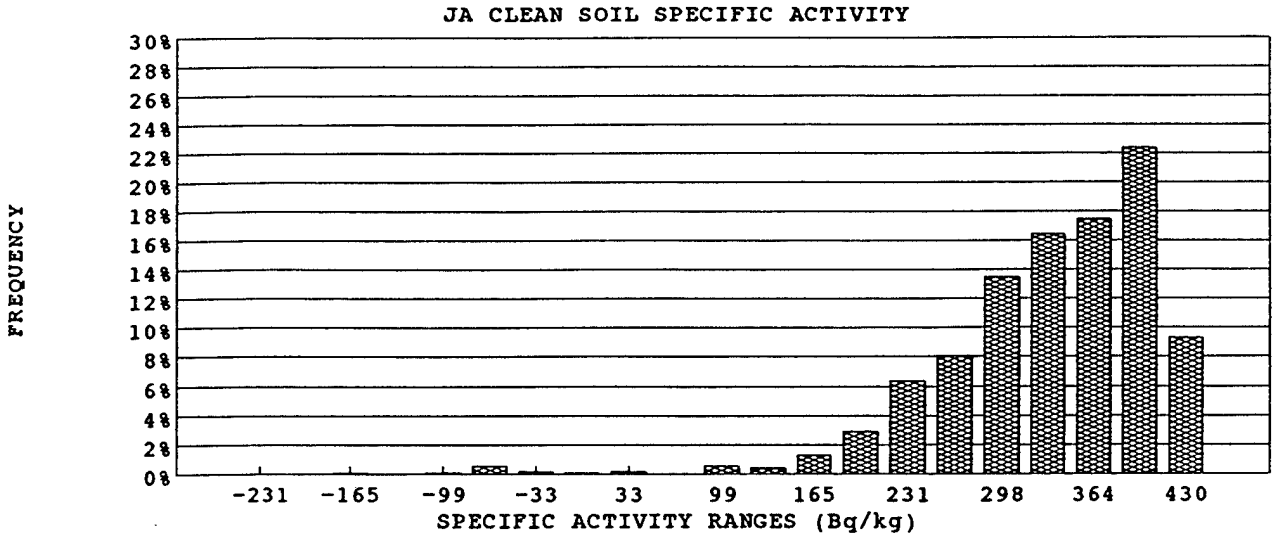
DET	SORTS	FREQ%
1	82	5.6%
2	294	20.0%
3	220	14.9%
4	299	20.3%
5	238	16.2%
6	197	13.4%
7	109	7.4%
8	33	2.2%
TOTAL	1,472	

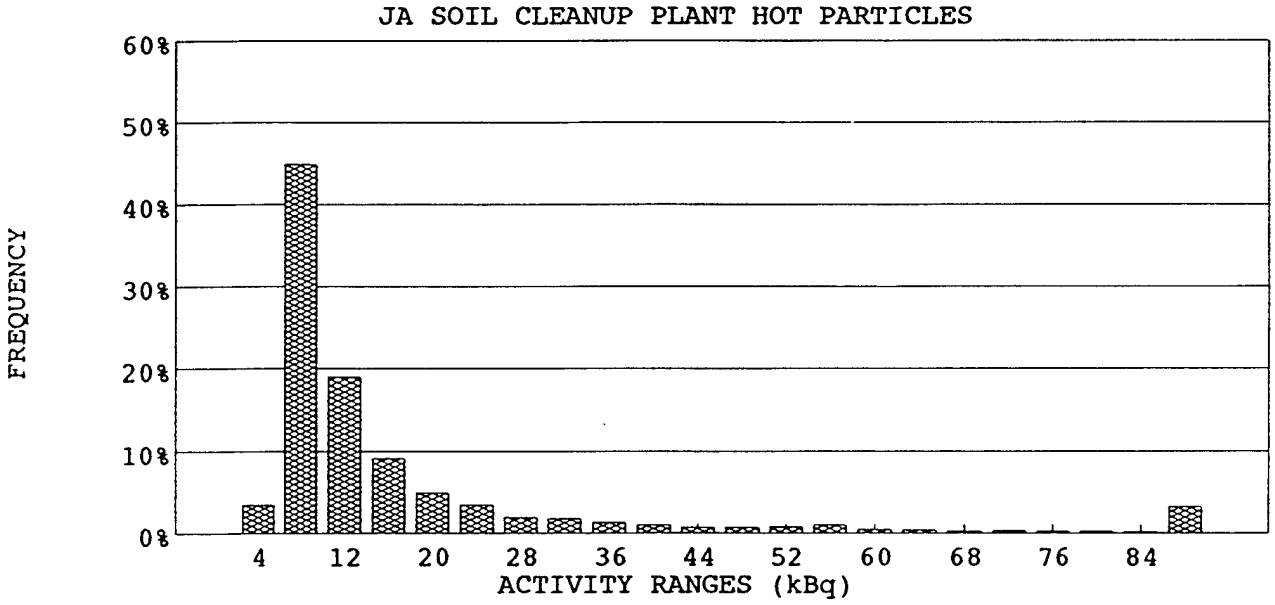
2-GATE SORTS

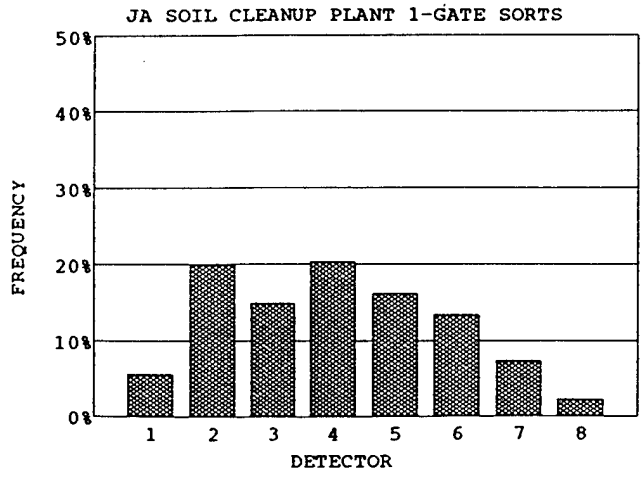
DET	SORTS	FREQ%
9	186	12.1%
10	298	19.5%
11	307	20.1%
12	281	18.4%
13	215	14.0%
14	172	11.2%
15	72	4.7%
TOTAL	1,531	

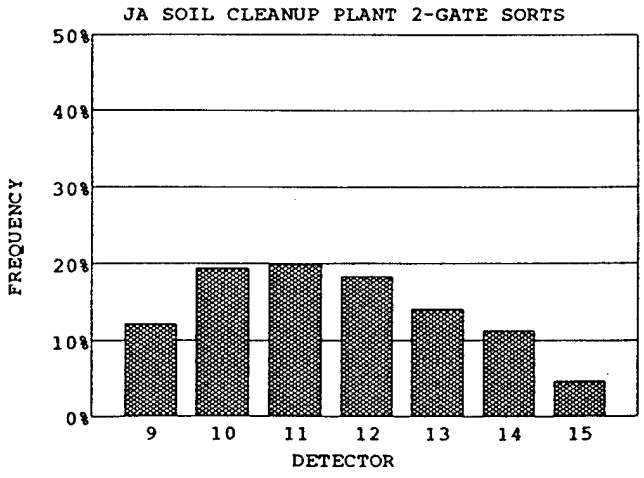
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	106	3.5%
-12000	0	-198	0.0%	8	1,348	44.9%
-10000	1	-165	0.1%	12	570	19.0%
-8000	0	-132	0.0%	16	276	9.2%
-6000	1	-99	0.1%	20	149	5.0%
-4000	6	-66	0.6%	24	105	3.5%
-2000	2	-33	0.2%	28	60	2.0%
0	1	0	0.1%	32	54	1.8%
2000	2	33	0.2%	36	40	1.3%
4000	0	66	0.0%	40	32	1.1%
6000	6	99	0.6%	44	22	0.7%
8000	5	132	0.5%	48	23	0.8%
10000	14	165	1.3%	52	24	0.8%
12000	31	198	2.9%	56	30	1.0%
14000	67	231	6.4%	60	15	0.5%
16000	85	264	8.1%	64	13	0.4%
18000	142	298	13.5%	68	8	0.3%
20000	173	331	16.4%	72	10	0.3%
22000	184	364	17.5%	76	8	0.3%
24000	236	397	22.4%	80	7	0.2%
26000	98	430	9.3%	84	6	0.2%
>28000	0	0	0.0%	>84	97	3.2%
TOTAL	1,054			TOTAL	3,003	

EVENT TYPES HPE 2,953 MPE 821 DISE 47,719


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

27-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.55 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.2 tons	97.6 tons	97.8 tons
MAXIMUM/SORT	4.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.2 yd³	77.4 yd³	77.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.8%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	4,760 kBq	1,378 kBq	3,081 kBq
MAXIMUM/SORT	412 kBq	242 kBq	10 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		5,796 Bq/kg	32 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,617		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,464		None	07:02
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	153			10:03
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	0			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,170		
2-SEC RECORDS WITH SORTS	273			
2-SEC RECORDS WITHOUT SORTS	15,897			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,890		
NONPROCESSING RECORDS (Test, calibration, etc)		10		

2-SEC SORT DETECTORS

1 DET	196	71.79%	5 DET	1	0.37%
2 DET	59	21.61%	6 DET	0	0.00%
3 DET	14	5.13%	7 DET	0	0.00%
4 DET	3	1.10%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 165.0 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

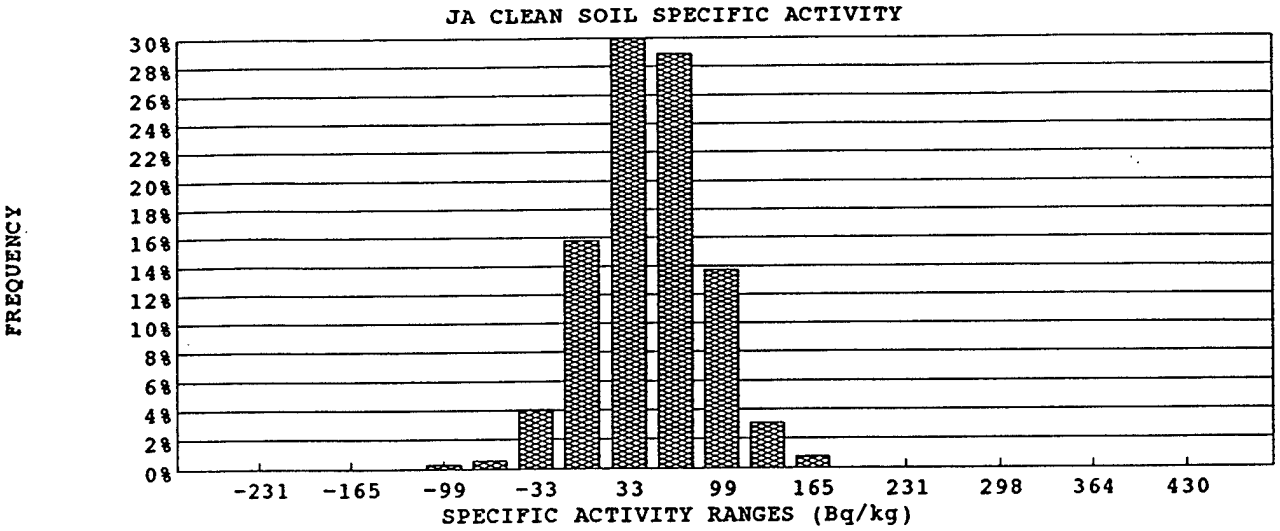
DET	SORTS	FREQ%
1	2	1.4%
2	11	7.5%
3	19	13.0%
4	25	17.1%
5	21	14.4%
6	27	18.5%
7	33	22.6%
8	8	5.5%
TOTAL	146	

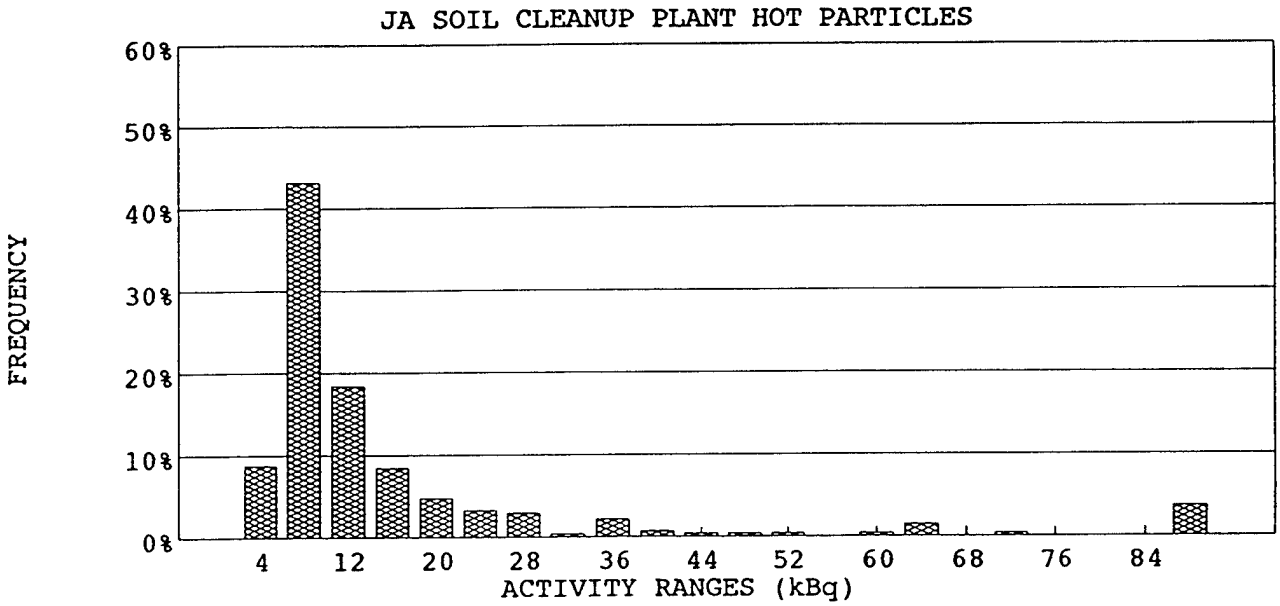
2-GATE SORTS

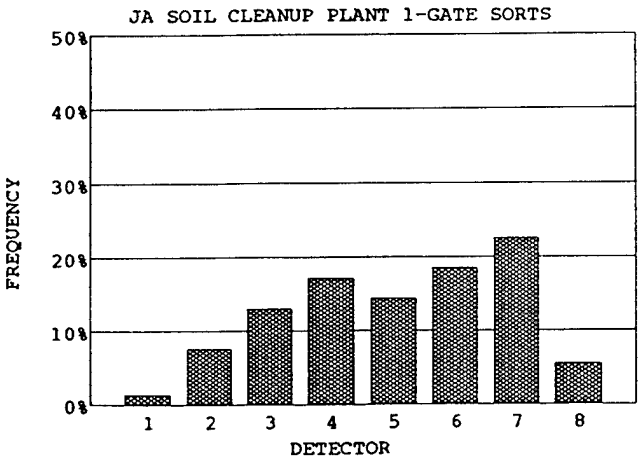
DET	SORTS	FREQ%
9	6	4.7%
10	8	6.3%
11	9	7.1%
12	26	20.5%
13	23	18.1%
14	31	24.4%
15	24	18.9%
TOTAL	127	

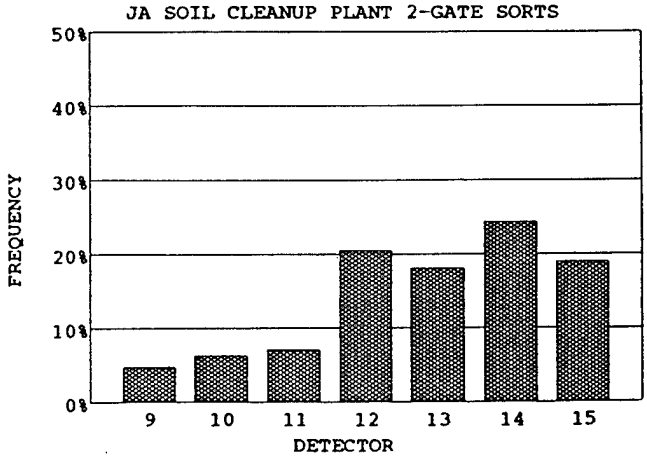
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	24	8.8%
-12000	0	-198	0.0%	8	118	43.2%
-10000	0	-165	0.0%	12	50	18.3%
-8000	0	-132	0.0%	16	23	8.4%
-6000	5	-99	0.3%	20	13	4.8%
-4000	9	-66	0.6%	24	9	3.3%
-2000	66	-33	4.1%	28	8	2.9%
0	257	0	15.8%	32	1	0.4%
2000	534	33	32.8%	36	6	2.2%
4000	470	66	28.9%	40	2	0.7%
6000	223	99	13.7%	44	1	0.4%
8000	50	132	3.1%	48	1	0.4%
10000	13	165	0.8%	52	1	0.4%
12000	0	198	0.0%	56	0	0.0%
14000	0	231	0.0%	60	1	0.4%
16000	0	264	0.0%	64	4	1.5%
18000	0	298	0.0%	68	0	0.0%
20000	0	331	0.0%	72	1	0.4%
22000	0	364	0.0%	76	0	0.0%
24000	0	397	0.0%	80	0	0.0%
26000	0	430	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	10	3.7%
TOTAL	1,627			TOTAL	273	

EVENT TYPES HPE 268 MPE 44 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

27-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.30 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	99.5 tons	99.9 tons
MAXIMUM/SORT	4.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.3 yd³	78.9 yd³	79.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	9,179 kBq	2,201 kBq	11,360 kBq
MAXIMUM/SORT	1,507 kBq	656 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	-6 kBq
SPECIFIC ACTIVITY		6,476 Bq/kg	114 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,651		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			06:59	10:03
NONE (AD=0 & MD=0 & MND>0)	1,434			09:39	
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	217			11:19	
UNEXPLAINED RECORDS	0			11:22	
0<AD<1kBq & MD>0	6			14:57	
AD=0 & MD>0	0			15:16	
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			16,510		
2-SEC RECORDS WITH SORTS	413				
2-SEC RECORDS WITHOUT SORTS	16,097				
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			2,064		
NONPROCESSING RECORDS (Test, calibration, etc)			4		

2-SEC SORT DETECTORS

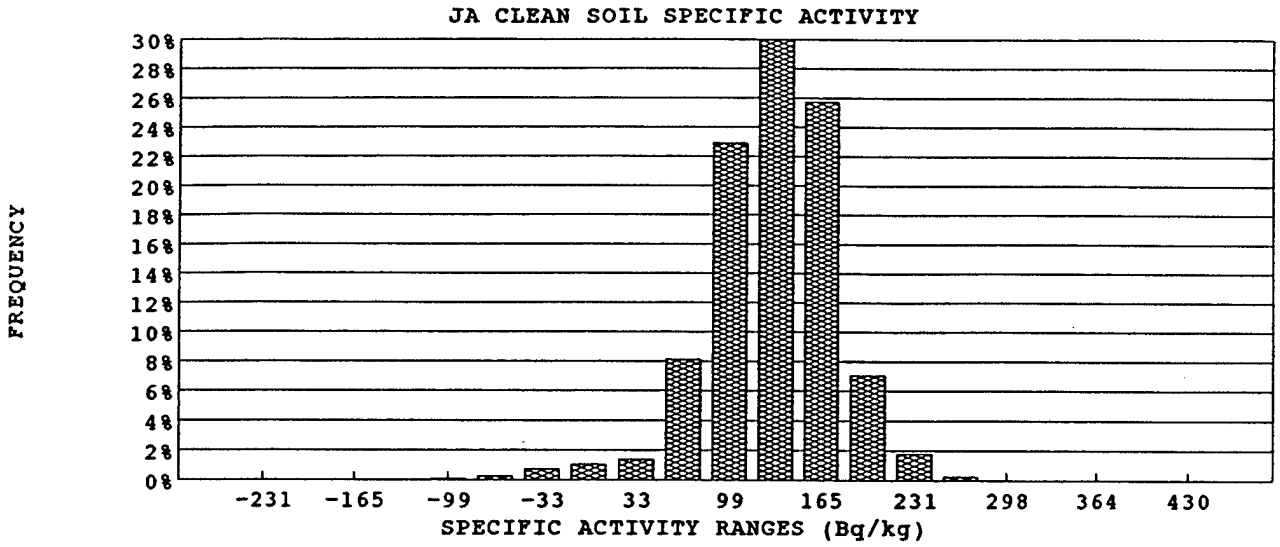
1 DET	307	74.33%	5 DET	0	0.00%
2 DET	90	21.79%	6 DET	0	0.00%
3 DET	15	3.63%	7 DET	0	0.00%
4 DET	1	0.24%	8 DET	0	0.00%

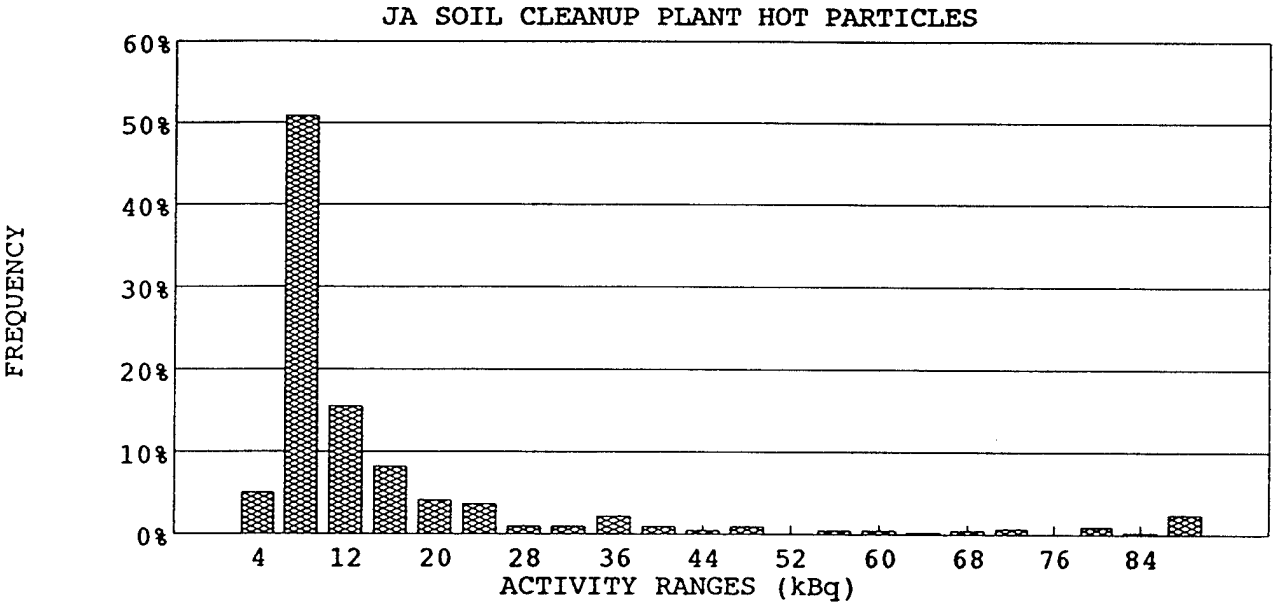
AVERAGE TIME BETWEEN 2-SEC SORTS 107.6 sec

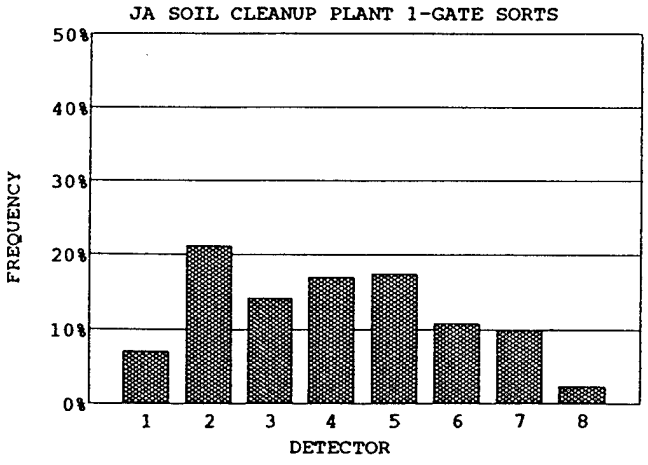
FREQUENCY DISTRIBUTIONS

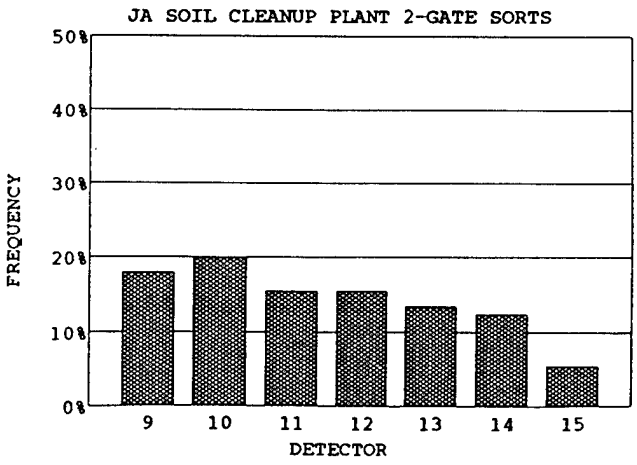
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	15	7.1%	-14000	0	-231	0.0%	4	21	5.1%
2	45	21.2%	-12000	0	-198	0.0%	8	210	50.8%
3	30	14.2%	-10000	0	-165	0.0%	12	64	15.5%
4	36	17.0%	-8000	0	-132	0.0%	16	34	8.2%
5	37	17.5%	-6000	1	-99	0.1%	20	17	4.1%
6	23	10.8%	-4000	4	-66	0.2%	24	15	3.6%
7	21	9.9%	-2000	12	-33	0.7%	28	4	1.0%
8	5	2.4%	0	17	0	1.0%	32	4	1.0%
TOTAL	212		2000	23	33	1.4%	36	9	2.2%
			4000	135	66	8.2%	40	4	1.0%
2-GATE DET	SORTS	FREQ%	6000	379	99	22.9%	44	2	0.5%
9	36	17.9%	8000	508	132	30.7%	48	4	1.0%
10	40	19.9%	10000	426	165	25.7%	52	0	0.0%
11	31	15.4%	12000	117	198	7.1%	56	2	0.5%
12	31	15.4%	14000	29	231	1.8%	60	2	0.5%
13	27	13.4%	16000	4	264	0.2%	64	1	0.2%
14	25	12.4%	18000	0	298	0.0%	68	2	0.5%
15	11	5.5%	20000	0	331	0.0%	72	3	0.7%
TOTAL	201		22000	0	364	0.0%	76	0	0.0%
			24000	0	397	0.0%	80	4	1.0%
			26000	0	430	0.0%	84	1	0.2%
			>28000	0	0	0.0%	>84	10	2.4%
			TOTAL	1,655			TOTAL	413	

EVENT TYPES	HPE	MPE	DISE
	418	30	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–94

WORK DAY START	06:00 AM	WORK DAY END	16:50 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	10.7 hr	10.7 hr	3.2 hr	10.0 hr	34.5 hr
SORTER START–UP	06:10	06:10	06:20	06:20	
START SOIL PROCESSING	06:18	06:18	06:35	06:35	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.3 hr	0.3 hr	0.8 hr
SORTER SHUT–DOWN	16:50	16:50	09:30	16:20	
END SOIL PROCESSING	16:37	16:38	09:19	16:10	
TIME REQUIRED TO SHUT DOWN	0.2 hr	0.2 hr	0.2 hr	0.2 hr	0.7 hr
ACTUAL PROCESS HOURS	9.9 hr	9.9 hr	1.7 hr	9.4 hr	30.9 hr
DOWN–TIME	0.7 hr	0.7 hr	1.5 hr	0.6 hr	3.6 hr
SYSTEM PAUSE	0.4 hr	0.4 hr	1.1 hr	0.0 hr	1.9 hr
SORTER NONAVAILABLE TIME	0.2 hr	0.2 hr	7.7 hr	0.8 hr	8.8 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					89.7%
PRODUCTIVTY					71.4%

PRODUCTIVITY

Date	28–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	347	Excused delays for contract (sorter–hrs)	7,235 hr
Current Contract week	58	Excused delay days (plant–days)	181 days
		Excused delay months (plant–month)	6.96 months
Soil production for Day	337 MT		
Cumlative Soil Production for Week	1,634 MT	Percent of contract completed	60.0%
Total Soil production for contract		Tons Ahead or Behind Schedule	2,029 MT
Since 6 Sep 93	58,435 MT	Days ahead or behind schedule	6.4 days
Since 6 Aug 93	60,026 MT		
Total Soil production for project	86,313 MT		

MT = metric tons

File Report1 Printed on 02-Nov-94 at 02:20:09 PM

SORTER 1

28-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.67 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	3.4 tons	104.7 tons	108.1 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	50.7 kg	
VOLUME IN-GROUND	2.7 yd³	83.0 yd³	85.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	96.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	53,393 kBq	12,465 kBq	23,082 kBq
MAXIMUM/SORT	994 kBq	332 kBq	24 kBq
MINIMUM/SORT	3 kBq	(482)Bq	-7 kBq
SPECIFIC ACTIVITY		3,679 Bq/kg	220 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,786		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		21			
NONE (AD=0 & MD=0 & MND>0)		764		06:18	06:18
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		1,001		07:25	
UNEXPLAINED RECORDS	0			08:15	
0<AD<1kBq & MD>0	4			09:07	
AD=0 & MD>0	0			15:09	
AD<0 & MD >0	1				
2-SEC COUNT PERIODS			17,860		
2-SEC RECORDS WITH SORTS		2,428			
2-SEC RECORDS WITHOUT SORTS		15,432			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			4,214		
NONPROCESSING RECORDS (Test, calibration, etc)			6		

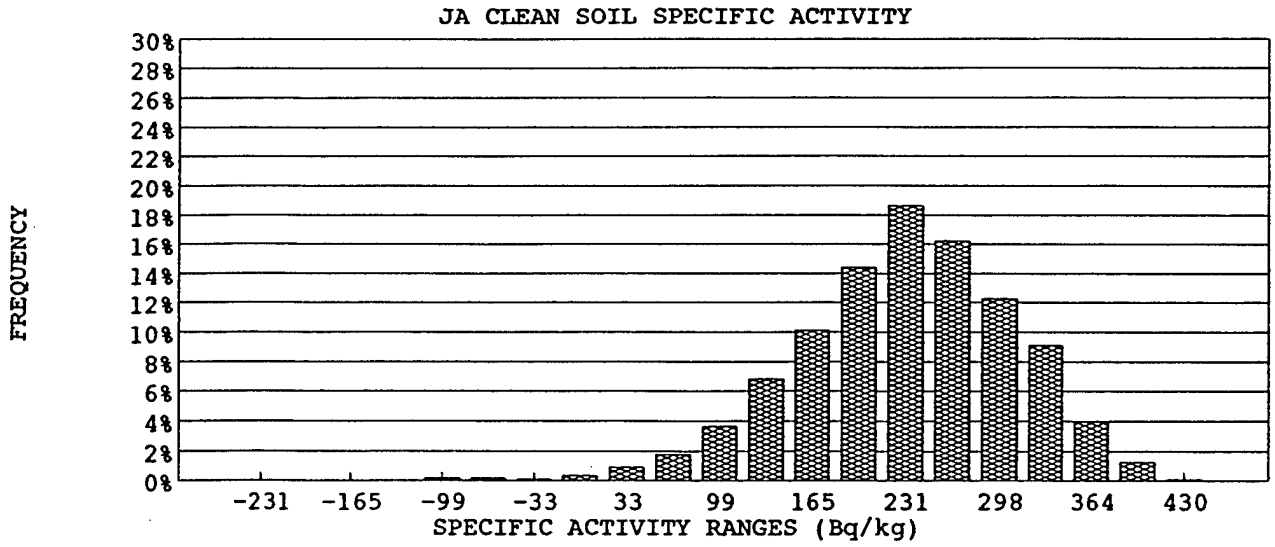
2-SEC SORT DETECTORS

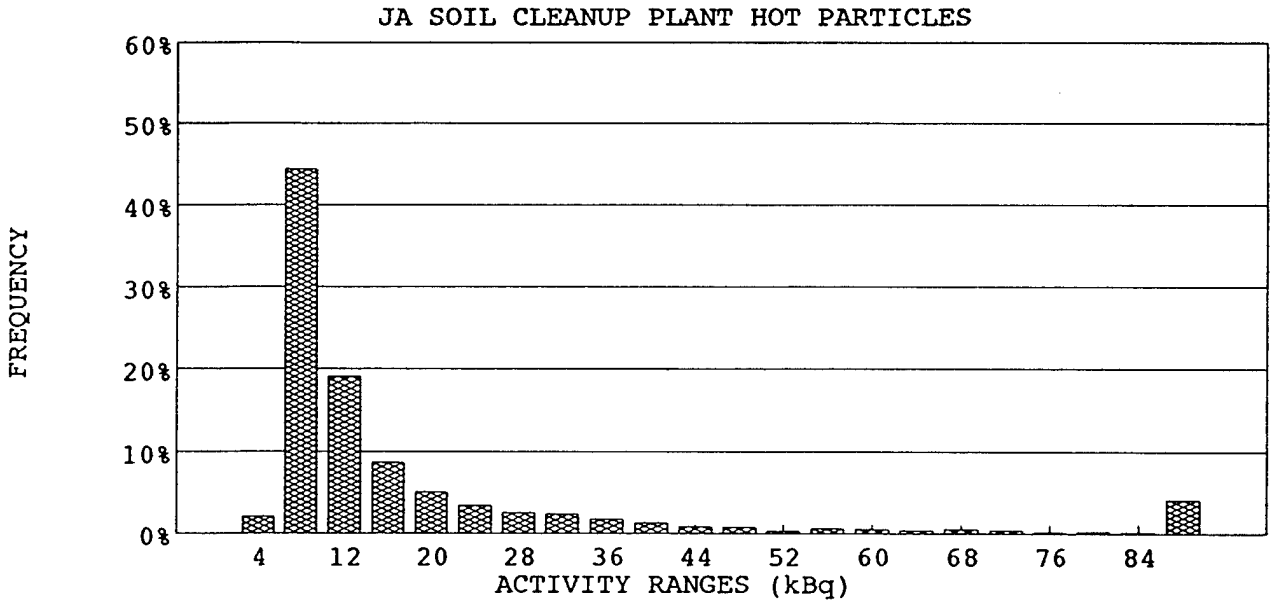
1 DET	1,751	72.12%	5 DET	6	0.25%
2 DET	539	22.20%	6 DET	0	0.00%
3 DET	109	4.49%	7 DET	0	0.00%
4 DET	23	0.95%	8 DET	0	0.00%

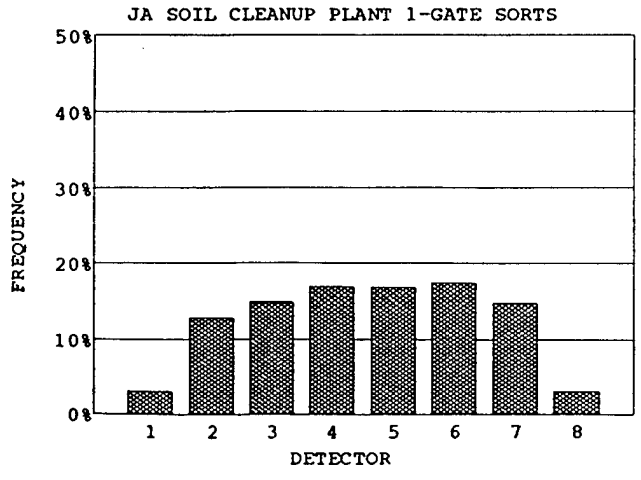
AVERAGE TIME BETWEEN 2-SEC SORTS 20.4 sec

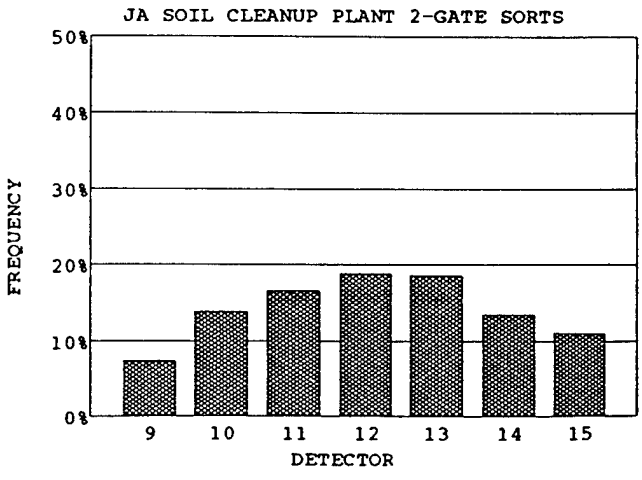
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	38	3.1%	-14000	0	-231	0.0%	4	51	2.1%
2	159	12.9%	-12000	0	-198	0.0%	8	1,078	44.4%
3	185	15.0%	-10000	0	-165	0.0%	12	462	19.0%
4	208	16.9%	-8000	0	-132	0.0%	16	211	8.7%
5	207	16.8%	-6000	3	-99	0.2%	20	123	5.1%
6	215	17.4%	-4000	3	-66	0.2%	24	84	3.5%
7	183	14.8%	-2000	2	-33	0.1%	28	61	2.5%
8	38	3.1%	0	6	0	0.3%	32	58	2.4%
TOTAL	1,233		2000	16	33	0.9%	36	43	1.8%
			4000	31	66	1.8%	40	33	1.4%
2-GATE SORTS			6000	65	99	3.7%	44	21	0.9%
DET	SORTS	FREQ%	8000	121	132	6.8%	48	19	0.8%
9	88	7.4%	10000	179	165	10.1%	52	8	0.3%
10	167	14.0%	12000	255	198	14.4%	56	16	0.7%
11	198	16.6%	14000	330	231	18.6%	60	13	0.5%
12	225	18.8%	16000	287	264	16.2%	64	9	0.4%
13	222	18.6%	18000	217	298	12.3%	68	13	0.5%
14	162	13.6%	20000	161	331	9.1%	72	10	0.4%
15	133	11.1%	22000	71	364	4.0%	76	4	0.2%
TOTAL	1,195		24000	22	397	1.2%	80	6	0.2%
			26000	2	430	0.1%	84	3	0.1%
			>28000	0	0	0.0%	>84	102	4.2%
			TOTAL	1,771			TOTAL	2,428	
EVENT TYPES		HPE	2,425	MPE	412	DISE	1,634		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.46 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	36.7 tons	71.7 tons	108.3 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
VOLUME IN-GROUND	29.1 yd³	56.8 yd³	85.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	66.2%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	71,803 kBq	35,382 kBq	22,842 kBq
MAXIMUM/SORT	2,167 kBq	802 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		965 Bq/kg	319 Bq/kg

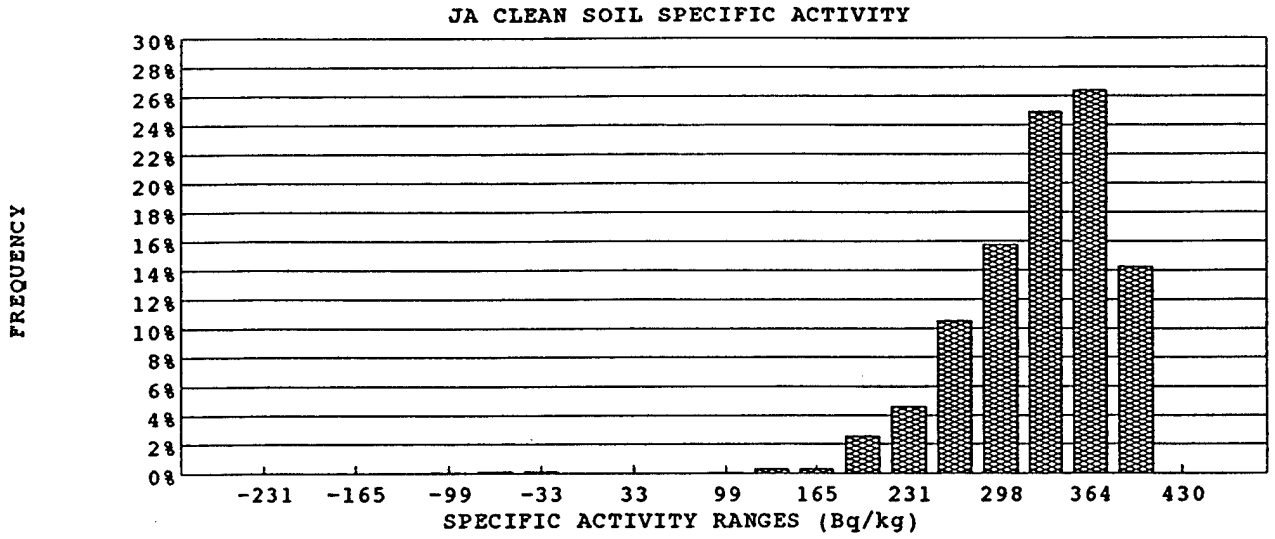
SORTS

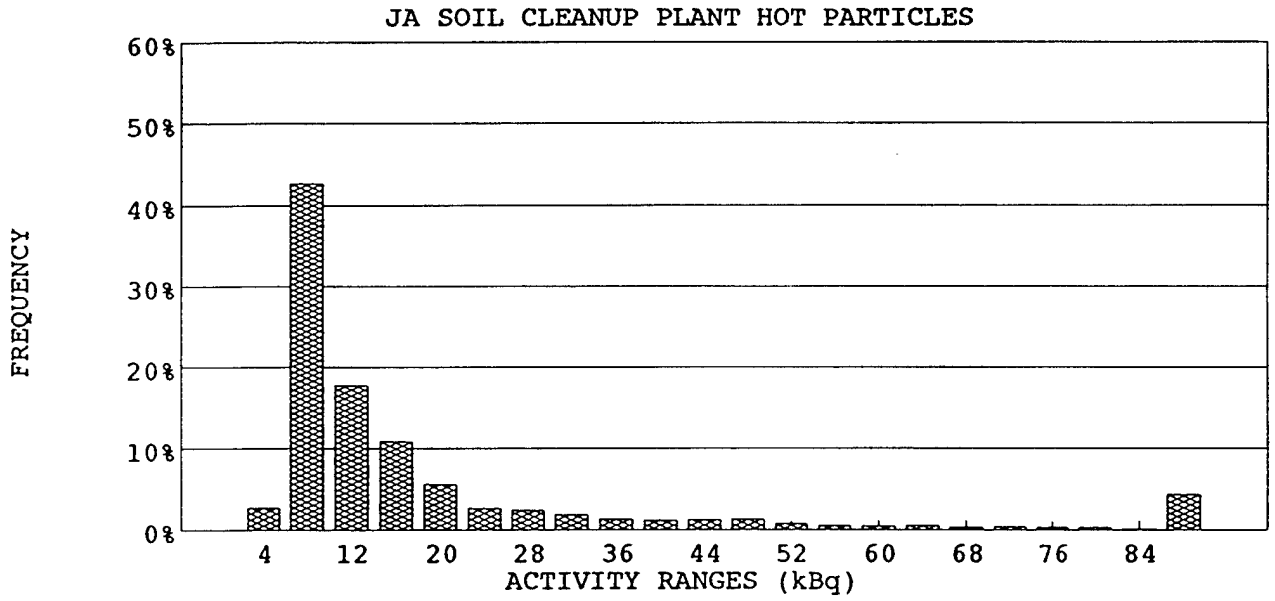
20-SEC PROCESS PERIODS					1,790		UNEXP TIME	PAUSE TIME
ALL 80 ELEMENTS SORT (MD>0&MND=0)			572				07:15	06:19
NONE (AD=0 & MD=0 & MND>0)			336					
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			882					
UNEXPLAINED RECORDS		0						
0<AD<1kBq & MD>0		1						
AD=0 & MD>0		0						
AD<0 & MD >0		0						
2-SEC COUNT PERIODS					17,900			
2-SEC RECORDS WITH SORTS			3,012					
2-SEC RECORDS WITHOUT SORTS			14,888					
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)					4,802			
NONPROCESSING RECORDS (Test, calibration, etc)					3			
2-SEC SORT DETECTORS								
1 DET	2,139	71.02%		5 DET	7	0.23%		
2 DET	695	23.07%		6 DET	0	0.00%		
3 DET	146	4.85%		7 DET	0	0.00%		
4 DET	25	0.83%		8 DET	0	0.00%		
AVERAGE TIME BETWEEN 2-SEC SORTS			16.7 sec					

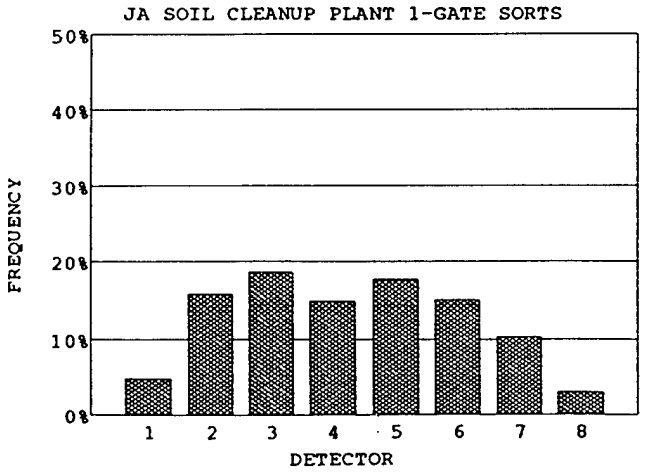
FREQUENCY DISTRIBUTIONS

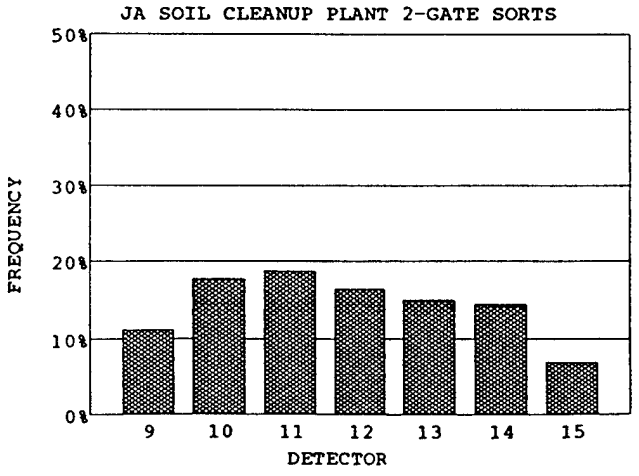
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	74	4.9%	-14000	0	-231	0.0%	4	82	2.7%
2	239	15.8%	-12000	0	-198	0.0%	8	1,286	42.7%
3	282	18.6%	-10000	0	-165	0.0%	12	534	17.7%
4	225	14.8%	-8000	0	-132	0.0%	16	327	10.9%
5	268	17.7%	-6000	1	-99	0.1%	20	169	5.6%
6	227	15.0%	-4000	2	-66	0.2%	24	79	2.6%
7	156	10.3%	-2000	2	-33	0.2%	28	73	2.4%
8	46	3.0%	0	0	0	0.0%	32	58	1.9%
TOTAL	1,517		2000	0	33	0.0%	36	40	1.3%
			4000	0	66	0.0%	40	36	1.2%
2-GATE DET	SORTS	FREQ%	6000	1	99	0.1%	44	37	1.2%
9	166	11.1%	8000	4	132	0.3%	48	39	1.3%
10	264	17.7%	10000	4	165	0.3%	52	24	0.8%
11	279	18.7%	12000	31	198	2.5%	56	17	0.6%
12	244	16.3%	14000	56	231	4.6%	60	15	0.5%
13	223	14.9%	16000	128	264	10.5%	64	18	0.6%
14	216	14.4%	18000	192	298	15.7%	68	11	0.4%
15	103	6.9%	20000	304	331	24.9%	72	13	0.4%
TOTAL	1,495		22000	322	364	26.4%	76	9	0.3%
			24000	174	397	14.3%	80	9	0.3%
			26000	0	430	0.0%	84	4	0.1%
			>28000	0	0	0.0%	>84	132	4.4%
			TOTAL	1,221			TOTAL	3,012	

EVENT TYPES HPE 2,975 MPE 1,460 DISE 44,030


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

28-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.56 ± 0.02 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	17.8 tons	18.2 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	57.5 kg	
VOLUME IN-GROUND	0.3 yd³	14.1 yd³	14.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	97.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	1,040 kBq	294 kBq	762 kBq
MAXIMUM/SORT	117 kBq	59 kBq	9 kBq
MINIMUM/SORT	3 kBq	0 Bq	-5 kBq
SPECIFIC ACTIVITY		665 Bq/kg	43 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		301		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	6			
NONE (AD=0 & MD=0 & MND>0)	255		06:57	06:48
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	40		07:49	06:52
UNEXPLAINED RECORDS	0		09:18	07:02
0<AD<1kBq & MD>0	0		09:19	07:45
AD=0 & MD>0	2			08:29
AD<0 & MD >0	0			09:18
2-SEC COUNT PERIODS		3,010		
2-SEC RECORDS WITH SORTS	77			
2-SEC RECORDS WITHOUT SORTS	2,933			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		378		
NONPROCESSING RECORDS (Test, calibration, etc)		0		

2-SEC SORT DETECTORS

1 DET	52	67.53%	5 DET	1	1.30%
2 DET	15	19.48%	6 DET	0	0.00%
3 DET	6	7.79%	7 DET	0	0.00%
4 DET	3	3.90%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 115.8 sec

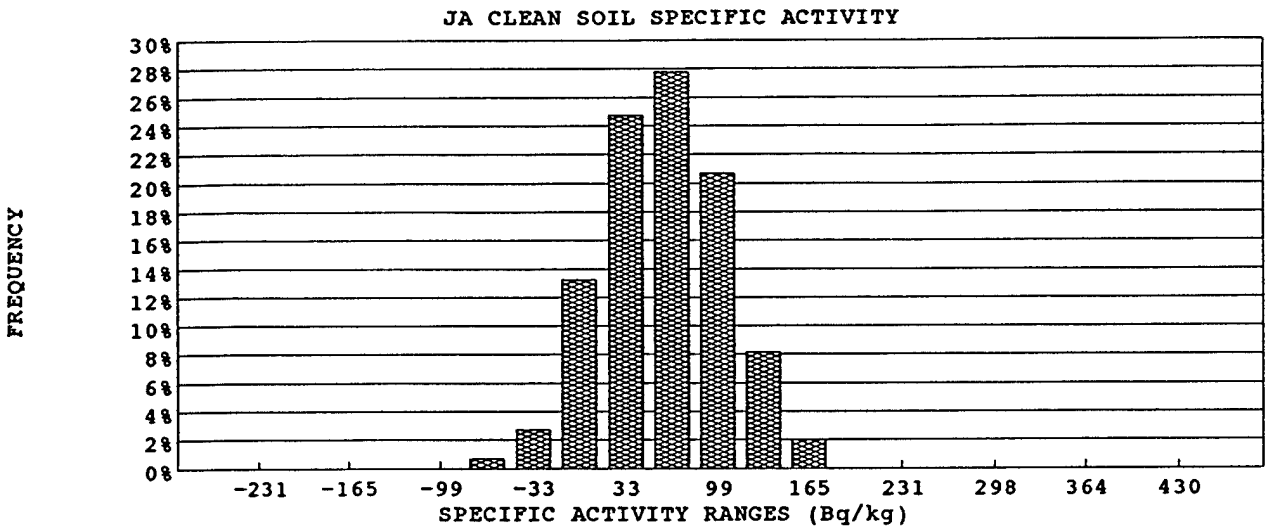
FREQUENCY DISTRIBUTIONS

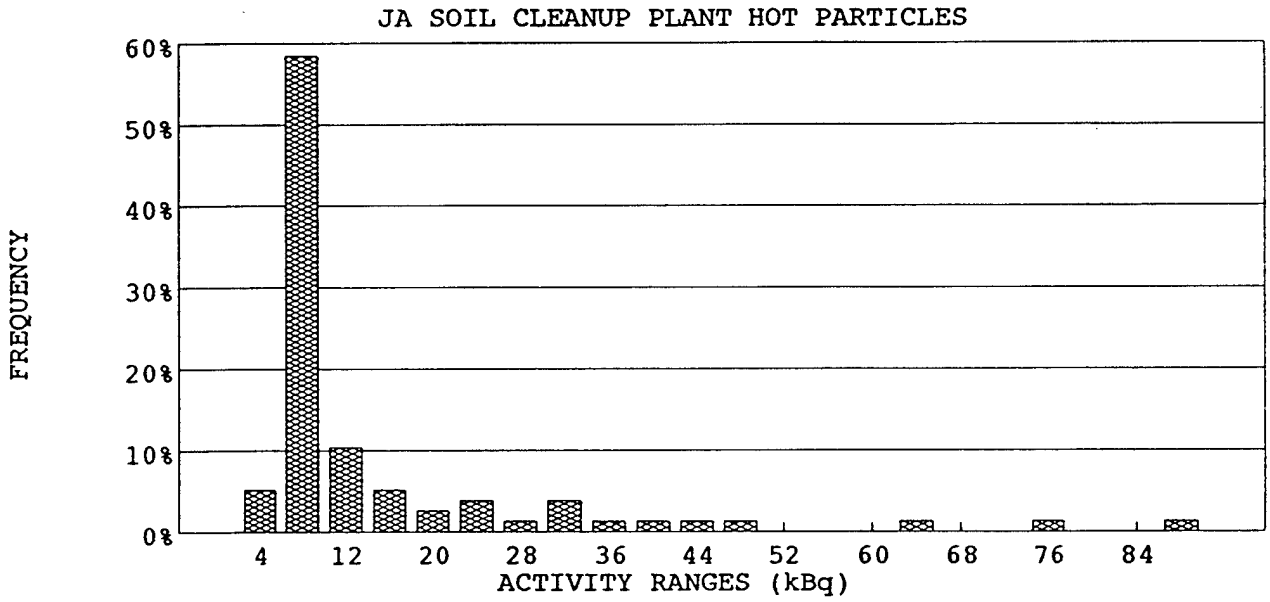
1-GATE DET	SORTS	FREQ%
1	1	2.7%
2	4	10.8%
3	4	10.8%
4	2	5.4%
5	5	13.5%
6	8	21.6%
7	9	24.3%
8	4	10.8%
TOTAL	37	

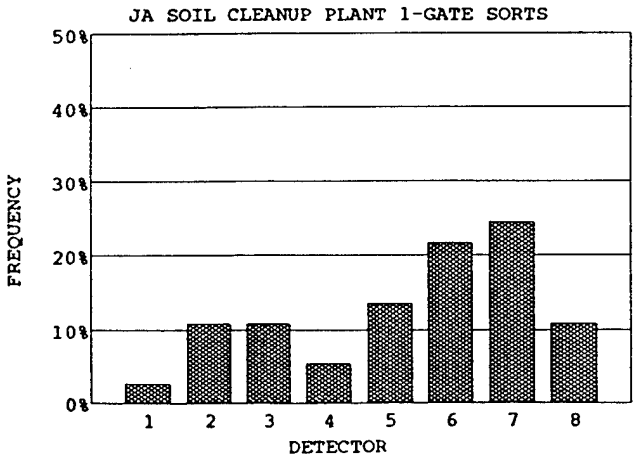
2-GATE DET	SORTS	FREQ%
9	1	2.5%
10	5	12.5%
11	2	5.0%
12	4	10.0%
13	9	22.5%
14	10	25.0%
15	9	22.5%
TOTAL	40	

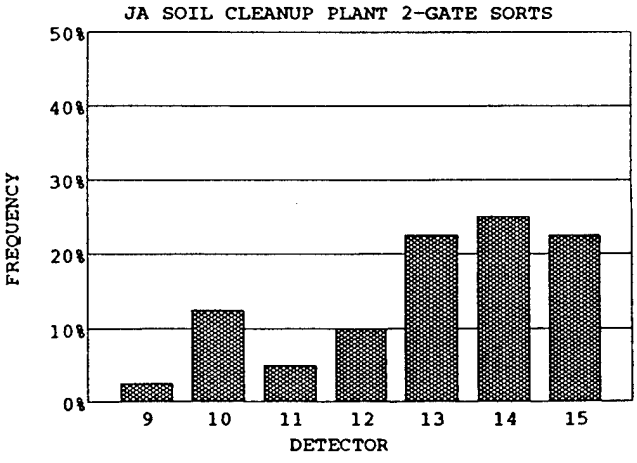
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	4	5.2%
-12000	0	-198	0.0%	8	45	58.4%
-10000	0	-165	0.0%	12	8	10.4%
-8000	0	-132	0.0%	16	4	5.2%
-6000	0	-99	0.0%	20	2	2.6%
-4000	2	-66	0.7%	24	3	3.9%
-2000	8	-33	2.7%	28	1	1.3%
0	39	0	13.2%	32	3	3.9%
2000	73	33	24.7%	36	1	1.3%
4000	82	66	27.8%	40	1	1.3%
6000	61	99	20.7%	44	1	1.3%
8000	24	132	8.1%	48	1	1.3%
10000	6	165	2.0%	52	0	0.0%
12000	0	198	0.0%	56	0	0.0%
14000	0	231	0.0%	60	0	0.0%
16000	0	264	0.0%	64	1	1.3%
18000	0	298	0.0%	68	0	0.0%
20000	0	331	0.0%	72	0	0.0%
22000	0	364	0.0%	76	1	1.3%
24000	0	397	0.0%	80	0	0.0%
26000	0	430	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	1	1.3%
TOTAL	295			TOTAL	77	

EVENT TYPES HPE 80 MPE 4 DISE 498


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

28-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.28 ± 0.03 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.5 tons	101.9 tons	102.4 tons
MAXIMUM/SORT	8.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	52.2 kg	
VOLUME IN-GROUND	0.4 yd³	80.8 yd³	81.2 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	8,041 kBq	2,272 kBq	13,618 kBq
MAXIMUM/SORT	135 kBq	129 kBq	18 kBq
MINIMUM/SORT	3 kBq	0 Bq	-3 kBq
SPECIFIC ACTIVITY		4,591 Bq/kg	134 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,693		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	1,394		12:38	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	299		14:23	
UNEXPLAINED RECORDS	0		15:10	
0<AD<1kBq & MD>0	3			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		16,930		
2-SEC RECORDS WITH SORTS	562			
2-SEC RECORDS WITHOUT SORTS	16,368			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		2,255		
NONPROCESSING RECORDS (Test, calibration, etc)		39		

2-SEC SORT DETECTORS

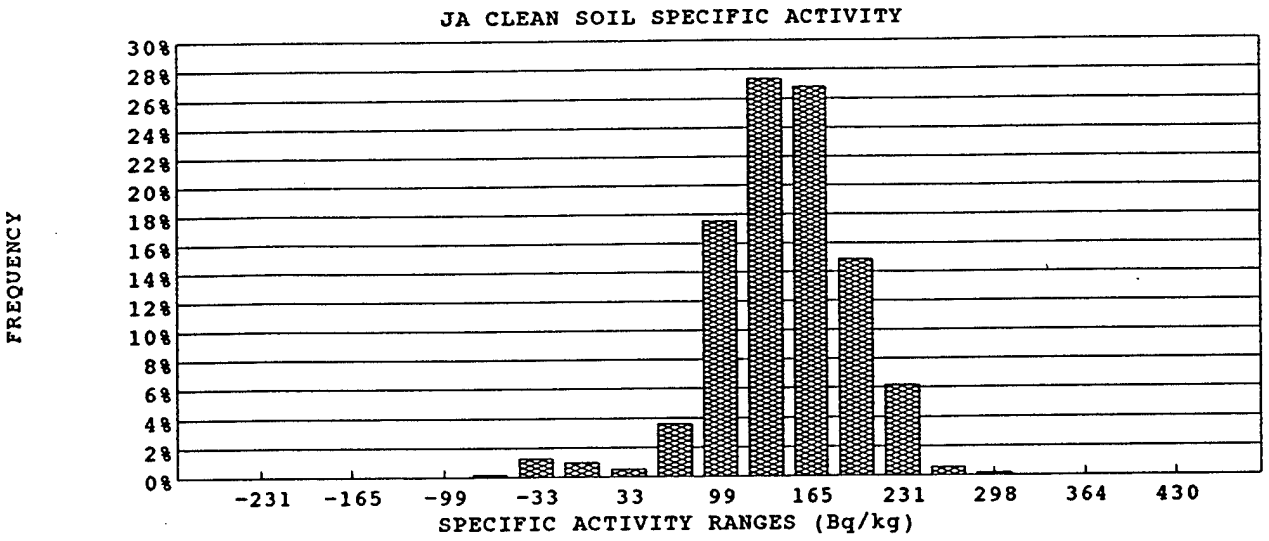
1 DET	418	74.38%	5 DET	0	0.00%
2 DET	127	22.60%	6 DET	0	0.00%
3 DET	16	2.85%	7 DET	0	0.00%
4 DET	1	0.18%	8 DET	0	0.00%

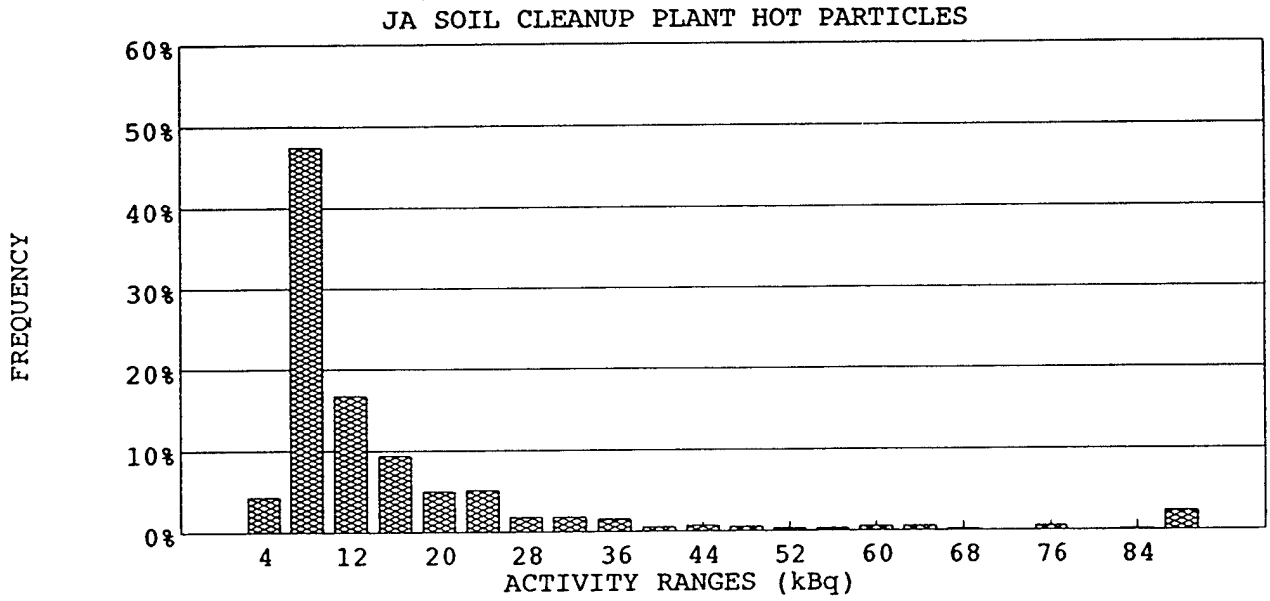
AVERAGE TIME BETWEEN 2-SEC SORTS 81.0 sec

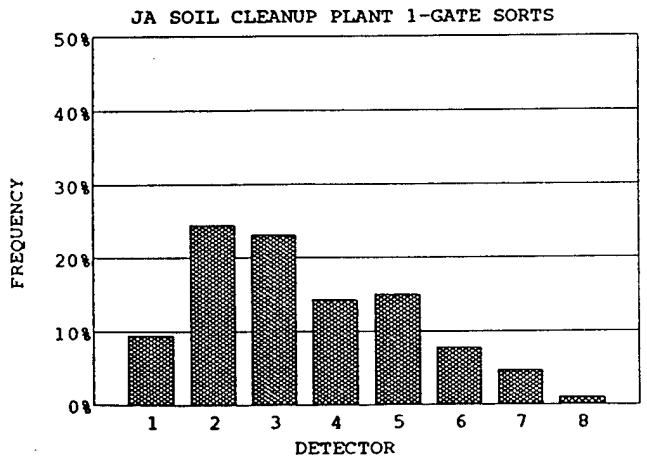
FREQUENCY DISTRIBUTIONS

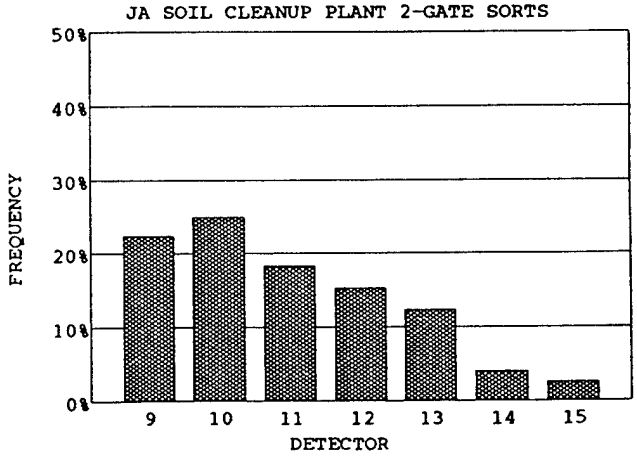
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	28	9.5%	-14000	0	-231	0.0%	4	24	4.3%
2	72	24.5%	-12000	0	-198	0.0%	8	267	47.5%
3	68	23.1%	-10000	0	-165	0.0%	12	94	16.7%
4	42	14.3%	-8000	0	-132	0.0%	16	53	9.4%
5	44	15.0%	-6000	0	-99	0.0%	20	28	5.0%
6	23	7.8%	-4000	3	-66	0.2%	24	29	5.2%
7	14	4.8%	-2000	22	-33	1.3%	28	10	1.8%
8	3	1.0%	0	17	0	1.0%	32	10	1.8%
TOTAL	294		2000	9	33	0.5%	36	9	1.6%
			4000	62	66	3.6%	40	3	0.5%
2-GATE DET	SORTS	FREQ%	6000	304	99	17.6%	44	4	0.7%
			8000	474	132	27.4%	48	3	0.5%
9	60	22.4%	10000	464	165	26.8%	52	2	0.4%
10	67	25.0%	12000	257	198	14.8%	56	2	0.4%
11	49	18.3%	14000	107	231	6.2%	60	3	0.5%
12	41	15.3%	16000	10	264	0.6%	64	3	0.5%
13	33	12.3%	18000	3	298	0.2%	68	1	0.2%
14	11	4.1%	20000	0	331	0.0%	72	0	0.0%
15	7	2.6%	22000	0	364	0.0%	76	3	0.5%
TOTAL	268		24000	0	397	0.0%	80	0	0.0%
			26000	0	430	0.0%	84	1	0.2%
			>28000	0	0	0.0%	>84	13	2.3%
			TOTAL	1,732			TOTAL	562	

EVENT TYPES	HPE	MPE	DISE
	562	90	0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	7.0 hr	7.0 hr	7.2 hr	7.2 hr	28.4 hr
SORTER START–UP	06:30	06:30	06:19	06:19	
START SOIL PROCESSING	06:35	06:35	06:40	06:43	
TIME REQUIRED TO START–UP	0.1 hr	0.1 hr	0.4 hr	0.4 hr	0.9 hr
SORTER SHUT–DOWN	13:30	13:30	13:30	13:30	
END SOIL PROCESSING	13:13	13:18	12:59	12:55	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.2 hr	0.5 hr	0.6 hr	1.6 hr
ACTUAL PROCESS HOURS	6.3 hr	6.5 hr	6.3 hr	6.2 hr	25.3 hr
DOWN–TIME	0.7 hr	0.5 hr	0.9 hr	1.0 hr	3.1 hr
SYSTEM PAUSE	0.3 hr	0.3 hr	0.0 hr	0.0 hr	0.6 hr
SORTER NONAVAILABLE TIME	3.5 hr	3.5 hr	3.3 hr	3.3 hr	13.6 hr
AUTHORIZED DELAY TIME	0.0 hr	0.0 hr	0.0 hr	0.0 hr	0.0 hr
PLANT PERFORMANCE					89.2%
PRODUCTIVTY					60.2%

PRODUCTIVITY

Date	29–Oct–94	Excused Delays for day (sorter–hrs)	0 hr
Contract day (from 6 Sep)	348	Excused delays for contract (sorter–hrs)	7,235 hr
Current Contract week	58	Excused delay days (plant–days)	181 days
		Excused delay months (plant–month)	6.96 months
Soil production for Day	276 MT		
Cumlative Soil Production for Week	1,910 MT	Percent of contract completed	60.3%
Total Soil production for contract		Tons Ahead or Behind Schedule	1,988 MT
Since 6 Sep 93	58,711 MT	Days ahead or behind schedule	6.3 days
Since 6 Aug 93	60,302 MT		
Total Soil production for project	86,589 MT		

MT = metric tons

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SORTER 1

29-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.30 ± 0.10 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	12.5 tons	56.6 tons	69.1 tons
MAXIMUM/SORT	60.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	49.9 kg	
VOLUME IN-GROUND	9.9 yd³	44.8 yd³	54.7 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	81.9%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	DISPERSED + PARTICLE CLEAN
TOTAL	49,048 kBq	16,109 kBq	17,687 kBq
MAXIMUM/SORT	1,560 kBq	672 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-8 kBq
SPECIFIC ACTIVITY		1,289 Bq/kg	313 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,141		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		182		08:29	08:00
NONE (AD=0 & MD=0 & MND>0)		307		11:02	12:42
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		652			
UNEXPLAINED RECORDS	0				
0<AD<1kBq & MD>0	2				
AD=0 & MD>0	0				
AD<0 & MD >0	0				
2-SEC COUNT PERIODS			11,410		
2-SEC RECORDS WITH SORTS		1,962			
2-SEC RECORDS WITHOUT SORTS		9,448			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,103		
NONPROCESSING RECORDS (Test, calibration, etc)			4		

2-SEC SORT DETECTORS

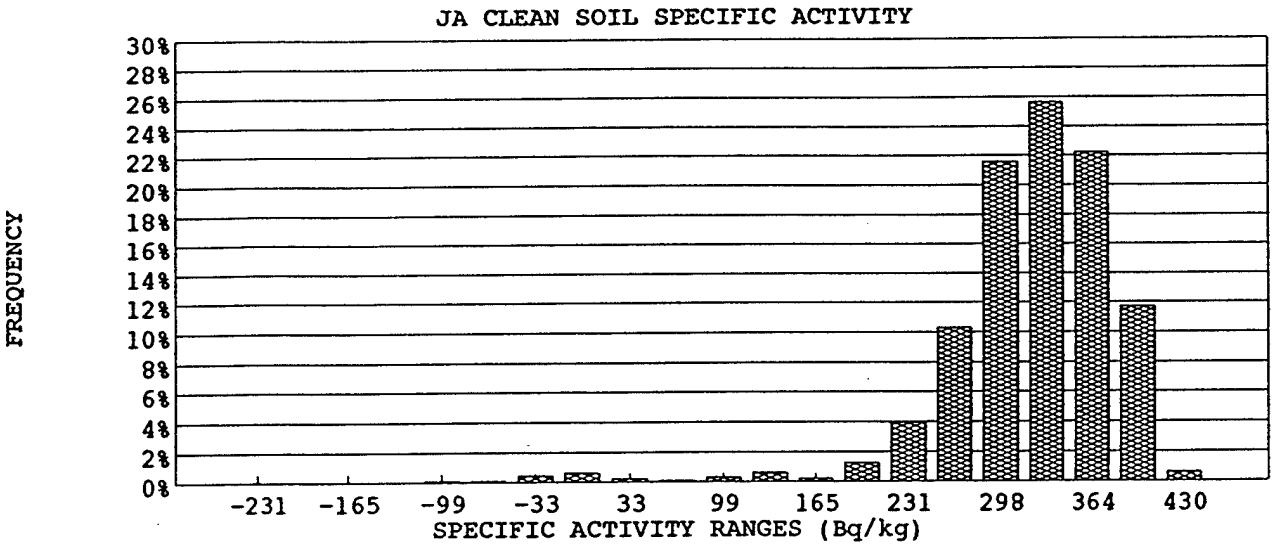
1 DET	1,413	72.02%	5 DET	3	0.15%
2 DET	438	22.32%	6 DET	0	0.00%
3 DET	95	4.84%	7 DET	0	0.00%
4 DET	13	0.66%	8 DET	0	0.00%

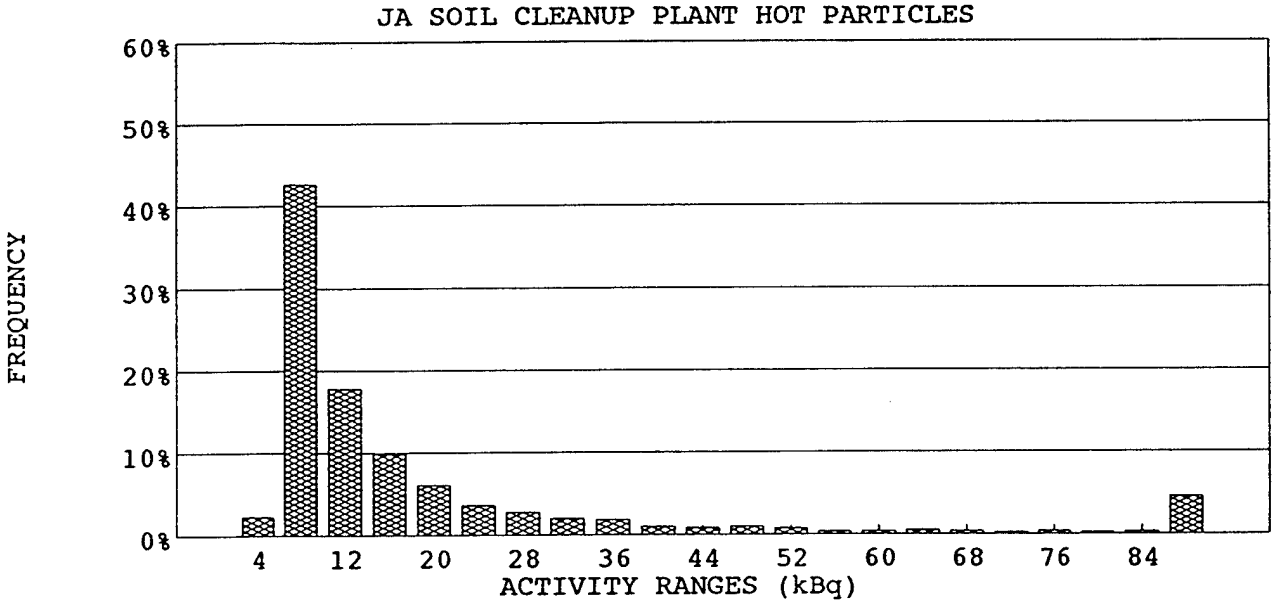
AVERAGE TIME BETWEEN 2-SEC SORTS 16.2 sec

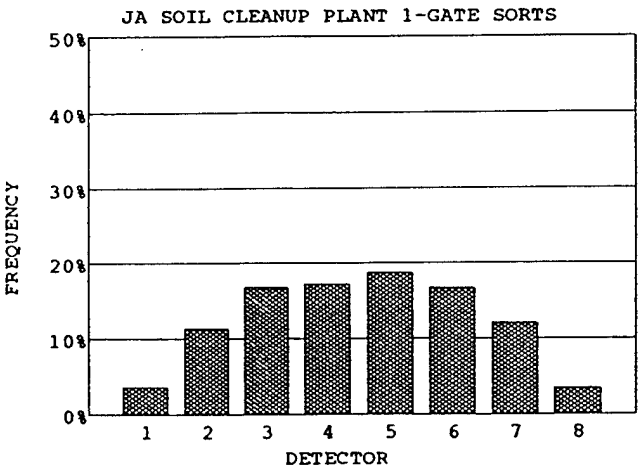
FREQUENCY DISTRIBUTIONS

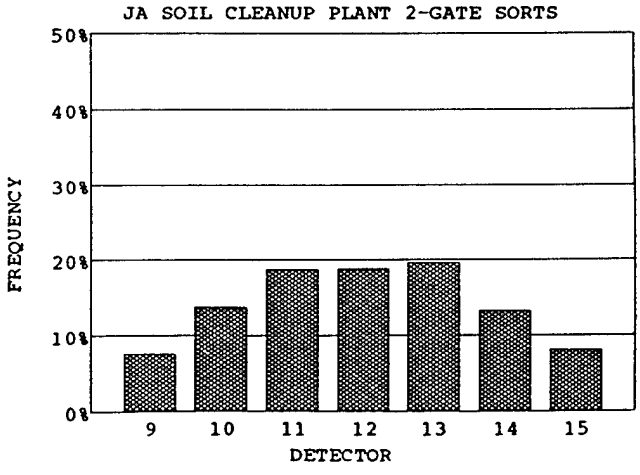
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	36	3.6%	-14000	0	-231	0.0%	4	45	2.3%
2	113	11.3%	-12000	0	-198	0.0%	8	837	42.7%
3	168	16.8%	-10000	0	-165	0.0%	12	349	17.8%
4	172	17.2%	-8000	0	-132	0.0%	16	193	9.8%
5	187	18.7%	-6000	1	-99	0.1%	20	120	6.1%
6	167	16.7%	-4000	1	-66	0.1%	24	71	3.6%
7	121	12.1%	-2000	4	-33	0.4%	28	54	2.8%
8	34	3.4%	0	6	0	0.6%	32	39	2.0%
TOTAL	998		2000	2	33	0.2%	36	36	1.8%
			4000	1	66	0.1%	40	19	1.0%
2-GATE DET	SORTS	FREQ%	6000	3	99	0.3%	44	17	0.9%
9	73	7.6%	8000	6	132	0.6%	48	20	1.0%
10	133	13.8%	10000	2	165	0.2%	52	15	0.8%
11	181	18.8%	12000	12	198	1.2%	56	8	0.4%
12	182	18.9%	14000	38	231	3.9%	60	8	0.4%
13	189	19.6%	16000	99	264	10.3%	64	11	0.6%
14	128	13.3%	18000	208	298	21.6%	68	7	0.4%
15	78	8.1%	20000	247	331	25.6%	72	5	0.3%
TOTAL	964		22000	214	364	22.2%	76	8	0.4%
			24000	113	397	11.7%	80	5	0.3%
			26000	6	430	0.6%	84	6	0.3%
			>28000	0	0	0.0%	>84	89	4.5%
			TOTAL	963			TOTAL	1,962	

EVENT TYPES	HPE	MPE	DISE
	1,919	488	14,113


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

29-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.76 ± 0.06 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	23.2 tons	47.4 tons	70.5 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	49.9 kg	
VOLUME IN-GROUND	18.4 yd³	37.5 yd³	55.9 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	67.1%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	54,928 kBq	24,126 kBq	14,685 kBq
MAXIMUM/SORT	1,084 kBq	507 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-9 kBq
SPECIFIC ACTIVITY		1,041 Bq/kg	310 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,165		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	354			
NONE (AD=0 & MD=0 & MND>0)	171		06:38	06:36
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	640		11:01	06:38
UNEXPLAINED RECORDS	0			06:39
0<AD<1kBq & MD>0	1			12:48
AD=0 & MD>0	1			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,650		
2-SEC RECORDS WITH SORTS	2,506			
2-SEC RECORDS WITHOUT SORTS	9,144			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		3,671		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

1 DET	1,757	70.11%	5 DET	3	0.12%
2 DET	595	23.74%	6 DET	0	0.00%
3 DET	129	5.15%	7 DET	0	0.00%
4 DET	22	0.88%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 13.3 sec

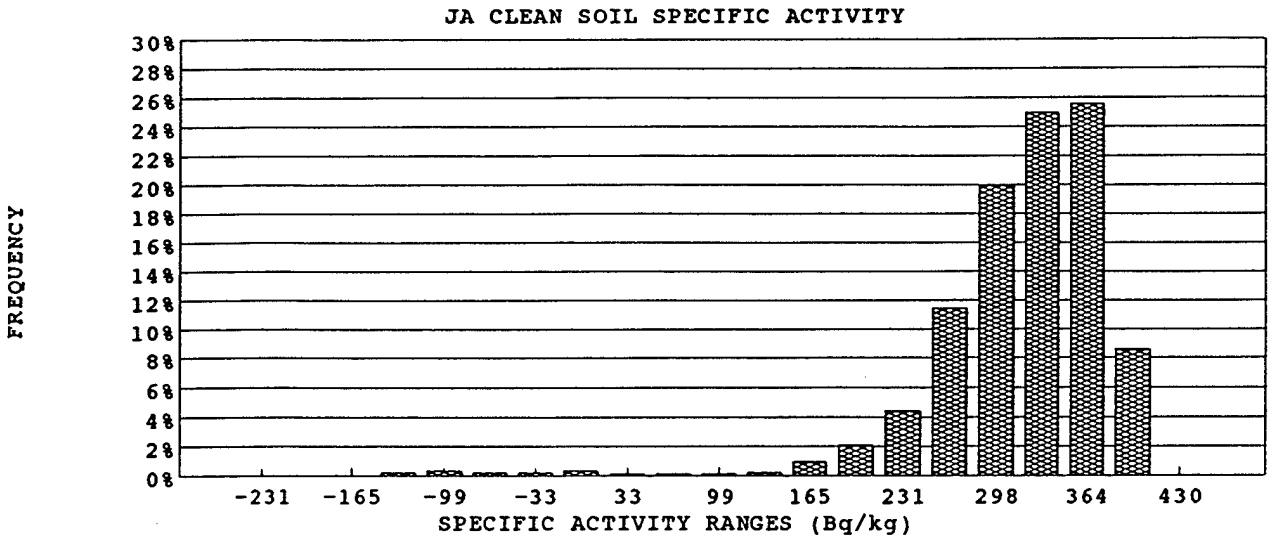
FREQUENCY DISTRIBUTIONS

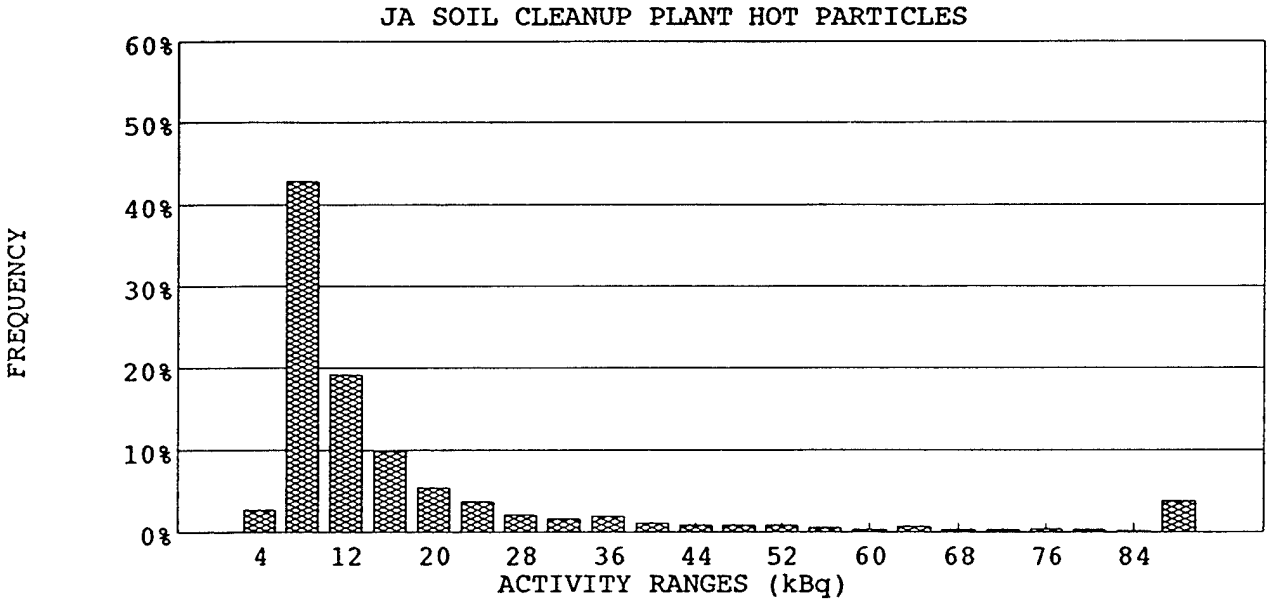
1-GATE DET	SORTS	FREQ%
1	66	5.2%
2	161	12.7%
3	202	15.9%
4	223	17.6%
5	227	17.9%
6	187	14.8%
7	148	11.7%
8	53	4.2%
TOTAL	1,267	

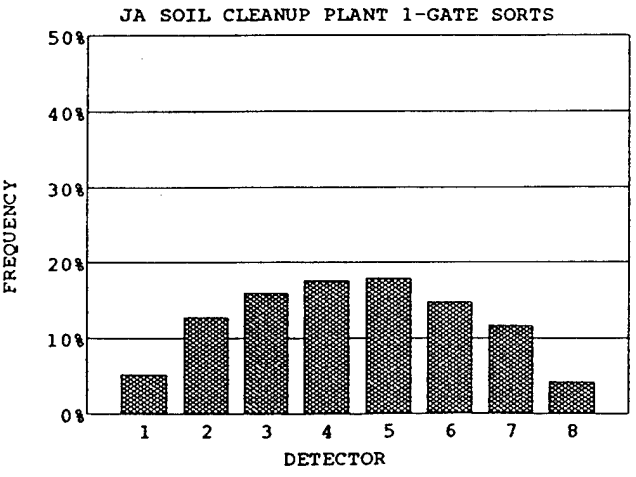
2-GATE DET	SORTS	FREQ%
9	132	10.7%
10	180	14.5%
11	227	18.3%
12	232	18.7%
13	186	15.0%
14	169	13.6%
15	113	9.1%
TOTAL	1,239	

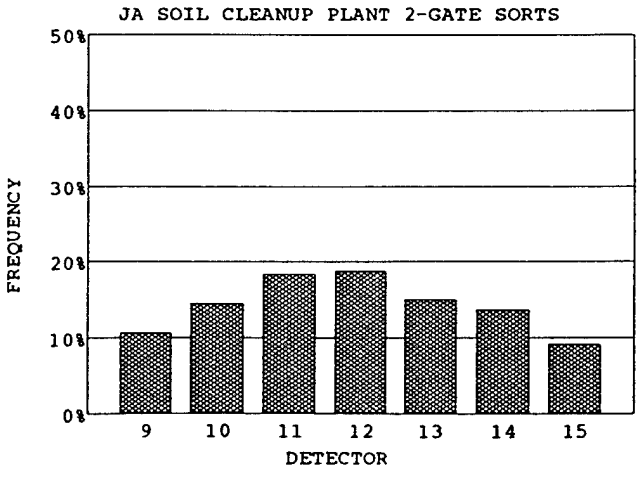
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
-14000	0	-231	0.0%	4	68	2.7%
-12000	0	-198	0.0%	8	1,074	42.9%
-10000	0	-165	0.0%	12	479	19.1%
-8000	2	-132	0.2%	16	246	9.8%
-6000	3	-99	0.4%	20	137	5.5%
-4000	2	-66	0.2%	24	93	3.7%
-2000	2	-33	0.2%	28	52	2.1%
0	3	0	0.4%	32	41	1.6%
2000	1	33	0.1%	36	49	2.0%
4000	1	66	0.1%	40	27	1.1%
6000	1	99	0.1%	44	22	0.9%
8000	2	132	0.2%	48	22	0.9%
10000	8	165	1.0%	52	22	0.9%
12000	17	198	2.1%	56	14	0.6%
14000	36	231	4.4%	60	9	0.4%
16000	93	264	11.4%	64	17	0.7%
18000	162	298	19.9%	68	8	0.3%
20000	203	331	24.9%	72	8	0.3%
22000	208	364	25.6%	76	10	0.4%
24000	70	397	8.6%	80	9	0.4%
26000	0	430	0.0%	84	4	0.2%
>28000	0	0	0.0%	>84	95	3.8%
TOTAL	814			TOTAL	2,506	

EVENT TYPES HPE 2,424 MPE 979 DISE 27,227


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

29-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.12 ± 0.09 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	68.2 tons	68.5 tons
MAXIMUM/SORT	4.5 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.2 yd³	54.1 yd³	54.3 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	3,682 kBq	1,037 kBq	7,748 kBq
MAXIMUM/SORT	99 kBq	42 kBq	19 kBq
MINIMUM/SORT	3 kBq	0 Bq	-4 kBq
SPECIFIC ACTIVITY		3,728 Bq/kg	114 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,132		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	962		10:04	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	170			
UNEXPLAINED RECORDS	0			
0<AD<1kBq & MD>0	1			
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		11,320		
2-SEC RECORDS WITH SORTS	310			
2-SEC RECORDS WITHOUT SORTS	11,010			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,442		
NONPROCESSING RECORDS (Test, calibration, etc)		9		

2-SEC SORT DETECTORS

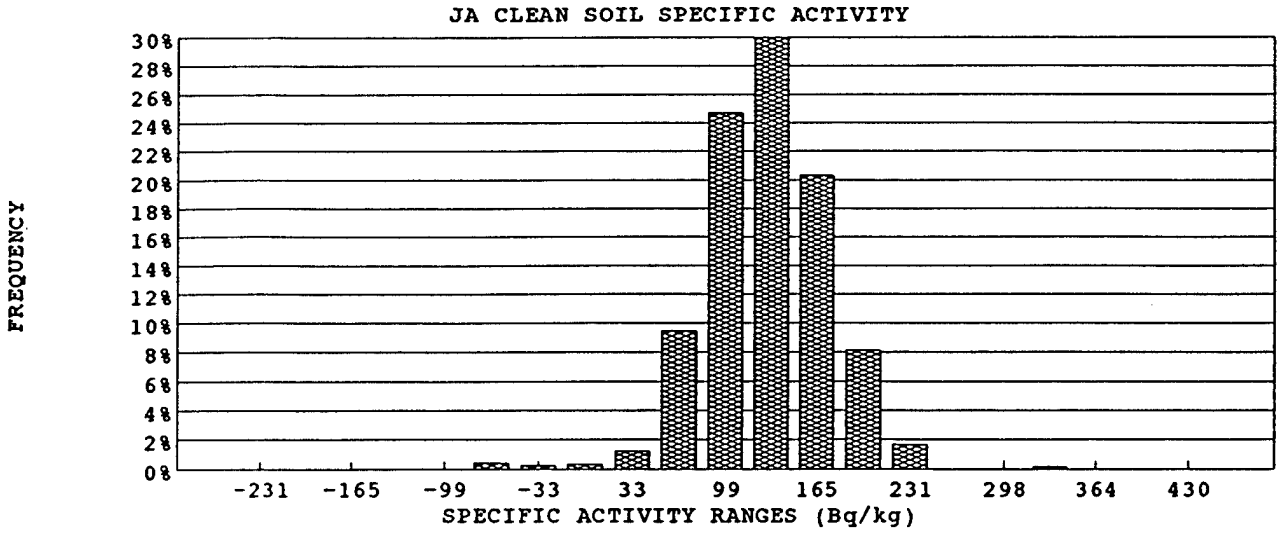
1 DET	235	75.81%	5 DET	0	0.00%
2 DET	66	21.29%	6 DET	0	0.00%
3 DET	9	2.90%	7 DET	0	0.00%
4 DET	0	0.00%	8 DET	0	0.00%

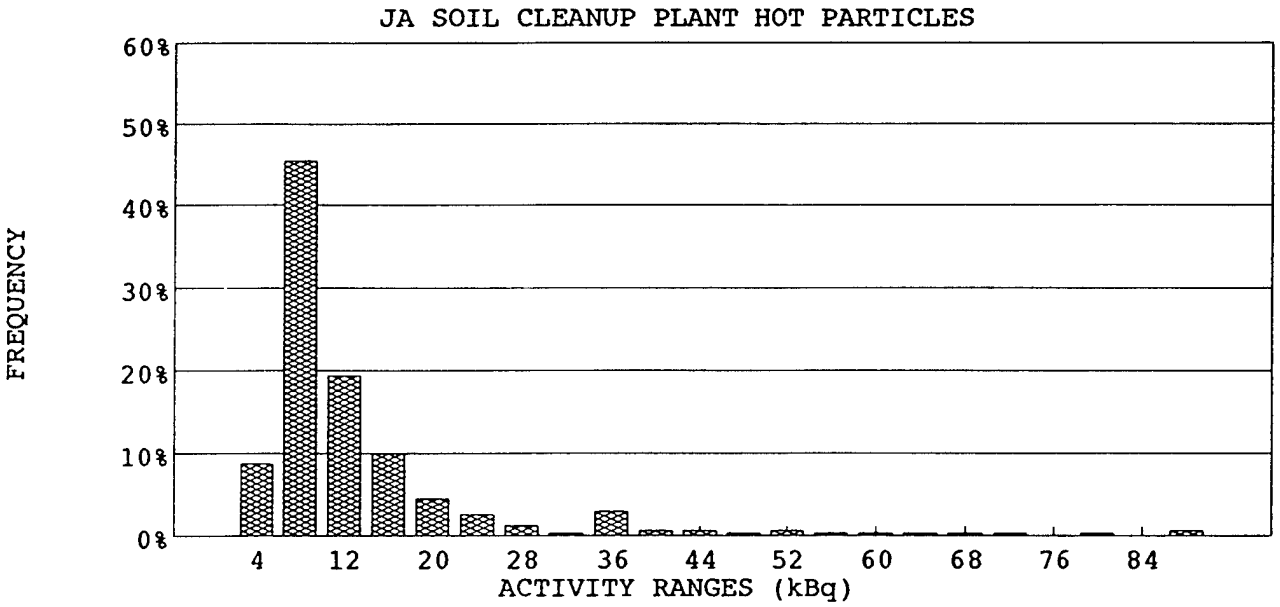
AVERAGE TIME BETWEEN 2-SEC SORTS 96.3 sec

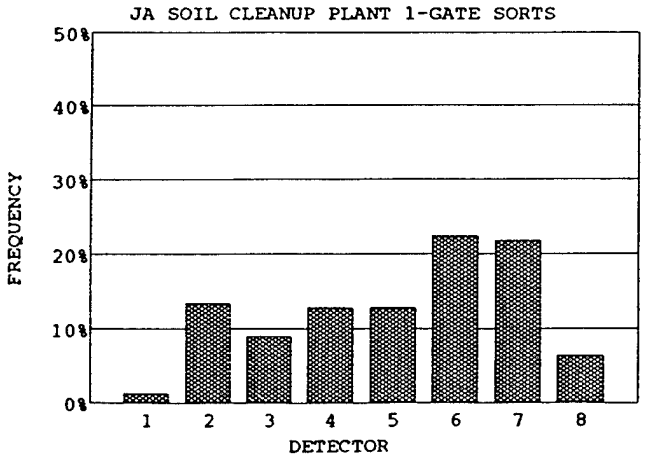
FREQUENCY DISTRIBUTIONS

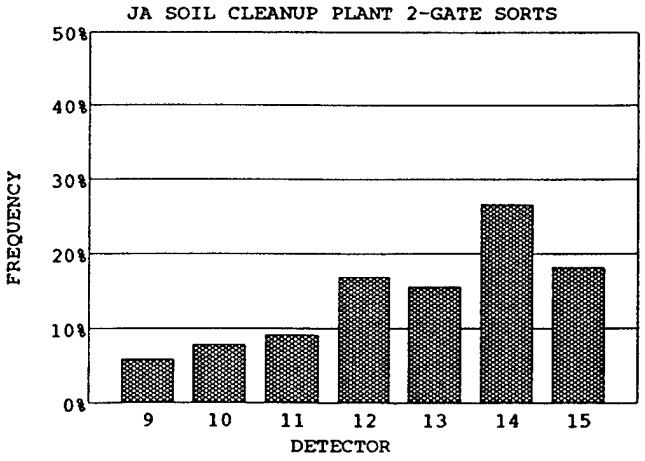
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	2	1.3%	-14000	0	-231	0.0%	4	27	8.7%
2	21	13.5%	-12000	0	-198	0.0%	8	141	45.5%
3	14	9.0%	-10000	0	-165	0.0%	12	60	19.4%
4	20	12.8%	-8000	0	-132	0.0%	16	31	10.0%
5	20	12.8%	-6000	0	-99	0.0%	20	14	4.5%
6	35	22.4%	-4000	5	-66	0.4%	24	8	2.6%
7	34	21.8%	-2000	3	-33	0.3%	28	4	1.3%
8	10	6.4%	0	4	0	0.4%	32	1	0.3%
TOTAL	156		2000	14	33	1.2%	36	9	2.9%
			4000	108	66	9.5%	40	2	0.6%
2-GATE SORTS			6000	282	99	24.7%	44	2	0.6%
DET	SORTS	FREQ%	8000	379	132	33.2%	48	1	0.3%
9	9	5.8%	10000	232	165	20.3%	52	2	0.6%
10	12	7.8%	12000	93	198	8.2%	56	1	0.3%
11	14	9.1%	14000	19	231	1.7%	60	1	0.3%
12	26	16.9%	16000	0	264	0.0%	64	1	0.3%
13	24	15.6%	18000	0	298	0.0%	68	1	0.3%
14	41	26.6%	20000	2	331	0.2%	72	1	0.3%
15	28	18.2%	22000	0	364	0.0%	76	0	0.0%
TOTAL	154		24000	0	397	0.0%	80	1	0.3%
			26000	0	430	0.0%	84	0	0.0%
			>28000	0	0	0.0%	>84	2	0.6%
			TOTAL	1,141			TOTAL	310	

EVENT TYPES HPE 321 MPE 45 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 0.62 ± 0.01 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.3 tons	67.2 tons	67.5 tons
MAXIMUM/SORT	6.1 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	54.5 kg	
VOLUME IN-GROUND	0.3 yd³	53.3 yd³	53.5 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.5%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	7,518 kBq	1,736 kBq	4,951 kBq
MAXIMUM/SORT	1,002 kBq	387 kBq	13 kBq
MINIMUM/SORT	3 kBq	0 Bq	-3 kBq
SPECIFIC ACTIVITY		5,225 Bq/kg	74 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,116		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	0			
NONE (AD=0 & MD=0 & MND>0)	912		08:07	None
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	204		10:25	
UNEXPLAINED RECORDS	0		11:01	
0<AD<1kBq & MD>0	7		11:39	
AD=0 & MD>0	0		12:01	
AD<0 & MD >0	0		12:23	
2-SEC COUNT PERIODS		11,160	12:33	
2-SEC RECORDS WITH SORTS	389			
2-SEC RECORDS WITHOUT SORTS	10,771			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,505		
NONPROCESSING RECORDS (Test, calibration, etc)		26		

2-SEC SORT DETECTORS

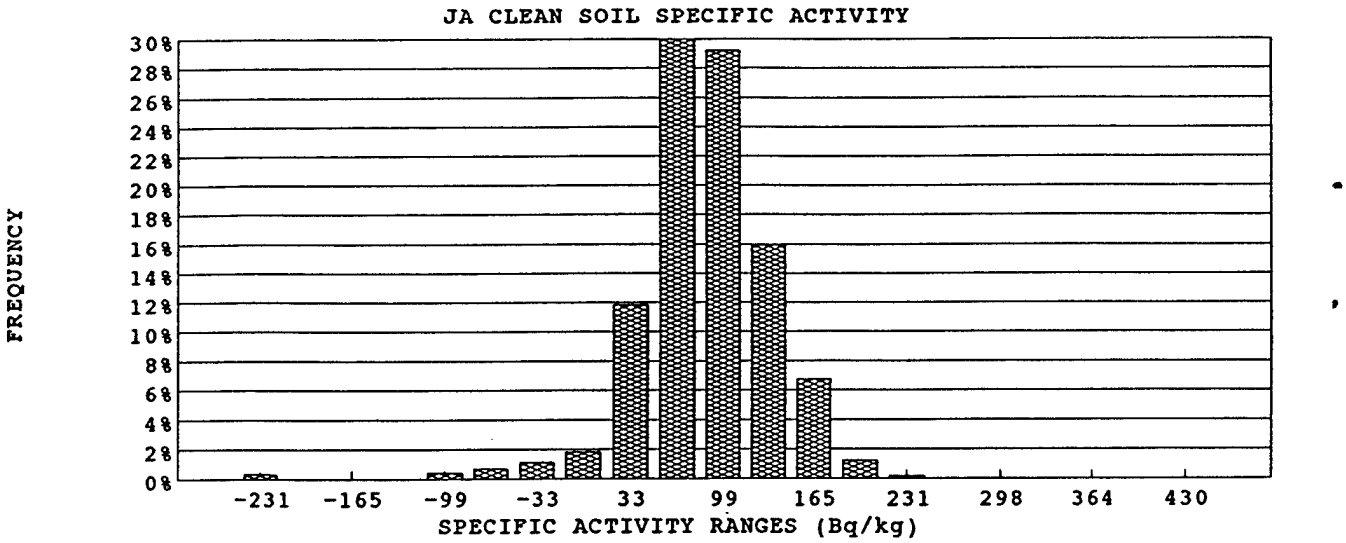
1 DET	294	75.58%	5 DET	0	0.00%
2 DET	82	21.08%	6 DET	0	0.00%
3 DET	13	3.34%	7 DET	0	0.00%
4 DET	0	0.00%	8 DET	0	0.00%

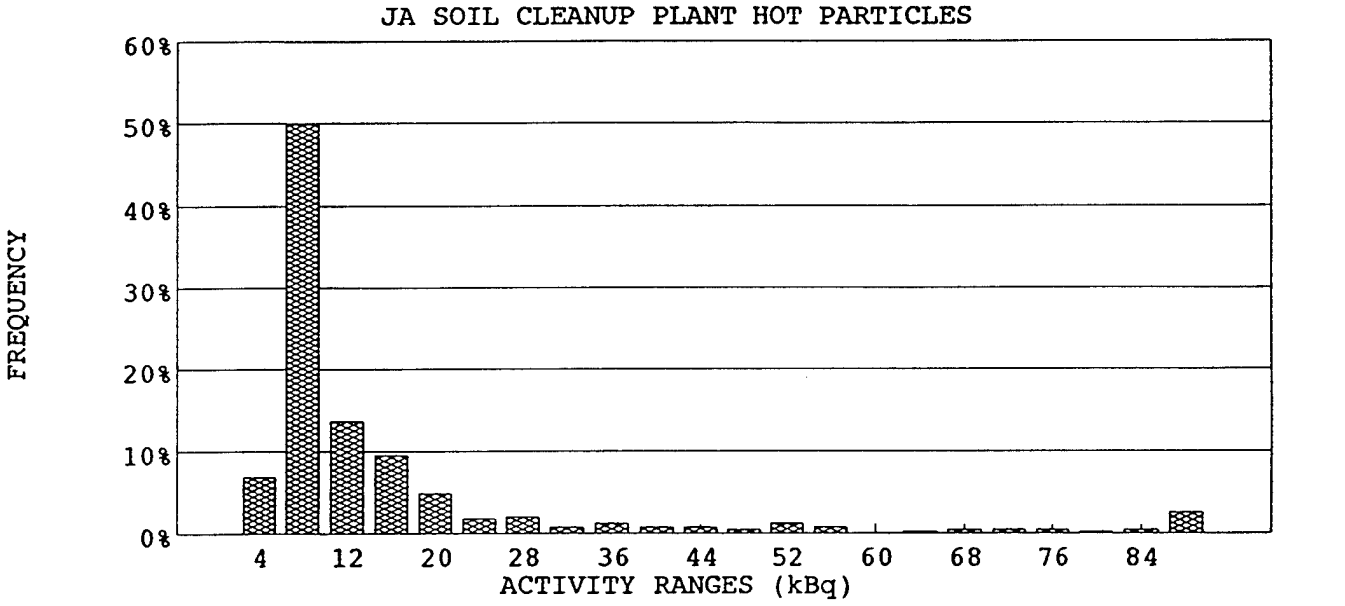
AVERAGE TIME BETWEEN 2-SEC SORTS 75.9 sec

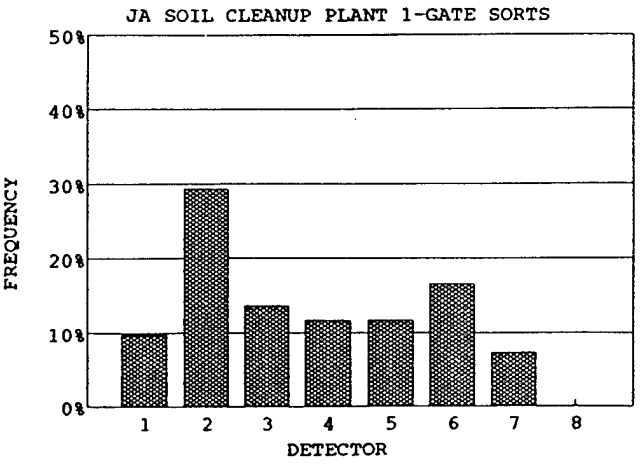
FREQUENCY DISTRIBUTIONS

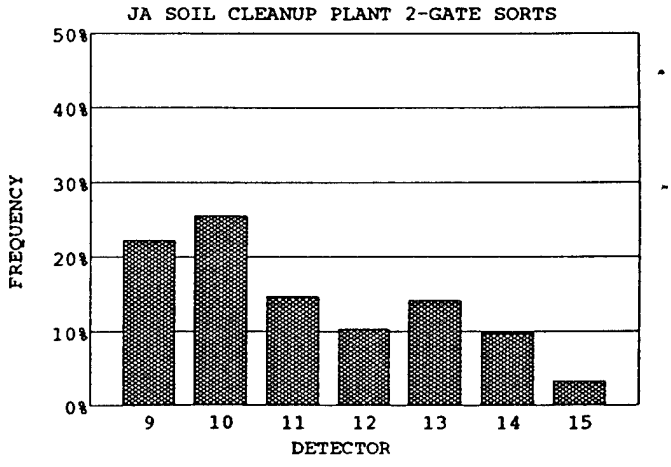
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	20	9.8%	-14000	4	-231	0.4%	4	27	6.9%
2	60	29.3%	-12000	0	-198	0.0%	8	194	49.9%
3	28	13.7%	-10000	0	-165	0.0%	12	53	13.6%
4	24	11.7%	-8000	0	-132	0.0%	16	37	9.5%
5	24	11.7%	-6000	5	-99	0.4%	20	19	4.9%
6	34	16.6%	-4000	8	-66	0.7%	24	7	1.8%
7	15	7.3%	-2000	13	-33	1.1%	28	8	2.1%
8	0	0.0%	0	21	0	1.8%	32	3	0.8%
TOTAL	205		2000	135	33	11.8%	36	5	1.3%
			4000	347	66	30.4%	40	3	0.8%
2-GATE SORTS			6000	334	99	29.2%	44	3	0.8%
DET	SORTS	FREQ%	8000	182	132	15.9%	48	2	0.5%
9	41	22.3%	10000	77	165	6.7%	52	5	1.3%
10	47	25.5%	12000	14	198	1.2%	56	3	0.8%
11	27	14.7%	14000	2	231	0.2%	60	0	0.0%
12	19	10.3%	16000	0	264	0.0%	64	1	0.3%
13	26	14.1%	18000	0	298	0.0%	68	2	0.5%
14	18	9.8%	20000	0	331	0.0%	72	2	0.5%
15	6	3.3%	22000	0	364	0.0%	76	2	0.5%
TOTAL	184		24000	0	397	0.0%	80	1	0.3%
			26000	0	430	0.0%	84	2	0.5%
			>28000	0	0	0.0%	>84	10	2.6%
			TOTAL	1,142			TOTAL	389	

EVENT TYPES HPE 392 MPE 45 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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–Oct–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	9.7 hr	9.7 hr	9.8 hr	9.8 hr	39.1 hr
SORTER START–UP	06:45	06:45	06:40	06:40	
START SOIL PROCESSING	07:06	07:06	07:09	07:09	
TIME REQUIRED TO START–UP	0.4 hr	0.4 hr	0.5 hr	0.5 hr	1.7 hr
SORTER SHUT–DOWN	16:29	16:29	16:29	16:29	
END SOIL PROCESSING	16:10	16:18	16:24	16:21	
TIME REQUIRED TO SHUT DOWN	0.3 hr	0.2 hr	0.1 hr	0.1 hr	0.7 hr
ACTUAL PROCESS HOURS	7.8 hr	8.0 hr	8.5 hr	8.2 hr	32.6 hr
DOWN–TIME	1.9 hr	1.7 hr	1.3 hr	1.6 hr	6.5 hr
SYSTEM PAUSE	1.2 hr	1.2 hr	0.7 hr	1.0 hr	4.1 hr
SORTER NONAVAILABLE TIME	0.8 hr	0.8 hr	0.7 hr	0.7 hr	2.9 hr
AUTHORIZED DELAY TIME	0.8 hr	0.8 hr	0.8 hr	0.8 hr	3.0 hr
PLANT PERFORMANCE					83.3%
PRODUCTIVTY					77.6%

PRODUCTIVITY

Date	31–Oct–94	Excused Delays for day (sorter–hrs)	3 hr
Contract day (from 6 Sep)	349	Excused delays for contract (sorter–hrs)	7,238 hr
Current Contract week	59	Excused delay days (plant–days)	181 days
		Excused delay months (plant–month)	6.96 months
Soil production for Day	355 MT		
Cumlative Soil Production for Week	355 MT	Percent of contract completed	60.7%
Total Soil production for contract		Tons Ahead or Behind Schedule	2,050 MT
Since 6 Sep 93	59,066 MT	Days ahead or behind schedule	6.5 days
Since 6 Aug 93	60,657 MT		
Total Soil production for project	86,943 MT		

MT = metric tons

File Report1 Printed on 03-Nov-94 at 06:33:18 AM

SORTER 1

31-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.35 ± 0.05 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	12.4 tons	72.6 tons	85.0 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	47.7 kg	
VOLUME IN-GROUND	9.8 yd³	57.6 yd³	67.4 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	85.4%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	59,670 kBq	18,222 kBq	21,630 kBq
MAXIMUM/SORT	2,516 kBq	1,070 kBq	24 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		1,467 Bq/kg	298 Bq/kg

SORTS

				UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS			1,405		
ALL 80 ELEMENTS SORT (MD>0&MND=0)		175			
NONE (AD=0 & MD=0 & MND>0)		454		08:21	07:06
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)		776		08:30	09:38
UNEXPLAINED RECORDS	0			08:35	13:55
0<AD<1kBq & MD>0	6			10:54	
AD=0 & MD>0	0			11:22	
AD<0 & MD >0	0			15:36	
2-SEC COUNT PERIODS			14,050		
2-SEC RECORDS WITH SORTS		2,480			
2-SEC RECORDS WITHOUT SORTS		11,570			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)			3,885		
NONPROCESSING RECORDS (Test, calibration, etc)			15		

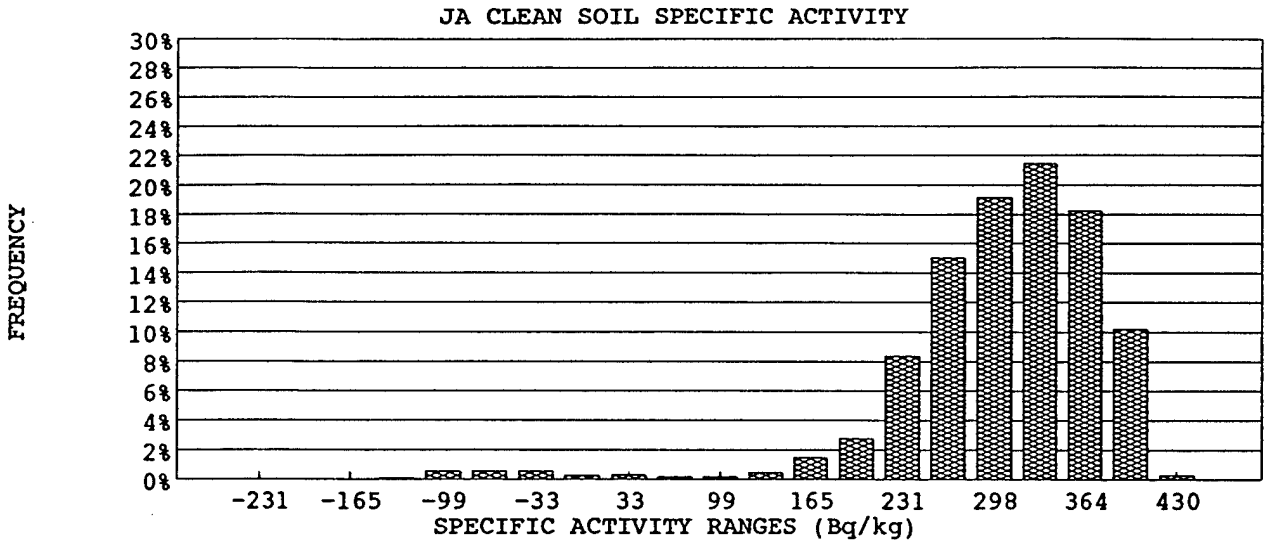
2-SEC SORT DETECTORS

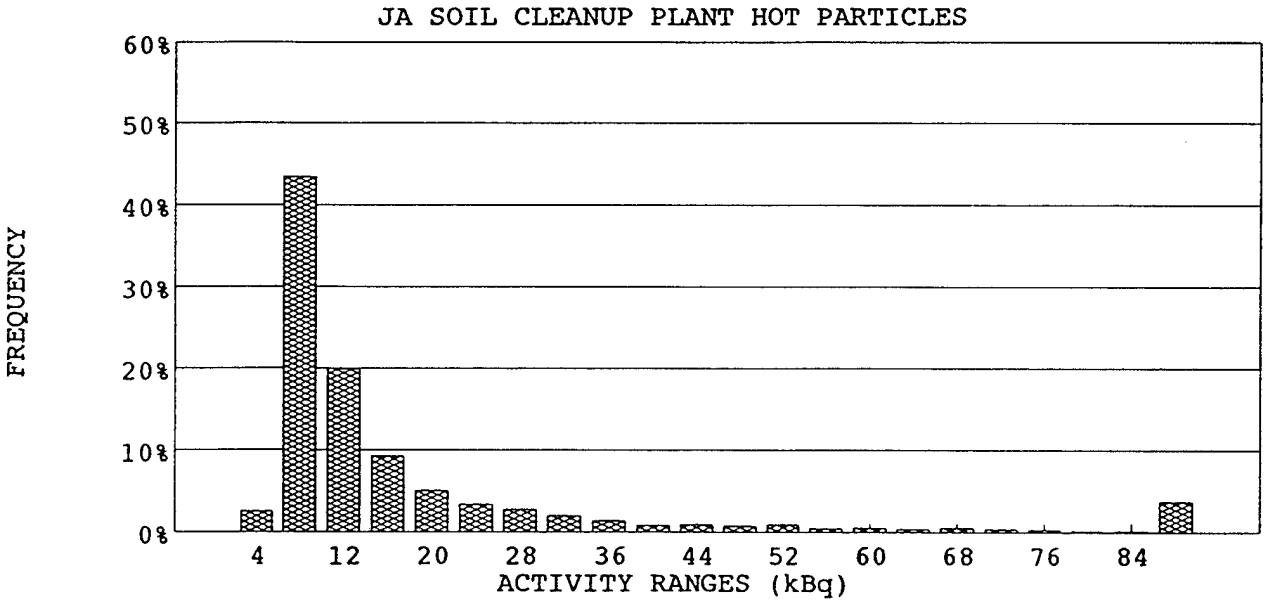
1 DET	1,716	69.19%	5 DET	12	0.48%
2 DET	597	24.07%	6 DET	0	0.00%
3 DET	129	5.20%	7 DET	0	0.00%
4 DET	26	1.05%	8 DET	0	0.00%

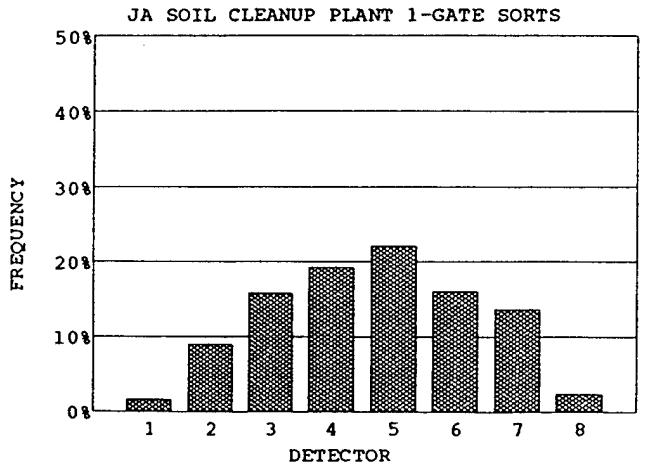
AVERAGE TIME BETWEEN 2-SEC SORTS 16.4 sec

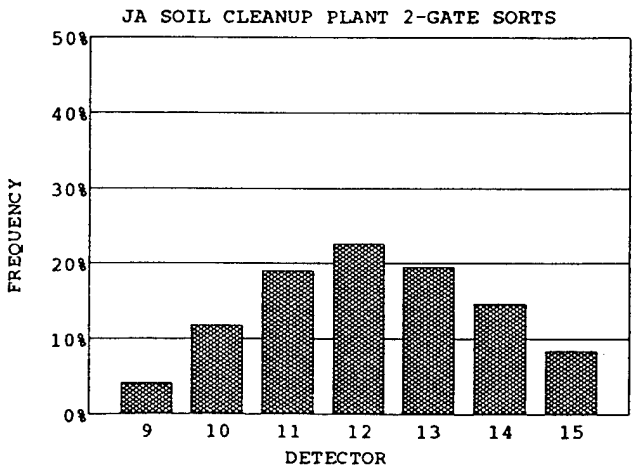
FREQUENCY DISTRIBUTIONS

1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	21	1.7%	-14000	0	-231	0.0%	4	64	2.6%
2	111	9.0%	-12000	0	-198	0.0%	8	1,078	43.5%
3	196	15.8%	-10000	0	-165	0.0%	12	493	19.9%
4	238	19.2%	-8000	1	-132	0.1%	16	229	9.2%
5	274	22.2%	-6000	7	-99	0.6%	20	127	5.1%
6	199	16.1%	-4000	7	-66	0.6%	24	84	3.4%
7	168	13.6%	-2000	7	-33	0.6%	28	68	2.7%
8	30	2.4%	0	3	0	0.2%	32	50	2.0%
TOTAL	1,237		2000	4	33	0.3%	36	35	1.4%
			4000	2	66	0.2%	40	21	0.8%
2-GATE SORTS			6000	2	99	0.2%	44	23	0.9%
DET	SORTS	FREQ%	8000	6	132	0.5%	48	19	0.8%
9	51	4.1%	10000	18	165	1.4%	52	23	0.9%
10	146	11.7%	12000	34	198	2.7%	56	11	0.4%
11	236	19.0%	14000	104	231	8.4%	60	14	0.6%
12	281	22.6%	16000	187	264	15.0%	64	9	0.4%
13	243	19.5%	18000	238	298	19.1%	68	14	0.6%
14	182	14.6%	20000	267	331	21.4%	72	9	0.4%
15	104	8.4%	22000	227	364	18.2%	76	8	0.3%
TOTAL	1,243		24000	127	397	10.2%	80	3	0.1%
			26000	4	430	0.3%	84	4	0.2%
			>28000	0	0	0.0%	>84	94	3.8%
			TOTAL	1,245			TOTAL	2,480	
EVENT TYPES		HPE	2,424	MPE	479	DISE	13,517		


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.53 ± 0.13 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	55.2 tons	32.0 tons	87.2 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	51.5 kg	
VOLUME IN-GROUND	43.8 yd³	25.3 yd³	69.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	36.7%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	69,900 kBq	44,168 kBq	10,575 kBq
MAXIMUM/SORT	2,988 kBq	1,684 kBq	23 kBq
MINIMUM/SORT	3 kBq	0 Bq	-0 kBq
SPECIFIC ACTIVITY		800 Bq/kg	331 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,441		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	896			
NONE (AD=0 & MD=0 & MND>0)	130		13:52	07:06
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	415			09:39
UNEXPLAINED RECORDS	0			10:32
0<AD<1kBq & MD>0	1			13:57
AD=0 & MD>0	0			
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,410		
2-SEC RECORDS WITH SORTS	2,869			
2-SEC RECORDS WITHOUT SORTS	11,541			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		4,310		
NONPROCESSING RECORDS (Test, calibration, etc)		3		

2-SEC SORT DETECTORS

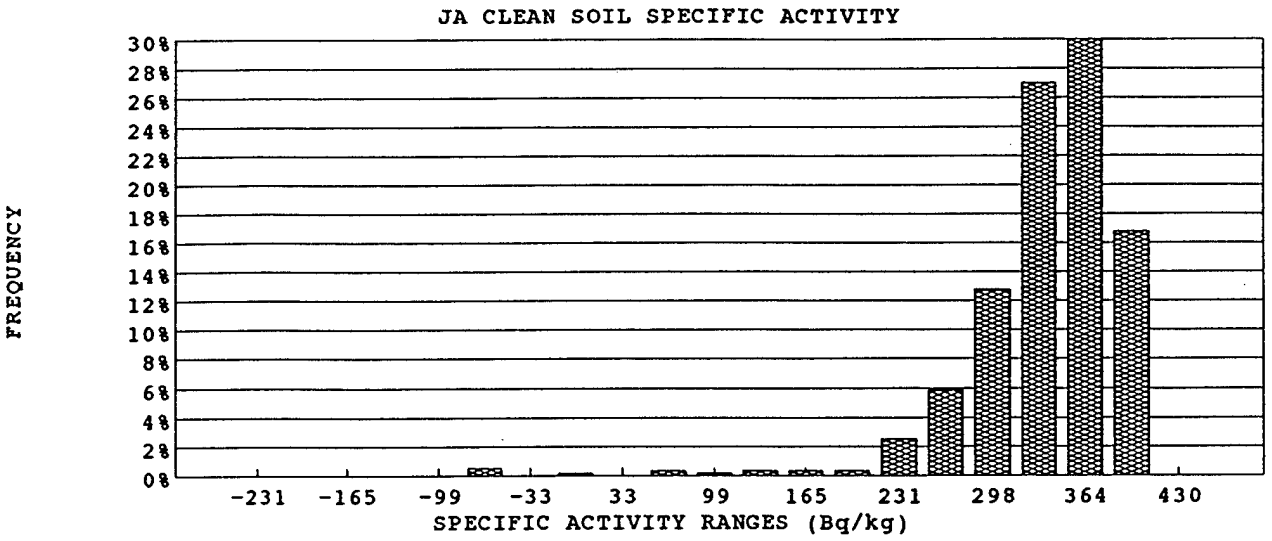
1 DET	1,991	69.40%	5 DET	6	0.21%
2 DET	684	23.84%	6 DET	0	0.00%
3 DET	157	5.47%	7 DET	0	0.00%
4 DET	31	1.08%	8 DET	0	0.00%

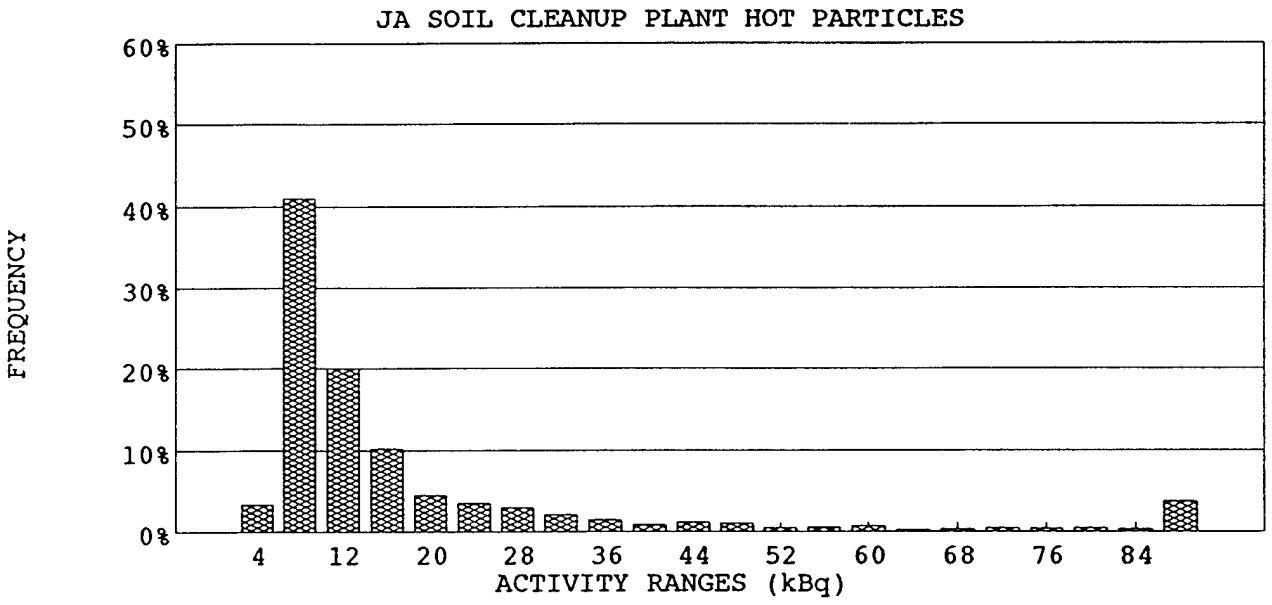
AVERAGE TIME BETWEEN 2-SEC SORTS 14.5 sec

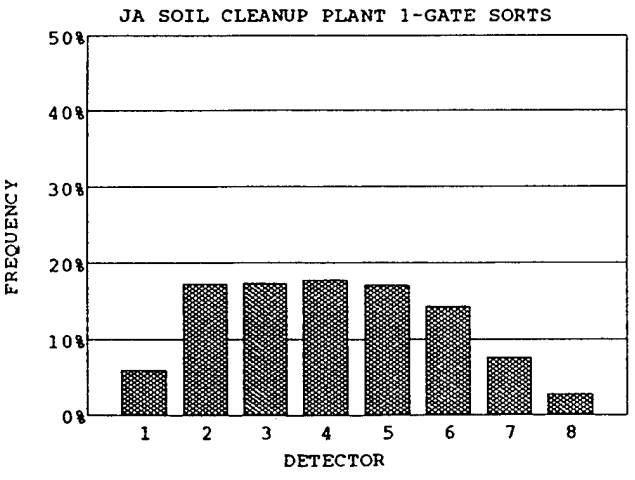
FREQUENCY DISTRIBUTIONS

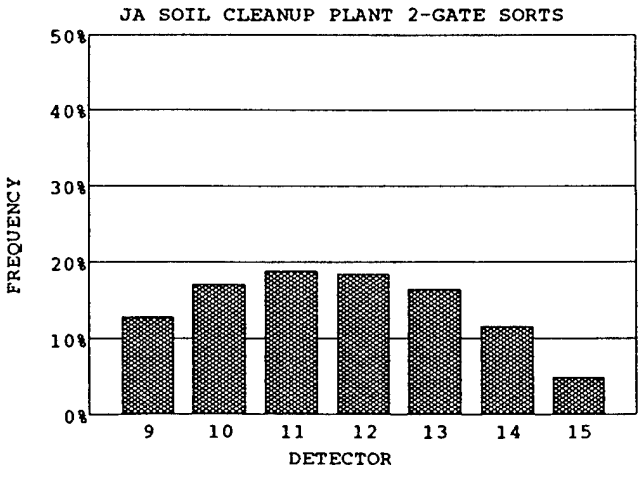
1-GATE DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	87	5.9%	-14000	0	-231	0.0%	4	96	3.3%
2	253	17.2%	-12000	0	-198	0.0%	8	1,175	41.0%
3	254	17.3%	-10000	0	-165	0.0%	12	573	20.0%
4	261	17.8%	-8000	0	-132	0.0%	16	294	10.2%
5	250	17.0%	-6000	0	-99	0.0%	20	129	4.5%
6	210	14.3%	-4000	3	-66	0.5%	24	101	3.5%
7	112	7.6%	-2000	0	-33	0.0%	28	85	3.0%
8	40	2.7%	0	1	0	0.2%	32	62	2.2%
TOTAL	1,467		2000	0	33	0.0%	36	43	1.5%
			4000	2	66	0.4%	40	25	0.9%
2-GATE DET	SORTS	FREQ%	6000	1	99	0.2%	44	35	1.2%
			8000	2	132	0.4%	48	30	1.0%
9	180	12.8%	10000	2	165	0.4%	52	13	0.5%
10	240	17.1%	12000	2	198	0.4%	56	17	0.6%
11	264	18.8%	14000	14	231	2.6%	60	20	0.7%
12	258	18.4%	16000	32	264	5.8%	64	7	0.2%
13	230	16.4%	18000	70	298	12.8%	68	9	0.3%
14	162	11.6%	20000	148	331	27.0%	72	15	0.5%
15	68	4.9%	22000	179	364	32.7%	76	11	0.4%
TOTAL	1,402		24000	92	397	16.8%	80	13	0.5%
			26000	0	430	0.0%	84	9	0.3%
			>28000	0	0	0.0%	>84	107	3.7%
			TOTAL	548			TOTAL	2,869	

EVENT TYPES HPE 2,734 MPE 1,714 DISE 68,577


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

31-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.13 ± 0.04 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.4 tons	92.5 tons	92.8 tons
MAXIMUM/SORT	5.3 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	55.2 kg	
VOLUME IN-GROUND	0.3 yd³	73.3 yd³	73.6 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.6%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	8,658 kBq	2,318 kBq	9,746 kBq
MAXIMUM/SORT	836 kBq	466 kBq	16 kBq
MINIMUM/SORT	3 kBq	0 Bq	−2 kBq
SPECIFIC ACTIVITY		6,462 Bq/kg	105 Bq/kg

SORTS

					UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS				1,534		
ALL 80 ELEMENTS SORT (MD>0&MND=0)			0			
NONE (AD=0 & MD=0 & MND>0)			1,315		08:20	09:53
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)			219		10:35	14:08
UNEXPLAINED RECORDS		0			11:20	
0<AD<1kBq & MD>0		3				
AD=0 & MD>0		0				
AD<0 & MD >0		0				
2-SEC COUNT PERIODS				15,340		
2-SEC RECORDS WITH SORTS			416			
2-SEC RECORDS WITHOUT SORTS			14,924			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)				1,950		
NONPROCESSING RECORDS (Test, calibration, etc)				6		

2-SEC SORT DETECTORS

1 DET	290	69.71%	5 DET	0	0.00%
2 DET	99	23.80%	6 DET	0	0.00%
3 DET	25	6.01%	7 DET	0	0.00%
4 DET	2	0.48%	8 DET	0	0.00%

AVERAGE TIME BETWEEN 2-SEC SORTS 105.8 sec

FREQUENCY DISTRIBUTIONS

1-GATE SORTS

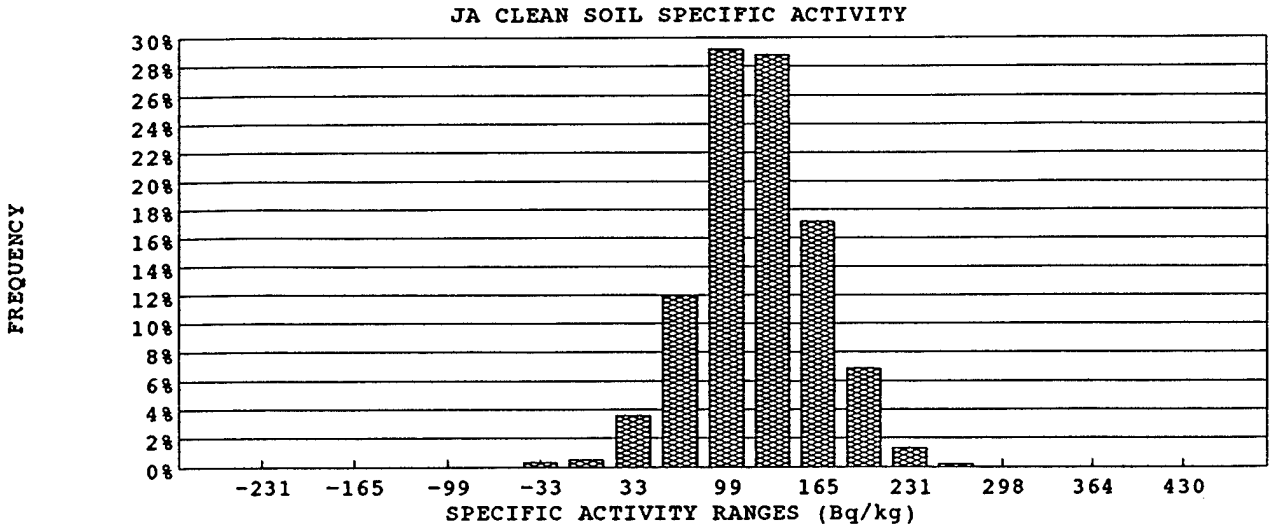
DET	SORTS	FREQ%
1	4	1.8%
2	9	4.1%
3	23	10.5%
4	27	12.3%
5	37	16.8%
6	53	24.1%
7	48	21.8%
8	19	8.6%
TOTAL	220	

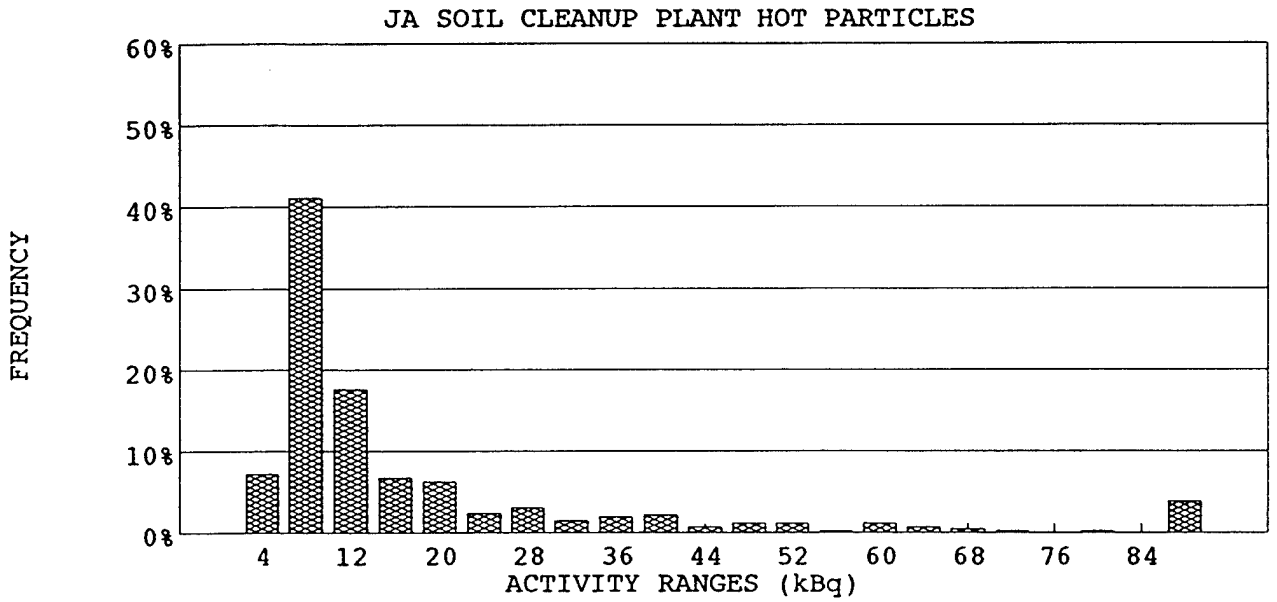
2-GATE SORTS

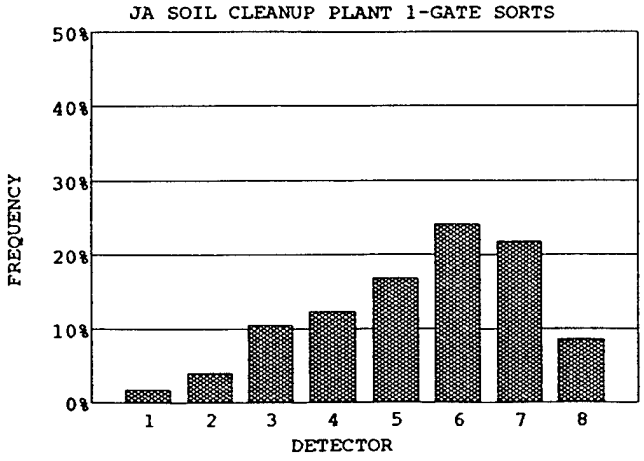
DET	SORTS	FREQ%
9	7	3.6%
10	12	6.1%
11	22	11.2%
12	37	18.9%
13	41	20.9%
14	42	21.4%
15	35	17.9%
TOTAL	196	

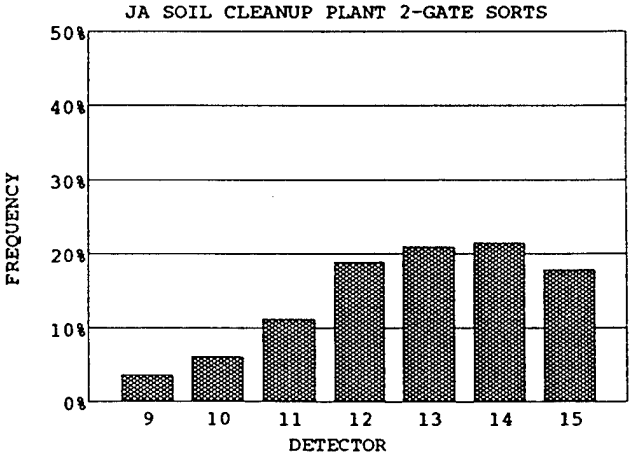
ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
−14000	0	−231	0.0%	4	30	7.2%
−12000	0	−198	0.0%	8	171	41.1%
−10000	0	−165	0.0%	12	73	17.5%
−8000	0	−132	0.0%	16	28	6.7%
−6000	0	−99	0.0%	20	26	6.3%
−4000	0	−66	0.0%	24	10	2.4%
−2000	5	−33	0.3%	28	13	3.1%
0	8	0	0.5%	32	6	1.4%
2000	55	33	3.6%	36	8	1.9%
4000	185	66	12.0%	40	9	2.2%
6000	450	99	29.2%	44	3	0.7%
8000	444	132	28.8%	48	5	1.2%
10000	264	165	17.1%	52	5	1.2%
12000	106	198	6.9%	56	1	0.2%
14000	20	231	1.3%	60	5	1.2%
16000	3	264	0.2%	64	3	0.7%
18000	0	298	0.0%	68	2	0.5%
20000	0	331	0.0%	72	1	0.2%
22000	0	364	0.0%	76	0	0.0%
24000	0	397	0.0%	80	1	0.2%
26000	0	430	0.0%	84	0	0.0%
>28000	0	0	0.0%	>84	16	3.8%
TOTAL	1,540			TOTAL	416	

EVENT TYPES HPE 399 MPE 73 DISE 0


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

31-Oct-94

SORTER SOIL DENSITY 1.30 tons/m³ BACKGROUND 2.29 ± 0.09 c/s

SOIL

	CONTAMINATED	CLEAN	TOTAL
MASS TOTAL	0.6 tons	89.1 tons	89.7 tons
MAXIMUM/SORT	63.0 kg	60.5 kg	
MINIMUM/SORT	0.8 kg	56.0 kg	
VOLUME IN-GROUND	0.5 yd³	70.6 yd³	71.1 yd³
WEIGHT RECOVERY (CLEAN/(HOT+CLEAN))	99.3%		

ACTIVITY

	PARTICLE	DISPERSED + PARTICLE HOT	CLEAN
TOTAL	6,866 kBq	1,746 kBq	9,538 kBq
MAXIMUM/SORT	171 kBq	57 kBq	15 kBq
MINIMUM/SORT	3 kBq	0 Bq	-7 kBq
SPECIFIC ACTIVITY		2,814 Bq/kg	107 Bq/kg

SORTS

			UNEXP TIME	PAUSE TIME
20-SEC PROCESS PERIODS		1,483		
ALL 80 ELEMENTS SORT (MD>0&MND=0)	4		09:15	07:47
NONE (AD=0 & MD=0 & MND>0)	1,249		09:39	08:14
SOME (AD>0&0<MD<MNDmax&MND<MNDmax)	230		11:17	09:53
UNEXPLAINED RECORDS	0		12:43	14:07
0<AD<1kBq & MD>0	6		16:08	
AD=0 & MD>0	0		16:18	
AD<0 & MD >0	0			
2-SEC COUNT PERIODS		14,830		
2-SEC RECORDS WITH SORTS	459			
2-SEC RECORDS WITHOUT SORTS	14,371			
TOTAL PROCESS RECORDS (2-s SORTS and 20-s PERIODS)		1,942		
NONPROCESSING RECORDS (Test, calibration, etc)		8		

2-SEC SORT DETECTORS

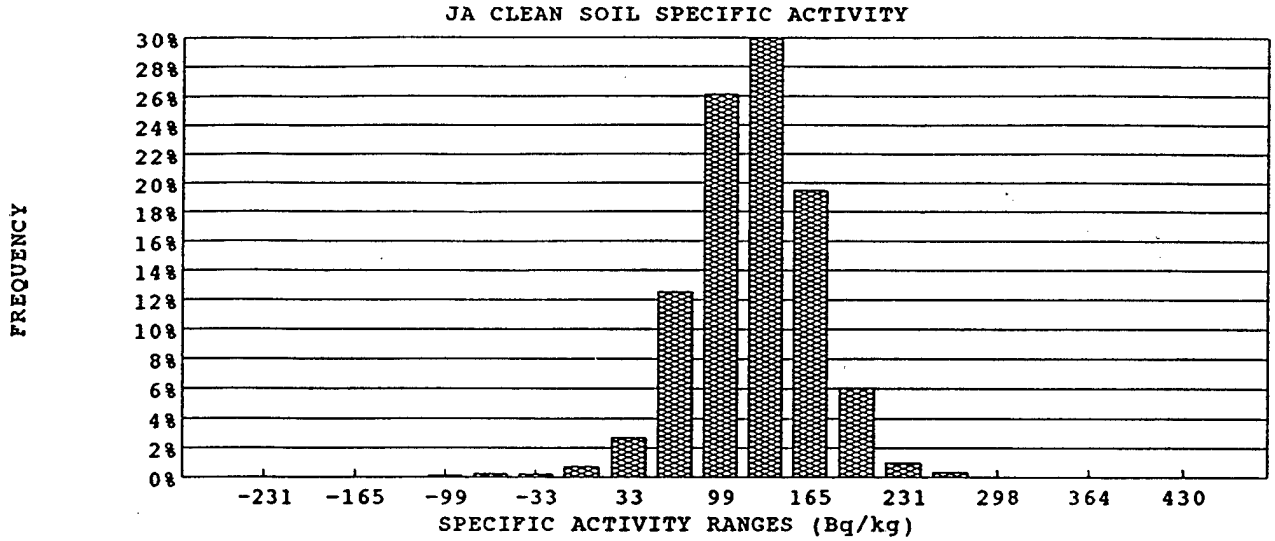
1 DET	335	72.98%	5 DET	1	0.22%
2 DET	99	21.57%	6 DET	0	0.00%
3 DET	20	4.36%	7 DET	0	0.00%
4 DET	4	0.87%	8 DET	0	0.00%

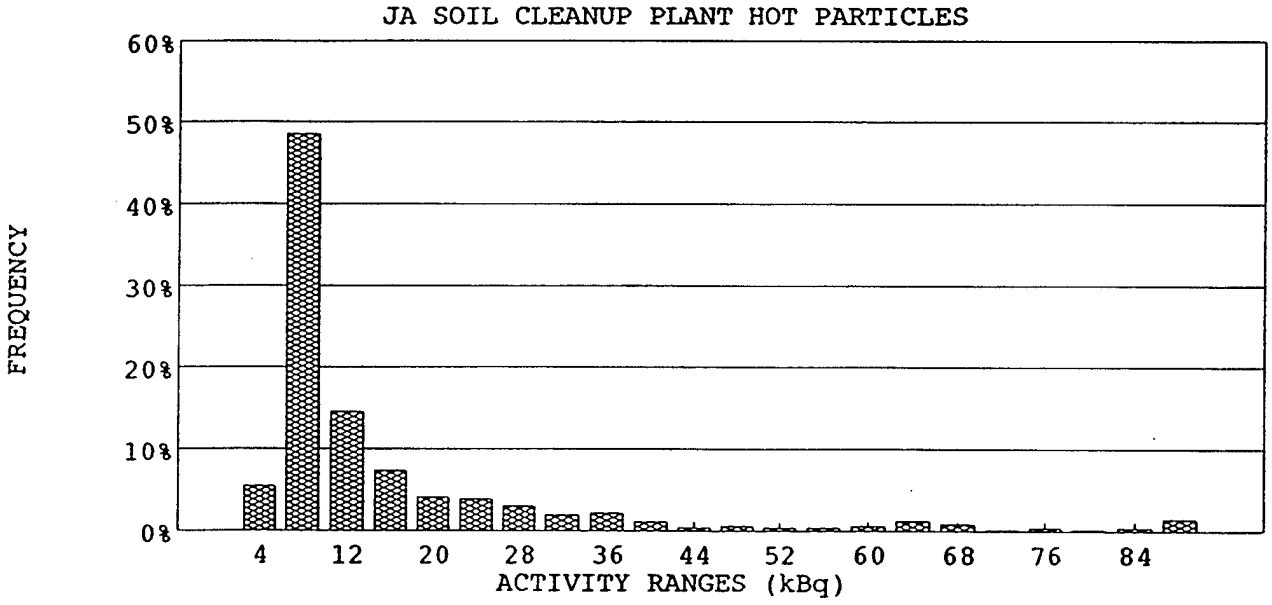
AVERAGE TIME BETWEEN 2-SEC SORTS 88.5 sec

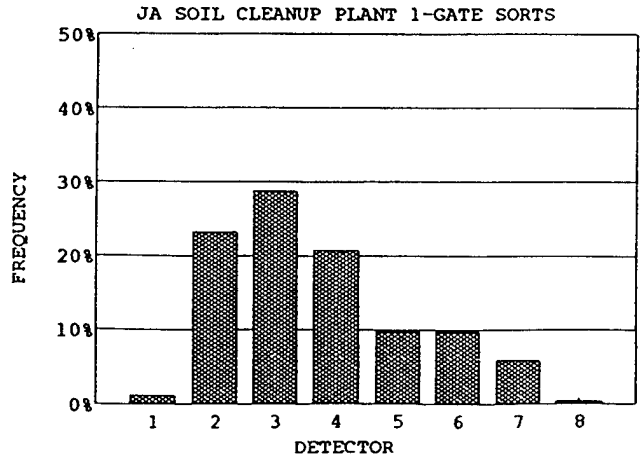
FREQUENCY DISTRIBUTIONS

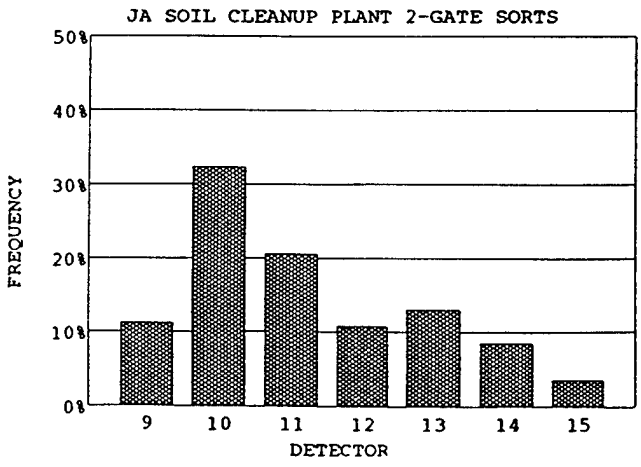
1-GATE SORTS DET	SORTS	FREQ%	ACT_ND (Bq)	NUM (#)	SPEC_A (Bq/kg)	FREQ%	ACT_P (kBq)	NUM (#)	FREQ%
1	3	1.3%	-14000	0	-231	0.0%	4	25	5.4%
2	55	23.3%	-12000	0	-198	0.0%	8	223	48.6%
3	68	28.8%	-10000	0	-165	0.0%	12	67	14.6%
4	49	20.8%	-8000	0	-132	0.0%	16	34	7.4%
5	23	9.7%	-6000	2	-99	0.1%	20	19	4.1%
6	23	9.7%	-4000	4	-66	0.3%	24	18	3.9%
7	14	5.9%	-2000	3	-33	0.2%	28	14	3.1%
8	1	0.4%	0	11	0	0.7%	32	9	2.0%
TOTAL	236		2000	40	33	2.7%	36	10	2.2%
			4000	186	66	12.5%	40	5	1.1%
2-GATE SORTS			6000	388	99	26.1%	44	2	0.4%
DET	SORTS	FREQ%	8000	453	132	30.5%	48	3	0.7%
9	25	11.2%	10000	290	165	19.5%	52	2	0.4%
10	72	32.3%	12000	90	198	6.1%	56	2	0.4%
11	46	20.6%	14000	15	231	1.0%	60	3	0.7%
12	24	10.8%	16000	5	264	0.3%	64	6	1.3%
13	29	13.0%	18000	0	298	0.0%	68	4	0.9%
14	19	8.5%	20000	0	331	0.0%	72	1	0.2%
15	8	3.6%	22000	0	364	0.0%	76	2	0.4%
TOTAL	223		24000	0	397	0.0%	80	1	0.2%
			26000	0	430	0.0%	84	2	0.4%
			>28000	0	0	0.0%	>84	7	1.5%
			TOTAL	1,487			TOTAL	459	

EVENT TYPES HPE 457 MPE 39 DISE 323


JA CLEAN SOIL SPECIFIC ACTIVITY
FREQUENCY
30%
28%
26%
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%
-231 -165 -99 -33 33 99 165 231 298 364 430
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

AUTHORIZED DELAYS

Table D-1. Johnston Atoll Plutonium Contaminated Soil Cleanup Project - Authorized Delays.

Week Ending	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Weekly Total	Project Total	
07-Aug-94	20.0	21.4	20.0	24.0	20.0	20.0	125.4	125.4	
14-Aug-94	20.0	20.4	20.0	20.8	33.4	20.0	134.6	260.0	
21-Aug-94	21.0	21.0	20.0	20.0	20.0	18.0	120.0	380.0	
28-Aug-94	35.0	33.5	40.0	40.0	40.0	40.0	228.5	608.5	
03-Sep-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	848.5	
11-Sep-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	1,088.5	
18-Sep-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	1,328.5	
25-Sep-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	1,568.5	
02-Oct-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	1,808.5	
09-Oct-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	2,048.5	
16-Oct-94	40.0	40.0	40.0	40.0	40.0	40.0	240.0	2,288.5	
23-Oct-94	40.0	40.0	27.0	5.8	0.0	0.0	112.8	2,401.3	
30-Oct-94	0.0	0.0	20.8	2.4	0.0	0.0	23.2	2,424.5	
31-Oct-94	3.0							2,427.5	Sorter Hrs
								607	Regular Hrs
								19,238	Excused Quota
								25,017	Regular Quota
								5,779	Adjusted Quota
								6,129	Qrtr Production

APPENDIX E

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 F

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.

DISTRIBUTION LIST

DSWA-TR-95-102

DEPARTMENT OF DEFENSE

DEFENSE SPECIAL WEAPONS AGENCY
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2 CY ATTN: ISST
ATTN: JOHN EDDY

DEFENSE TECHNICAL INFORMATION CENTER
2 CY ATTN: DTIC/OCP

FIELD COMMAND DEFENSE SPECIAL WEAPONS AGENCY
2 CY ATTN: CDR W R ARGUELLO

DEPARTMENT OF ENERGY

DEPARTMENT OF ENERGY
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