EPA Region 5 Records Ctr.
248201

STS CONSULTANTS

CONSULTING ENGINEERS

Grand Pier Center LLC
Final Closure Report

Volume II of II
Attachments

1-24418-XK
July 2, 2001

STS CONSULTANTS, LTD.

ATTACHMENTS

ATTACHMENTS

ATTACHMENT A

UNILATERAL ADMINISTRATIVE ORDER, FIRST AMENDMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5

IN THE MATTER OF:	)	Docket No. V-W-'96-C-5[illegible]
	)	
Lindsay Light II Site Chicago, Illinois	)	ADMINISTRATIVE ORDER PURSUANT TO SECTION 106(a)
	)	OF THE COMPREHENSIVE
	)	ENVIRONMENTAL RESPONSE,
Respondents:	)	COMPENSATION, AND
	)	LIABILITY ACT OF 1980,
The Chicago Dock & Canal Trust Kerr-McGee Chemical Corporation	)	AS AMENDED, 42 U.S.C. SECTION 9606(a)

I. JURISDICTION AND GENERAL PROVISIONS

This Order is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9606(a), and delegated to the Administrator of the United States Environmental Protection Agency ("U.S. EPA") by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by U.S. EPA Delegation Nos. 14-14-A and 14-14-B, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A and 14-14-B.

This Order pertains to property located at 316 East Illinois Street, Chicago, Illinois (the "Lindsay Light II Site" or the "Site"). This Order requires the Respondents to conduct removal activities described herein to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the Site.

U.S. EPA has notified the State of Illinois of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

II. PARTIES BOUND

This Order applies to and is binding upon Respondents and Respondents' heirs, receivers, trustees, successors and assigns. Any change in ownership or corporate status of Respondents including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondents' responsibilities under this Order. Respondents are jointly and severally liable for carrying out all activities required by this Order. Compliance or noncompliance by one or more Respondent with any provision of this Order shall not excuse or justify noncompliance by any other Respondent.

Respondents shall ensure that their contractors, subcontractors, and representatives comply with this Order. Respondents shall be responsible for any noncompliance.

III. FINDINGS OF FACT

Based on available information, including the Administrative Record in this matter, U.S. EPA hereby finds that:

1. The Lindsay Light II Site ("the Site" or "the Facility") is located at 316 East Illinois Street, Chicago, Cook County, Illinois. The Site is situated in an urban area called the Gold Coast, and is surrounded by commercial and residential buildings. A shopping mall is located approximately 200 feet to the southeast. The Chicago River is located 1 mile south of the Site, and Lake Michigan is about 1.5 miles east of the Site.

2. The Site is currently a parking lot operated by General Parking, and owned by the Chicago Dock and Canal Trust ("CDCT").

3. Until 1936, Lindsay Light manufactured incandescent gas mantels at 161 East Grand, which is .25 miles from the Site. It is unknown if they worked elsewhere; however, Sanborn maps from 1906 do show Lindsay Light being at other Chicago locations. During 1931-1936, the company moved its operations to West Chicago, Illinois.

4. The principal ingredient in gas mantle manufacture is thorium as a nitrate. Small amounts of cerium, beryllium and magnesium nitrates are also used. Thorium occurs principally as the parent radionuclide thorium-232 in association with its daughter products in a decay sequence known as the Thorium Decay Series. Thorium radionuclides are also found in the Uranium Decay Series and the Actinium Decay Series. It is believed that the principal source of contamination at this Site is the Thorium Decay Series.

5. It is unclear what Lindsay Light actually did at 316 East Illinois; however, records from The Chicago Dock and Canal Trust indicate this Site was a stable, and that Lindsay Light leased portions of the building from The Chicago Dock and Canal Trust from 1915-1933.

6. On June 3, 1993, U.S. EPA and the Illinois Department of Nuclear Safety conducted a joint investigation at the Site. This investigation verified the presence of radioactivity at levels clearly above natural background. Gamma readings were found as high as 280 uR/hr on a Ludlum Model 19 Micro-R meter. Background measured at the Site had gamma readings of 20 uR/hr.

7. The Chicago Dock and Canal Trust entered into an Administrative Order by Consent ("AOC") with U.S. EPA to study the extent of subsurface radiation and radionuclide content before excavation. The AOC was signed by U.S. EPA on January 27, 1994, and the extent of contamination ("EOC") study was completed by CDCT in May 1994. The final report concerning the extent of contamination was delivered to U.S. EPA on October 17, 1995, and was approved on March 13, 1996.

8. A brief summary of the final report approved by U.S. EPA on March 13, 1996, is as follows: 12 areas exhibit elevated gamma levels; the maximum contamination depth extends to 2.5 meters (8 feet) below the ground surface; and Resource Conservation and Recovery Act ("RCRA")-characteristic waste is not present on-site. The highest gamma level is 252 times above background, or 1.1 milliRoentgen per hour.

9. Activities completed at this Site, besides the extent of contamination study, have been the voluntary placement by CDCT of notices at the entrances to the parking lot informing patrons of the risks associated with the lot.

IV. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting these removal actions, U.S. EPA determines that:

1. The Lindsay Light II Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

2. Radionuclides are "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

3. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

4. Respondent The Chicago Dock & Canal Trust is the present "owner" and "operator" of the Lindsay Light II Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20). Respondent Kerr-McGee Chemical Corporation is a person who is the corporate successor of the Lindsay Light Company. The Lindsay Light Company was the operator of the Lindsay Light II Site at the time of disposal of any hazardous substances, or who arranged for disposal or transport for disposal of hazardous substances at the Lindsay Light II Site. Respondents are therefore liable persons under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" into the "environment" as defined by Sections 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).

6. The conditions present at the Site constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended ("NCP"), 40 CFR Part 300. These factors include, but are not limited to, the following:

a. actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

This factor is present at the Site due to the existence of a public parking lot on property found to have gamma readings measured as high as 1.1 milliRoentgen per hour. This reading is 252 times the background level measured for the Site.

Gamma rays are penetrating radiation indistinguishable from X-rays which can be absorbed by tissue in the human body, thereby increasing the cancer risk for the person exposed. The excess risk to a transient spending 29 minutes per day for a 250 day work year at the peak exposure spot is 10^{-4}. Transients were judged to be parking lot customers, people using the lot for a short cut, or temporary workers.

The Site is surrounded by two-foot high steel guardrails, which do not totally restrict access. Furthermore, there are two parking attendants stationed at this parking lot on a 24-hour basis to collect fees, although initial readings taken on June 3, 1993, indicate that there were no levels above background where the attendants are stationed. Again, such an exposure entails cancer risk that would have no personal or societal benefit. Direct measurement with survey instruments at the present parking lot attendant stations found background radiation levels which were confirmed with longer measurements using thermoluminescent dosimeters ("TLDs") placed in the ticket booths between June 3, 1993, and June 30, 1993. Conditions at the Site have not changed since the site assessment on June 3, 1993. There is no guarantee that the ticket booths could not be moved to the peak point of gamma readings at some future time, thereby introducing the potential for exposure and risk to be actualized.

The EOC study confirmed that elevated radioactivity levels are due to past industrial processes. The Site is also surrounded by commercial and residential buildings, whose occupants use this parking lot and adjacent sidewalks. Situated 200 feet southeast of the Site is the North Pier shopping mall.

b. high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

This factor is present at the Site due to the existence of elevated gamma exposure levels which validates subsurface deposits of radiological contaminants. The dominant concern is intrusion into these materials that will contaminate the intruder and their equipment and, further, lead to dispersal or spreading of the contaminants from their present locations. Such a scenario probably has arisen, and could again arise, with parking lot excavation where workers and their equipment are contaminated by radioactive soils, dry soil dispersed in the wind, and excavation spoils moved off-site. The number of people exposed could greatly increase and might include workers who subsequently use contaminated machinery, residents near the parking lot who might come in contact with wind dispersed soils, and use of excavation spoils. Such spreading could occur within downtown Chicago where the parking lot is located and out for several miles depending upon where workers reside and where spoils are used.

c. other situations or factors that may pose threats to public health or welfare or the environment;

This factor is present at the Site due to the property's planned future development. Such construction would entail excavating into potentially contaminated soils for placement of building footings and cause increased releases into the environment and human exposure to contaminants. Also, it has not been determined whether subsurface contaminants are soluble. If they are, there could be spreading via groundwater.

This Site appears to be gridded with sewer lines. These could be conduits for the spread of both soluble and insoluble materials off-site, for extension of the region of contamination, and for an increase in the potential for sewer workers to be exposed to contaminants.

7. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

8. The removal actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP and CERCLA.

V. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, U.S. EPA hereby orders that Respondents perform the following actions:

1. Notice of Intent to Comply

Respondents shall notify U.S. EPA in writing within 3 business days after the effective date of this Order of Respondents' irrevocable intent to comply with this Order. Failure of each Respondent to provide such notification within this time period shall be a violation of this Order.

2. Designation of Contractor, Project Coordinator, and On-Scene Coordinator

Respondents shall perform the removal actions themselves or retain contractors to implement the removal actions. Respondents shall notify U.S. EPA of Respondents' qualifications or the name and qualifications of such contractors, whichever is applicable, within 10 business days of the effective date of this Order. Respondents shall also notify U.S. EPA of the name and qualifications of any other contractors or subcontractors retained to perform work under this Order at least 5 business days prior to commencement of such work. U.S. EPA retains the right to disapprove of the Respondents or any of the contractors and/or subcontractors retained by the Respondents. If U.S. EPA disapproves a selected contractor, Respondents shall retain a different contractor within 2 business days following U.S. EPA's disapproval and shall notify U.S. EPA of that contractor's name and qualifications within 3 business days of U.S. EPA's disapproval.

Within 10 business days after the effective date of this Order, the Respondents shall designate a Project Coordinator who shall be responsible for administration of all the Respondents' actions required by the Order and submit the designated coordinator's name, address, telephone number, and qualifications to U.S. EPA. To the greatest extent possible, the Project Coordinator shall be present on-site or readily available during site work. U.S. EPA retains the right to disapprove of any Project Coordinator named by the Respondents. If U.S. EPA disapproves a selected Project Coordinator, Respondents shall retain a different Project Coordinator within 3 business days following U.S. EPA's disapproval and shall notify U.S. EPA of that person's name and qualifications within 4 business days of U.S. EPA's disapproval. Receipt by Respondents' Project Coordinator of any notice or communication from U.S. EPA relating to this Order shall constitute receipt by all Respondents.

The U.S. EPA has designated Verneta Simon of the Emergency Response Branch, Region 5, as its On-Scene Coordinator (OSC). Respondents shall direct all submissions required by this Order to the OSC at U.S. EPA, 77 West Jackson Boulevard, SE-5J, Chicago, Illinois, 60604-3590, by certified or express mail. Respondents shall also send a copy of all submissions to Nancy-Ellen Zusman, Assistant Regional Counsel, 77 West Jackson Boulevard, C-29A, Chicago, Illinois, 60604-3590. All Respondents are encouraged to make their submissions to U.S. EPA on recycled paper (which includes significant postconsumer waste paper content where possible) and using two-sided copies.

3. Work to Be Performed

Respondents shall perform, at a minimum, the following response activities:

a. Develop and implement a Site Health and Safety Plan.

b. Develop and implement Site security measures.

c. Develop and implement an air monitoring program.

d. Remove contamination until the cleanup criterion of 5 picoCuries per gram total radium (radium-226 + radium-228) over background is achieved. This cleanup criterion will be met in each 15 centimeter layer below the surface. Averaging over areas up to 100 square meters will be allowed, but only after reasonable efforts have been made to achieve levels As Low As Reasonably Achievable ("ALARA"). It is not U.S. EPA's intent to leave any elevated areas of contamination if at all possible.

e. Establish local background for radium-226 and radium-228 from four soil samples taken on the property at points where the gamma exposure rates are lowest plus eight soil samples taken off-site, but in the immediate vicinity, of the parking lot.

f. Transport and dispose of all characterized or identified hazardous substances, pollutants, wastes, or contaminants at a RCRA/CERCLA/IDNS-approved disposal facility in accordance with the U.S. EPA off-site policy.

g. Conduct off-site surveying and sampling as necessary and, at a minimum, implement the standards of 40 Code of Federal Regulations ("CFR") 192, if deemed necessary should contamination be discovered beyond current site boundaries.

h. Backfill all excavations with suitable material, and if soil, test borrow source for radioactivity and other pertinent characteristics in 40 CFR Part 261.

3.1 Work Plan and Implementation

Within 15 calendar days after the effective date of this Order, the Respondents shall submit to U.S. EPA for approval a draft Work Plan for performing the removal activities set forth above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the activities required by this Order.

U.S. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan. If U.S. EPA requires revisions, Respondents shall submit a revised draft Work Plan within 7 business days of notification. Respondents shall implement the Work Plan as finally approved in writing by U.S. EPA in accordance with the schedule approved by U.S. EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be fully enforceable under this Order. Respondents shall notify U.S. EPA at least 48 hours prior to performing any on-site work pursuant to the U.S. EPA approved work plan.

Respondents shall not commence or undertake any removal actions at the Site without prior U.S. EPA approval.

3.2 Health and Safety Plan

Within 15 calendar days after the effective date of this Order, the Respondents shall submit a plan for U.S. EPA review and comment that ensures the protection of the public health and safety during performance of on-site work under this Order. This plan shall comply with applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 CFR Part 1910. If U.S. EPA determines it is appropriate, the plan shall also include contingency planning. Respondents shall incorporate all changes to the plan recommended by U.S. EPA, and implement the plan during the pendency of the removal action.

3.3 Quality Assurance and Sampling

All sampling and analyses performed pursuant to this Order shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with U.S. EPA guidance. Upon request by U.S. EPA, Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. Respondents shall provide to U.S. EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or

analysis. Respondents shall also ensure provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, "Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites."

Upon request by U.S. EPA, Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondents or their contractors or agents while performing work under this Order. Respondents shall notify U.S. EPA not less than 3 business days in advance of any sample collection activity. U.S. EPA shall have the right to take any additional samples that it deems necessary.

3.4 Reporting

Respondents shall submit a monthly written progress report to U.S. EPA concerning activities undertaken pursuant to this Order, beginning 30 calendar days after the date of U.S. EPA's approval of the Work Plan, until termination of this Order, unless otherwise directed by the OSC. These reports shall describe all significant developments during the preceding period, including the work performed and any problems encountered, analytical data received during the reporting period, and developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

Any Respondent that owns any portion of the Site, and any successor in title shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice of this Order to the transferee and written notice of the proposed conveyance to U.S. EPA and the State. The notice to U.S. EPA and the State shall include the name and address of the transferee. The party conveying such an interest shall require that the transferee will provide access as described in Section V.4 (Access to Property and Information).

3.5 Final Report

Within 60 calendar days after completion of all removal actions required under this Order, the Respondents shall submit for U.S. EPA review a final report summarizing the actions taken to comply with this Order. The final report shall conform to the requirements set forth in Section 300.165 of the NCP. The final report shall also include a good faith estimate of total costs incurred in complying with the Order, a listing of quantities and types of materials removed, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destinations of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits).

The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

> Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

4. Access to Property and Information

Respondents shall provide or obtain access as necessary to the Site and all appropriate off-site areas, and shall provide access to all records and documentation related to the conditions at the Site and the activities conducted pursuant to this Order. Such access shall be provided to U.S. EPA employees, contractors, agents, consultants, designees, representatives, and State of Illinois representatives. These individuals shall be permitted to move freely at the Site and appropriate off-site areas in order to conduct activities which U.S. EPA determines to be necessary. Respondents shall submit to U.S. EPA, upon request, the results of all sampling or tests and all other data generated by Respondents or their contractors, or on the Respondents' behalf during implementation of this Order.

Where work under this Order is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall obtain all necessary access agreements within 14 calendar days after the effective date of this Order, or as otherwise specified in writing by the OSC. Respondents shall immediately notify U.S. EPA if, after using their best efforts, they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. U.S. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the response activities described herein, using such means as U.S. EPA deems appropriate.

5. Record Retention, Documentation, Availability of Information

Respondents shall preserve all documents and information, in their possession or the possession of their contractors, subcontractors or representatives, relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for six years following completion of the removal actions required by this Order. At the end of this six year period and at least 60 days before any document or information is destroyed, Respondents shall notify U.S. EPA that such documents and information are available to U.S. EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to U.S. EPA. In addition, Respondents shall provide documents and information retained under this Section at any time before expiration of the six year period at the written request of U.S. EPA.

6. Off-Site Shipments

All hazardous substances, pollutants or contaminants removed off-site pursuant to this Order for treatment, storage or disposal shall be treated, stored, or disposed of at a RCRA/CERCLA/IDNS-approved disposal facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR § 300.440, 58 Federal Register 49215 (Sept. 22, 1993).

7. Compliance With Other Laws

All actions required pursuant to this Order shall be performed in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e) and 40 CFR Section 300.415(i). In accordance with 40 CFR Section 300.415(i), all on-site actions required pursuant to this Order shall, to the extent practicable, as determined by U.S. EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements under federal environmental or state environmental or facility siting laws.

8. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the activities conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, the Respondents shall immediately take all appropriate action to prevent, abate or minimize such release, or endangerment caused or threatened by the release. Respondents shall also immediately notify the OSC or, in the event of his/her unavailability, shall notify the Regional Duty Officer, Emergency Response Branch, Region 5 at (312) 353-2318, of the incident or Site conditions.

Respondents shall submit a written report to U.S. EPA within 7 business days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. Respondents shall also comply with any other notification requirements, including those in CERCLA Section 103, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act, 42 U.S.C. § 11004.

VI. AUTHORITY OF THE U.S. EPA ON-SCENE COORDINATOR

The OSC shall be responsible for overseeing the implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this Order, or to direct any other response action

undertaken by U.S. EPA or Respondents at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

U.S. EPA and Respondents shall have the right to change their designated OSC or Project Coordinator. U.S. EPA shall notify the Respondents, and Respondents shall notify U.S. EPA, as early as possible before such a change is made, but in no case less than 24 hours before such a change. Notification may initially be made orally, but shall be followed promptly by written notice.

VII. PENALTIES FOR NONCOMPLIANCE

Violation of any provision of this Order may subject Respondents to civil penalties of up to $25,000 per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1).

Respondents may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondents violate this Order or any portion hereof, U.S. EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

VIII. REIMBURSEMENT OF COSTS

Respondents shall reimburse U.S. EPA, upon written demand, for all response costs incurred by the United States in overseeing Respondents' implementation of the requirements of this Order. U.S. EPA may submit to Respondents on a periodic basis a bill for all response costs incurred by the United States with respect to this Order. U.S. EPA's Itemized Cost Summary, or such other summary as certified by U.S. EPA, shall serve as the basis for payment.

Respondents shall, within 30 days of receipt of the bill, remit a cashier's or certified check for the amount of those costs made payable to the "Hazardous Substance Superfund," to the following address:

U.S. Environmental Protection Agency
Superfund Accounting
P.O. Box 70753
Chicago, Illinois 60673

Respondents shall simultaneously transmit a copy of the check to the Director, Superfund Division, U.S. EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590. Payments shall be

XI. MODIFICATIONS

Modifications to any plan or schedule may be made in writing by the OSC or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within 7 business days; however, the effective date of the modification shall be the date of the OSC's oral direction. The rest of the Order, or any other portion of the Order, may only be modified in writing by signature of the Director, Superfund Division, Region 5.

If Respondents seek permission to deviate from any approved plan or schedule, Respondents' Project Coordinator shall submit a written request to U.S. EPA for approval outlining the proposed modification and its basis.

No informal advice, guidance, suggestion, or comment by U.S. EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve Respondents of their obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XII. NOTICE OF COMPLETION

After submission of the Final Report, Respondents may request that U.S. EPA provide a Notice of Completion of the work required by this Order. If U.S. EPA determines, after U.S. EPA's review of the Final Report, that all work has been fully performed in accordance with this Order, except for certain continuing obligations required by this Order (e.g., record retention), U.S. EPA will provide written notice to the Respondents. If U.S. EPA determines that any removal activities have not been completed in accordance with this Order, U.S. EPA will notify the Respondents, provide a list of the deficiencies, and require that Respondents modify the Work Plan to correct such deficiencies. The Respondents shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the U.S. EPA notice. Failure to implement the approved modified Work Plan shall be a violation of this Order.

XIII. ACCESS TO ADMINISTRATIVE RECORD

The Administrative Record supporting these removal actions is available for review during normal business hours in the U.S. EPA Record Center, Region 5, 77 W. Jackson Blvd., Seventh Floor, Chicago, Illinois. Respondents may contact Nancy-Ellen Zusman, Assistant Regional Counsel, at (312) 886-5825 to arrange to review the Administrative Record. An index of the Administrative Record is attached to this Order.

XIV. OPPORTUNITY TO CONFER

Within 3 business days after receipt of this Order, Respondents may request a conference with U.S. EPA. Any such conference shall be held within 5 business days from the date of the request, unless extended by agreement of the parties. At any conference held pursuant to the request, Respondents may appear in person or be represented by an attorney or other representative.

If a conference is held, Respondents may present any information, arguments or comments regarding this Order. Regardless of whether a conference is held, Respondents may submit any information, arguments or comments (including justifications for any assertions that the Order should be withdrawn against a Respondent), in writing to U.S. EPA within 2 business days following the conference, or within 7 business days of receipt of the Order if no conference is requested. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondents a right to seek review of this Order. Requests for a conference shall be directed to Nancy-Ellen Zusman, Assistant Regional Counsel, at (312) 886-5825. Written submittals shall be directed as specified in Section V.2 of this Order.

XV. SEVERABILITY

If a court issues an order that invalidates any provision of this Order or finds that Respondents have sufficient cause not to comply with one or more provisions of this Order, Respondents shall remain bound to comply with all provisions of this Order not invalidated by the court's order.

XVI. EFFECTIVE DATE

This Order shall be effective 10 business days following issuance unless a conference is requested as provided herein. If a conference is requested, this Order shall be effective 5 business days after the day of the conference.

IN THE MATTER OF:

LINDSAY LIGHT II SITE
CHICAGO, ILLINOIS

IT IS SO ORDERED

BY: _____ DATE: 6/6/96

William E. Muno, Director
Superfund Division
United States
Environmental Protection Agency
Region 5

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
LINDSAY LIGHT II
CHICAGO, ILLINOIS

UPDATE #3
JUNE 3, 1996

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
07/26/95	STS Consultants Ltd.	U.S. EPA	The Chicago Dock & Canal Trust Report for Characterization Investigation: Gamma Radiation Survey, Lindsay Light II Site, Chicago, IL w/Attachments A-E (3 Volumes)	1324

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
LINDSAY LIGHT II
CHICAGO, ILLINOIS

UPDATE #2 (REVISED)
APRIL 1, 1996

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
04/22/96	Simon, V., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Determination of Threat to Public Health and the Environment at the Lindsay Light II Site, Chicago, IL	40

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
LINDSAY LIGHT II
CHICAGO, ILLINOIS

UPDATE #1
SEPTEMBER 18, 1995

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
09/00/93	Rogers & Associates Engineering Corporation	Chicago Dock & Canal Trust	Work Plan for Characterization of Radioactive Contamination, 316 East Illinois St., Chicago, Illinois: Appendix E, Supplemental; Other Sampling	17
10/05/95	Simon, V., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Determination of Threat to Public Health or the Environment at the Lindsay Light II Site	22

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
LINDSAY LIGHT II SITE
CHICAGO, ILLINOIS

ORIGINAL
May 2, 1994

DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
06/21/93	Karl, R., U.S. EPA	Klinger, J., Illinois Dept. of Nuclear Safety	Letter Illinois Dept. of Nuclear Safety	1
08/18/93	Kouris, T., Ecology & Environment, Inc.	Pfundheller, J., U.S.EPA	Letter re: Site Assessment	4
08/26/93	TMA Eberline	Ecology & Environment, Inc.	Thermoluminescent Dosimeter Badges Data	3
08/27/93	Klinger, J., Illinois Dept. of Nuclear Safety	Karl, R., U.S. EPA	Response to U.S. EPA Letter Dated 6/21/93	2
1/27/94	Muno, W., U.S. EPA	Chicago Dock & Canal Trust	Administrative Order by Consent	16
07/11/94	Simon, V., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum	12

ATTACHMENT B

LIABILITY FILE INDEX

1. Minutes from meetings of Lindsay Light II Company.
   1922, 1924, 1925, 1929, 1931.

2. Chicago Tribune article.
   July 1993.

3. 104(e) response from Kerr-McGee Corporation.
   January 3, 1994.

4. Press release issued by The Chicago Dock & Canal Trust.
   July 6, 1993.

5. Enforcement Confidential Addendum from Action Memo.
   April 1996.

LIST OF RESPONDENTS RECEIVING UNILATERAL ADMINISTRATIVE ORDER
LINDSAY LIGHT II SITE

Kerr-McGee Chemical Corporation
c/o Richard A. Meserve, Esq.
Covington & Burling
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044-7566

Chicago Dock & Canal Trust
c/o Vincent S. Oleskiewicz, Esq.
Baker & McKenzie
One Prudential Plaza
130 East Randolph Drive
Chicago, Illinois 60601

ATTACHMENT B

WORK PLAN

R E P O R T

Grand Pier L.L.C.
401 North Michigan Avenue
Chicago, Illinois 60611

Work Plan for Site Radiation Survey and Excavation Soil Management

Grand Pier Center
Chicago, Illinois

STS Project No. 24418-XK

March 20, 2000

March 20, 2000

Mr. Michael Witte
Grand Pier L.L.C.
401 North Michigan Avenue
Chicago, Illinois 60611

RE: Work Plan for Site Radiation Survey and Excavation Soil Management, Grand Pier Center, Chicago, Illinois - STS Project No. 24418-XK

Dear Mr. Witte:

Attached please find our Work Plan for the above referenced project. This Work Plan reflects changes requested by USEPA following their review of an initial draft (March 6, 2000) and Revision 1 (March 16, 2000)

Please contact us with any questions you may have regarding this project.

Regards,

STS CONSULTANTS, LTD.

Richard G. Berggreen, C.P.G.
Principal Geologist

Attachment

GRAND PIER CENTER L.L.C.
401 NORTH MICHIGAN AVENUE
CHICAGO, ILLINOIS 60611

TABLE OF CONTENTS

		Page No.
1.0	**Introduction**	1
2.0	**Proposed Development, Excavations, Schedule, Sequencing**	4
2.1	Strip Asphalt, Remove Subgrade	5
2.2	Remove Piers and Footings for Overhead Roadway	5
2.3	Test Pit Caisson Locations	5
2.4	Excavate Basement Area (Area B)	6
2.5	Drill and Install Caissons	6
2.6	Excavate for Grade Beams and Caisson Caps	6
2.7	Construction and Backfilling	7
2.8	Illinois Street Viaduct Caissons	7
3.0	**Proposed Contamination Screening**	9
3.1	Surface Grid Survey	9
3.2	Construction Excavation Screening	10
4.0	**Air Monitoring, Health and Safety**	14
4.1	Air Monitoring	14
4.2	Health and Safety	14
5.0	**Closure Documentation**	15
5.1	Verification Sampling	15
5.2	Closure Report	15
5.3	Material Disposal	16

FIGURES

Figure 1	Site Plan Area Designations
Figure 2A	Caisson Plan - Area B
Figure 2B	Caisson Plan - Area C
Figure 3	Grade Beam Plan
Figure 4	Illinois Street Viaduct Piers
Figure 5	Illinois Street Viaduct Caissons
Figure 6	Subsurface Utility Plan

ATTACHMENTS

Attachment 1	Health and Safety Plan
Attachment 2	Geotechnical Boring Logs
Attachment 3	Highway Authority Agreement

Property Owner: Grand Pier Center, LLC

Property Location: Parcel Bounded by Illinois (south), St. Clair Street (west), Columbus Drive (east), and Grand Avenue (north), excepting the northwest corner of this block.

Parcel ID Number: 17-10-212-019

WORK PLAN FOR SITE RADIATION SURVEY AND EXCAVATION SOIL MANAGEMENT GRAND PIER CENTER CHICAGO, ILLINOIS

1.0 INTRODUCTION

The subject property for this Work Plan is bounded by Illinois Street on the south, Columbus Drive on the east, Grand Avenue on the north, and St. Clair Street on the west, with the exception of the northwest corner of this block which is not included in the development (Figure 1). Note that the currently proposed development consists of the eastern approximately 428 feet of this parcel (Areas B and C). The southwest corner is proposed for future development (Area A).

Proposed development includes a slab-on-grade retail facility occupying the eastern part of Phase 1, (Area C) and other retail occupying the western part of Phase 1 which would include a basement (Area B). The high-rise tower proposed for the Phase II parcel (Area A) is proposed as slab-on-grade. All structures will be supported on a caisson foundation system. Grade beams will be incorporated in the foundations for the eastern slab-on-grade construction (Area C).

Development of the site began December 27, 1999 and was halted February 29, 2000. When construction activities start again, work hours will be from 7:00 a.m. to 7:00 p.m. It is proposed to work 6 days a week.

The site is owned by Grand Pier Center LLC, who are responsible for implementing this Work Plan. Grand Pier is contracting with Morse Diesel, Inc. as Construction Manager and STS Consultants, Ltd. (STS) as Environmental Consultant to complete a multi-use commercial development on this property.

The subject property has had a variety of land uses. Two underground storage tanks, apparently for heating oil, were removed from near the northeast corner of the site as construction began. Building foundations and floor slabs indicating the former presence of a basement at the east end of the site were encountered in geotechnical borings and caisson test pit exploration. The 1950 Sanborn Fire Insurance map shows a Chicago Police Traffic Division Headquarters at the southeast corner of the site. Other features evident on plans, historic aerial photos and fire insurance maps of the site include:

- A freight tunnel extending approximately 70 ft onto the site from the east, near the northeast corner, as shown on Figure 6.
- Noake, Wheeler, Clough Co. varnish factory at the east end of the site on 1906 Sanborn Fire Insurance maps.
- The Lake Shore Foundry on the south central portion of the site on 1891 Rascher Fire Insurance maps.
- A Commonwealth Edison substation near the northcentral part of the site on the 1950 Sanborn Fire Insurance maps.

The adjacent property to the east (Lindsay Light II site) was found in previous investigations to contain thorium-impacted soil. The property to the west (161 East Grand) was formerly occupied by the company involved in the manufacturing which used the thorium material. The USEPA requested permission to screen the subject site to see if there were any indicators of thorium contamination on the subject property. An initial screening on February 29, 2000 identified several areas which exhibited gamma radiation levels above background levels. Samples were obtained March 1, 2000 for gamma spec analysis to characterize the radioactive material.

This Work Plan describes the survey methods which are proposed for identifying the thorium impacted materials. Additionally, this Work Plan describes the survey methods proposed to monitor the excavation phases of the construction in order to identify and appropriately manage any thorium impacted soil encountered. Efforts to screen soils removed from the site to six disposal sites are also described herein.

Mr. Richard G. Berggreen, Principal Geologist with STS will be Project Coordinator . Mr. Dumas Guerrier, Senior Environmental Technician with STS, will be Field Team Leader. Stan A. Huber Consultants, Inc. will be the Health Physics Subcontractor. Radiation laboratory services will be provided through Radiation Safety Services, Inc.

Construction for this project began with the stripping of the asphalt parking lot. Several pier foundations for an overhead roadway were removed from the southwest corner of the site. Several caisson test pit probes have been excavated to investigate for obstructions. Excavation spoil soil piles are present on site as well as staged caisson casings. Construction activities were temporarily halted upon the discovery of the elevated radiation on February 29, 2000.

It is the intention of this Work Plan, upon approval by USEPA, to proceed with the site survey, identify and remove the thorium contaminated soil, resume the construction excavation operations and provide concurrent monitoring, with any additional contamination removed to clean limits when it is identified. Upon completion of all required excavation and removal of all identified thorium impacted soils above the proposed clean-up threshold of 7.1 pCi/g, the owner will request a closure document from USEPA representing the clean-up meets appropriate levels to be protective of public health and the environment.

Section 2.0 of this Work Plan describes the proposed development and excavation. The anticipated schedule and sequencing is also described.

Section 3.0 presents the proposed monitoring to be conducted. This monitoring includes the initial site survey and screening in the course of removal of identified contamination, and the monitoring to be conducted as construction excavation proceeds.

Section 4.0 summarizes the air monitoring, personnel monitoring, health and safety training, and required equipment screening before leaving the site.

Section 5.0 describes the closure documentation which will be prepared upon removal of all identified thorium impacted soil from the site.

2.0 PROPOSED DEVELOPMENT, EXCAVATIONS, SCHEDULE, SEQUENCING

The Grand Pier Center site consists of three areas which will have separate and distinct development and excavation activities. Area A, farthest west (Figure 1), will be developed as a high-rise in a future development phase. Area B, at the center of the site, will have a one-story deep basement, excavated 15 feet below street grade. Area C, at the east end of the site, is proposed to be slab-on-grade. Caissons will be drilled throughout the site (Figure 2). Area C will also have grade beams between caisson caps (Figure 3). Additionally, an upper level roadway supported on piers and caissons will be constructed over Illinois Street along the south side of a portion of the site (Figure 4, 5).

Site development is anticipated to proceed through the following tasks:

- Strip asphalt and sub-grade gravel (completed Areas B, C; pending Area A)
- Remove piers and footings for overhead roadway (begun)
- Test pit probe caisson locations for obstructions (begun)
- Excavate site in basement for caisson drilling (begun)
- Drill caissons
- Excavate for grade beams, caisson cap construction
- Construction of grade beams, caisson caps, basement walls and backfilling
- Installation of subgrade utility corridors
- Illinois Street viaduct caissons

As contamination is detected, either in the initial surface survey or in the course of monitoring the excavations, the areas will be designated with a magenta and yellow rope and stakes or fence posts. These areas will be designated exclusion zones, and will require appropriate personal protective equipment (PPE) and personal air monitoring to enter. All equipment and personnel which enter an exclusion zone will need to be frisked clean upon leaving the exclusion zone. Personnel entering exclusion zones must be 40-hour health and safety trained.

Restarting the construction activities at the site in coordination with the contamination removal efforts will involve close coordination so as to minimize interference and unnecessary delay. It is anticipated the activities will proceed as follows. Specific details on each activity are presented in Sections 2.1 through 2.8.

The first effort will be to clear all identified contamination locations in Areas B and C, based on the surface survey data. This removal effort will not include the locations currently obstructed by material and equipment, for example under the caisson casings at the southeast corner of the site. Those areas will be monitored and soil removed as equipment and material can be moved in the normal course of construction. Where contamination is identified but removal is delayed due to obstructions or sequencing of excavation activities, there is concern for equipment and personnel coming into contact with that soil and possibly spreading or increasing exposure potential. To minimize that potential, those areas which will not be isolated as exclusion zones and which may remain unexcavated for

some time will be marked by spray paint and covered with plywood so as to prevent contact with equipment and/or construction personnel. Those areas shall be excavated to clean limits as soon as practical.

After all identified contamination in Areas B and C has been removed, caissons will be installed in Area C, while test pits are excavated in Area B. Caissons will be installed in Area B as grade beams and caisson cap excavations are completed in Area C.

The basement excavation will be completed in Area B. Area A will be stripped of asphalt, the soil screened and any identified contamination removed, and caissons will be probed and drilled. Caisson cap excavations will be completed for Area A and along Illinois Street. Note that the Illinois Street viaduct caissons, in that they are off-site, may be installed concurrently with one or more of the on-site activities.

2.1 Strip Asphalt, Remove Subgrade

The site paving and subgrade have been removed. This facilitates surveying of the soil to more effectively identify elevated gamma radiation (Section 3.0 describes the proposed screening methods). This removal has already been completed on Areas B and C. Area A will not be stripped until Phase II is scheduled to begin construction.

2.2 Remove Piers and Footings for Overhead Roadway

The overhead roadway above Illinois Street at the southwest corner of the site extended into the airspace above the site. This roadway was supported on three piers on the site. The site airspace portion of the road has been removed and the piers taken down. The footings for the piers are in the process of being demolished in excavations on the order of 6 feet deep. Excavated soil and debris from those demolished footings remains adjacent to the excavations. The excavation, excavated soil, and debris will be scanned for contamination (Section 3.0).

2.3 Test Pit Caisson Locations

In order to locate and remove potential obstructions from caisson locations, each location will be explored by excavating a test pit to the natural soils. Any former structure or demolition debris obstruction will be removed and the location backfilled before the caisson is drilled. These test pits provide an opportunity to screen the fill soils for evidence of contamination (Section 3.0). Any contamination encountered will be removed to clean limits before backfilling.

Several locations have been excavated and remain as depressions on-site. Other locations remain to be excavated. Any that have been excavated and backfilled will be screened for potential contamination as the caissons are drilled.

2.4 Excavate Basement Area (Area B)

The area comprising the middle of the site, Area B, will be excavated for a one level basement. It is understood that the north wall will likely be sheeted to provide for complete excavation, while the remaining sides will be sloped soil. This area is to be partially excavated prior to installation of caissons in this area. This excavation will extend part way through the urban fill soils to a depth of approximately 5 feet, whereas the fill ranges from 7 to 9 feet deep below original site grade. That fill is underlain by fine to medium sand, with a trace of silt and gravel. Groundwater is typically 13 feet deep.

This excavation can be screened for contamination as it is extended (Section 3.0).

2.5 Drill and Install Caissons

Current site development plans show 117 caissons will be installed in development of Areas B and C. Each caisson location will have been screened for contamination as the obstruction test pit exploration was conducted, or if excavated and backfilled before screening began, those caissons will be surveyed by screening the cuttings as the upper portion of the caisson is drilled (Section 3.0). As a result, the caissons can be drilled without constraint, on the condition that the remediation of any contamination encountered in the test pits proceeded to clean limits. If contamination extends below the fill soil and sufficiently far into the natural sand soil so as to preclude removal before the caissons are installed, caissons at those locations will require screening of the cuttings through any soils continuing to exhibit contamination (Section 3.0). This limit of practical excavation prior to caisson installation is anticipated to be at the groundwater table, estimated at approximately 13 ft below grade.

2.6 Excavate for Grade Beams and Caisson Caps

In Area C, the foundation system includes a network of grade beams spanning between caisson caps (Figure 3). These grade beams are constructed in trenches excavated an estimated 5 to 7 feet deep. These trenches offer an opportunity to explore along those alignments for contaminated soil. Note that given the spacing of the grade beams and excavations for caisson caps, the majority of Area C will be excavated to 5 feet at a minimum and to 7 feet along the grade beam and caisson cap locations.

Excavations will also be required at the top of each caisson for construction of a cap. The location may have been previously screened in the course of test pit exploration and would therefore not require additional monitoring. Where test pits for obstructions were conducted before monitoring began and as a result screening at those locations was not previously conducted, the soil will be screened as the caisson cap excavation proceeds (Section 3.0).

2.7 Construction and Backfilling

After the grade beams and caisson caps are constructed, the lower level slab and street level floor slabs can be poured and basement walls constructed.

The excavations exterior to the basement walls will be backfilled. The excavated trenches in which the grade beams were constructed will be backfilled. Any subsurface corridors which will be excavated for underground utilities can be screened for potential contamination at this time, when the site is returned to a uniform grade. No further excavation or monitoring is anticipated to be necessary after this point in the construction schedule.

All backfill for this site must meet one of two criteria. If the backfill is "clean" fill from on-site, it must be below 7.1 pCi/g total radium. If the fill is from off-site, it must be 3.7 pCi/g or less total radium.

2.8 Illinois Street Viaduct Caissons

An upper level roadway will be constructed over a portion of Illinois Street (Figure 4). This roadway will be supported on piers whose foundations are caissons drilled and constructed through the sidewalk adjacent to the right-of-way of Illinois Street (Figure 5). A total of 13 caissons are proposed to be installed, 7 on the south side of Illinois Street and 6 on the north side.

This work will involve drilling a 36 inch diameter caisson. The caisson will be drilled to a depth of 80 feet, will penetrate the urban fill which underlies this area of Chicago to a depth of approximately 8 - 10 feet, the natural sand present to a depth of 20 to 28 feet, generally getting deeper to the east, and into the glacial hard pan clays which extend to bedrock at greater than 100 feet deep. A boring plan and boring logs for geotechnical borings in Illinois Street and adjacent Grand Pier Center are included as Attachment 2.

The caissons will be drilled directly from the street level. The sidewalk will be cut and removed at each caisson location. The soil beneath the sidewalk will be surveyed and any contaminated material removed to the limits of the removed sidewalk opening. Any remaining contamination not removed in the course of excavation and construction will be identified to USEPA for an ongoing record. No other excavation, other than removal of existing sidewalk and identified contamination, will precede drilling. Subsequent construction of the caisson cap will entail excavation of a temporary opening 8 feet square and approximately 5 feet below street grade. That work will also require monitoring, as described in Section 3.0.

Cuttings from the caisson drilling will be brought up on the caisson auger flights, screened for radiation while on the augers as specified in Section 3.0, and spun off for loading and transport. Soil exhibiting evidence of contamination be spun off in a separate area from apparently clean material.

Upon completion of the drilling, the reinforcing steel will be placed in the drilled hole and concrete placed to complete the caisson. There will be no contact with soil except that which is brought up on the auger flights, until the area around each caisson top is excavated for construction of the caisson cap.

At that time an 8 foot square area will be saw cut around each caisson. Sidewalk, curb, gutter and street pavement will be removed and the soil screened for contamination. After removal of any contaminated soil, the remaining clean soil will be excavated to a depth of 4.5 to 5 feet deep, using a small hydraulic excavator and hand digging. Forms will be constructed for the caisson cap. Reinforcing steel will be placed and the concrete poured. The forms will be removed and granular material, CA-6 or equivalent, will be used to fill the excavation, and the area will be re-paved.

3.0 PROPOSED CONTAMINATION SCREENING

Contamination screening for thorium-impacted soil will occur in two stages. The current site grade will be surveyed for evidence of elevated gamma radiation. Certain materials present on the site will need to be relocated to allow surveying, for example, the caisson casing stored near the southeast corner of the site. Also, some of the soils stockpiled will need to be screened, as described in Section 3.1.

The second stage of screening will be done in the course of site excavations. These excavations are anticipated to include:

- Overhead street pier excavations
- Test pits for caisson obstructions
- Caisson drilling
- Basement excavation, Area B
- Grade beam trenches
- Utility corridors
- Illinois street viaduct caissons
- Off-site soil screening

The monitoring of these excavations is described in Section 3.2.

3.1 Surface Grid Survey

The currently exposed soil surface will be surveyed for elevated gamma readings. The survey will proceed to cover the exposed soil on survey lines spaced 5 meters. Gamma count values shall be taken at intervals spaced 5 meters (5 x 5 meter grid). The site grid will be marked by stakes and flagging at the edges of the property and by paint on the ground surface on the interior of the site. The areas between the grid points will be scanned following Lindsey Light II Scoping and Planning (S&P) Documents SOP 210-1 so as to cover the intra-grid areas.

The excavated soil which is present on-site in stockpiles will be screened for elevated radiation before it is removed from the site. Screening will be done by surveying the exterior of the pile and removing the soil in maximum 2 ft lifts. Efforts will be made to avoid mixing and homogenizing the soil as it is excavated. All soil exceeding the apparent 7.1 pCi/g clean-up threshold will be managed as thorium contaminated soil.

The surveys will be conducted using a 2 x 2 NaI gamma detector (Ludlum 2221 or the equivalent alarm feature Ludlum instrument). The detector will be unshielded to provide for broader area screening in assessing the surface survey. Values will be recorded in counts per minute (cpm). Screening records will include recording the instrument serial number, calibration date, operator, and site grid coordinates surveyed.

The maximum value will be recorded for each grid cell and all anomalously high areas (2 times background) will have the approximate limits designated on the survey data sheets.

Locations with elevated gamma counts will be marked and the vicinity surveyed at a 1 meter grid spacing to identify the limits of the elevated readings. Those areas will be designated as contaminated zones and soil removed. Verification sampling and analyses will be conducted as specified in this Work Order (Section 5.0).

3.2 Construction Excavation Screening

Soil screening in the course of construction is intended to identify contamination which may otherwise by masked by overlying soil, but would be exposed and transported off site in the course of construction excavation. As with the Surface Grid Survey, when survey results find evidence of thorium contamination, the area will be determined and the contaminated soils removed to the limits of the cleanup criteria of 7.1 pCi/g.

All verification of clean closure will be based on gamma spec analysis of samples run at an on-site laboratory. Analysis will be conducted using detectors and NUTRANL software capable of meeting the detection limits to support the 7.1 pCi/g clean-up determination. Replicate split samples will be run by USEPA as a confirmation. However, upon demonstration of the on-site laboratory capability, field screening results will be checked by analysis at the field laboratory as excavation proceeds, and the field laboratory results will be used to request closure from USEPA representatives.

A cross check series of 10 samples collected from the site will be split and analyzed at the on-site laboratory and through USEPA at Argonne National Laboratory. These samples will provide a comparison of results to allow the on-site laboratory to be used as the closure verification analysis.

The following provides a description of the screening conducted for each of the anticipated excavation types.

– *Overhead Street Pier Excavation*

These excavations already exist at the site. The excavations are approximately 12 x 12 feet in horizontal dimension and 7 feet deep. Minor additional excavation may be necessary to remove foundation remnants. However, these excavations are near their final size and can be screened. The walls and floor will be screened in accordance with Section 5 of this Work Plan and any materials exceeding the clean up criteria of 7.1 pCi/g will be removed. Removal will extend to clean limits or the property boundary and be subject to verification screening by the USEPA and confirmation samples to be laboratory analyzed. Excavated soil and debris will require screening prior to removal off site. Screening will require the excavated material which is present on-site be less than two feet thick to be covered by a walk-over survey. Piles greater than two feet will be excavated in lifts of a maximum of two feet and screened after each lift. Efforts will be made to minimize mixing and homogenization during excavation.

– *Test Pits for Caisson Obstructions*

Test pits to remove potential obstructions have been or will be excavated with hydraulic excavator at each caisson location. However, in Area B, if no obstructions are apparent, based on field observations and boring logs, test pits may be omitted. The test pits will extend through the fill soils and basement floors which may be present based on boring logs from Area C at this site. Depth to natural soils varies from 7 to 9 feet. Test pits will be monitored by screening the soils as they are excavated, and by screening the in-place soils in the walls and floor of the test pits. All soils exceeding clean up criteria will be removed from the site.

All of the caisson locations in Area C were previously excavated for obstructions. Approximately one quarter (17 of 65) of the locations in Area B have been test pitted. (See the following section and Figure 2A).Rather than re-excavating those locations, the caisson cuttings will be screened as the caisson is drilled.

When test pit monitoring identifies contamination which exceeds the cleanup threshold of 7.1 pCi/g, the contamination will be removed to clean limits before the test pit is backfilled and the caisson is drilled. The only exception would be if the contamination extended below the groundwater table or beyond the limits of the site.

– *Caisson Drilling*

At those locations where the test pits were excavated prior to initiation of screening (all caissons in Area C, and the following caissons in Area B: 6.5A through 14A, 6.5B through 8B, 12B, 6.5C, 7D, 11D and 12D, Figures 2A, 2B) the caisson drill cuttings will be screened. Screening will be conducted while the material remains on the auger. Material exhibiting readings 2 times background or higher will be spun off and surveyed on the ground. All material exceeding 7.1 pCi/g will be containerized and removed from the site.

Note that caissons at Column Station C-25 (Column No. 60) and Station C-22 (Column No. 57) have already been installed.

– *Basement Excavation - Area B*

The basement excavation in Area B has a design depth of 15 feet. Borings indicate fill extends to an estimated 7 to 9 feet below original site grade. This portion of the site will be monitored as the excavation proceeds, with excavation lifts limited to not more than 2 feet. Monitoring will continue to the base of the fill soils, or to a clean (less than 7.1 pCi/g) base, whichever is deeper. However, it is not proposed to extend the excavation below the design depth of the proposed basement excavation. This excavation limit is expected to be constrained by groundwater elevations at the site.

Should dewatering of the basement excavation in Area B be required, to either manage precipitation accumulation or groundwater infiltration, a permit will be obtained from the Metropolitan Water Reclamation District, and any required sampling and monitoring will be conducted and provided. Additionally, any permits required by the Chicago Sewer

Department will be obtained and any required sampling and monitoring will be conducted and provided.

– *Grade Beam Trenches*

In Area C of the site, which will be built slab-on-grade, the structure has a foundation consisting of caissons and a network of grade beams. These grade beams are constructed between caissons, in forms inside trenches excavated between the caissons. The trenches are approximately 5 to 7 feet below grade. This excavation will likely lower all of Area C to at least 5 feet deep.

As these trenches are excavated, the excavated soil will be screened and the walls and floor of the trench will be screened in lifts of not more than 2 feet between screening surveys. All soil which exceeds the clean-up criteria of 7.1 pCi/g will be removed from the site and clean closure documented in accordance with procedures in Section 5.0 of this Work Plan.

Area A will also be generally excavated to approximately 5 feet for construction of caisson caps. This will allow for screening and survey in maximum 2 feet lifts as this excavation proceeds.

– *Utility Trench Corridors*

Following the completion of the foundation elements, including the caissons, caisson caps and grade beams, it is anticipated that the basement walls will be formed and poured and the site will be backfilled around the grade beams and exterior to the basement walls. The final excavation before placing the floor slab at site grade will be excavating the underground utility corridors. Where those excavations pass through soil not previously screened clean, the excavation spoil and walls and floor of the trenches will be surveyed. Material exceeding the cleanup criteria will be removed to clean limits. Figure 6 identifies the utility tie-in locations proposed for the current development. Specifically, this figure shows where excavations at the margins of the site property will occur within the city right-of-way.

– *Illinois Street Viaduct*

All pavement removed, including sidewalk, curb and gutter, and street pavement will be screened for radiation in accordance with the methods proposed in the Highway Authority Agreement, to the same extent as if the Agreement applied to this location. (The Highway Authority agreement is provided on a separate document referenced herein.) Materials exhibiting readings indicative of levels exceeding 7.1 pCi/g will be handled as contaminated.

Soil will be screened on all augers returning cuttings from the urban fill and sand soils from the caissons. Material will be screened on the augers before it is spun off. If there are indications of elevated radiation, the material will be spun off onto an area underlain with plastic sheeting. The soil will be screened on the ground, and material exhibiting readings above the 7.1 pCi/g clean-up threshold will be loaded into Supersacks for disposal. All Supersacks will be either loaded directly into shipping containers or will be placed in a

secure location inside the locked perimeter fence of the Grand Pier site, pending off-site shipping.

Monitoring will be done with NaI detectors which have been calibrated to the 7.1 pCi/g standards at the Kerr-McGee West Chicago facility.

Documentation will include recording the apparent depth of any cuttings which exhibit anomalous results, that is greater than 2 times background. Records will also document the instrument and technician conducting the monitoring. Separate records will be made for each caisson boring.

- Off-Site Soil Screening

Initial construction activities resulted in asphalt, concrete and soil being removed from the site. That soil and material was not screened for potential contamination. In order to assess whether thorium contamination is present in that soil, the disposal sites were screened with a walkover survey.

Contact persons at the disposal sites (waste disposal landfills, asphalt recycling, concrete crushing facilities) were notified, requests made to identify where the material was placed, and an opportunity provided to conduct a walkover survey of the material. Representatives of USEPA and Health Physics contractors conducted the walkover. The surveys utilized calibrated gamma detection instruments. Samples for laboratory analysis were collected as necessary from areas exhibiting anomalous radioactivity. The results of those sample analyses will be provided to USEPA, and included in the final closure report.

4.0 AIR MONITORING, HEALTH AND SAFETY

4.1 Air Monitoring

Air monitoring will be conducted at two levels. Site monitoring will be conducted at the four sides of the site (north, south, east, and west). This air monitoring is for the purpose of documenting, and if detected, initiating measures to control off-site airborne contamination.

The procedures for site air monitoring are presented in attached SOP 212, Section 5.1.

Personnel air monitoring will be required for workers in an exclusion zone. Procedures for personnel air monitoring are presented in attached SOP 212, Section 5.2.

4.2 Health and Safety

The site survey and remediation oversight will be conducted in accordance with the attached Health and Safety Plan. This plan includes required training, personnel protection equipment, general work precautions, and medical monitoring among other issues. The Health and Safety Plan is included as Attachment 1.

All accidents or injury "near misses" will be communicated to USEPA representatives in a timely manner. Project safety briefings will be a regular part of project communication between the Field Team Leader and project contractors and subcontractors.

5.0 CLOSURE DOCUMENTATION

It is the objective of this Work Plan to provide for the removal of thorium contaminated soil from the Grand Pier Center site. Additionally, it is the objective to obtain from the USEPA agreement with the documentation that there is no evidence of residual contamination and that the site does not represent a risk to public health or the environment. It is the intention that this agreement be made with no deed restriction or constraint on future uses of the property.

5.1 Verification Sampling

Soil exhibiting contamination above the clean-up threshold of 7.1 pCi/g total Radium (Ra-226 + Ra-228) will be removed, placed on transport boxes as specified in the S & P documents, and shipped to a facility licensed to accept this waste. Initial field demonstration that the location has been excavated to clean limits will be made with a 2 x 2 NaI detector which has been calibrated against the calibration plates at the Kerr-McGee West Chicago facility. Samples will then be collected and analyzed at an on-site laboratory using NUTRANL software and gamma spec analyses.

Upon documenting clean closure, the USEPA representatives will be notified and provided results of the laboratory analysis. Release of remediated areas will require signed documentation by USEPA of their review and concurrence of the laboratory results for that area. It is understood that USEPA will obtain a sample for analysis at their contract laboratory. However, closure will not be required to wait for USEPA laboratory results, but will be based on the field laboratory results. It is noted that the use of the field laboratory for closure verification will be contingent on demonstrating agreement between the field laboratory results and results from USEPA's contract laboratory at Argonne National Laboratory.

Upon receipt of laboratory results documenting the verification soil samples are below the 7.1 pCi/g total Radium threshold, the location will be cleared for backfilling or continued construction activities as may be necessary.

5.2 Closure Report

The closure documentation report will provide a summary of the locations remediated, the volumes of all materials removed and their disposal locations, resources allocated and costs for the removal, analytical results, field data documenting the clean closure, and an affidavit in accordance with the requirements of the UAO for the adjacent Lindsay Light II site, Section 24, Termination and Satisfaction. This closure documentation report will be provided within 60 days of the completion of the removal of all identified thorium impacted soil.

5.3 Material Disposal

Material which exceeds the clean-up criteria of 7.1 pCi/g will be managed for off-site disposal. Material including soil, asphalt, concrete, and urban debris fill which exceeds the clean-up criteria will either be loaded into Supersacks, if a sufficiently small volume is encountered at any particular location, or will be loaded directly into the shipping containers. Supersacks will be loaded into shipping containers before removal from the site.

The exterior of all containers will be surveyed clean before they leave the site.

Material will be disposed of at Envirocare in Clive, Utah. Kerr-McGee, LLC is responsible for arranging transportation and disposal. Shipping and placarding will be in accordance with all Department of Transportation regulations for shipping contaminated material.

ATTACHMENT 1

HEALTH AND SAFETY PLAN

Grand Pier Center L.L.C.
North Columbus RV3 Project

Health and Safety Plan

Title:	Health and Safety Plan
Revision No:	0
Approved By:	
Date:	

Grand Pier Center L.L.C.
North Columbus RV3 Project

Health and Safety Plan

Submitted to:

U.S. EPA Region V

Office of Superfund

Richard G. Berggreen Project Principal	Date
Health & Safety Coordinator	Date

TABLE OF CONTENTS

1. **SCOPE OF PLAN** 1-1

2. **SAFETY MANAGEMENT** 2-1
   2.1 Health and Safety Coordinator 2-1

3. **PERSONNEL RESPONSIBILITIES** 3-1

4. **HAZARD ASSESSMENT** 4-1
   4.1 Principal Contaminants (known or suspected) 4-1
   4.2 Physical Hazards 4-1
      4.2.1 Heat Stress 4-2
      4.2.2 Cold Stress 4-2
      4.2.3 Electrical Hazards 4-3
      4.2.4 Noise Hazard 4-4
      4.2.5 Overt Chemical Exposure 4-4
      4.2.6 Adverse Weather Conditions 4-4
   4.3 Medical Evaluation and Surveillance Program 4-5
      4.3.1 Dosimetry/Personnel Monitoring 4-5
      4.3.2 Requirement for Dosimetry 4-5
      4.3.3 Bioassay 4-5
      4.3.4 Emergency Medical Treatment 4-7
   4.4 Accident and Incident Reporting 4-7

5. **TRAINING** 5-1
   5.1 Project and Site-Specific Training 5-1
   5.2 Visitor Orientation 5-1
   5.3 Safety "Tailgate" Meetings 5-1
   5.4 First Aid 5-2
   5.5 Safe Work Permit 5-2

6. **COMMUNICATIONS** 6-1
   6.1 General Communications 6-1
   6.2 Radios/Telephones 6-1
   6.3 Emergency Warning 6-1
   6.4 Hand Signals 6-1
   6.5 Site Security 6-2

7. **PERSONNEL EXPOSURE AND AIR QUALITY MONITORING** 7-1
   7.1 Air Quality (Dust) 7-1
   7.2 Airborne Radioactivity Monitoring 7-1
   7.3 Internal Monitoring 7-2
   7.4 External Radiation Monitoring 7-2
   7.5 Radiological Surveys 7-2

TABLE OF CONTENTS (cont.)

7.6 Contamination Monitoring 7-2
7.7 Total Organic Vapor Monitoring 7-3
7.8 Action Levels 7-3

8. PERSONAL PROTECTIVE EQUIPMENT 8-1

9. CONTAMINATION REDUCTION PROCEDURES 9-1
9.1 Equipment 9-1
9.2 Personnel 9-1
9.3 Contamination Prevention 9-2
9.4 Disposal Procedures 9-2

10. GENERAL WORK PRECAUTIONS 10-1
10.1 Kerr-McGee Safety Handbook 10-1
10.2 Personnel 10-1
10.3 Operational Precautions 10-2

11. SANITARY FACILITIES 11-1
11.1 Potable Water 11-1
11.2 Toilet Facilities 11-1
11.3 Washing Areas 11-1

12. FIRE CONTROL EQUIPMENT 12-1

13. CONFINED SPACE PROGRAM 13-1
13.1 Purpose 13-1
13.2 Responsibilities 13-1
13.2.1 Health and Safety Coordinator 13-1
13.2.2 Offsites Manager 13-1
13.2.3 Field Team Leader 13-2
13.2.4 Personnel 13-2
13.3 Definition of a Confined Space 13-2
13.4 Confined Space Entry Procedures 13-3
13.4.1 Safety Work Permit Required 13-3
13.4.2 Pre-entry Testing for Potential Hazards 13-3
13.4.3 Rescue Procedures 13-4
13.5 Training 13-5
13.6 Safe Work Practices 13-5

14. ELECTRICAL LOCKOUT/TAGOUT 14-1

TABLE OF CONTENTS (cont.)

APPENDICES
Appendix A Medical Evaluation Program

TABLES
Table 7.1 Action Levels as Determined by Radioactivity

FIGURES
Figure 1.1 Visitor Information Sheet
Figure 3.1 Impacted Areas Where Exclusion Zones may by Established
Figure 4.1 Accident/Exposure Investigation Report
Figure 5.1 Safety Meeting Report
Figure 5.2 Safe Work Permit

EMERGENCY PHONE NUMBERS

IN THE EVENT OF AN EMERGENCY DIAL: 911

AMBULANCE SERVICE 911

FIRE DEPARTMENT 911

EMERGENCY RESCUE SERVICE 911

POLICE DEPARTMENT 911

NATIONAL RESPONSE CENTER 1-800-424-8802

CHEMTREC 1-800-424-9300

POISON CONTROL CENTER 1-800-732-2200

NORTHWESTERN MEMORIAL HOSPITAL ..... (312) 908-2000

ILLINOIS DEPARTMENT OF NUCLEAR SAFETY (IDNS) EMERGENCY NUMBER ..... (217) 785-0600

STS PROJECT PRINCIPAL (847) 279-2472

ILLINOIS EMERGENCY MANAGEMENT ..... (217) 782-7860

U.S. EPA REGION V 24-HOUR EMERGENCY NUMBER .... (312) 353-2318

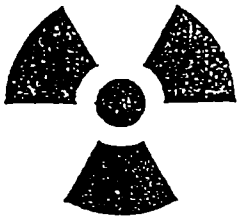
FIGURE 1.1
VISITOR INFORMATION SHEET

NORTH COLUMBUS RV3 SITE

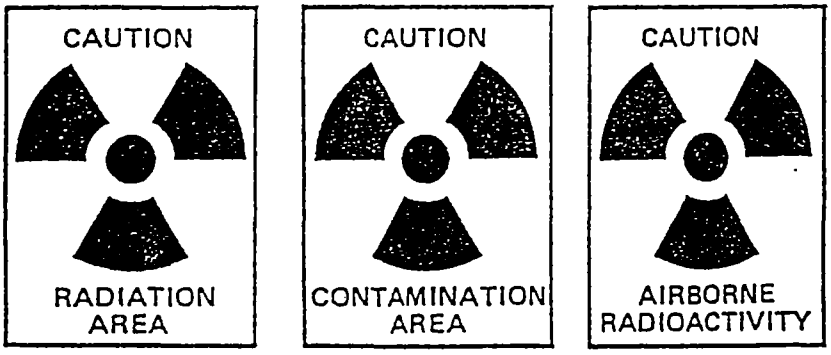
KM-4792

VISITOR INFORMATION

NOTICE TO VISITOR: ALL VISITORS MUST BE ESCORTED AT ALL TIMES WHILE ON THIS SITE.



CAUTON. Radioactive materials are present on this site. Radioactive materials may be found throughout the site. Grounds, buildings and equipment have low levels of contamination.



CONTROLLED AREAS: Do not enter areas with these signs unless you have an escort or health physics has given specific approval and you understand access limitations.

You must wear protective clothing in controlled areas. Health physics will provide you with instructions.

You must wear a personal radiation dosimeter if you enter an area which is controlled.

No smoking, eating, drinking or chewing in controlled areas.
NO EXCEPTIONS.

You may request to see radioactive materials license for this facility as granted by the USNRC.
Notify Health Physics if you do not understand these instructions.

NAME _____ DATE _____

2. SAFETY MANAGEMENT

The following safety management structure will be utilized for the implementation, administration, and monitoring of the HASP.

2.1 HEALTH AND SAFETY COORDINATOR

The Health and Safety Coordinator (HSC) shall assume overall responsibility for the HASP. The HSC or designee shall monitor and maintain quality assurance of the HASP until project completion. Principal duties of the HSC include:

- Review project background data,
- Approve all HASP modifications,
- Administer and enforce the HASP,
- Evaluate the adequacy of personal protective equipment (PPE) to be used by Site personnel,
- Conduct required on-site training except tailgate safety meetings that will be conducted by the Field Team Leader,
- Brief visitors on work Site conditions, and
- Administer personnel and ambient air monitoring procedures.

The HSC or designee has the authority to stop work in the event conditions develop which pose an unreasonable risk to Site personnel or persons in the vicinity.

3. PERSONNEL RESPONSIBILITIES

The HSC or designee will administer and supervise the HASP at the work-site level. He will monitor all operations and will be the primary on-site contact for health and safety issues, and will have full authority to stop operations if conditions are judged to be hazardous to on-site personnel or the public.

The HSC will brief all Site personnel on the contents of the HASP. Personnel will be required to review the HASP, and have the opportunity to ask questions about the planned work or hazards. The Field Team Leader will conduct tailgate safety meetings to familiarize the Site personnel with Site conditions, boundaries, and physical hazards. Site personnel will conduct their assigned tasks in accordance with the HASP at all times.

If at any time Site personnel observe unsafe conditions, faulty equipment or other conditions which could jeopardize personnel health and safety, they are required to immediately report their observations to the HSC or Field Team Leader.

Work zones will be established at the Site. These zones include clean/support zones, decontamination zones, and exclusion zones. Although the clean/support zones are anticipated to remain fixed, other zones will move about the Site as drilling and excavation work progresses. Figure 3.1 shows the impacted areas where exclusion zones may be established during excavation activities.

4. HAZARD ASSESSMENT

The following represents potential hazards associated with this project.

4.1 PRINCIPAL CONTAMINANTS (KNOWN OR SUSPECTED)

- Thorium
- Uranium
- Radium
- Radon

The contaminants are present in the soil at low concentrations. These primary routes of entry to the body will be considered:

ROUTE	ENTRY MADE VIA:
Inhalation:	Airborne dust containing heavy metal radionuclides.
Ingestion:	Airborne dust containing heavy metal radionuclides/contaminants.
	Improper or poor personal hygiene practices.
Eye and Skin:	Direct contact with contaminants.
	Improper or poor personal hygiene practices.
	Airborne dust containing heavy metal/radionuclide contaminant.
	Cuts and abrasions.
Direct Exposure:	Penetrating gamma radiation in air and soil.

4.2 PHYSICAL HAZARDS

Before field activities begin, the HSC will conduct a Site reconnaissance to identify any real or potential hazards created from Site activities. Physical hazards inherent to construction activities and power-operated equipment may exist.

4.2.1 Heat Stress

Field activities in hot weather create a potential for heat stress. The warning symptoms of heat stress include fatigue; loss of strength; reduced accuracy, comprehension and retention; and reduced alertness and mental capacity. To prevent heat stress, personnel shall receive adequate water supplies and electrolyte replacement fluids, and maintain scheduled work/rest periods.

The Field Team Leader or designee shall continuously visually monitor personnel to note for signs of heat stress. In addition, field personnel will be instructed to observe for symptoms of heat stress and methods on how to control it. One or more of the following control measures can be used to help control heat stress.

- Provision of adequate liquids to replace lost body fluids. Employees must replace body fluids lost from sweating. Employees must be encouraged to drink more than the amount required to satisfy thirst, 12 to 16 ounces every half hour is recommended. Thirst satisfaction is not an accurate indicator of adequate salt and fluid replacement. Replacement fluids can be commercial mixes such as Gatorade.

- Establishment of a work regimen that will provide adequate rest periods for cooling down. This may require additional shifts of workers.

- Breaks should be taken in a cool and shaded rest area (77 degrees is best).

- Employees shall remove impermeable protective garments during rest periods.

- Employees shall not be assigned other tasks during rest periods.

- All employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress.

4.2.2 Cold Stress

Field activities are not anticipated during cold weather; however, if the field activities occur during a period when temperatures average below freezing, the following guidelines will be followed.

Persons working outdoors in temperatures of 40 degrees and below may suffer from cold exposure. During prolonged outdoor periods with inadequate clothing, effects of cold exposure may even occur at temperatures well above freezing. Cold exposure may cause severe injury by freezing exposed body surfaces (frostbite) or result in profound generalized cooling, possibly causing death. Areas of the body which have

high surface area-to-volume ratios such as fingers, toes and ears are the most susceptible to frostbite.

Two factors influence the development of a cold injury: ambient temperature and the velocity of the wind. Wind chill is used to describe the chilling effect of moving air in combination with low temperature. For instance, 10° F with a wind of 15 miles per hour (mph) is equivalent in chilling effect to still air at -18°F.

As a general rule, the greatest incremental increase in wind chill occurs when a wind of 5 mph increases to 10 mph. Additionally, water conducts heat 240 times faster than air. Thus, the body cools suddenly when external chemical-protective equipment is removed if the clothing underneath is perspiration-soaked.

Local injury resulting from cold is included in the generic term "frostbite". There are several degrees of damage. Frostbite of the extremities can be categorized into:

- Frost nip or incipient frostbite: Characterized by sudden blanching or whitening of skin.
- Superficial frostbite: Skin has a waxy or white appearance and is firm to the touch, but tissue beneath is resilient.
- Deep frostbite: Tissues are cold, pale, and solid; extremely serious injury.

Prevention of frostbite is vital. Keep the extremities warm. Wear insulated clothing as part of one's protective gear during extremely cold conditions. Check for symptoms of frostbite at every break. The onset is painless and gradual--you might not know you have been injured until it is too late.

To administer first aid for frostbite, bring the victim indoors and rewarm the areas quickly in water 95° to 100°F. Give individual a warm drink--not coffee, tea, or alcohol. The victim should not smoke. Keep the frozen parts in warm water or covered with warm clothes for 30 minutes, even though the tissue will be very painful as it thaws; then elevate the injured area and protect it from injury. Do not allow blisters to be broken. Use sterile, soft, dry material to cover the injured areas. Keep victim warm and get immediate medical care.

4.2.3 Electrical Hazards

Overhead power lines, downed electrical wires, buried cables and improper use of electrical extension cords can pose a danger of shock or electrocution. All Site personnel should immediately report to the Field Team Leader any condition that could result in a potential electrical hazard.

The Field Team Leader will notify Site personnel during the safety meetings of the locations of known underground cables and utilities.

4.2.4 Noise Hazard

Operation of equipment may present a noise hazard to workers. Site personnel will utilize hearing protection when noise levels are determined to be in excess of 29 CFR 1910.95 requirements. Noise monitoring will be performed to determine noise levels.

4.2.5 Overt Chemical Exposure

Typical response procedures include:

SKIN CONTACT: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention. Eye wash will be provided on-site at the work zone and support zone as appropriate. If affected, eyes should be continuously flushed for a minimum of 15 minutes.

INHALATION: Move to fresh air and transport to hospital. Decontaminate as other actions permit.

INGESTION: Transport to emergency medical facility. Decontaminate as permitted by other requirements.

PUNCTURE WOUND OR LACERATIONS: Transport to emergency medical facility. Field Team Leader will provide Material Safety Data Sheets (MSDS) to medical personnel as requested. Decontaminate as permitted by other requirements.

4.2.6 Adverse Weather Conditions

In the event of adverse weather conditions, the Field Team Leader will determine if work can continue without endangering the health and safety of field workers. Some items to be considered before determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related working conditions.
- Limited visibility.
- Potential for electrical storms or high winds.

4.3 MEDICAL EVALUATION AND SURVEILLANCE PROGRAM

All field project personnel shall receive a medical evaluation in accordance with 29 CFR 1910.120 and Appendix A. Personnel who receive a medical evaluation will be notified by the medical contractor as to the outcome of their evaluation. This will be in the form of a confidential report addressed to the individual and will contain a breakdown of the clinical findings. In addition, it will indicate any areas of concern which would justify further medical consultation by the individual's personal physician. In the event that the areas of concern are of a severe nature, a follow-up notification will be made to the individual by the medical consultant to answer any questions the employee may have.

4.3.1 Dosimetry/Personnel Monitoring

All project personnel shall participate in a dosimetry program administered by the Project Health Physics Personnel. (The dosimetry program shall comply with 32 IAC 340[1], i.e. dosimeters shall be processed by a dosimetry processor accredited by the National Voluntary Laboratory Accreditation Program.) The Project Health Physics Personnel shall maintain records of all radiation exposures incurred by field personnel including all contractors. These records will be maintained in an up-to-date manner to comply with the requirements of 32 IAC 340.4010. The HSC shall review the results of personal exposure monitoring to determine compliance with exposure limit requirements.

4.3.2 Requirement for Dosimetry

Personal dosimetry is required for anyone who enters a radiologically controlled area in which he/she may receive in one calendar year a dose in excess of 10% of the limits in 32 IAC 340. Any person who works in a radiation area will be required to have a personal dosimeter. As a matter of policy, all individuals shall be required to use a dosimeter (either self-reading type, film badge or Thermoluminescence Detector (TLD)) whenever they enter the Exclusion Zone.

4.3.3 Bioassay

Bioassay is the determination of the types and amounts of radioactive materials which are inside the body. By analyzing the rate of deposition, the rate of excretion, and any other available information regarding placement in the body, internal exposures from radioactive materials can be estimated.

Procedures for bioassay will be consistent with the previous Lindsay Light Health and Safety Plan. Bioassays are not anticipated to be required for the excavation and removal activities proposed, based on levels documented as present. The determination of the need for bioassay will be based on dosimetry monitoring and review and recommendations fromthe Project Health Physics personnel.

[1] The IDNS regulations are usually more restrictive than US Nuclear Regulatory Commission (NRC) regulations. However, if there is a conflict between IDNS and NRC regulations, the NRC regulations will be used to determine compliance.

4.3.4 Emergency Medical Treatment

Emergency first aid should be administered on-site as appropriate. The individual should be decontaminated if possible, depending on the severity of the injury, and transported to the nearest medical facility, if needed. Treatment of the injury is of primary concern and decontamination a secondary concern. Levels of radioactive contamination at the Site could be acutely hazardous if decontamination is not undertaken during an emergency situation. The Field Team Leader will complete the appropriate incident report, if warranted. See Section 4.4, Accident and Incident Reporting.

An emergency first-aid station will be established and will include a first-aid kit for on-site emergency first aid.

Provisions for emergency medical treatment shall be integrated with the following guidelines:

- At least one individual qualified to render first aid and Cardiopulmonary Resuscitation (CPR) will be assigned to each shift.
- Emergency first aid stations in the immediate work vicinity.
- Conspicuously posted phone numbers and procedures for contacting ambulance services, fire department, police, and medical facilities.
- Maps and directions to medical facilities.
- Conspicuously posted evacuation routes and gathering area locations shall be posted around the Site.

4.4 ACCIDENT AND INCIDENT REPORTING

All accidents, injuries, or incidents will be reported to the HSC. This accident/incident will be reported as soon as possible to the employee's supervisor. An Accident/Incident Form will be completed by the Field Team Leader, and a copy will be forwarded to the Project Manager. A copy of the form is shown as Figure 4.1.

Figure 4.1

Accident/Exposure Investigation Report (Page 1 of 3)

Accident/Exposure Investigation Report

Company			Date
Investigation Team			
Employee's Name & ID			
Sex Age Job Description			
Department & Location			
Accident Date & Time			
Date & Time Accident Reported to Supervisor			
Nature of Incident			
Nature of Injury			
Referred to Medical Facility/Doctor		Yes	No
Employee Returned to Work	Yes	Date/Time	No
Injured Employee Interview/Statement—Attached			
Witnesses			
Witnesses Interviews/Statements—Attached			
Photographs of Site—Attached			
Diagrams of Site—Attached			
Equipment Records—Attached—Reviewed		Yes	No

Accident/Exposure Incident Description

Make additional copies of this form as needed. (form provided courtesy of Safety Publications of California © 1990)

Figure 4.1

Accident/Exposure Investigation Report (Page 2 of 3)

Accident/Exposure Investigation Report

Accident Description

Date & Time **Location**

Employees Involved

Preventive Action Recommendations

Corrective Actions Completed	Manager Responsible	Date Completed

—Employee Lost Time—Temporary Help—Cleanup—Repair—Discussion—

Accident Cost Analysis	Investigation	Compliance	Total Cost
Medical			
Production Loss			

Report Prepared By **Date Completed**

Safety Committee Review **Yes** **No**

Corrective Action **Date Started**

Safety Communication Notice Prepared **Date**

Safety Director Signature

Make additional copies of this form as needed. (form provided courtesy of Safety Publications of California © 1990)

Figure 4.1

Accident/Exposure Investigation Report (Page 3 of 3)

Accident/Exposure Investigation Report

Accident Description

Date & Time **Location**

Employees Involved

Employee Interview/Statement—Injured Employee—Witness

Employee Name

Interviewed By

Accident Diagram/Photographs

Make additional copies of this form as needed. (form provided courtesy of Safety Publications of California © 1990)

5. TRAINING

All Site personnel shall be trained and certified in accordance with 29 CFR 1910.120.

5.1 PROJECT- AND SITE-SPECIFIC TRAINING

Prior to project start-up, all assigned personnel shall receive an initial project- and site-specific training session. This training shall include, but not be limited to, the following areas:

- Review of the Health and Safety Plan;
- Review of applicable radiological and physical hazards;
- PPE levels to be used by Site personnel;
- Site security control;
- Emergency response and evacuation procedures;
- Project communication;
- Required decontamination procedures;
- Prohibited on-site activities;
- Instructions to workers in accordance with 10 CFR 1912; and
- U.S. NRC Regulatory Guide 8.13 and Declared Pregnant Woman Policies (Females).

5.2 VISITOR ORIENTATION

All non-essential personnel and visitors who plan to enter the exclusion zone will be briefed on the HASP requirements and 10 CFR 1912 requirements prior to entry with a trained Site escort. In addition, female visitors will be instructed regarding U.S. NRC Regulatory Guide 8.13 and Declared Pregnant Woman Policies.

5.3 SAFETY "TAILGATE" MEETINGS

Before the start of work each day, the Field Team Leader will assemble the Site personnel for a brief safety meeting. The purpose of these meetings will be to discuss

project status, problem areas, conditions, safety concerns, PPE levels and to reiterate HASP requirements. The Field Team Leader will complete a Safety Meeting Report (Figure 5.1) to indicate the contents of the meeting and the attendees.

5.4 FIRST AID

At least one (1) individual, trained and qualified to administer first aid and CPR in accordance with American Red Cross requirements, will be present at the Site.

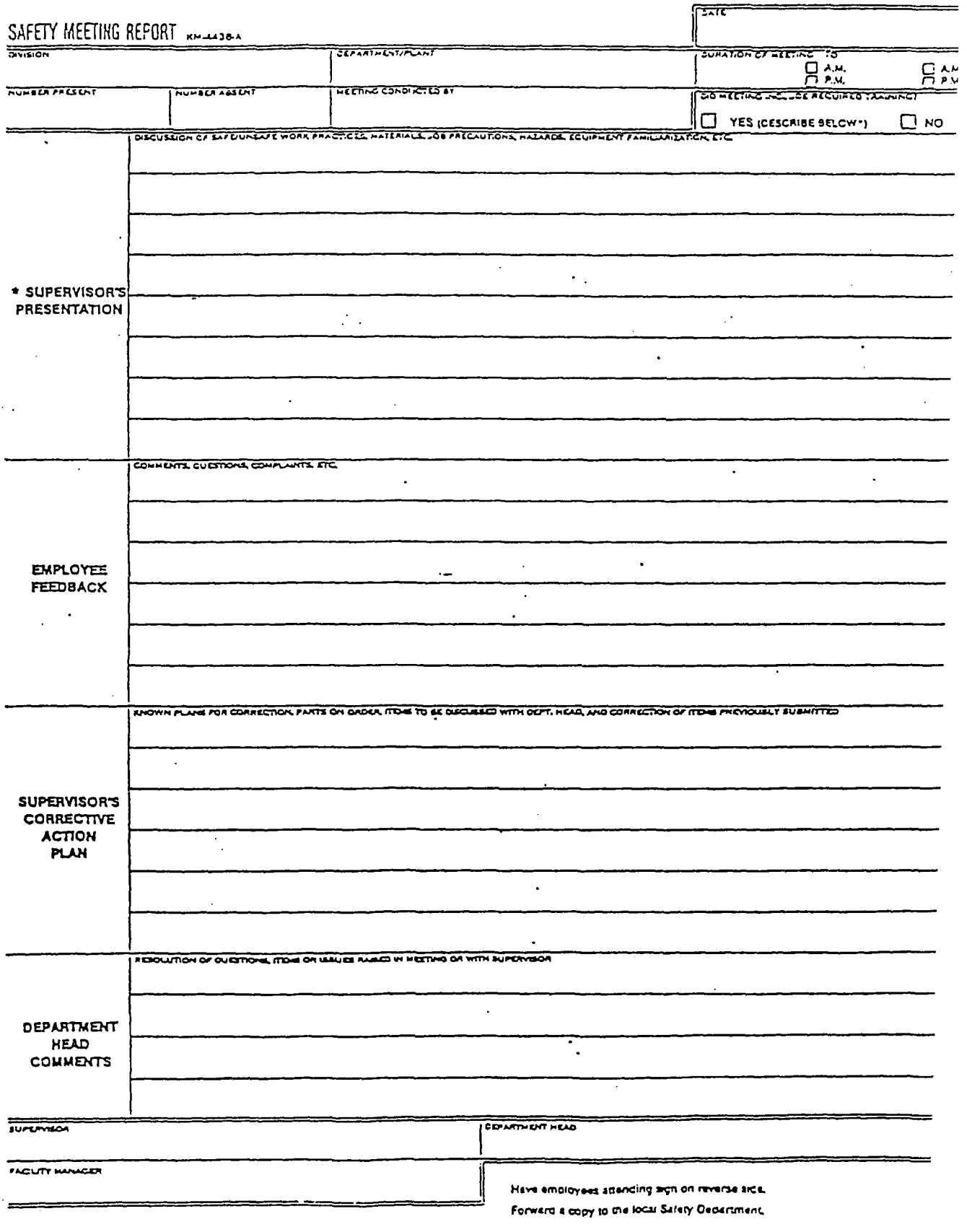
5.5 SAFE WORK PERMIT

Site workers in special work conditions such as confined space, hot work, trenching, or other physical hazards, must be skilled at such work and trained to recognize these as special work conditions. Confined space is defined by OSHA 1910.146. Section 13 of this HASP contains further information on the confined space program to be followed.

Figure 5.2 shows the Safe Work Permit to be completed by the HSC and signed by workers for special work conditions.

Figure 5.1

Safety Meeting Report (KM-4438-A, front side)



SAFETY MEETING REPORT KM-4438-A

DATE

DIVISION

DEPARTMENT/PLANT

DURATION OF MEETING TO
☐ A.M. ☐ A.M.
☐ P.M. ☐ P.M.

NUMBER PRESENT

NUMBER ABSENT

MEETING CONDUCTED BY

DID MEETING INCLUDE REQUIRED TRAINING?
☐ YES (DESCRIBE BELOW*) ☐ NO

* SUPERVISOR'S PRESENTATION

DISCUSSION OF SAFE/UNSAFE WORK PRACTICES, MATERIALS, JOB PRECAUTIONS, HAZARDS, EQUIPMENT FAMILIARIZATION, ETC.

EMPLOYEE FEEDBACK

COMMENTS, QUESTIONS, COMPLAINTS, ETC.

SUPERVISOR'S CORRECTIVE ACTION PLAN

KNOWN PLANS FOR CORRECTION, PARTS ON ORDER, ITEMS TO BE DISCUSSED WITH DEPT. HEAD, AND CORRECTION OF ITEMS PREVIOUSLY SUBMITTED

DEPARTMENT HEAD COMMENTS

RESOLUTION OF QUESTIONS, ITEMS OR ISSUES RAISED IN MEETING OR WITH SUPERVISOR

SUPERVISOR

DEPARTMENT HEAD

FACILITY MANAGER

Have employees attending sign on reverse side.
Forward a copy to the local Safety Department.

Figure 5.1

Safety Meeting Report (KM-4438-A, reverse side)

TO BE SIGNED BY ALL EMPLOYEES ATTENDING MEETING

I have received and understand the information and/or training indicated on the reverse side.

SIGNATURE	DATE	SIGNATURE	DATE

LIST ALL EMPLOYEES ABSENT FROM MEETING

Figure 5.2

Safe Work Permit (KM-2565-1-B, upper section of front side)

SAFE WORK PERMIT KM-2565-1-B

SHADED AREAS MUST BE COMPLETED. COMPLETED PERMIT MUST BE POSTED AT THE ENTRY OR WORK SITE.

PLANT/DEPARTMENT	ISSUED BY	DATE	TIME (FROM) ☐ A.M. ☐ P.M.	(TO)
ACCEPTED BY		COMPANY/DEPARTMENT/CONTRACTOR		
RESPONSIBILITY TRANSFERRED TO (NAME)		CO-SIGNATURE (IF REQUIRED)		
LIST ALL WORKERS OR ATTACH ROSTER (OVER)		IS WORK AREA OSHA PSM REGULATED? ☐ Yes ☐ No		

AN ALERT, GAS RELEASE, EVACUATION, INTERRUPTION OF 8 HOURS OR MORE OR CHANGE IN WORKING CONDITIONS SUSPENDS THIS PERMIT. (Permit must be reissued or reauthorized)

SECTION 1 — GENERAL AREA WORK PERMIT

1. WORK LIMITED TO THE FOLLOWING: (DESCRIPTION & AREA/EQUIPMENT)

2. ON-SITE INSPECTION CONDUCTED/ALL LOCKS OR TAGS ATTACHED, IF REQUIRED/ENVIRONMENTAL IMPACT OF JOB CONSIDERED — PERMIT ISSUER INITIALS — PERMIT REC INITIALS

3. SPECIAL HAZARDS TO PROTECT AGAINST ☐ NONE MSDS AVAILABLE ☐ YES ☐ NO ☐ N/A

CHEMICALS (NAME)

☐ Flammable ☐ Noise ☐ Hot Water/Steam ☐ Thermal Burn ☐ Falls ☐ Pinch Pts./Srp. Edges
☐ Toxic ☐ Corrosive ☐ Heat Stress ☐ Elect./High Vltg. Line ☐ Asbestos ☐ Other _____
☐ Skin Contact ☐ Reactive ☐ High Pressure ☐ Inert Atmosphere ☐ Radiation _____

ENERGY TYPE(S): ☐ Electrical _____ ☐ Hydraulic/Pneumatic _____ ☐ Other (magnitude) _____

4. SAFETY EQUIPMENT (OTHER THAN AREA REQUIREMENTS) ☐ NONE

☐ Rain Suit ☐ Gloves ☐ Face Shield ☐ Ground Fault Circuit Int. ☐ Air Pack (SCBA) ☐ Fire Resistant
☐ Chemical Suit ☐ Hearing Protection ☐ Hood ☐ Barricades/Warning Signs ☐ Supplied Air ☐ Long Sleeves
☐ Rubber Boots ☐ Chemical Goggles ☐ Fall Restraint Device ☐ Communications Eqpt.(Isl) ☐ Respirator ☐ Other _____

5. THE PERSON RECEIVING THE PERMIT VERIFIES THAT ALL WORKERS :

A. Have been through the Plant Safety Orientation	☐ Yes	F. Know emergency alarms, evacuation, assembly points	[
B. Understand Applicable HAZCOM requirements	☐ Yes	G. Know the Procedures for Safe Job Completion	[
C. Have discussed hazards of the job and area	☐ Yes	H. Have inspected all tools/equipment/scaffolding	[
D. Know the location/use of safety showers/eye wash stations	☐ Yes	I. Understand the Housekeeping Requirements	[
E. Know the location of the phone or intercom	☐ Yes	PERMIT RECEIVER INITIALS	

6. POTENTIALLY AFFECTED AREA PERSONNEL AND WORKERS NOTIFIED OF WORK TO BE DONE ☐ YES ☐ N/A

7. THE FOLLOWING RESPONSIBILITIES HAVE BEEN COMMUNICATED TO THE PERSON RECEIVING THIS PERMIT:
☐ Conditions For Work Stoppage ☐ Performing The Work Safely ☐ Completion Of Section 8 And Permit R
☐ Crew Accountability ☐ Reporting Changes That Affect Job Safety

SECTION 2 — AIR TESTS

PRIOR TO ENTRY OR HOT WORK ☐ DOES NOT APPLY — TEST IN ORDER INDICATED

		READING	RANGE / MAXIMUM	TESTED BY	LOCATION OF TEST	TIME
1. Oxygen meter test performed	☐ Yes ☐ N/A	%O_2	RANGE 19.5-23.5% O_2			
2. Combustible gases and vapors test	☐ Yes ☐ N/A	% LEL	MAXIMUM 10% LEL			
3. Tests for toxics (Substance)	☐ Yes ☐ N/A	READING ☐ PPM ☐ mg/M	PEL/TLV ☐ PPM ☐ mg/M			

SECTION 3 — OBSERVATION & RESCUE

☐ DOES NOT APPLY

1. ☐ Yes ☐ N/A	Continuous monitoring for _____ (SUBSTANCE)		TESTED BY	TIME (FROM) ☐ A.M. ☐ P.M.	TIME (TO)
☐ Yes ☐ N/A	Periodic tests for _____ (SUBSTANCE)		TESTED BY	TIME (FROM) ☐ A.M. ☐ P.M.	TIME (TO)
☐ Duration of work ☐ Personal	☐ Area ☐ Other _____				
2. ☐ Yes ☐ N/A	Fire/safety/confined space attendants	DESIGNATED PERSON(S)		HOW TO CONTACT	
3. ☐ Yes ☐ N/A	Backup rescuer(s)	DESIGNATED PERSON(S)		HOW TO CONTACT	
4. ☐ Yes ☐ N/A	Special rescue service/ equipment required	LOCATION OF SPECIAL EQUIPMENT		RESCUE SERVICE PHONE NU	

Figure 5.2

Safe Work Permit (KM-2565-1-B, lower section of front side)

SECTION 4 — HOT WORK

☐ DOES NOT APPLY

	YES	N/A		YES
1. Fire Extinguisher (Type) _____ Is it full?			8. Ground lead attached to work	
2. Survey area for combustibles and openings, holes, trenches, etc.			9. Prevention of heat exposure to gasket, seals, liners	
3. Combustible materials removed or protected			10. Other work in area which should be stopped	
4. Heat/spark control - tarps, covers, water, etc.			11. Material present which emits vapor when heated	
5. Precaution taken for hidden combustibles			12. Radiant heat transfer considered	
6. Purge gas used. Type _____			13. Equipment operating or contains original contents	
7. Adjacent areas safe/sewers protected			14. Ducts or conveyors plugged or protected	

SECTION 5 — ENERGY LOCKED/TAGGED

☐ DOES NOT APPLY

	YES	NO	N/A		YES	NO
1. Line positively identified				9. Are all automatic valves secured in a safe position?		
2. Line equip. drained/depressured, piping properly supported				10. Electrical panel switches locked, tagged and tested		
3. Line/equipment cleaned and purged				11. Field switches tested		
4. Blinds and/or block and bleed in place				12. Fuses removed/switches open		
5. Lock(s) required (list lockout points)				13. Are belts/couplings removed?		
6. Splash guards considered				14. Are rotating parts blocked?		
7. Adjacent area safe. (If limited, describe below)				COMMENTS		
8. Area roped/taped off						

SECTION 6 — CONFINED SPACE

☐ DOES NOT APPLY

	YES	NO	N/A		YES	NO
1. Confined space entry required?				5. Have authorized entrants signed opposite side of this form?		
2. Space to be entered _____				6. Have designated attendants signed opposite side of this form?		
3. Purpose of entry _____						
4. Is space a permit-entry space? If "YES", complete opposite column				7. Have all necessary hazard control measures been taken?		
				8. Has all required equipment been provided?		

SECTION 7 — TRENCHING/EXCAVATION

☐ DOES NOT APPLY

	YES	NO	N/A		YES	NO
1. Has the area been inspected for underground power lines or product lines?				4. Have precautions been taken if the trench/excavation develops into a confined space?		
2. Does the trench require shoring/bracing/support?				5. Have overhead power/product lines been removed or identified?		
3. Has the soil been evaluated for stability?				6. Will leaking water or rain water affect the stability of the trench/excavation?		

SECTION 8 — Questions to be Completed on Permit Expiration or Job Completion

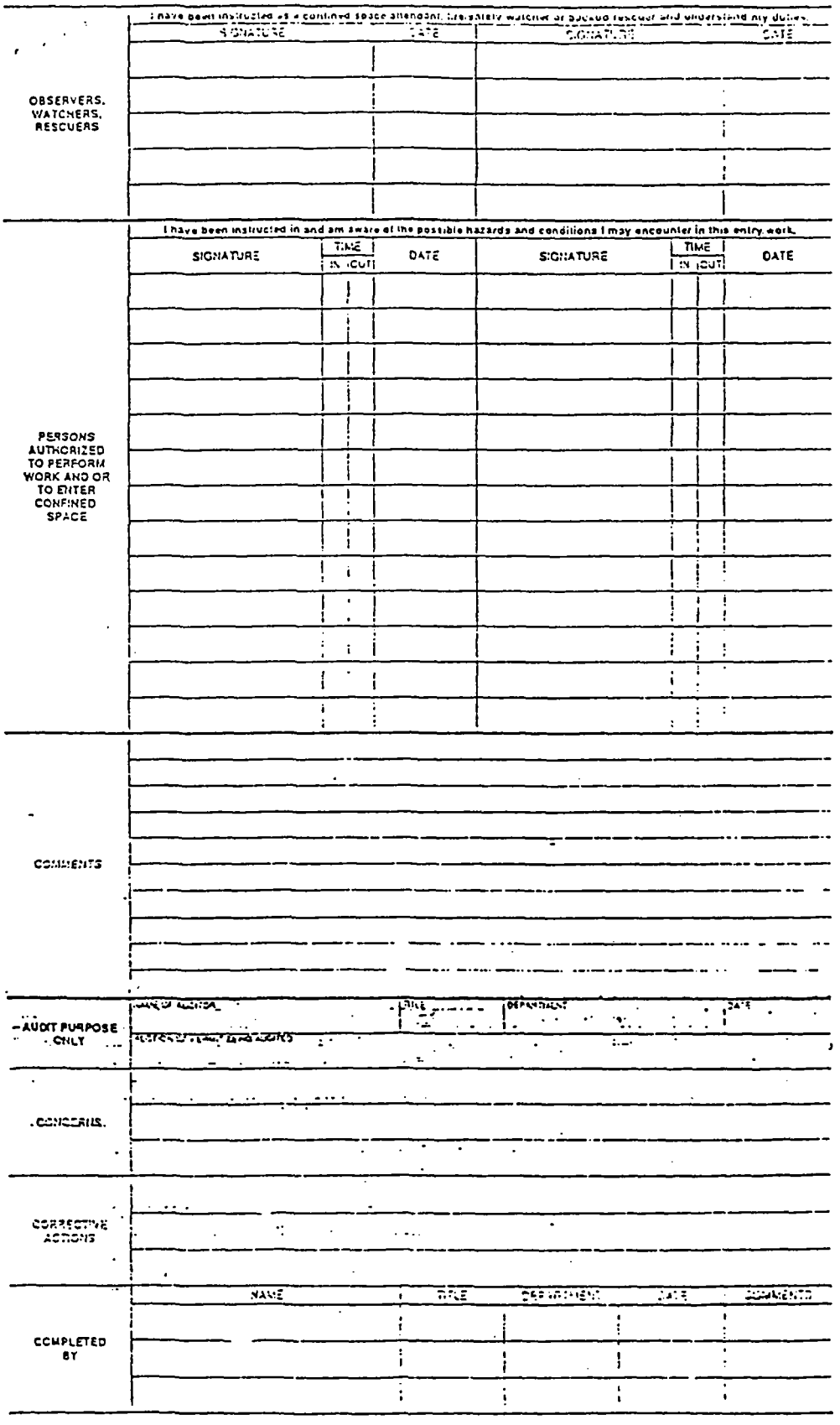
WORKER CLOSEOUT SIGNATURE

TIME ☐ A.M. ☐ P.M.

	YES	NO	N/A		YES	NO
1. Has the job been completed?				5. Have safety devices been reinstalled?		
2. Has the area been cleaned of work material?				6. Has hot work area been surveyed for smoldering materials?		
3. Have department personnel been informed job is done?				7. Special precautions, concerns or remarks?		
4. Have all locks and/or tags been removed?				COMMENTS		

Figure 5.2

Safe Work Permit (KM-2565-1-B, reduction of reverse side)



OBSERVERS, WATCHERS, RESCUERS

I have been instructed as a confined space attendant, to reliably watch or provide rescue and understand my duties.

SIGNATURE	DATE	SIGNATURE	DATE

PERSONS AUTHORIZED TO PERFORM WORK AND OR TO ENTER CONFINED SPACE

I have been instructed in and am aware of the possible hazards and conditions I may encounter in this entry work.

SIGNATURE	TIME IN	TIME OUT	DATE	SIGNATURE	TIME IN	TIME OUT	DATE

COMMENTS

AUDIT PURPOSE ONLY

NAME OF AUDITOR | TITLE | DEPARTMENT | DATE

AUDITOR'S SIGNATURE

CONCERNS

CORRECTIVE ACTIONS

COMPLETED BY

NAME	TITLE	DEPARTMENT	DATE	COMMENTS

6. COMMUNICATIONS

6.1 GENERAL COMMUNICATIONS

The Field Team Leader will have available at the Site the means for telephone communications, or an equivalent means of communication, for summoning emergency assistance from the fire/ambulance and police departments in the event they are required. The telephone will also act as a direct link to technical personnel for information pertaining to all phases of the project.

6.2 RADIOS/TELEPHONES

Short-range walkie talkies or cellular telephones will be made available to designated personnel working at the Site.

6.3 EMERGENCY WARNING

In the event of an emergency condition, the Field Team Leader will notify project personnel verbally if all are within immediate hearing and via a bull horn if the Site area is large. The Field Team Leader will also notify visitors present within the area. Site personnel will immediately proceed to a predesignated assembly area as designated by the Field Team Leader during the daily safety meeting. Personnel will remain in the designated area until further instructions are received by the Field Team Leader.

All communication equipment will be tested at the beginning of each day to verify operational integrity.

6.4 HAND SIGNALS

Hand signals will be used by field teams in conjunction with the buddy system. Hand signals shall be familiar to the entire field team before operations commence and should be reviewed during site-specific training.

Signal	Meaning
Hand gripping throat	Out of air; can't breathe
Grip partner's wrist	Leave area immediately; no debate
Hands on top of head	Need assistance
Thumbs up	OK; I'm all right; I understand
Thumbs down	No; negative

6.5 SITE SECURITY

Only authorized personnel will be permitted on the Site in accordance with the requirements of the Site Security Plan (Appendix E to the Removal Action Work Plan) and this HASP. Visitors and other non-essential personnel may enter the work area only upon authorization by the Field Team Leader. This restricted access will ensure that the Field Team Leader can communicate with each person authorized to enter the work area.

7. PERSONNEL EXPOSURE AND AIR QUALITY MONITORING

7.1 AIR QUALITY (DUST)

Due to the nature of the principal contaminants associated with the project, dust suppression will be important as a means of minimizing exposure levels and off-site migration of contaminants. The Field Team Leader will routinely monitor the project area. The OSHA personal exposure limit (PEL) for nuisance dust is 15 mg/m^3.

7.2 AIRBORNE RADIOACTIVITY MONITORING

Monitoring for airborne radioactivity exposure is as important as monitoring for external radiation exposure. Monitoring for airborne radioactivity exposure requires the following elements:

- Air sampling for radioactive particulates,
- Recordkeeping regarding personnel work locations and time in location, and
- Respiratory protective equipment records regarding devices used by workers in airborne radioactivity areas.

By closely monitoring these three elements, a continuous record of personnel exposure to airborne radioactivity is maintained.

Lapel samplers worn for personal air monitoring can be utilized for airborne radioactivity monitoring. Air filters shall be analyzed on a daily basis to determine potential contributions to dose from radionuclides. It is expected that naturally occurring radon and thorium daughters will interfere with analyses. Additional evaluation of samples shall be performed when determined necessary based upon elevated results. Such analyses shall be performed after allowing time for decay of some interfering radionuclides.

Downwind monitoring of the excavation areas for radioactive particulate activity also will be performed. High volume air samplers shall run continuously during operations and be evaluated on a daily basis for gross alpha activity. Comparisons will be made to 32 IAC 340 Appendix A to ensure that adequate radiological controls are in place for workers and the general public. As low as reasonably achievable (ALARA) concepts will be utilized when considering protective measures to ensure that internal exposures are minimized, while also considering the effects of such protective measures with respect to external exposures. Controls on the Site such as wetting of soils and procedural changes, will be employed prior to the prescription of respiratory protective equipment.

Time decay of interfering nuclides generally refers to radon-222 decay and daughters but may also include thoron decay. The specific times for decay of samples is best addressed in procedures rather than in the health and safety plan. Air samples will be decayed a minimum of 5 hours to allow for counting without interference from radon-222 and its daughters. Thoron (Rn-220), if present in significant amounts, will require decay for up to 4 days to allow for decay of it is Pb-212 daughter (10.6 hour half life).

After filters have been collected and decayed overnight, there will be a morning count of the filter that will serve to identify high gross counts for the previous day. This will alert health & safety staff of a potential problem which they can investigate more promptly. The count, after 4 days decay, will serve to be the official measurement of Th-Alpha.

7.3 INTERNAL MONITORING

Internal monitoring to determine intakes of radioactive material will be performed as needed based upon the results of the air sampling program. Bioassay methods to be considered should include in-vivo, as well as in-vitro, assessments. Routine bioassay of workers is not anticipated based upon the low concentrations of radioactivity in soils to be excavated.

7.4 EXTERNAL RADIATION MONITORING

External radiation monitoring of workers will be performed using film badges or thermoluminescent dosimeters. Dosimetry will be provided and processed by a service holding National Voluntary Laboratory Accreditation Program (NVLAP) certification. Pocket dosimeters may also be utilized for visitors and other infrequent personnel requiring access to the Site.

7.5 RADIOLOGICAL SURVEYS

Radiological surveys will be performed to ensure that radiation levels and contamination levels are within regulatory limits for workers and the general public. Radiation surveys will consist of ambient gamma surveys using micro-R meter or Geiger detectors, as appropriate, and contamination surveys. Airborne radioactivity measurements will be performed as described in the Air Monitoring Plan (Appendix B to the Removal Action Work Plan).

7.6 CONTAMINATION MONITORING

Samples shall be obtained periodically in work areas to ensure that radioactivity is present at acceptable levels and is prevented from leaving the Site. Decontamination of elevated areas will be performed to maintain contamination at levels that are ALARA.

Before leaving the exclusion zone, Site personnel shall be checked through use of a hand-held frisker to ensure that contamination is not present on skin or clothes. The Field Team Leader will be immediately informed regarding any contamination on individuals and will initiate appropriate decontamination techniques. Proper disposition of contaminated personal effects and clothing also will be the responsibility of the Field Team Leader.

7.7 TOTAL ORGANIC VAPOR MONITORING

In addition to the radiological contaminants, there is a slight potential of encountering organic vapors. Organic vapors were encountered near the water table during previous investigation at the Site. Routine screening for total organic vapors will be conducted with a photoionization detector (PID), or similar type equipment, on a daily basis. The screening will evaluate ambient photoionization volatile organic vapors and some semi-volatile organic vapors.

Total organic vapors in ambient air will be obtained periodically with a PID during daily field activities. The PID provides real-time readings of exposure to volatile organics and some semi-volatile organics. Measurements will be made daily, prior to activities, to determine background levels. Monitoring measurements will be taken when:

- operations change,
- work moves to a different portion of the Site, and
- personnel observe contaminated materials.

These screening operations will be used to identify conditions requiring an upgrade to full-face respirators as described in Section 7.8.2.

7.8 ACTION LEVELS

7.8.1 Radiological Action Levels

Radiological action levels for on-site workers will be determined by smear/swipe measurements as well as airborne particulate monitoring for the presence of radioactivity. The Field Team Leader will perform radiological monitoring. The radioactive contamination on the Site is particulate and insoluble in water. Therefore, there will be no fixed contamination on the workers. Action levels as determined by radioactive monitoring can be found in Table 7.1.

To avoid the need for upgrade of personal protection equipment due to airborne contamination, engineering controls such as the use of water to minimize dust levels will be implemented as necessary during excavation and restoration activities.

7.8.2 Organic Vapors Action Levels

Grand Pier LLC is taking a conservative approach to organic vapor monitoring at the Site. A PID will be used to monitor for organic vapors. Operations will be discontinued if the PID reads 5 ppm[1] or greater and the area will be evacuated. The Site Health and Safety Officer will retest the area wearing a full-face respirator. Operations will not resume until the PID reads less than 5 ppm, and remains below 5 ppm.

---

[1]PID level obtained for Benzene from NIOSH Pocket Guide to Chemical Hazards.

TABLE 7-1

ACTION LEVELS AS DETERMINED BY RADIOACTIVITY

Note: Personnel shall not be exposed to airborne radioactivity such that their weekly intake exceeds 12 Derived Air Concentration (DAC)-hours without prior approval of the Field Team Leader or designee.

Level of protection may be increased to Level C (full-face air purifying respirator) when airborne monitoring indicates that contamination levels have reached 30% of the DAC. All assessments shall incorporate ALARA principles. Engineering controls shall be used prior to assignment of respiratory protective equipment.

Signs shall be posted at entrances to areas where airborne radioactivity levels exceed, or have the potential to exceed, 25% of the DAC.

Radiation Type	Action Level	Level of Respiratory Protection/Action
a. Contamination on smear samples	60 pCi/100 cm^2 gross alpha[a]	Consider modified Level C (full- face APR) based upon ALARA evaluation.
b. Airborne Radioactivity	30% DAC[b]	Consider Level C (full-face APR) based upon ALARA evaluation. Ensure proper posting. Consider internal monitoring
c. Ambient Gamma (work areas)	5 mrem/hr[c]	Consider procedures for shielding of soils. Ensure proper posting.
d. Ambient Gamma (off-site areas)	2 mrem/hr[d]	Implement immediate controls to reduce dose equivalent rate.

Notes

(a) This is approximately 3 times the unrestricted release criteria in the NRC Regulatory Guide 1.86. If any dry-brushing or otherwise abrasive-type decontamination of the sampled equipment is required, the Action Level shown shall require modified Level C (full-face APR).

(b) Potential Airborne Radioactivity Area as defined in 10 CFR 20. Workers with 1000 DAC-hours per year to date must wear modified Level C (full-face APR) until the end of the calendar year.

(c) The ambient gamma dose equivalent rate action level of 5 mrem/hr stems, from the 10 CFR 20 radiation area definition. If the ambient gamma dose equivalent rate reaches 2 mrem/hr, one or more of the following actions will be implemented: The source may be shielded; the working distance from the source may be increased; or the worker's exposure time may be limited.

(d) The ambient gamma action level for off-site is based upon the 10 CFR 20 requirements to maintain dose equivalent rates in unrestricted areas such that they do not exceed 0.002 rem in any one hour.

8. PERSONAL PROTECTIVE EQUIPMENT

It is anticipated that most excavation activities in designated exclusion zones can be conducted in Level D personal protective equipment (PPE), with a contingency upgrade to Level C, based on the action levels listed in Section 7. Level C will be used when required by Special Work Permits, or when directed by the Field Team Leader.

Level D personal protective clothing and equipment for excavation activities includes:

- Coveralls,
- Hard hat,
- Chemical resistant, OSHA approved safety shoes/boots,
- Cotton or leather gloves,
- Safety glasses, and
- Dust mask (optional).

Level C protective clothing and equipment includes:

- Full-face air-purifying respirator (NIOSH/MSHA approved) fitted with radionuclides/HEPA cartridges and/or organic vapor cartridges, depending on which action levels are exceeded (see Section 7 of this HASP),
- Coveralls,
- Tyvek coveralls - required in areas when splashing by contaminated soils or water is a possibility,
- Cotton or leather gloves,
- Disposable latex inner gloves - required in areas when splashing by contaminated soils or water is a possibility,
- Nitrile outer gloves (taped) - required in areas when splashing by contaminated soils or water is a possibility,
- Chemical-resistant steel toe boots, and
- Hard hat.

Action levels used to determine the need to upgrade or downgrade the levels of protection are described in Section 7 of this HASP.

9. CONTAMINATION REDUCTION PROCEDURES

9.1 EQUIPMENT

Portable equipment will be decontaminated with soap and water and rinsed with tap water. Heavy equipment will be steam-cleaned with water and, if necessary, a detergent solution. It is not anticipated that chemical cleaning will be necessary for decontamination.

9.2 PERSONNEL

If levels of radioactivity show that individuals can remove coveralls and other personal protective clothing and equipment before leaving the work-site and, thus complete decontamination, the individuals may leave the Site. If, however, levels of radioactivity show that individuals cannot achieve decontamination by the removal of coveralls and showering is required, they will be dressed in clean coveralls, boots and gloves and be transported to Northwestern Memorial Hospital* to complete decontamination.

If substantial skin contamination occurs on an individual working with radioactive materials, the following specific procedures should be followed to prevent fixation of the material in the skin or absorption of the radioactivity through the skin.

Immediate Action: Notify the HSC or Field Team Leader, who will supervise the decontamination. If contamination is spotty, the HSC or Field Team Leader will supervise the cleaning of the individual spots with swabs, soap, or water. If the contamination is general, the HSC or Field Team Leader may recommend washing the area gently in warm or cool water (not hot) using hand soap (not detergent) for one minute. Rinse, dry, and monitor for radioactivity. This soap wash step may be repeated three times.

Evaluation: If the above procedure fails to remove all the skin contamination, the treatment should cease. An evaluation of the skin contamination should be performed by the HSC or Field Team Leader including an estimate of the dose commitment to the skin, and the quantity and identity of the nuclides contaminating the skin. If additional decontamination steps are necessary, they are performed and documented by the HSC. The guidelines for Personnel Decontamination in the Radiological Health Handbook, HEW 1970, beginning on page 194, can be used as applicable. CAUTION: Do not use chemicals for personnel decontamination until full evaluation of the contamination is made by the HSC or Field Team Leader.

* Northwestern Memorial Hospital has provided tentative approval (March 17, 2000 Dr. Mark Zimmer, Safety Dept.) for use as decontamination as necessary. Final approval will be obtained before resuming work.

9.3 CONTAMINATION PREVENTION

Work practices that minimize the spread of contamination will reduce worker exposure and help ensure valid sample results by precluding cross-contamination. Procedures for contamination avoidance include:

- knowing the limitations of all personal protective equipment being used,
- avoiding walking through areas of obvious or known contamination,
- refraining from handling or touching contaminated materials directly. Do not sit or lean on potentially contaminated surfaces,
- ensuring personal protective equipment has no cuts or tears prior to donning,
- fastening all closures on suits, covering with tape if necessary,
- taking steps to protect against any skin injuries,
- staying upwind of airborne contaminants, and
- when working in contaminated areas, refraining from eating, chewing gum, smoking, or engaging in any activity from which contaminated materials may be ingested.

9.4 DISPOSAL PROCEDURES

All discarded materials, waste materials, or other field equipment and supplies should be handled in such a way as to preclude the spread of contamination, creating a sanitary hazard, or causing litter to be left on-site. All potentially contaminated waste materials (e.g., clothing, gloves) shall be monitored and segregated in accordance with monitoring results into either radioactive or non-radioactive waste. Appropriate labels shall be affixed to all containers of radioactive materials.

10 GENERAL WORK PRECAUTIONS

10.1 GENERAL WORK PRECAUTIONS

The following general work precautions apply to all Site personnel.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in the work area.

- Hands and face must be thoroughly washed upon leaving the work area. Wash water will be provided at the Site for this purpose.

- Whenever levels of radioactivity warrant, the entire body should be thoroughly washed, as soon as possible, after the protective coveralls and other clothing are removed as part of the decontamination process.

- No facial hair that interferes with a satisfactory fit of the mask-to-face-seal is allowed on personnel required to wear respirators.

- Contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, do not walk through puddles, leachate, discolored surfaces, kneel on ground, lean, sit, or place equipment on drums, containers, or the ground.

- Medicine, drugs and alcohol may interfere with or impair judgment and reaction times. Therefore, usage of prescribed drugs must be specifically approved by a qualified physician and made known to the Field Team Leader prior to an individuals' presence on the work-site. Alcoholic beverage intake is strictly prohibited at the Site and prior to work.

- All personnel must be familiar with standard operating procedures and any additional instructions and information contained in the HASP.

- All personnel must adhere to the requirements of the HASP.
- Contact lenses are not permitted when respiratory protection is required or where the possibility of a splash exists.
- Personnel must be cognizant of symptoms for radiological exposure on-site, for heat stress and cold stress, and knowledgeable regarding emergency measures contained in the Emergency Contingency Plan.
- Respirators shall be cleaned and disinfected after each day's use or more often, if necessary.
- Prior to donning, respirators shall be inspected for worn or deteriorated parts. Emergency respirators or self-contained devices will be inspected at least once a month and after each use.
- Each employee shall be familiar with the project's Respiratory Protection Program.

10.2 OPERATIONAL PRECAUTIONS

The following operational precautions must be observed at all times.

- All Site personnel shall be adequately trained and thoroughly briefed on anticipated hazards, equipment to be worn, safety practices to be followed, emergency procedures, and communications.
- All required respiratory protective devices and clothing shall be worn by all personnel going into areas designated for wearing protective equipment.
- All Site personnel shall use the buddy system when wearing respiratory protective equipment. At a minimum, a third person, suitably equipped as a safety backup, is required during extremely hazardous entries.
- During continual operations, on-site workers act as a safety backup to each other. Off-site personnel provide emergency assistance.
- Personnel should practice any unfamiliar operations prior to undertaking the actual procedure.
- Entrance and exit locations shall be designated and emergency escape routes delineated. Warning signals for Site evacuation must be established.
- Personnel and equipment in the contaminated work area should be minimized, consistent with effective Site operations.

- Work areas for various operational activities shall be established.
- Procedures for leaving a contaminated area shall be planned and implemented prior to going on-site. Work areas and decontamination procedures shall be established based on expected Site conditions.
- Frequent and regular inspection of Site operations will be conducted to ensure compliance with the HASP. If any changes in operation occur, the HASP will be modified to reflect those changes.

11. SANITARY FACILITIES

11.1 POTABLE WATER

a. An adequate supply of potable drinking water shall be maintained at all times immediately outside the Site. Drinking water shall meet all federal, state and local health requirements.

b. Drinking water shall be supplied to project personnel via approved dispensing sources.

c. Paper cups shall be permitted for the drinking of potable water supplies.

d. Drinking water dispensers shall be clearly marked and shall, in no way, have the potential for contamination from non-potable supplies.

e. Site personnel must be fully decontaminated prior to approaching the drinking water supply.

11.2 TOILET FACILITIES

a. Adequate toilet facilities shall be provided at the Site.

b. These facilities shall be in the form of portable chemical toilets.

c. Routine servicing and cleaning of the toilets should be established with the selected contractor and shall be in accordance with federal, state, and local health regulations.

d. Site personnel must be fully decontaminated prior to approaching the toilet facilities.

11.3 WASHING AREAS

a. Adequate washing areas shall be provided for personal use within the work area.

b. Washing areas shall be maintained in a sanitary condition and will be provided with adequate supplies of soap, towels for drying, and covered waste receptacles.

c. Washing areas shall be maintained and sanitized daily.

d. No eating, drinking or smoking shall be permitted in the work area. This policy will be strictly enforced by the Field Team Leader.

12. FIRE CONTROL EQUIPMENT

An adequate number of approved portable fire extinguishers (class rated A, B and C) shall be readily available at the Site at all times.

All Site personnel shall be trained in the use of the extinguishers. Extinguishers shall only be used on outbreak stage fires or fires of minor nature. The local fire department shall be contacted in the event of a larger fire and Site evacuation procedures should be commenced in accordance with the procedures described in the Emergency Contingency Plan.

13. CONFINED SPACE PROGRAM

13.1 PURPOSE

In the event that confined space work is a necessity, a Confined Space Program will be implemented. Training in the recognition of confined spaces is a component of the health and safety training program.

The purpose of the Confined Space Program is to establish procedures to protect personnel from this serious hazard in the course of their work; and at a minimum, to comply with 29 CFR OSHA 1910.146. This document assigns responsibilities and sets standards for personnel engaged in activities where confined spaces may be present.

13.2 RESPONSIBILITIES

13.2.1 Health and Safety Coordinator

The Health and Safety Coordinator administers the Confined Space Program. The Health and Safety Coordinator's responsibilities include:

- Review of the HASP for potential confined space hazards and design alternative approaches to accomplish the confined space tasks;
- Coordinating and managing the Confined Space Program in the event one is required;
- Establishing priorities for implementation of the program;
- Assisting with recognition and implementation of the Confined Space Program;
- Advising project management on confined space issues; and
- Communicating the Confined Space Program to personnel by training related to specific Site activities.

13.2.2 Project Manager

The Project Manager directs the application of the Confined Space Program to project work. The Project Manager is responsible for:

- Working with the Health and Safety Coordinator to prepare information describing activities that might be conducted in a confined space area;

- Assuring that all personnel engaged in project activities are familiar with the definition of a confined space;

- Assuring that personnel are familiar with the Confined Space Program, and that project activities are conducted in compliance with the Confined Space Program;

- Assuming the responsibilities of the Field Team Leader if another person is not assigned these responsibilities.

13.2.3 Field Team Leader

The Field Team Leader is responsible for the implementation of the Confined Space Program on-site during field activities. The Field Team Leader is responsible for:

- Overseeing implementation of the Confined Space Program during field operations; and

- Reporting confined space work activity, and any violations of the Confined Space Program, to the Project Manager and the Health and Safety Coordinator.

13.2.4 Personnel

Personnel are responsible for:

- Familiarizing themselves with the Confined Space Program and following it;

- Becoming familiar with the criteria for determining a confined space, and with the monitoring, permitting, and other requirements of the program; and

- Reporting immediately a confined space condition to the Field Team Leader.

13.3 DEFINITION OF A CONFINED SPACE

Confined space means a space that:

1. Is large enough and so configured that an employee can bodily enter and perform assigned work;

2. Has limited or restricted means for entry or exit (such as pits, storage bins, hoppers, crawl spaces, and storm cellar areas); and

3. Is not designed for continuous employee occupancy.

Any workspace meeting all of these criteria is a confined space and the Confined Space Program must be followed.

13.4 CONFINED SPACE ENTRY PROCEDURES

13.4.1 Safety Work Permit Required

All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. The Safe Work Permit for entry into a confined space must be completed before work begins; it verifies completion of the items necessary for confined space entry. The Permit will be kept at the Site for the duration of the confined space work. If there is an interruption of work, or the alarm conditions change, a new Permit must be obtained before work begins.

A permit is not required when the space can be maintained for safe entry by 100% fresh air mechanical ventilation. This must be documented and approved by the Health and Safety Coordinator. Mechanical ventilation systems, where applicable, shall be set at 100% fresh air.

The Field Team Leader must certify that all hazards have been eliminated on the Entry Permit. If conditions change, a new permit is required.

13.4.2 Pre-entry Testing for Potential Hazards

a. Surveillance

Personnel first will survey the surrounding area to assure the absence of hazards such as contaminated water, soil, or sediment, barrels, tanks, or piping where vapors may drift into the confined space.

b. Testing

No personnel will enter a confined space if any one of these conditions exists during pre-entry testing. Determinations will be made for the following conditions:

1. Presence of toxic gases or dusts: Equal to or more than 5 parts per million (ppm) on the organic vapor analyzer with an alarm, above background outside the confined space area; or other action levels for specific gases, vapors, or dusts as specified in the Health and Safety Plan and the Confined Space Permit based on knowledge of Site constituents;

2. Presence of explosive/flammable gases: Equal to or greater than 10% of the Lower Explosive Limit (LEL) as measured with a combustible gas indicator or similar instrument (with an alarm); and

3. Oxygen Deficiency: A concentration of oxygen in the atmosphere equal to or less than 19.5% by volume as measured with an oxygen meter.

Pre-entry tests results will be recorded and kept at the Site for the duration of the job by the Field Team Leader. Affected personnel can review the test results.

c. Authorization

Only the Field Team Leader and the Health and Safety Coordinator can authorize any personnel to enter into a confined space. This is reflected on the Safe Work Permit for entry into a confined space. The Field Team Leader must assure that conditions in the confined space meet permit requirements before authorizing entry.

d. Safe Work Permit

An Safe Work permit for confined space entry must be filled out by the Health and Safety Coordinator or Field Team Leader. A copy of the Safe Work Permit is included as Figure 5.2.

e. Attendants

One worker will stand by outside the confined space ready to give assistance in the case of an emergency. Under no circumstances will the standby worker enter the confined space or leave the standby position. There shall be at least one other worker not in the confined space within sight or call of the standby worker.

f. Observation and Communication

Communications between standby worker and entrant(s) shall be maintained at all times. Methods of communication that may be specified in the Safe Work Permit and the HASP may include voice, voice by powered radio, tapping or rapping codes, signaling tugs on rope, and standby worker's observations that activity appears normal.

13.4.3 Rescue Procedures

Acceptable rescue procedures include entry by a team of rescuers only if the appropriate self-contained breathing apparatus (SCBA) is available; or use of public emergency services.

The standby worker must be trained in first aid, CPR, and respirator use. A first aid kit should be on hand and ready for emergency use. The standby worker must be trained in rescue procedures. Retrieval of an unconscious victim in a confined space will only be conducted by trained rescue personnel. An emergency call to 911 will be initiated to assist the victim.

13.5 TRAINING

Personnel who will engage in field activities will be given annual training on the requirements and responsibilities in the Confined Space Program and on OSHA 1910.146. Only trained personnel can work in confined spaces. Workers should be experienced in the tasks to be performed, instructed in proper use of respirators, lifelines and other equipment, and practice emergency procedures and self-rescue.

Before each Site activity, the determination of confined space work will be part of the Site characterization process. Training in the site-specific confined space activities will be part of the site-specific health and safety training.

13.6 SAFE WORK PRACTICES

- Warning signs should be posted. These include warnings for entry permits, respirator use, prohibition of hot work and emergency procedures and phone numbers.

- Cylinders containing oxygen, acetylene or other fuel such as gasoline must be removed a safe distance from the confined space work area.

- Purging and ventilating is done before work begins to remove hazardous vapors from the space. The space should be monitored to ensure that the gas used to purge the space (e.g. tank) has also been removed. Local exhaust should be used where general exhaust is not practical.

- The buddy system is used at all times. A standby person always must be posted within sight of, or in communication with, the person inside the confined space. The standby should not enter the confined space, but instead will call for help in an emergency and not leave the post. Communication should be maintained at all times with workers inside the confined space.

- Emergency planning in the HASP and an Safe Work Permit must be approved in advance and the proper rescue equipment must be immediately available.

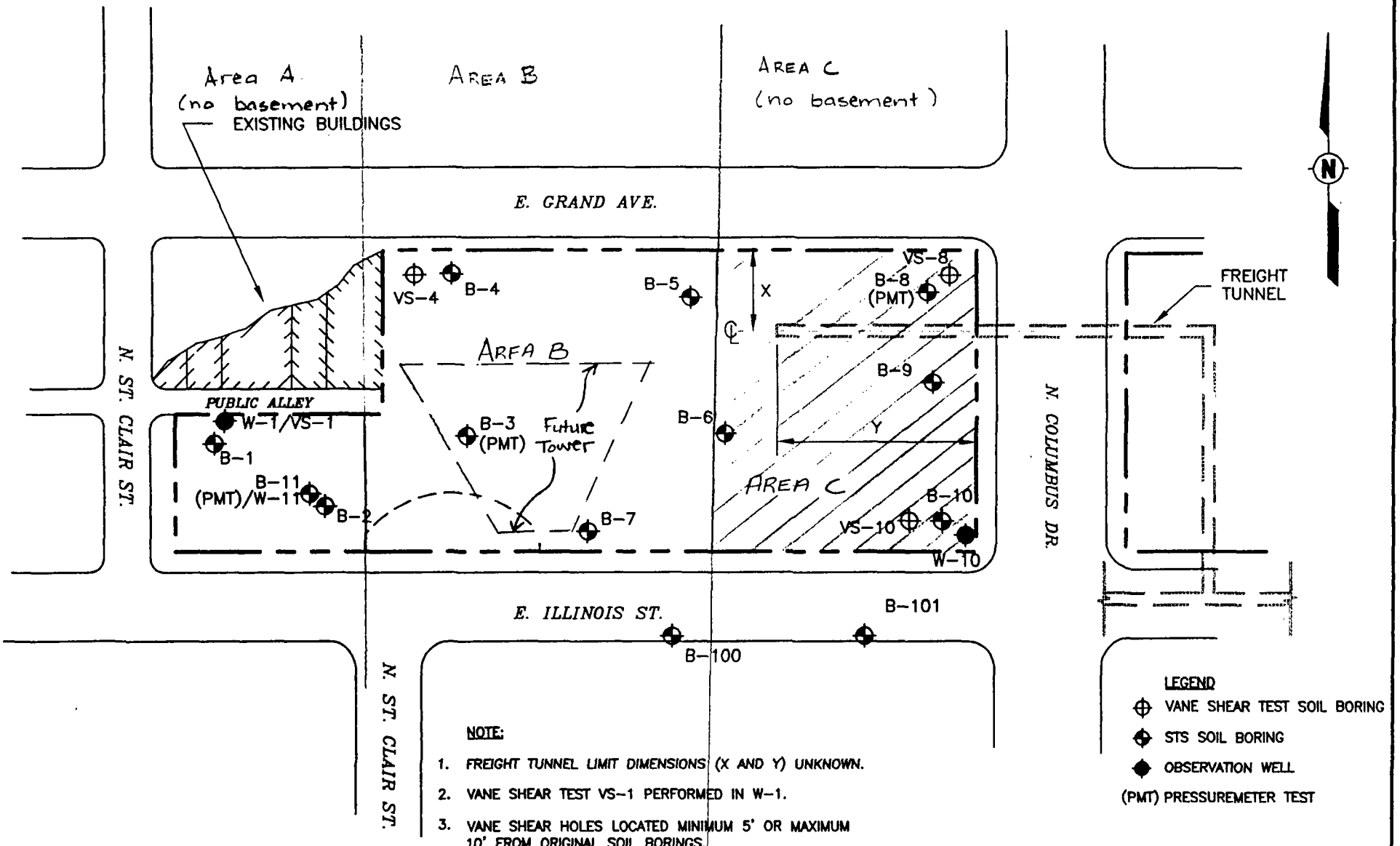
14. ELECTRICAL LOCKOUT/TAGOUT

The Field Team Leader must approve all work in areas requiring lockout/tagout procedures. Specific procedures and permitting requirements will be specified in the HASP, or in a revised HASP based on the need for a worker to work around electrical equipment.

All systems must be locked out and tagged before the work begins. This includes pipes, air lines, electrical equipment and mechanical devices. The equipment must be start tested and approved for use by a worker by the Health and Safety Coordinator or the Field Team Leader by start-testing to make sure the locked-out equipment does not operate.

ATTACHMENT 2

GEOTECHNICAL BORING LOGS



STS Consultants Ltd
Consulting Engineers

SOIL BORING LOCATION DIAGRAM
PROPOSED GRAND PIER CENTER DEVELOPMENT
225 EAST ILLINOIS STREET
CHICAGO, ILLINOIS

DRAWN BY	KKB	DATE	6-12-98
CHECKED BY	DR	DATE	6-12-98
APPROVED BY	WHW	DATE	6-12-98
CADFILE	X:\PROJECTS\24418\ss\G1SS1.dwg 06/15/1998 09:46		

STS PROJECT NO. 24418-SS
STS PROJECT FILE G1SS1.dwg
SCALE 1"=100'±
FIGURE NO. 1

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-1

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

SURFACE ELEVATION 12.0 CCD +/-

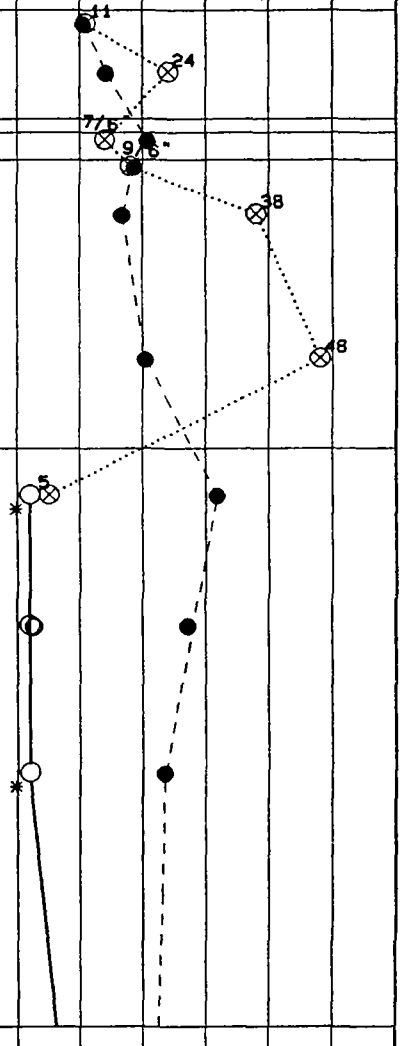
DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL
		PA		Driller notes 3 in. asphalt Driller notes miscellaneous fill
5.0	1	SS		Fill: Silty fine to coarse sand, little fine to coarse gravel, trace clay - brown to black - medium dense - moist to wet (SM)
	2	SS		Trace brick from 5-7 ft.
		RB		
	3	SS		Fill: Driller notes concrete slab
	3A	SS		Fill: Silty gravelly medium to coarse sand - brown to black - medium dense - moist to wet (SM)
10.0		RB		
	4	SS		Fine to coarse sand, trace fine to coarse gravel and silt - brown - dense - moist to saturated (SM)
		RB		
15.0	5	SS		
		RB		
20.0	6	SS		Silty clay, trace gravel, sand and shale - gray - soft to medium (CL)
		RB		
25.0		ST		
		RB		
30.0	8	ST		
35.0		RB		
40.0				

UNIT DRY WT. LBS./FT.3

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2 (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-1

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 12.0 CCD +/-	
				Continued from previous page	
40.0	9	ST		Silty clay, trace gravel, sand and shale - gray - soft to medium (CL)	
45.0		RB			
50.0	10	ST			
55.0		RB		Silty clay, trace fine gravel, fine to coarse sand, and shale - gray - very stiff to hard (CL)	
60.0	11	ST		Silt seams in Sample 11.	
65.0		RB			
70.0	12	ST			
		RB			
75.0	13	ST			118
		PA			
	14	ST			
80.0		RB			

* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 2 OF 3

STS Consultants Ltd.

CLIENT: B.M. Chin & Associates, Inc.	LOG OF BORING NUMBER: B-1
PROJECT NAME: Grand Pier	ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3
						SURFACE ELEVATION 12.0 CCD +/-	
						Continued from previous page	
80.0							
		15	ST			Silty clay, trace fine gravel, fine to coarse sand, and shale - gray - hard to very stiff (CL)	
			RB				
		16	ST				127
			RB				
85.0		17	ST			Sand seams in Sample 17.	
			RB				
						Silt seams in Sample 18.	
90.0		18	ST				
90.5						End of Boring	
						Borehole grouted upon completion.	
						Asphalt patch at ground surface.	
						Casing used: 25 ft. of 4 in.	
						Automatic-Mobile Hammer used for Standard Penetration Tests.	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2: 1 2 3 4 5

PLASTIC LIMIT % × — WATER CONTENT % ● — LIQUID LIMIT % △: 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT. ⊗: 10 20 30 40 50

7.0

*7+

*7+

* Calibrated Penetrometer

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

WL 8.5 ft. WS	BORING STARTED 1/9/98	STS OFFICE Chicago Area-01	
WL	BORING COMPLETED 1/9/98	ENTERED BY KKB	SHEET NO. 3 OF 3
WL	RIG/FOREMAN Rotary/Lehtinen	APP'D BY DR	STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-2

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

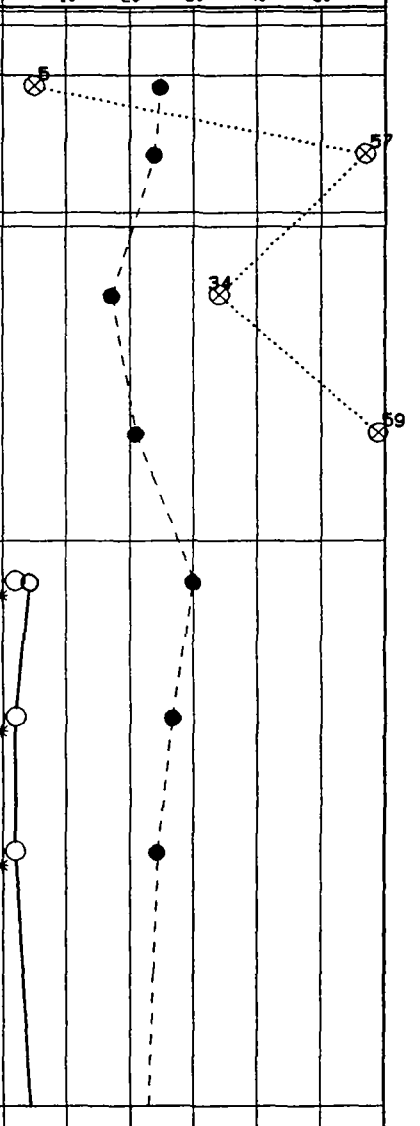
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 12.0 CCD +/-	
		PA		Driller notes 2 in. of asphalt.	
		PA		Driller notes 6 in. of crushed stone base course.	
	1	SS		Driller notes miscellaneous fill.	
5.0		PA		Fill: Silty sand and fractured bricks, trace fine to coarse gravel - dark brown to yellow brown - loose to very dense - moist (SM to GM)	
	2	SS			
		PA			
		RB		Driller notes 6 in. concrete slab	
10.0	4	SS		Fine to medium sand, trace silt and fine gravel - brown - dense to very dense - moist to wet (SP)	
		RB			
15.0	5	SS			
		RB			
20.0	6	ST		Silty clay, trace sand and shale - soft to medium (CL)	96
		RB			
25.0	7	ST			
		RB			
30.0	8	ST			
35.0		RB			
40.0					



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-3

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

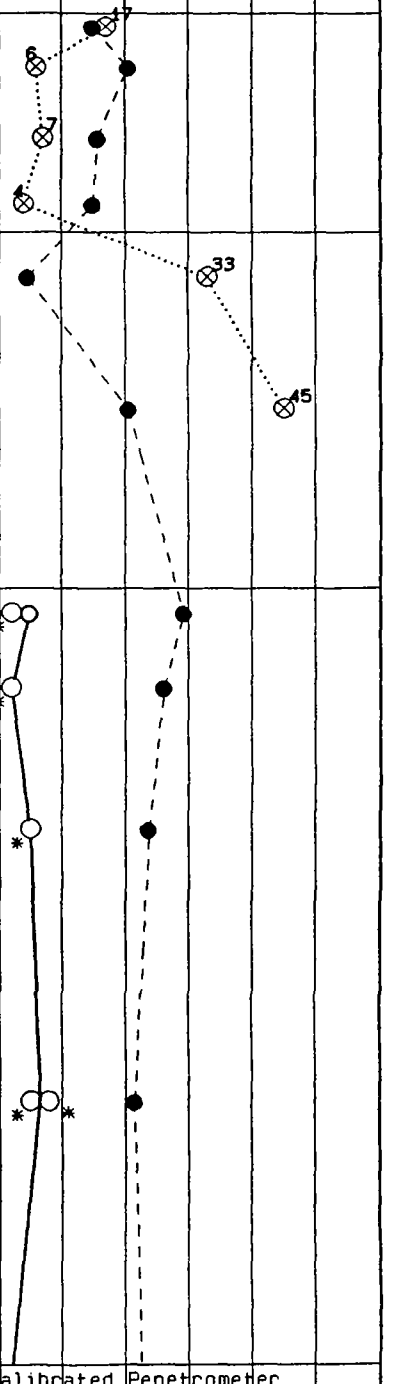
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION 12.0 CCD +/-	
			PA			Driller notes 3 in. of asphalt.	
		1	SS			Driller notes crushed stone base course.	
		2	SS			Miscellaneous fill: Fine to coarse sand, some brick, wood, cinders, concrete and gravel, little silt, trace clay - brown and black - medium dense to loose	
5.0			PA				
		3	SS				
			PA				
		4	SS				
10.0			PA			Fine to medium sand, trace silt - brown - dense - moist to saturated (SP)	
		5	SS				
			PA				
15.0						Little fine gravel in Sample 6.	
		6	SS				
			RB				
20.0							
		7	ST			Silty clay, trace shale - gray - soft (CL)	97
25.0			RB				
		8	ST				
			RB				
30.0		9	ST				
			RB				
35.0							
		10	ST			Trace sand in Sample 10. Consistency of Sample 10 medium.	
40.0							
			RB				
45.0							
50.0						... continued	



* Calibrated Penetrometer

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-4

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

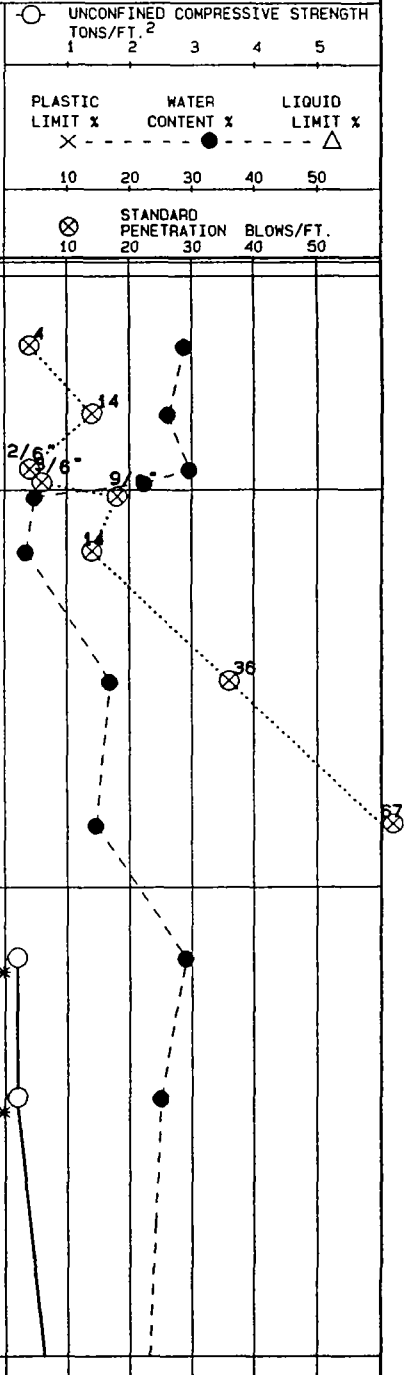
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
						SURFACE ELEVATION 13.0 CCD +/-	
			PA			Driller notes 2 in. of asphalt.	
			PA			Driller notes crushed stone base course	
		1	SS			Fill: Silty fine to coarse sand, some cinders, trace gravel and brick - black - loose to medium dense - moist (SM)	
5.0			PA				
		2	SS				
			PA				
		3	SS*				
		3A	SS				
		3B	SS				
10.0			PA			Fine to medium sand, trace silt and gravel - brown - medium dense to very dense - moist to saturated (SP)	
		4	SS				
			PA				
15.0		5	SS				
			RB				
20.0		6	SS				
			RB			Silty clay, trace sand, gravel and shale - gray - soft (CL)	
25.0		7	ST				
			RB				
30.0		8	ST				
35.0			RB				
40.0							



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-5

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

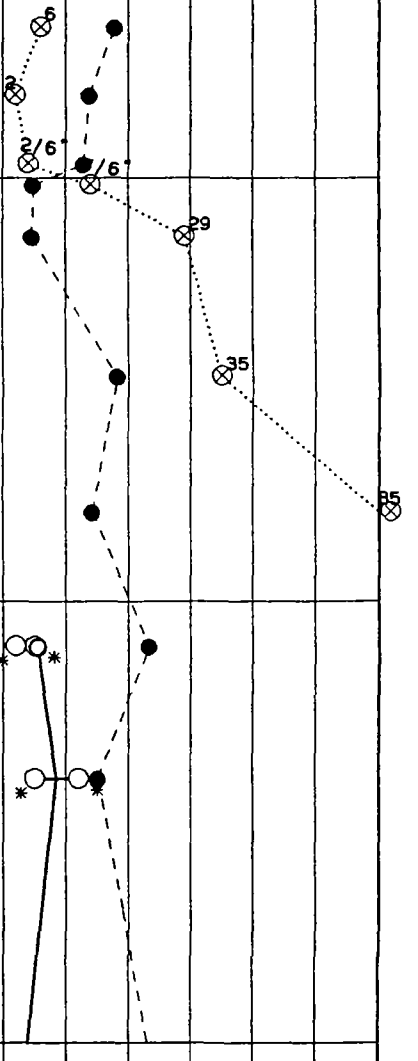
DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 13.0 CCD +/-	
				Driller notes 3 in. of asphalt.	
				Driller notes 3 in. of crushed stone base course.	
	1	SS		Driller notes 6 in. of concrete	
		PA		Fill: Silty fine to medium sand, little fine gravel, trace clay, cinders and bricks - black - loose (SM)	
5.0	2	SS			
		PA			
	3	SS			
	3A	SS			
		PA		Fine to coarse sand, trace silt and gravel - brown - medium dense to dense - moist to wet (SP)	
10.0	4	SS			
		PA			
15.0	5	SS			
		RB		Little fine to medium gravel in Samples 5 and 6.	
20.0	6	SS		Density of Sample 6 extremely dense.	
		RB			
25.0				Silty clay, trace shale - gray - soft to medium (CL)	108
	7	ST			
		RB			
30.0	8	ST		Consistency of Sample 8 medium to stiff.	
35.0		RB			
40.0					

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT %

(10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

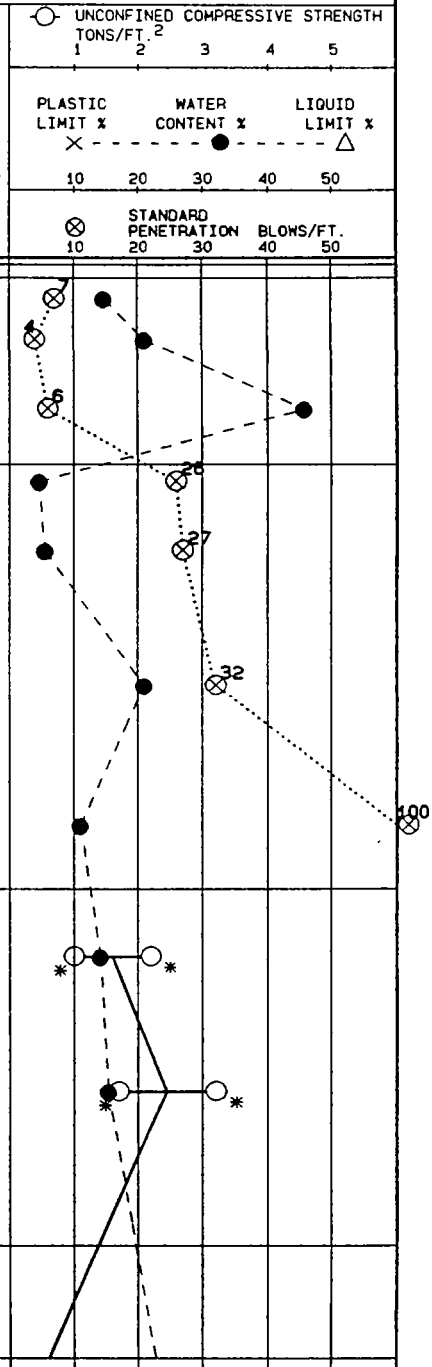
STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.	LOG OF BORING NUMBER: B-6
PROJECT NAME: Grand Pier	ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3
				SURFACE ELEVATION 12.0 CCD+/-	
		PA		Driller notes 3 in.of asphalt.	
	1	SS		Driller notes 6 in. of crushed stone base course.	
	2	SS		Fill: Silty fine to medium sand, little fine gravel, trace clay, cinders and bricks - black - loose (SM)	
5.0		PA			
	3	SS		Trace organics in Sample 3.	
		PA			
	4	SS		Fine to medium sand, trace silt and fine gravel - brown - medium dense to dense - moist to saturated (SP)	
10.0		PA			
	5	SS			
		PA			
15.0					
	6	SS			
		PA			
20.0					
	7	SS		Density in Sample 7 extremely dense.	
		RB		Silty clay, little sand and gravel, trace shale - gray - stiff to very stiff (CL)	
25.0					
	8	ST			
		RB			
30.0					
	9	ST			
35.0		RB			
				Silty clay, trace gravel and shale - gray - medium to stiff (CL)	
40.0					
				* Calibrated Penetrometer	
				... continued	



The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-7

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % × — WATER CONTENT % ● — LIQUID LIMIT % △ (10 20 30 40 50)

STANDARD PENETRATION ⊗ BLOWS/FT. (10 20 30 40 50)

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
			PA			SURFACE ELEVATION 12.0 CCD +/-	
			PA			Driller notes 3 in. of asphalt.	
			PA			Driller notes 9 in. of concrete.	
		1	SS			Fill: Silty fine to coarse sand, little fine to medium gravel, trace topsoil, cinders and bricks - black (SM)	
5.0			PA				
		2	SS				
			PA				
		3	SS*				
		3A	SS			Fine to medium sand, trace silt and gravel - brown - medium dense to extremely dense - moist (SP)	
10.0			PA				
		4	SS				
			PA				
15.0		5	SS				
			RB				
20.0		6	SS				
			RB				
25.0						Silty clay, trace shale - gray - soft (CL)	
		7	ST				
			RB				
30.0		8	ST				
			RB				
35.0							
40.0							

61.8

* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-8

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

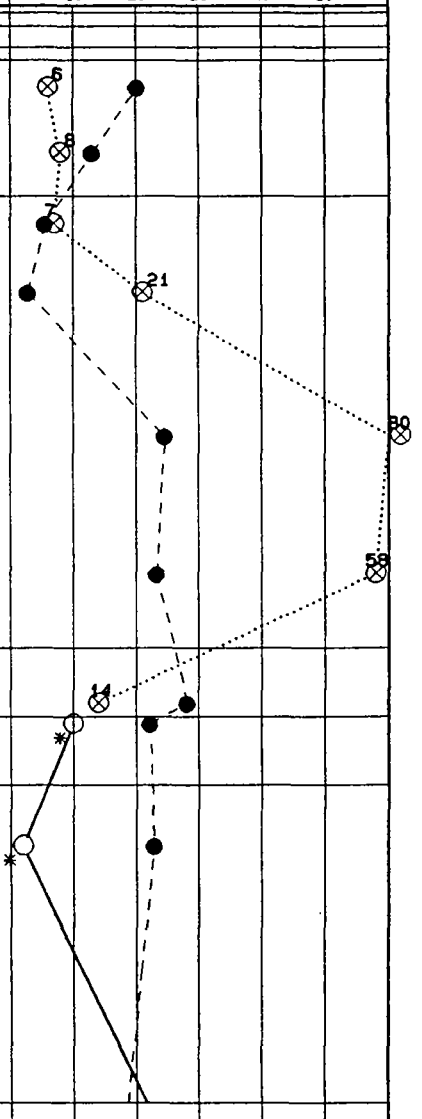
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
		PA		SURFACE ELEVATION 13.0 CCD +/-	
		PA		Driller notes 3 in. of asphalt.	
		PA		Driller notes crushed stone base course.	
		PA		Driller notes brick cobblestone.	
		PA		Driller notes concrete.	
	1	SS		Fill: Silty fine to coarse sand, little gravel, trace clay, brick and cinders - black and brown - loose (SM)	
5.0		PA			
	2	SS			
		PA			
	3	SS		Fine to medium sand, trace silt and gravel - brown - medium dense to dense - moist to saturated (SP)	
		PA			
10.0	4	SS		Density of Sample 3 loose.	
		PA			
15.0	5	SS		Density of Sample 5 very dense.	
		RB			
20.0	6	SS			
		RB			
25.0				Silty fine to medium sand, trace gravel - gray - medium dense - saturated (SM)	
	7	SS			
	7A	SS		Silty clay, trace sand - gray - stiff (CL)	
		RB			
30.0				Silty clay, trace sand and shale - gray - soft (CL)	
	8	ST			
35.0		RB			
40.0					



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-8

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

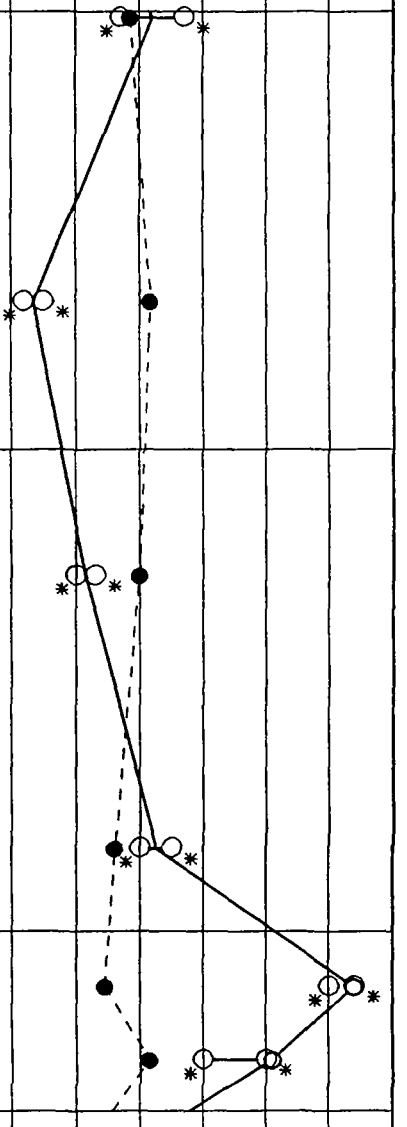
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3
				SURFACE ELEVATION 13.0 CCD +/-	
				Continued from previous page	
40.0	9	ST		Silty clay, trace sand and shale - gray - soft (CL)	
				Consistency of Sample 9 stiff to very stiff.	
45.0		RB			
50.0	10	ST			
55.0		RB		Silty clay, trace sand, gravel and shale - gray - stiff to very stiff (CL)	
60.0	11	ST			
65.0		RB			
70.0	12	ST			
		RB			
75.0	13	ST		Silty clay, trace sand and shale - gray - hard to very stiff (CL)	122
		RB			
	14	ST			113
80.0		RB			
				... continued	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2: 1 2 3 4 5

PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT %: 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT.: 10 20 30 40 50



* Calibrated Penetrometer

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 2 OF 4

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-8

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.: Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 13.0 CCD +/-	
				Continued from previous page	
80.0	15	ST		Silty clay, trace sand and shale - gray - hard to very stiff (CL)	
		RB			
	16	ST		Silty clay, trace gravel, sand and shale - gray - hard (CL)	
		RB			
85.0	17	ST		Pressuremeter Tests 82.5-85'	
		RB			
	18	ST		Pressuremeter Test at 87.5-90'.	
90.0		RB			
	19	SS*		Silty clay, trace sand and shale - gray - hard (CL)	
				Pressuremeter Test at 92.5 to 95'.	
95.0		RB			
	20	SS*			
100.0		RB			
105.0	21	SS*			
110.0		RB		Gravelly silt, little clay, trace sand - gray - extremely dense - wet (ML)	
115.0	22	SS*		Driller notes silty clay from 118-123'.	
120.0					

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % × — WATER CONTENT % ● — LIQUID LIMIT % △ (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. ⊗ (10 20 30 40 50)

7+ 7+ 7+ 100/6" 60/6" 7+ 60/6" 7+ 150/6"

* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-8

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2 (1 2 3 4 5) / PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT % (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)
					SURFACE ELEVATION 13.0 CCD +/-		
					Continued from previous page		
120.0					Gravelly silt, little clay, trace sand - gray - extremely dense - wet (ML)		
		RB			Driller notes silty clay from 118-123'.		
125.0					Driller notes limestone bedrock from 125.5-127.5'.		
127.5					End of Boring Borehole grouted upon completion. Asphalt patch at ground surface. Casing used: 30 ft. of 4 in. Automatic-Mobile Hammer used for Standard Penetration Tests. SS* = Standard penetration value based on first 6 inches of driving.		

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

WL 13.5 ft. WD	BORING STARTED 1/19/98	STS OFFICE Chicago Area-01	
WL 15 ft. BCR; 13 ft. ACR	BORING COMPLETED 1/20/98	ENTERED BY KKB	SHEET NO. 4 OF 4
WL	RIG/FOREMAN Rotary/Baker	APP'D BY DR	STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-9

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

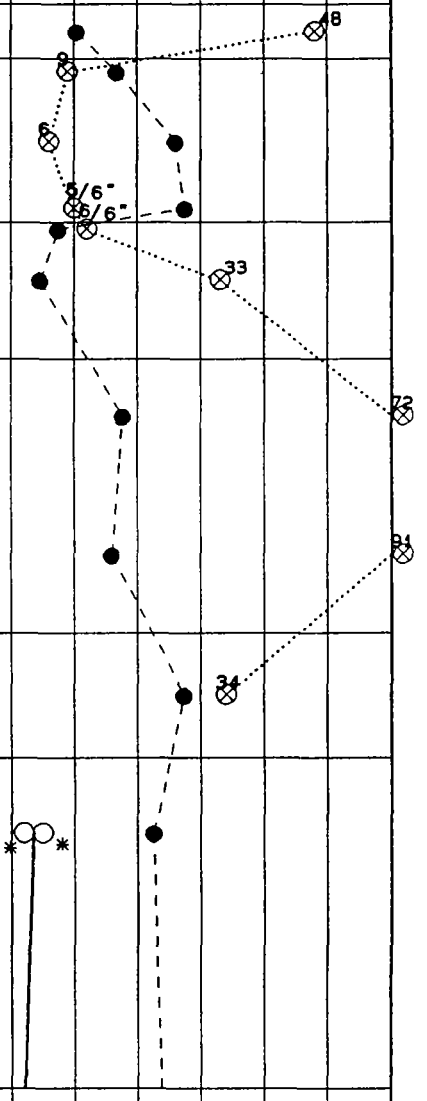
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % × — WATER CONTENT % ● — LIQUID LIMIT % △ (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. ⊗ (10 20 30 40 50)

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
			PA			SURFACE ELEVATION 13.0 CCD+/-	
			PA			Driller notes 3 in. of asphalt	
		1	SS			Driller notes crushed stone base course	
		2	SS			Fill: Fine to coarse sand, little fine gravel, trace silt, concrete, cinders and brick - black - dense (SP)	
5.0			PA				
		3	SS			Fill: Fine to coarse sand and cinders, little fine gravel, trace brick - black - loose (SP)	
			PA			Driller notes slight petroleum odor.	
		4	SS				
		4A	SS				
10.0			PA			Fine to medium sand, trace silt and gravel - brown - dense (SP)	
		5	SS			Driller notes slight petroleum odor.	
			PA				
15.0						Fine to coarse sand, trace silt and gravel - gray - very dense to extremely dense - moist (SP)	
		6	SS				
			RB				
20.0		7	SS				
			RB				
25.0						Fine to medium sand, little silt - gray and brown - dense - saturated (SP)	
		8	SS				
			RB			Silty clay, trace sand and shale - gray - soft (CL)	
30.0		9	ST				
35.0			RB				
40.0							



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-10

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

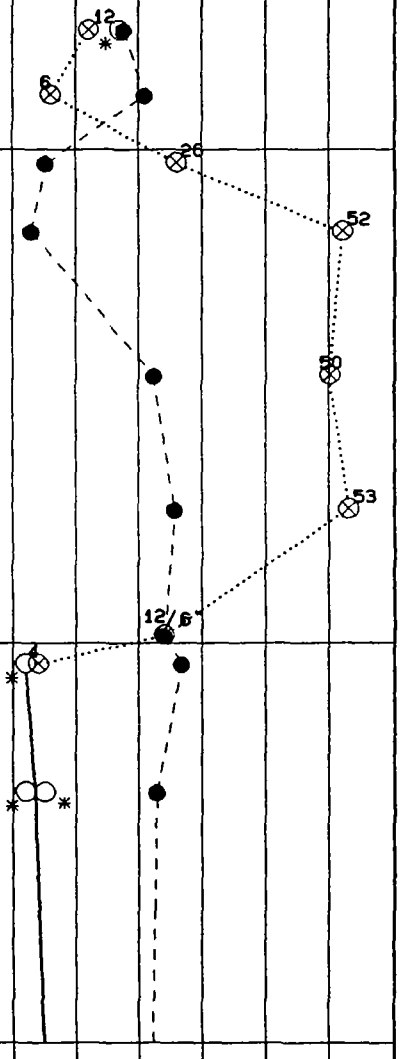
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % × — WATER CONTENT % ● — LIQUID LIMIT % △ (10 20 30 40 50)

STANDARD PENETRATION ⊗ BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 12.0 CCD+/-	
		PA		Driller notes 2 in. of asphalt	
		PA		Driller notes crushed stone base course	
	1	SS		Fill: Silty fine to coarse sand and cinders with trace brick and gravel - black - moist (SM)	
5.0		PA			
	2	SS			
		PA			
	3	SS		Fine to coarse sand, little gravel, trace silt - brown - medium dense to dense - moist to saturated (SP)	
10.0		PA			
	4	SS			
		PA			
15.0	5	SS			
		RB			
20.0	6	SS			
		RB			
25.0	7	SS*		Coloring of Sample 7 slightly gray.	
	7A	SS		Silty clay, trace sand, gravel and shale - gray - soft to medium (CL)	
		RB			
30.0	8	ST			
35.0		RB			
40.0					



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 2441B-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-11

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2 (1 2 3 4 5) / PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT % (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)
					SURFACE ELEVATION 12.0 CCD		
		PA			Blank drill through urban fill and sand strata.		
5.0							
10.0							
15.0							
20.0		RB			Blank drill through gray silty clay.		
25.0							
30.0							
35.0							
40.0							

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-100

PROJECT NAME: Grand Pier Center

ARCHITECT-ENGINEER: TT-CBM

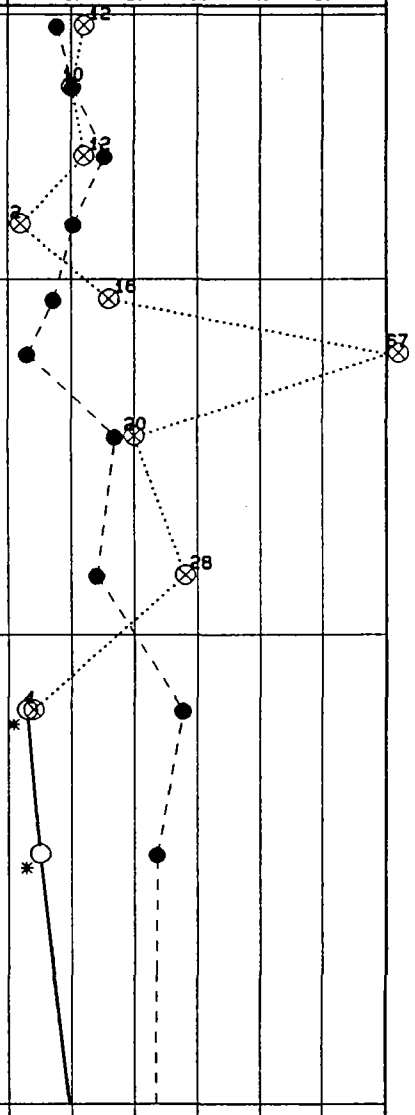
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT % | WATER CONTENT % | LIQUID LIMIT % (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
		PA			SURFACE ELEVATION ± +12.5 CCD	
					Driller's note: 4" of concrete sidewalk	
	1	SS			Fill: Fine to medium sand, little gravel, trace cinders, brick and concrete - brown and black - medium dense (SP)	
		PA				
	2	SS				
5.0		PA				
	3	SS				
		PA				
	4	SS			Relative density in S-4 loose.	
		PA				
10.0	5	SS			Fine to medium sand, trace fine gravel - brown - medium dense to very dense - moist to saturated (SP)	
		RB				
	6	SS				
		RB				
15.0	7	SS				
		RB				
20.0	8	SS				
		RB			Silty clay, trace shale - gray - soft (CL)	
25.0	9	SS				
		RB				
30.0	10	ST				
		RB				
35.0						
40.0						



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT R.M. Chin & Associates, Inc.	LOG OF BORING NUMBER B-101
PROJECT NAME Grand Pier Center	ARCHITECT-ENGINEER TT-CBM

SITE LOCATION
NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} 1 2 3 4 5

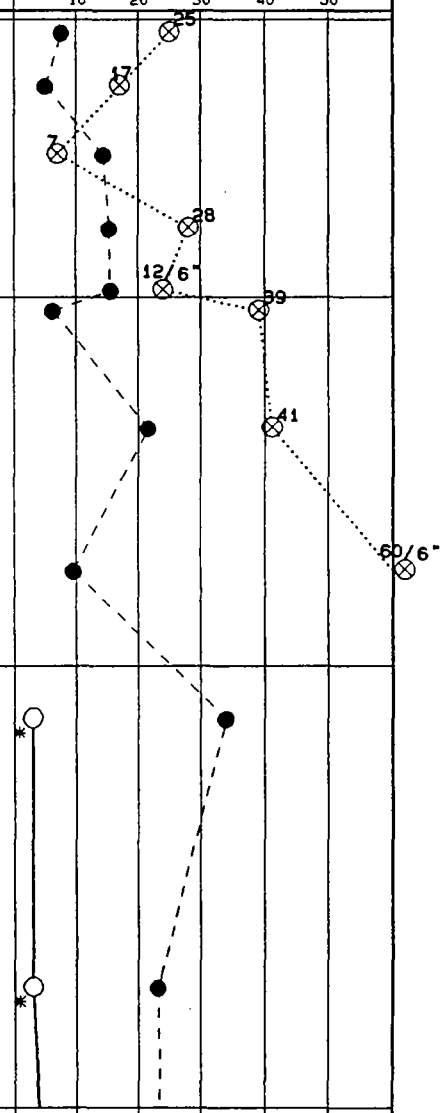
PLASTIC LIMIT % — WATER CONTENT % — LIQUID LIMIT % 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT. 10 20 30 40 50

UNIT DRY WT. LBS./FT.^{3}

SURFACE ELEVATION 12.5 CCD

DEPTH (FT)	ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
			PA			Driller's note: 4" of concrete sidewalk
		1	SS			Fill: Fine to medium sand, little gravel, trace clay, cinders, brick and concrete - brown and black - medium dense to dense (SP)
			PA			
		2	SS			
5.0			PA			Some concrete in S-1 and S-2.
		3	SS			Relative density in S-3 loose.
			PA			
		4	SS			
10.0			PA			
		5	SS			
		5A	SS			Fine to medium sand, trace fine gravel and silt - brown - dense - moist (SP)
			RB			
15.0		6	SS			
			RB			
20.0		7	SS			
			RB			
25.0						Silty clay, trace shale - gray - soft (CL)
		8	ST			
30.0			RB			
35.0		9	ST			
40.0						



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS

ATTACHMENT 3

HIGHWAY AUTHORITY AGREEMENT

No P.I.N. applicable
Document affects public way.

99924673

RIGHT-OF-WAY AGREEMENT

This Right-of-Way Agreement ("Agreement") is entered into this 27th day of Sept., 1999 by and among River East, L.L.C. ("River East") and Kerr-McGee Chemical L.L.C. ("Kerr-McGee"), together referred to herein as the Obligors ("Obligors"), and the City of Chicago ("City"), as follows:

1. This Agreement is not binding on the City until it is executed by a duly authorized representative of the City. Prior to execution, this Agreement constitutes an offer by the Obligors. The duly authorized representatives of the Obligors have signed this Agreement, and this Agreement is binding upon them and their successors by merger or reorganization, upon execution by the City.

2. The Obligors stipulate:

   a. The Site is located at 316 E. Illinois Street, Chicago, Illinois ("the Site"). The Site is and has been for multiple decades, used as an asphalt-paved parking lot. The Site is bounded by Grand Avenue, McClurg Court, Illinois Street and Columbus Drive.

   b. On June 3, 1993, the United States Environmental Protection Agency ("USEPA") and the Illinois Department of Nuclear Safety ("IDNS") conducted a joint investigation at the Site and verified the presence of radioactivity below the asphalt surface of the Site at levels above natural background. USEPA determined that the use of the Site as a parking lot posed a negligible risk to the public.

   c. A historical search determined that in the 1920s and 1930s a company known as the Lindsay Light Company leased the Site for the processing of thorium ores. Lindsay Light is a predecessor of Kerr-McGee. An ingredient in gas mantel manufacturing is thorium extracted from sand and formed into a solution into which mantels were dipped during the manufacturing process. It is believed that Section 11(e) (2) material, 42 U.S.C. §2014(e)(2) from this processing process is found at and around the Site ("Thorium Residuals").

   d. On January 27, 1994, the Chicago Dock & Canal Trust ("Chicago Dock") (a predecessor to River East), entered into an Administrative Order by Consent ("AOC") with USEPA to investigate and study the extent of Thorium Residuals at

the Site. The study was completed in May, 1994. A final report concerning the extent of contamination was delivered to USEPA on October 17, 1995, and the study was approved by USEPA on March 13, 1996. The final report concluded, inter alia, that there were twelve subsurface areas at the Site which exhibited elevated gamma radiation levels. The AOC is Attachment B.

e. On June 6, 1996, the USEPA issued a Unilateral Administrative Order ("UAO") to Chicago Dock and Kerr-McGee directing that a removal action be conducted at the Site pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9606(a). The UAO established criteria (the "Cleanup Criteria") for Thorium Residuals of 7.1 picoCuries per gram total radium – 5 picoCuries per gram total radium above background. The UAO is attached as Attachment C.

f. Pursuant to the UAO and with approval of USEPA, Chicago Dock and Kerr-McGee conducted and completed a removal action at the Site. This remediation took several months during CY1996 and 1997 and involved the removal and disposal of soils from the Site.

g. During the removal action, testing along Illinois Street and Columbus Drive revealed deposits of Thorium Residuals which could not be readily excavated. Information regarding the known location of this contamination was provided to the City during a meeting on June 26, 1997, and in subsequent correspondence dated July 14, 1997. Attachment D depicts the portions of Grand Avenue, Illinois Street , McClurg Court and Columbus Drive rights-of-way adjacent to the Site that are the subject of this Agreement ("designated rights-of-way"). The impacted areas of the designated rights-of-way adjacent to the Site where Thorium Residuals are known to be located ("impacted rights-of-way") are described on Attachment E. If subsequent sampling and analysis indicates the presence of contaminants associated with Thorium Residuals beneath the designated rights-of-way, then those areas shall be subject to and covered by this Agreement.

h. Attached as Attachment E is a site map showing the known areas of Thorium Residuals in the impacted rights-of-way, and the relative concentration of the Thorium Residuals governed by the UAO.

3. The City stipulates that it holds the designated rights-of-way adjacent to the Site in trust for the public and has jurisdiction over the designated rights-of-way.

4. The parties stipulate that:

a. This Agreement is intended to meet the requirements of the United States Environmental Protection Agency regarding Thorium Residuals.

b. This Agreement shall run with the land constituting the designated rights-of-way and shall be recorded by the Obligors at their expense with the Cook County

Recorder of Deeds on the property described in Attachment D (the designated rights-of-way). Within thirty (30) days of such recording with the Cook County Recorder of Deeds, the Obligors shall provide the City a copy of the Agreement that has been stamped by the Cook County Recorder of Deeds to indicate that it has been recorded with that office. No filing or notice will be referenced against the Site.

c. This Agreement shall be null and void should the United States Environmental Protection Agency not approve it.

5. The City agrees that it will limit access to soil as described herein under portions of the impacted rights-of way described in Attachment E and in any supplemental exhibits as provided in ¶2(g) that exceed USEPA Cleanup Criteria, as provided in Code Section 10-20-100, et.seq. subject to the following conditions:

a. Where the pavement and sidewalk in the impacted rights-of-way are to be considered engineered barriers to gamma radiation emanating from Thorium Residuals, the Obligors agree to reimburse the City for maintenance activities requested by the Obligors. The City does not agree to maintain the designated rights-of-way, nor does it guarantee that the designated rights-of-way will continue as a roadway or sidewalk, or that the impacted rights-of-way will always be maintained as an engineered barrier.

b. This Agreement does not in any way limit the City's authority to construct, reconstruct, repair or maintain and operate the designated rights-of-way upon the property or other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals, or to allow others to use the designated rights-of-way. To that extent, the City reserves the right to identify, investigate, and remove soil contaminated with Thorium Residuals above the Cleanup Criteria from the impacted rights-of-way or from other portions of the designated rights-of-way adjacent to the Site subsequently identified as containing contaminants associated with Thorium Residuals and to dispose of them in accordance with applicable environmental regulations so as to avoid causing a further release of the contaminants and to protect human health and the environment. The Obligors shall reimburse the reasonable actual costs incurred by the City or its contractors or agents in so identifying, investigating, removing, storing, handling or disposing of soil contaminated with Thorium Residuals above the Cleanup Criteria, and it shall not be a defense for the Obligors that those costs were not consistent with or required by United States Environmental Protection Agency regulations, guidelines or policies. Prior to incurring any such costs, the City shall first give the Obligors thirty days notice, unless there is an urgent reason otherwise, to remove or dispose of soil contaminated with Thorium Residuals above the Cleanup Criteria to the extent necessary for the City's work. The City will cooperate with the Obligors in the conduct of the work including providing reasonable and appropriate access. USEPA shall also be forwarded a copy of this notice. Failure to give this

opportunity to the Obligors shall not be a defense to a claim for reimbursement or that the work should not have been done. If no such notice and opportunity are provided by the City to the Obligors and there was no urgent reason otherwise, the City's claim for reimbursement against the Obligors for such costs shall not exceed $10,000.00. For the purpose of this Agreement only, there is a rebuttable presumption that Thorium Residuals found in the portions of the impacted rights-of-way or in other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals arose from the release of Thorium Residuals from the Site. Should the Obligors not reimburse the costs identified here, this Agreement shall be null and void in addition to such other remedies as may be available to the City.

6. The Obligors agree to indemnify and hold harmless the City, its agents and employees, and contractors, for all obligations asserted against or costs incurred by them associated with the release of contaminants associated with Thorium Residuals in the impacted rights-of-way or in other portions of the designated rights-of-way subsequently identified as containing Thorium Residuals.

7. Violation of the terms of this Agreement by the Obligors, or their successor(s) in interest, may be grounds for voidance of this Agreement.

8. No violation of a permit by a third party shall constitute a breach of this Agreement by the City. The Obligors also agree that their personnel, if any, at the Site will exercise due diligence in notifying those accessing contaminated soil in the impacted rights-of-way of their rights and responsibilities under this Agreement.

9. Should the City breach this Agreement, the Obligors' sole remedy is for an action for damages in the Circuit Court of Cook County. Any and all claims for damages against the City, its agents, contractors, employees or its successors in interest arising at any time are limited to an aggregate maximum of $20,000.00. No other breach by the City, its agents, contractors, employees or its successors in interest of a provision of this Agreement is actionable in either law or equity by the Obligors against the City or them and the Obligors hereby release the City, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing contaminated soil in the designated rights-of-way. Should the City convey, vacate or transfer jurisdiction of the designated rights-of-way, the Obligors may pursue an action under this Agreement, not limited in amount, against the successors in interest, other than the City, or any of its departments, or State agency, in a Court of Law.

10. The City will limit access to the rights-of-way as follows:

    a. Normal Access: The City will limit access to designated rights-of-way via the City Department of Transportation ("CDOT"), or its successor entity. Pursuant to §§10-20-100 and 10-20-150 of the Municipal Code of Chicago, a permit must be

issued by CDOT to any party, including the City, requesting to perform subsurface work in a City right-of-way. CDOT maintains and will maintain a permit database which, in conjunction with the City Department of Environment ("DOE"), tracks City rights-of-way with reported subsurface contamination. CDOT will consult the database whenever a party requests such a permit. The CDOT permit database will indicate the reported contamination under the impacted rights-of-way and it will indicate that radiation surveillance must be performed before and during excavations performed on other impacted rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals through sampling and analysis. The permit database will also indicate that radiation surveillance must be performed during excavation or other work that disturbs or exposes the soil beneath the designated right-of-way. The CDOT database will direct the permit applicant to DOE to obtain detailed information on the nature and extent of the contamination and of the radiation surveillance requirements for any excavation near other impacted rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals. After the permit applicant consults with DOE, the applicant must complete a form where the applicant acknowledges that it is aware of the contamination, will take appropriate steps to ensure the health and safety of people working in the impacted rights-of-way, and agrees to follow the health and safety plan for Thorium Residuals for these rights-of-way ("Health and Safety Plan"), attached as Attachment F, or other plan reviewed by USEPA that provides equal or greater health and safety protections, and to dispose of Thorium Residuals as required by law. DOE will provide written notice to River East, Kerr-McGee and USEPA at the time permit applicants contact DOE about the designated rights-of-ways and the radiation surveillance requirements.

b. Emergency Access: The City Board of Underground ("BOU"), the City Department of Buildings, and the Chicago Fire Department, or their successor entities, will be notified of the contamination at the impacted rights-of-way and will be forwarded copies of all available environmental data regarding the impacted rights-of-way, including the Health and Safety Plan. BOU will provide this information to all utilities in the area. In the event of an emergency that occurs outside of CDOT business hours, this will enable utilities to provide their personnel with the appropriate information to ensure that proper health and safety precautions are taken.

11. The City will place and maintain placards in any underground access in the rights-of-way that state "Before Work, Contact Chicago Department of Transportation."

12. Notice for purposes of this Agreement should go to the following:

City of Chicago:
Commissioner
Department of Environment
30 N. LaSalle Street
25th Floor
Chicago, IL 60602
312/744-7606

River East LLC
contact Kevin Augustyn
Randy Grueb
Charles Langenfeld
455 East Illinois
Suite 565
Chicago, IL 60611
Telephone: 312/321-8900
Facsimile: 312/755-2750

and:

Vincent S. Oleszkiewicz
counsel for River East LLC/MCL Companies
Baker & McKenzie
130 East Randolph Drive
Chicago, IL 60601
Telephone: 312/861-3737
Facsimile: 312/861-2899

Kerr-McGee
contact: Dan White
Kerr-McGee Center
Oklahoma City, OK 73125
Telephone: 405/270-3792
Facsimile: 405/270-3787

and:

Richard Meserve
counsel for Kerr-McGee
Covington & Burling
1201 Pennsylvania Ave., N.W.

Washington, D.C. 20044
Telephone: 202/662-5304
Facsimile: 202/662-6291

U.S. EPA Region 5
Lindsay Light II Site, Office of Regional Counsel
contact: Mary Fulghum
77 West Jackson Boulevard
Chicago, IL 60604-3590
Telephone: 312/886-4683
Facsimile: 312/886-0747

13. Obligors, and any of their successor(s) by merger or reorganization pursuant to paragraph 1 of this Agreement, shall, at least 15 days prior to such subsequent merger or reorganization, give written notice and a copy of this Agreement to subsequent successor entity(ies), and provide written notice thereof to the City. The notice to the City shall include the name and address of the successor entity(ies).

14. If any provision of this Agreement is determined to exceed the authority of the City, or if any provision of this Agreement is declared null and void or unenforceable by any court or tribunal having jurisdiction, then this Agreement shall be null and void. If this Agreement is declared null and void, the information about the contamination will remain in the CDOT database and all permit applicants will be required to consult with DOE as described above. Similarly, the Emergency Access procedures described above will remain in force if the Agreement is declared null and void.

15. This Agreement shall continue in effect from the date of the Agreement until the Thorium Residuals in the soil are subsequently reduced through active remediation to levels approved by USEPA, such that unrestricted access to the impacted rights-of-way or other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals is demonstrated to be appropriate and there is no longer a need for this Agreement, and USEPA has, upon written request to the USEPA and notice to the City, provided a written determination authorizing unencumbered access to the impacted rights-of way.

16. Nothing in this Agreement shall be deemed to create any right or obligation in any person not a party hereto and this Agreement shall not be construed in any respect to be a contract in whole or in part for the benefit of any third party nor an admission of any fact, condition or obligation by or for the benefit of any third party, nor shall any statement herein be considered an admission of fact for any purpose or use outside this Agreement. Nothing in this Agreement shall preclude the City, Kerr-McGee or River East from petitioning U.S. EPA for a relaxation of the Cleanup Criteria, if circumstances so warrant.

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____
Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, L.L.C.
Its: Sole Member
By: River East, L.L.C.
Its: Manager

By: _____
Its: _____

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY: _____ Date: 09/24/99
George D. Christiansen
Vice President

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____
Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, ~~L.L.C.~~ Inc.
Its: ~~Sole Member~~
~~By: River East, L.L.C.~~
Its: Manager

By: _____ 9/27/99
Its: Manager

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date: 9/24/99

Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, L.L.C.
Its: Sole Member
By: River East, L.L.C.
Its: Manager

By: _____
Its: _____

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____

ATTACHMENT C

AREA A CLOSURE REPORT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JAN 03 2001

SE-5J

VIA FACSIMILE AND U.S. MAIL

Mr. Richard G. Berggreen, C.P.G.
STS Consultants, Ltd.
750 Corporate Woods Parkway
Vernon Hills, IL 60061-3153

RE: Lindsay Light II Site/RV3 North Columbus Drive

Dear Mr. Berggreen:

The U.S. Environmental Protection Agency (USEPA) has reviewed the Final Area A Closure Report dated November 15, 2000 regarding Area A of the North Columbus Drive Property. The Closure Report indicates that the removal activities conducted removed the radioactive contamination from Area A. This letter is to confirm that the Area A Closure Report is hereby approved and, therefore, no additional removal activities are warranted in Area A.

If you have questions regarding this letter, please contact me, as soon as possible, at (312) 886-3601 or contact Fred Micke, On-Scene Coordinator, at (312) 886-5123, or Larry Jensen, Health Physicist, at (312) 886-5026.

Sincerely,

Verneta S. Simon

Verneta J. Simon, P.E.
On-Scene Coordinator
ERB Section #3

cc: Dan White, Kerr-McGee
Kevin Augustyn, River East
Naren Prasad, Chicago Department of Environment

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

R E P O R T

Grand Pier Center LLC
401 North Michigan Avenue
Chicago, Illinois 60611

Area A Closure Report
Revision 1

Grand Pier Center
Chicago, Illinois

24418-XK

November 15, 2000

November 17, 2000

Ms. Verneta Simon, On-Scene Coordinator
Mr. Fred Micke, On-Scene Coordinator
U. S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard, SE-5J
Chicago, Illinois 60604

RE: Revised Area A Closure Report, North Columbus Drive RV3 Site, Chicago, Illinois – STS Project No. 24418-XK

Dear Ms. Simon and Mr. Micke:

Enclosed in the revised Area A Closure Report for the above-referenced site. This report has been revised in response to USEPA comments in a letter dated September 18, 2000.

1. **The Attachment 3-Excavation Lift Survey Sheets have been reviewed. The material screened and tested in the fourth lift, the last lift, appears to be "clean". However, USEPA was not present when this lift was screened and tested and, therefore, USEPA must sample portions of this lift in order to verify that Area A is clean. Test pit sampling in grid J to K from –5 to –8; and grid M to N from –5 to –6 must be performed. The test pit for each of these grids must uncover the entire footprint of the grid to a depth of the native sand material.**

   These grids were selected because these grids have the highest "clean" walkover readings of the fourth lift. The results from USEPA's test pit work must be included in the final Closure Report.

   Response: Test pits were excavated and surveyed by USEPA. Analytic data from soil samples are included in Attachment 4.

2. **The Attachment 1 and Attachment 3 Survey Sheets must indicate if the probe was shielded or unshielded. The Sheets must also indicate the count rate corresponding to the 7.1 pCi/g clean-up level.**

   Response: Reference has been added to survey sheets indicating whether the probes were shielded or unshielded, and specifying the clean-up level count rate.

3. **Figure 2 must be modified to indicate the drain tile found below the concrete slab. The drawing submitted on August 30 can be used if desired.**

   Response: Figure 2 was modified to add the drain tile.

4. **A narrative must be added to the Closure Report describing the hot spot located at M.5(0.5). The narrative must state how this hot spot was found and how it was remediated.**

   Response: The text was modified to describe the hot spot location and remediation.

On behalf of Grand Pier, STS Consultants, Ltd. requests USEPA issue a closure confirmation letter based upon this revised Area A Closure Report.

Please contact me at 847-279-2500 if you have any questions or comments.

Regards,

STS CONSULTANTS, LTD.

Richard G. Berggreen, C.P.G.
Principal Geologist

cc: Mike Witte, Grand Pier Center LLC
Rick Mueller, Bill Anaya, Johnson & Bell
Tom Dimond, Mayer, Brown & Platt
Dan White, Kerr-McGee
Bernie Bono, Bono Consulting
Mark Krippel, Kerr-McGee
John Curtiss, AIG
J. T. Smith, Covington & Burling

NORTH COLUMBUS RV3 SITE
AREA A CLOSURE REPORT
GRAND PIER CENTER
CHICAGO, ILLINOIS

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	WORK SCOPE	1
3.0	CONCLUSIONS	3

Figures

Figure 1	Site Plan
Figure 2	Walls and Caissons Present in Area A
Figure 3	Depth of Excavation Plan View

Attachments

Attachment 1	Walkover Survey Data Sheets
Attachment 2	Verification Sign-off Forms, Analytical Data
Attachment 3	Excavation Lift Survey Sheets
Attachment 4	Excavation Samples Analytical Data

Appendices

Appendix A	Closure Documentation (June 12, 2000); Work Plan Modification (June 15, 2000); Addendum to Closure Documentation (June 21, 2000)

NORTH COLUMBUS RV3 SITE
AREA A CLOSURE REPORT
GRAND PIER CENTER
CHICAGO, ILLINOIS

1.0 INTRODUCTION

This Closure Report describes the work conducted on the North Columbus RV3 site to document the conditions on the portion of the Grand Pier Center development referred to as Area A. Area A is the westernmost portion of the Grand Pier site (Figure 1). Area A is proposed to be developed at some time in the future, perhaps several years after the current development work. Formerly, there were concerns regarding the potential for thorium impacted soil on the Grand Pier Center property. It is the purpose of this closure report to document the removal of any thorium impacted soils from Area A, in order that the future development will be able to proceed without this concern being a potential issue affecting development. This report has been prepared to provide these data to the U. S. Environmental Protection Agency (USEPA) in order that they may issue a Closure Confirmation letter stating that all appropriate inquiry have been conducted, that there is no further remediation necessary on the site, and all evidence of thorium impacted soil has been removed.

This report describes the survey work that was conducted, the removal of thorium impacted soil and rubble debris encountered, verification surveys and sampling conducted in cooperation with the USEPA, and the screening of the soil and rubble fill which remains on site. Analytical data for samples collected from the site are also included.

2.0 WORK SCOPE

Geotechnical borings completed in 1998 on Area A indicate the site subsurface profile consisted of the following:

- asphalt pavement
- 6 to 9 inch limestone gravel base course
- miscellaneous full consisting of silty sand, fractured brick and rubble fill, and gravel to a depth of 7 to 7.5 feet
- basement floor slab
- fine to coarse sand, apparently the natural soils at the site.

These geotechnical borings were not screened for radiation. The samples retained from these borings were not analyzed for radioactivity.

Walkover gamma surveys of Area A, while the asphalt pavement was in place, detected several locations on Area A which had elevated gamma readings, levels approximately twice background. These locations were near the center of Area A.

A concrete wall was found running north-south approximately on the line between Area A and Area B to the east. This wall was removed early in the excavation of Area A. It was subsequently found that Area A was entirely surrounded with basement walls. Caissons

were also found in a pattern beneath Area A, on a spacing of approximately 15 feet on center. A sketch of the walls and caissons found in Area A is included as Figure 2.

The asphalt pavement was removed from Area A in sections. The northwest approximately one quarter was removed first. A walkover survey was conducted using a shielded 2 x 2 NaI detector. The survey was conducted and recorded on the 5 x 5 meter grid which extended from the "0" (zero) line between Areas A and B, to "–8" (minus eight) at the far west side of the site, and "H" on the north to "N" on the south. Survey profile sheets of the walkover readings taken upon removal of the asphalt are included in Attachment 1.

Gamma survey data indicated much of the area stripped of asphalt was above the cleanup criteria of 7.1 pCi/g. Those soils with readings indicating an exceedance of the cleanup criteria were excavated and loaded into transport boxes for disposal at Envirocare in Clive, Utah. The areas were then surveyed by STS personnel and confirmation samples were taken and analyzed. When those analyses indicated clean up levels had been achieved, USEPA was notified to survey and sample for closure verification. Six sub-samples were collected and analyzed for each area subject to verification documentation.

This removal, confirmation sampling, and verification survey and sampling was conducted site-wide as the asphalt was removed and the underlying soil exposed. Figure 3 presents a plan of the excavated portions of Area A, indicating the depth of the removal excavations. The majority of the site was excavated to a depth of 1 foot to 3 feet during the removal effort, although the southeastern part of Area A was excavated to approximately 5 feet.

Attachment 2 includes the verification sign-off sheets for the areas surveyed and released for back filling by USEPA. The analytical results supporting the sign-off request forms are also included.

In order to confirm the condition of the remaining fill underlying Area A, a Closure Documentation Work Plan Modification was submitted to USEPA June 15, 2000 and modified June 20, 2000. This Closure Documentation Work Plan (Appendix A) provides for the excavation and screening of the fill soil remaining on Area A, and the removal of the basement floor slab and screening of the natural sand soil beneath the basement floor slab.

Excavation of this fill soil proceeded in lifts of 2 feet thick or less. A total of four lifts and surveys were recorded. The initial survey was the excavation following the general site removal effort, at approximately minus 2 feet below original site grade. The subsequent lifts were at –4, -6 and –8 feet, the last following removal of the basement floor. Note that each lift survey covered the entire surface of Area A, including the complete removal of the basement floor slab to expose the sand soil at –8 feet. Survey sheets of the screening for each of the lifts are included in Attachment 3.

The soil immediately beneath the asphalt was the only thorium impacted soil encountered. That soil was subsequently removed. No other areas exhibiting elevated gamma readings were detected within Area A. One location immediately to the east of Area A, at location M.5-0.5, was noted to be above the cleanup criteria. The location was noted in the walkover survey at the –4 foot depth. That location was in part of Area B which had been previously surveyed and released by USEPA. The elevated reading was attributed to spillage onto that location when the wall separating Areas A and B was taken down. The material was cleaned up similar to a spill which might occur while loading transport boxes, hand shoveled into a Super Sack and loaded for disposal with other soils generated elsewhere on site from work in Areas B and C. The location was surveyed following the cleanup and all soil above the cleanup criteria had been removed.

In addition to the survey records, samples were also collected of representative materials in each of the lifts as the excavation and screening progressed. Approximately 85 samples were collected and analyzed from the excavated fill soil and underlying soil in Area A. Those analytical results are presented in Attachment 4.

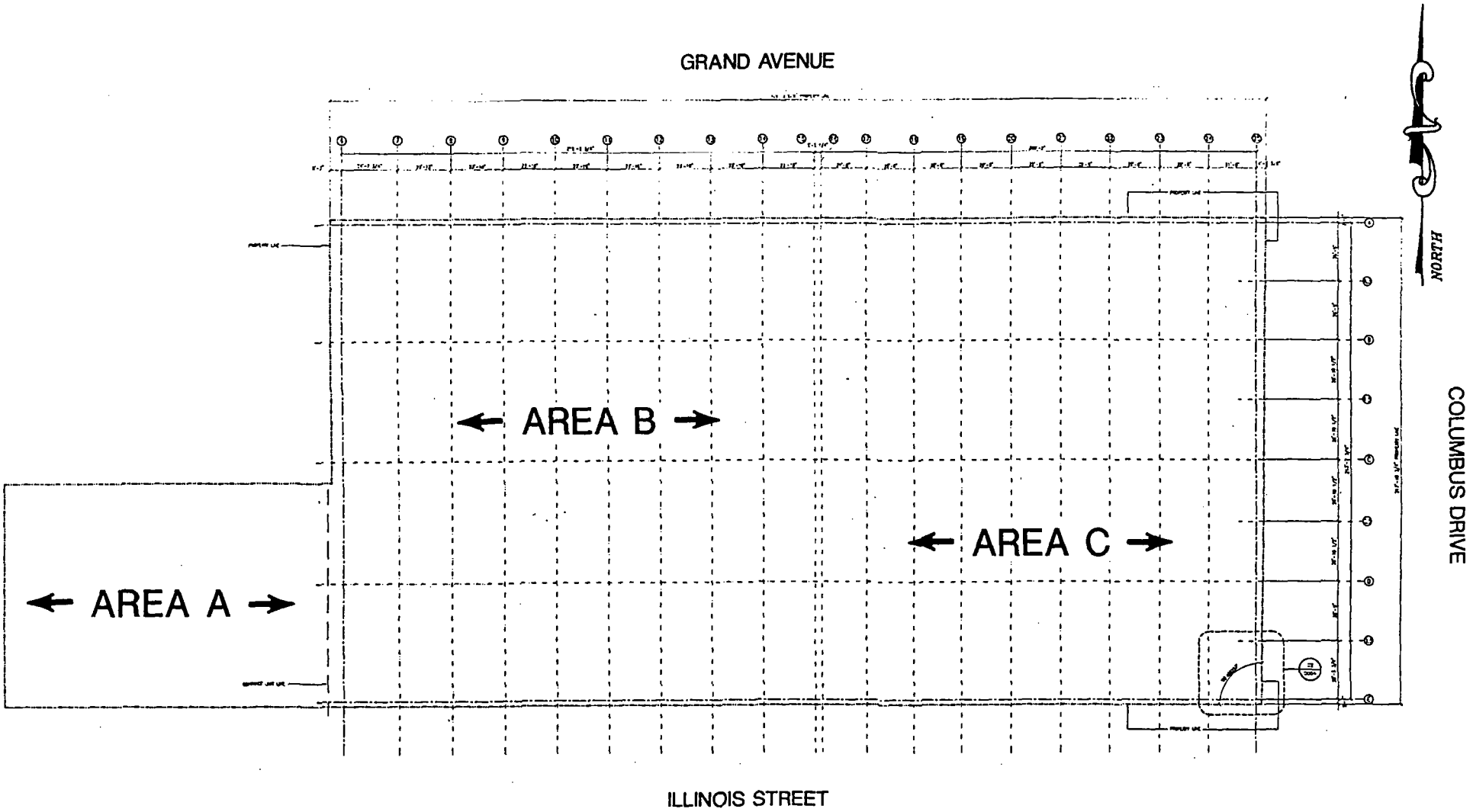
Documentation of the Area A closure was initially submitted to USEPA July 27, 2000. Following review of that July 27 report, in a letter dated September 18, 2000, USEPA requested test pit exploration at 5 grid locations for verification by USEPA. These grid locations were J to K from –5 to –8, and grid M to N from –5 to -6. The test pits were to excavate the entire footprint of each grid to the depth of the native sand soil.

The test pits were excavated on October 30, 2000. USEPA personnel surveyed these test pits on October 31, 2000. Analysis of 2 samples collected was provided to USEPA October 31, 2000, and authorization to backfill the pit was received November 1, 2000. The analytic data are included in Attachment 4.

3.0 CONCLUSIONS

Area A has had all identified thorium impacted soil removed for off-site disposal. USEPA verification was obtained on all identified impacted locations. Subsequently, an excavation, screening and sampling effort documented the condition of the remaining soil beneath the site, extending through the basement floor slab to the natural sand beneath the site. 100 percent of the site was screened in lifts not exceeding 2 feet, and no additional thorium impacted soil was identified.

On the basis of the attached data, a closure letter is requested from USEPA indicating that all appropriate inquiry has been conducted, there is no further investigation or removal required at this property, and there is no evidence of any thorium impacted soil remaining on the property.

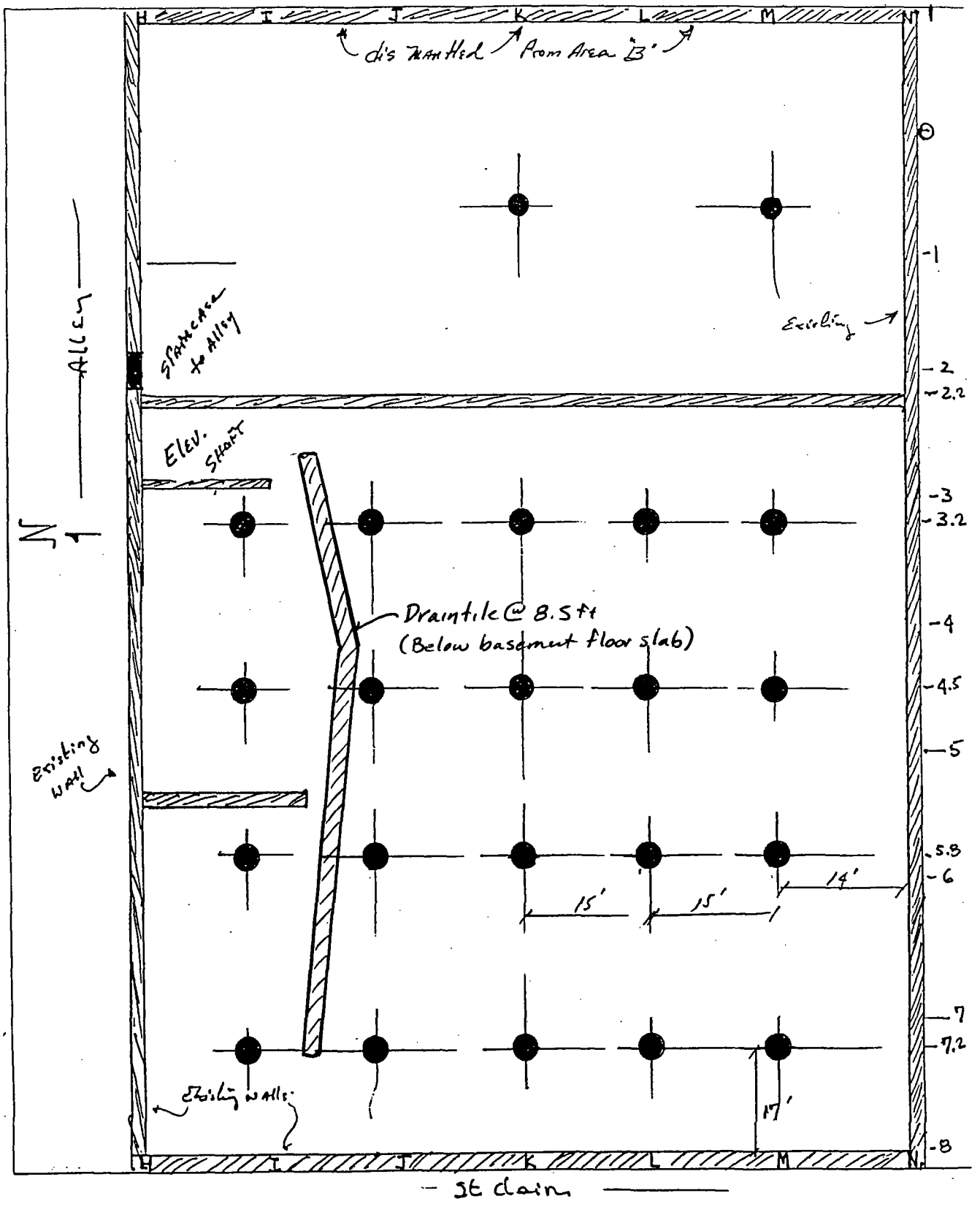


SITE PLAN
GRAND PIER CENTER
CHICAGO, ILLINOIS

STS Consultants Ltd.
Consulting Engineers

STS PROJECT NO.	24418-XK
STS PROJECT FILE	
SCALE	NTS
FIGURE NO.	1

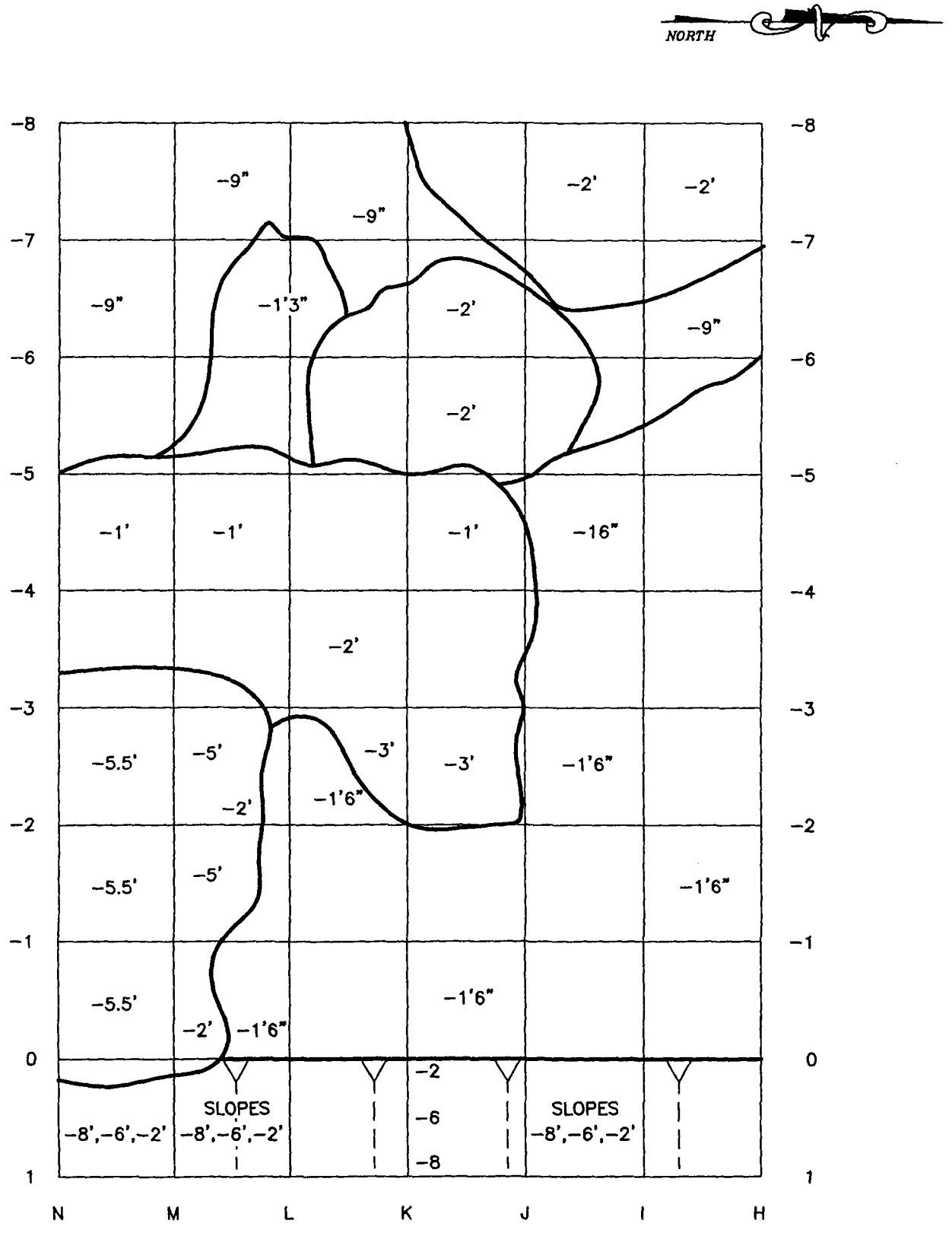
DRAWN BY	KKB	DATE	7-26-00
CHECKED BY		DATE	
APPROVED BY	RGB	DATE	7-26-00
CADFILE			



STS Consultants Ltd.
Consulting Engineers

WALLS AND CAISSONS PRESENT IN AREA A GRAND PIER CENTER CHICAGO, ILLINOIS

DRAWN BY	KKB	7-26-00
CHECKED BY		
APPROVED BY	RGB	7-26-00
CADFILE	SCALE	NTS
STS PROJECT NO. 24418-XK	FIGURE NO.	2



STS Consultants Ltd.
Consulting Engineers

DEPTH OF EXCAVATION
PLAN VIEW AREA A
GRAND PIER CENTER
CHICAGO, ILLINOIS

DRAWN BY	KKB	7-26-(
CHECKED BY		
APPROVED BY	RGB	7-26-(
CADFILE AREA_A_DEPTH.dwg	SCALE NTS	
STS PROJECT NO. 24418-XK	FIGURE NO. 3	

X:\PROJECTS\24418\xk\AREA_A_DEPTH.dwg 07/27/2000 13:49

ATTACHMENT 1

WALKOVER SURVEY DATA SHEETS

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-31-00 TECHNICIAN: Tristan

INST. MODEL: 2221 SERIAL NO.: 132849

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: under asphalt 2 inches (before remediation)

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

	-8	-7	-6	-5	-4
H	8200	7900	3600		
I	21000	20900	9200		
J	8800	7900	8300		
K	3300	2700	12500		
L					

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-1-00 TECHNICIAN: Tristan

INST. MODEL: 2221 SERIAL NO.: 132844

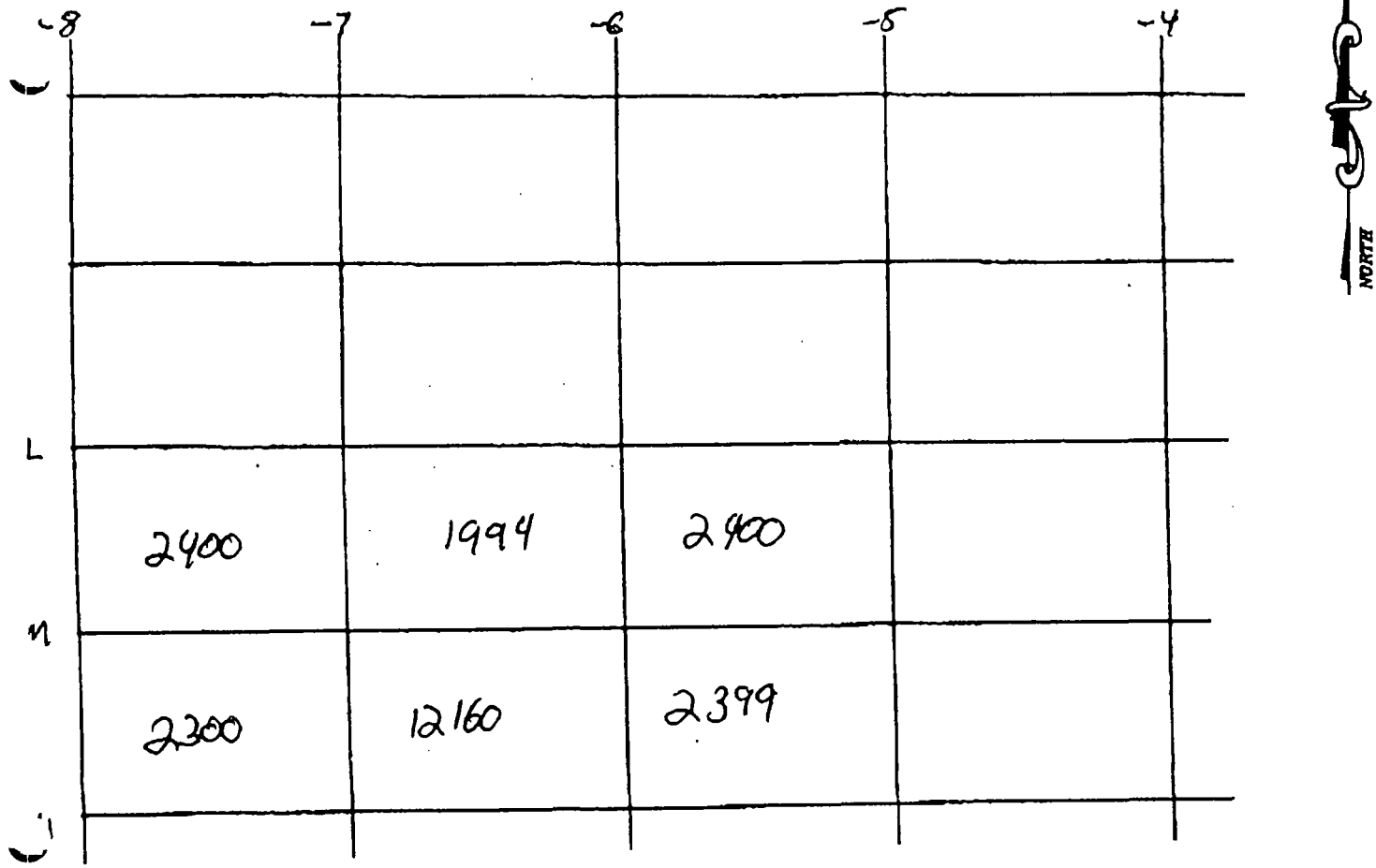
INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: under Asphalt 2 inches (before remediation)

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-1-00 TECHNICIAN: Tyson / Bert

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? _____ LIFT ELEVATION: 2 inches under asphalt

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-4	-3	-2	-1	0	
					H
2600	2900	4000	2800	8600	
					I
3700	3800	14000	3300	7300	
					J
3679	7300	7900	2900	9200	
					K
36000	11436	12000	2033	8700	
					L

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-1-00 TECHNICIAN: Tristan / Brett

INST. MODEL: 2221 Shielded SERIAL NO.: 135442

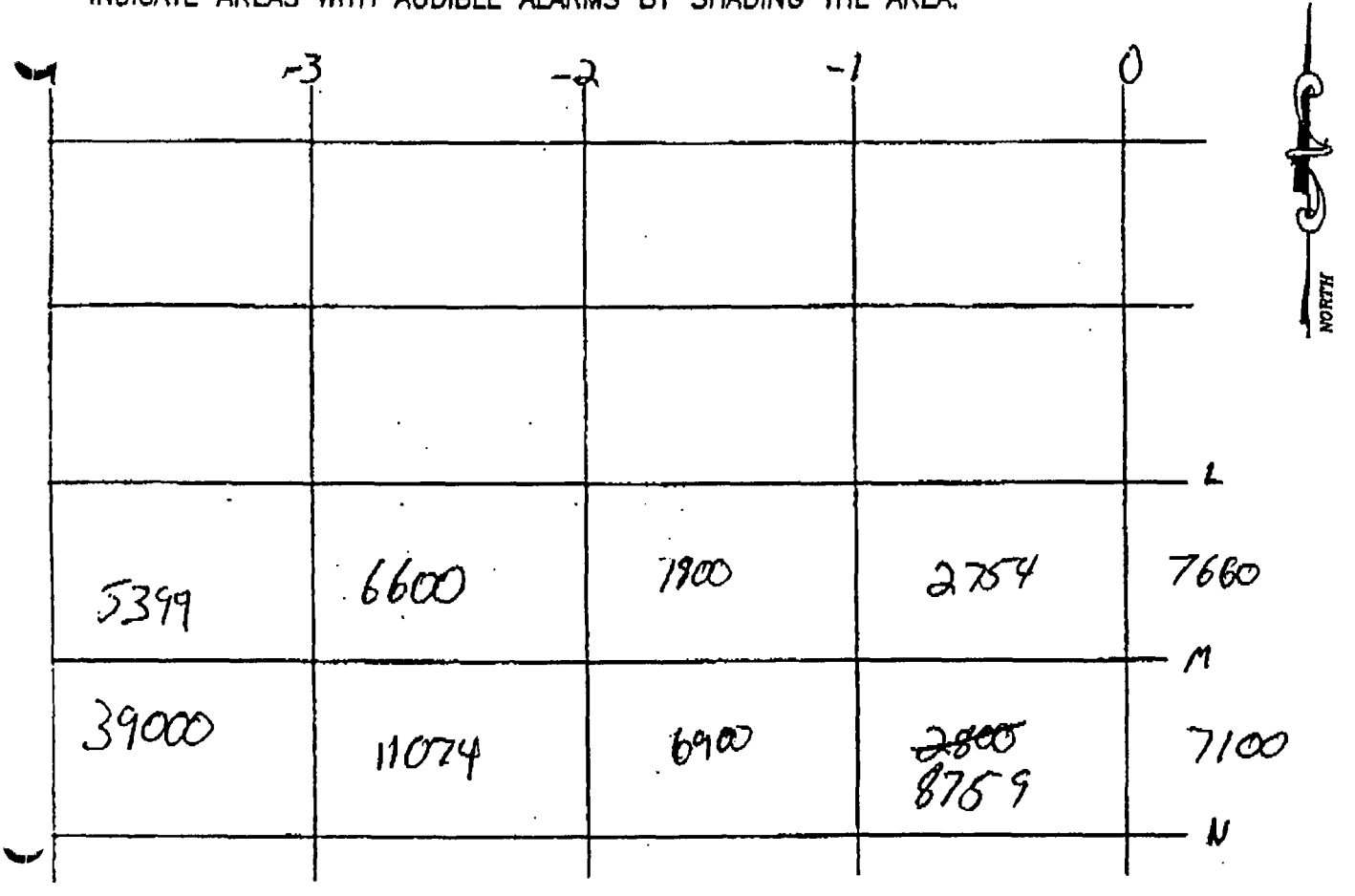
INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 2 inches under Asphalt

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-5 TECHNICIAN: Tribes

INST. MODEL: 2221 SERIAL NO.: 134542

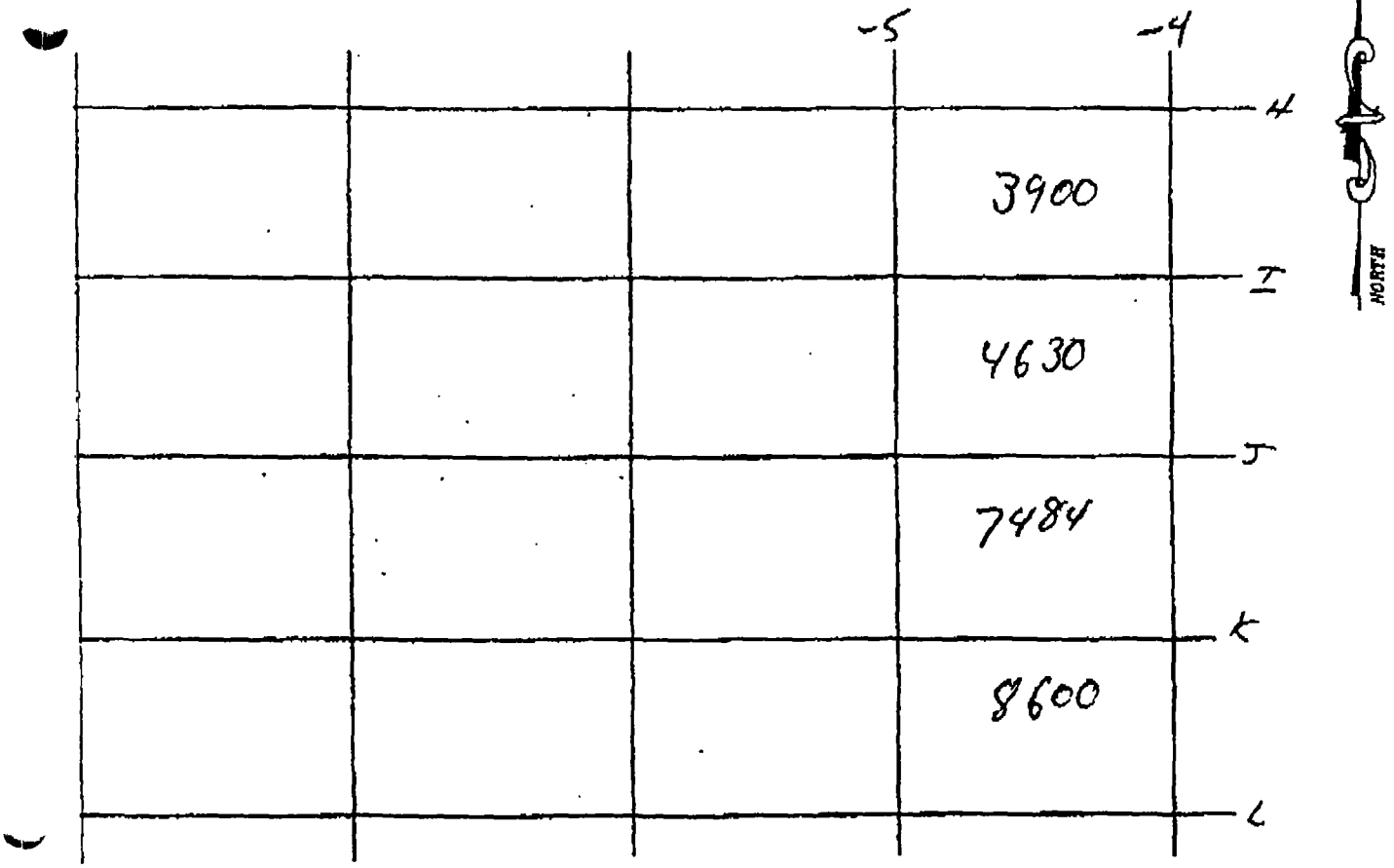
INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 2 inches under asphalt

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-5-00 TECHNICIAN: Tristan

INST. MODEL: 2221 SERIAL NO.: 134542

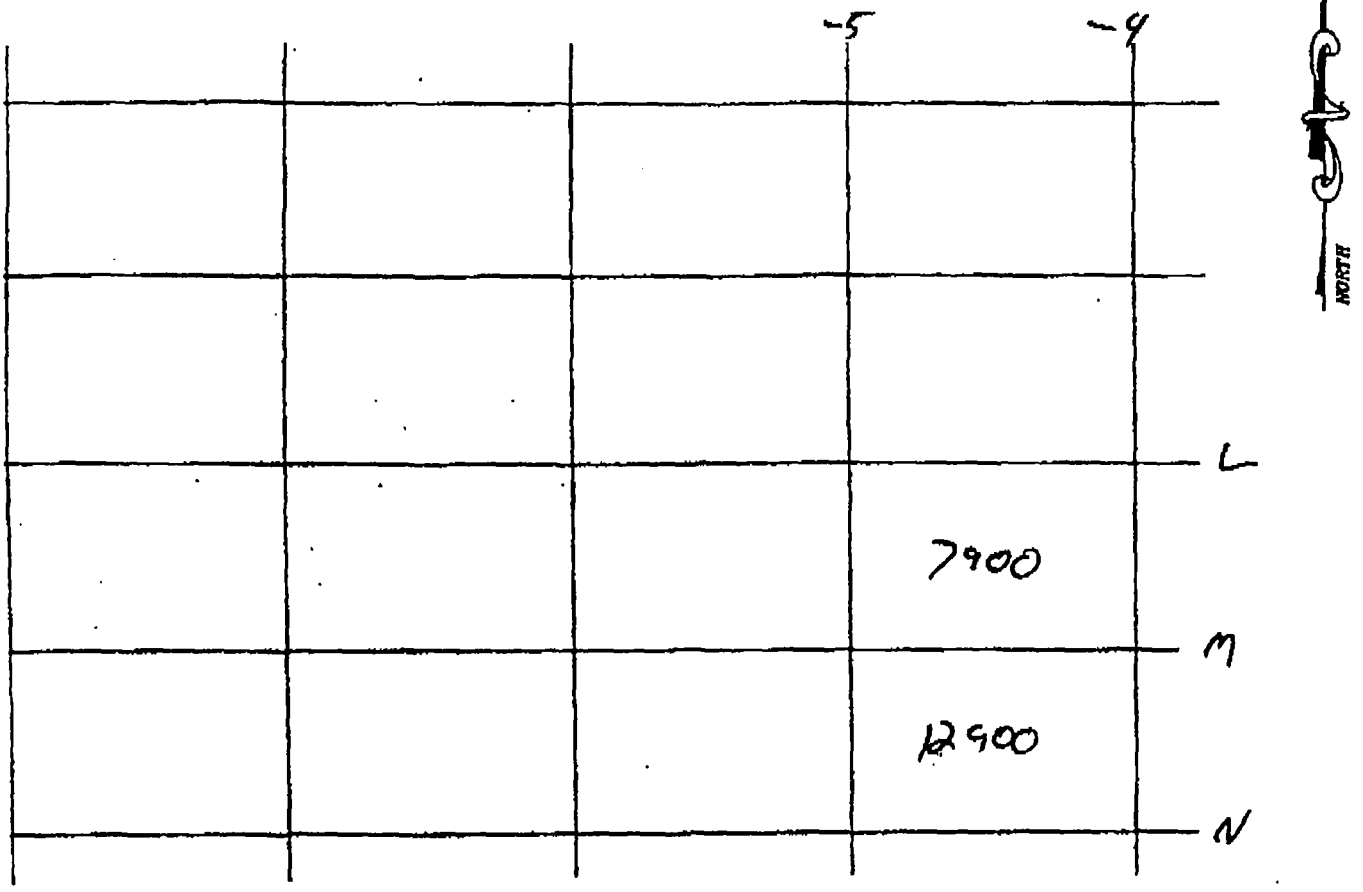
INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 2 inches under asphalt

"Surveyed with unshielded 2 x 2 probe.
Cleanup threshold 21,000 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

ATTACHMENT 2

VERIFICATION SIGN-OFF FORMS, ANALYTICAL DATA

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: E-(-1)

Date of Verification Survey: 6-6-00

Time of Verification Survey 9ish (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6-6-00

[signature] (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 6/6/00

Veneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	1.32	+/-	1.60
TH-232	1.43	+/-	.39
RA-226	1.36	+/-	.66
K-40	40.39	+/-	13.55

S1587
I-(-1) EPA #1
06/06/00 13:21
GRAND PIER-RSSI

U-238	-1.10	+/-	1.64
TH-232	2.40	+/-	.43
RA-226	1.39	+/-	.70
K-40	5.15	+/-	13.36

S1588
I-(-1) EPA #2
06/06/00 13:27
GRAND PIER-RSSI

U-238	-.15	+/-	1.52
TH-232	2.02	+/-	.39
RA-226	.29	+/-	.62
K-40	42.77	+/-	13.20

S1589
I-(-1) EPA #3
06/06/00 13:33
GRAND PIER-RSSI

U-238	3.51	+/-	1.68
TH-232	1.07	+/-	.39
RA-226	1.58	+/-	.67
K-40	25.56	+/-	13.67

S1590
I-(-1) EPA #4
06/06/00 13:39
GRAND PIER-RSSI

U-238	1.73	+/-	1.50
TH-232	2.00	+/-	.37
RA-226	.62	+/-	.60
K-40	23.90	+/-	12.26

S1591
I-(-1) EPA #5
06/06/00 13:45
GRAND PIER-RSSI

U-238	-.53	+/-	1.27
TH-232	1.49	+/-	.33
RA-226	1.27	+/-	.54
K-40	29.50	+/-	11.13

S1592
I-(-1) EPA #6
06/06/00 13:51
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-(2)

Date of Verification Survey: 6/6/00

Time of Verification Survey 10:00 (am)pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: _____ Date 6/6/00

DUMMERSAIS F. GUERRIER (Print Name)

SEE Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/7/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: _____ Date 6/7/00

Veronica Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.13	+/-	1.29
TH-232	1.43	+/-	.33
RA-226	1.90	+/-	.56
K-40	3.32	+/-	10.70

S1593
I-(-2) EPA #1
06/06/00 13:57
GRAND PIER-RSSI

U-238	-1.06	+/-	1.19
TH-232	1.17	+/-	.31
RA-226	2.99	+/-	.52
K-40	10.01	+/-	10.06

S1594
I-(-2) EPA #2
06/06/00 14:02
GRAND PIER-RSSI

U-238	2.18	+/-	1.54
TH-232	.94	+/-	.37
RA-226	1.72	+/-	.64
K-40	17.67	+/-	12.84

S1595
I-(-2) EPA #3
06/06/00 14:08
GRAND PIER-RSSI

U-238	-.85	+/-	1.89
TH-232	1.51	+/-	.48
RA-226	1.63	+/-	.81
K-40	23.78	+/-	16.08

S1596
I-(-2) EPA #4
06/06/00 14:13
GRAND PIER-RSSI

U-238	2.72	+/-	1.50
TH-232	1.83	+/-	.37
RA-226	.43	+/-	.60
K-40	29.85	+/-	12.36

S1597
I-(-2) EPA #5
06/06/00 14:19
GRAND PIER-RSSI

U-238	2.80	+/-	1.24
TH-232	.71	+/-	.30
RA-226	2.35	+/-	.52
K-40	10.30	+/-	10.35

S1598
I-(-2) EPA #6
06/06/00 14:25
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-(9)

Date of Verification Survey: 6/6/00

Time of Verification Survey 10:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/6/00

Dumarsais E. Guenmin (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/7/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 6/7/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.63	+/-	1.27
TH-232	1.84	+/-	.32
RA-226	1.44	+/-	.52
K-40	30.38	+/-	10.45

S1599
I-(-4) EPA #1
06/06/00 14:30
GRAND PIER-RSSI

U-238	2.29	+/-	1.71
TH-232	2.15	+/-	.42
RA-226	1.82	+/-	.70
K-40	14.07	+/-	13.44

S1600
I-(-4) EPA #2
06/06/00 14:36
GRAND PIER-RSSI

U-238	1.37	+/-	2.30
TH-232	2.57	+/-	.57
RA-226	1.51	+/-	.92
K-40	-10.86	+/-	16.60

S1601
I-(-4) EPA #3
06/06/00 14:42
GRAND PIER-RSSI

U-238	1.77	+/-	1.87
TH-232	1.83	+/-	.46
RA-226	2.22	+/-	.77
K-40	18.63	+/-	14.80

S1602
I-(-4) EPA #4
06/06/00 14:47
GRAND PIER-RSSI

U-238	2.78	+/-	1.84
TH-232	1.56	+/-	.45
RA-226	2.00	+/-	.75
K-40	22.53	+/-	14.67

S1603
I-(-4) EPA #5
06/06/00 14:53
GRAND PIER-RSSI

U-238	3.03	+/-	1.55
TH-232	1.74	+/-	.38
RA-226	1.13	+/-	.62
K-40	20.05	+/-	12.51

S1604
I-(-4) EPA #6
06/06/00 14:59
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-(-6)

Date of Verification Survey: 6/6/00

Time of Verification Survey 8:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guerrier Date 6/6/00

Dumarsais J. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 6/6/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.65	+/-	1.68
TH-232	1.78	+/-	.43
RA-226	2.33	+/-	.70
K-40	17.33	+/-	13.57

S1551
I-(-6) EPA #1
06/06/00 09:41
GRAND PIER-RSSI

U-238	.29	+/-	1.60
TH-232	1.51	+/-	.40
RA-226	1.30	+/-	.67
K-40	32.60	+/-	13.75

S1552
I-(-6) EPA #2
06/06/00 09:47
GRAND PIER-RSSI

U-238	.84	+/-	1.16
TH-232	.56	+/-	.28
RA-226	2.19	+/-	.49
K-40	53.21	+/-	10.39

S1553
I-(-6) EPA #3
06/06/00 09:53
GRAND PIER-RSSI

U-238	.50	+/-	1.91
TH-232	3.43	+/-	.49
RA-226	1.06	+/-	.77
K-40	23.23	+/-	14.69

S1554
I-(-6) EPA #4
06/06/00 09:58
GRAND PIER-RSSI

U-238	-.76	+/-	1.55
TH-232	1.65	+/-	.40
RA-226	1.00	+/-	.66
K-40	26.30	+/-	13.14

S1555
I-(-6) EPA #5
06/06/00 10:04
GRAND PIER-RSSI

U-238	.54	+/-	1.59
TH-232	1.54	+/-	.39
RA-226	1.31	+/-	.66
K-40	26.98	+/-	13.14

S1556
I-(-6) EPA #6
06/06/00 10:10
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-(-7.5)

Date of Verification Survey: 6/6/00

Time of Verification Survey 8:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 6-6-00

Duwayne F. Guenther (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Date 6/6/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.75	+/-	1.27
TH-232	.82	+/-	.31
RA-226	2.08	+/-	.55
K-40	26.86	+/-	11.24

S1557
I-(-7.5) EPA #1
06/06/00 10:16
GRAND PIER-RSSI

U-238	.21	+/-	1.21
TH-232	1.24	+/-	.30
RA-226	1.81	+/-	.51
K-40	27.92	+/-	10.30

S1558
I-(-7.5) EPA #2
06/06/00 10:22
GRAND PIER-RSSI

U-238	2.40	+/-	1.35
TH-232	1.15	+/-	.33
RA-226	.55	+/-	.55
K-40	24.63	+/-	11.80

S1559
I-(-7.5) EPA #3
06/06/00 10:29
GRAND PIER-RSSI

U-238	.01	+/-	1.33
TH-232	1.30	+/-	.34
RA-226	.76	+/-	.57
K-40	23.10	+/-	11.78

S1560
I-(-7.5) EPA #4
06/06/00 10:35
GRAND PIER-RSSI

U-238	1.30	+/-	.99
TH-232	1.29	+/-	.24
RA-226	1.44	+/-	.42
K-40	17.09	+/-	8.35

S1561
I-(-7.5) EPA #5
06/06/00 10:41
GRAND PIER-RSSI

U-238	2.04	+/-	1.28
TH-232	1.13	+/-	.31
RA-226	.96	+/-	.53
K-40	10.47	+/-	10.58

S1562
I-(-7.5) EPA #6
06/06/00 10:47
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: K-O

Date of Verification Survey: 6/14/00

Time of Verification Survey 10:15 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 6/14/00

(Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.38	+/-	1.08
TH-232	1.61	+/-	.27
RA-226	1.31	+/-	.45
K-40	32.45	+/-	9.31

S1684
K-0 EPA #1
06/14/00 14:02
GRAND PIER-RSSI

U-238	1.02	+/-	1.61
TH-232	1.48	+/-	.41
RA-226	1.83	+/-	.69
K-40	-2.02	+/-	13.00

S1685
K-0 EPA #2
06/14/00 14:07
GRAND PIER-RSSI

U-238	2.66	+/-	1.90
TH-232	2.69	+/-	.48
RA-226	2.10	+/-	.77
K-40	-9.16	+/-	14.16

S1686
K-0 EPA #3
06/14/00 14:13
GRAND PIER-RSSI

U-238	.79	+/-	1.63
TH-232	1.69	+/-	.41
RA-226	1.32	+/-	.68
K-40	17.46	+/-	13.47

S1687
K-0 EPA #4
06/14/00 14:19
GRAND PIER-RSSI

U-238	2.31	+/-	1.30
TH-232	1.37	+/-	.32
RA-226	1.63	+/-	.54
K-40	20.54	+/-	10.74

S1688
K-0 EPA #5
06/14/00 14:25
GRAND PIER-RSSI

U-238	1.37	+/-	1.50
TH-232	1.67	+/-	.38
RA-226	1.17	+/-	.62
K-40	15.74	+/-	12.38

S1689
K-0 EPA #6
06/14/00 14:30
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: K-(-2)

Date of Verification Survey: 6-14-00

Time of Verification Survey 9:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6-14-00

DUMARSAIS F. GUERRIER (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	2.57	+/-	1.71
TH-232	1.81	+/-	.42
RA-226	1.58	+/-	.69
K-40	8.09	+/-	13.01

S1666
K-(-2) EPA #1
06/14/00 12:13
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.76	+/-	1.93
TH-232	2.15	+/-	.47
RA-226	1.36	+/-	.77
K-40	26.10	+/-	15.11

S1667
K-(-2) EPA #2
06/14/00 12:19
GRAND PIER-RSSI
NUTRANL RESUTS

U-238	.66	+/-	1.71
TH-232	2.04	+/-	.43
RA-226	1.65	+/-	.71
K-40	16.83	+/-	13.67

S1668
K-(-2) EPA #3
06/14/00 12:25
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.05	+/-	1.45
TH-232	1.55	+/-	.35
RA-226	2.77	+/-	.59
K-40	2.08	+/-	11.06

S1669
K-(-2) EPA #4
06/14/00 12:31
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.95	+/-	1.48
TH-232	2.48	+/-	.38
RA-226	.84	+/-	.60
K-40	42.37	+/-	12.50

S1670
K-(-2) EPA #5
06/14/00 12:37
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.89	+/-	2.20
TH-232	2.41	+/-	.55
RA-226	1.68	+/-	.90
K-40	22.75	+/-	17.00

S1671
K-(-2) EPA #6
06/14/00 12:43
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: K-(-4)

Date of Verification Survey: 6-14-00

Time of Verification Survey 9:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/14/00

DUMARSAIS E. GUERRIER (Print Name)

field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.83	+/-	1.55
TH-232	2.79	+/-	.40
RA-226	.89	+/-	.63
K-40	23.56	+/-	12.60

S1654
K-(-4) EPA #1
06/14/00 10:52
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.13	+/-	1.66
TH-232	3.14	+/-	.44
RA-226	2.71	+/-	.70
K-40	11.12	+/-	12.95

S1655
K-(-4) EPA #2
06/14/00 10:59
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.42	+/-	1.29
TH-232	2.12	+/-	.32
RA-226	3.67	+/-	.53
K-40	-4.45	+/-	9.92

S1656
K-(-4) EPA #3
06/14/00 11:05
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.60	+/-	1.77
TH-232	2.62	+/-	.45
RA-226	.73	+/-	.71
K-40	28.68	+/-	14.15

S1657
K-(-4) EPA #4
06/14/00 11:12
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.30	+/-	1.99
TH-232	2.60	+/-	.51
RA-226	1.98	+/-	.82
K-40	25.55	+/-	15.49

S1658
K-(-4) EPA #5
06/14/00 11:20
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.35	+/-	1.51
TH-232	2.93	+/-	.39
RA-226	.99	+/-	.61
K-40	7.64	+/-	11.64

S1659
K-(-4) EPA #6
06/14/00 11:26
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: K-(-6)

Date of Verification Survey: 6/6/00

Time of Verification Survey 8:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/6/00

Dumarais L. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 6/6/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	1.07	+/-	1.58
TH-232	2.23	+/-	.40
RA-226	1.53	+/-	.65
K-40	43.62	+/-	13.21

S1563
K-(-6) EPA #1
06/06/00 10:53
GRAND PIER-RSSI

U-238	3.19	+/-	1.70
TH-232	2.88	+/-	.42
RA-226	1.78	+/-	.67
K-40	2.64	+/-	12.41

S1564
K-(-6) EPA #2
06/06/00 10:59
GRAND PIER-RSSI

U-238	.42	+/-	1.74
TH-232	2.50	+/-	.44
RA-226	1.36	+/-	.71
K-40	13.15	+/-	14.00

S1565
K-(-6) EPA #3
06/06/00 11:09
GRAND PIER-RSSI

U-238	1.50	+/-	1.66
TH-232	2.48	+/-	.41
RA-226	1.75	+/-	.67
K-40	40.32	+/-	13.06

S1566
K-(-6) EPA #4
06/06/00 11:14
GRAND PIER-RSSI

U-238	1.34	+/-	1.58
TH-232	2.07	+/-	.40
RA-226	.97	+/-	.64
K-40	35.05	+/-	13.03

S1567
K-(-6) EPA #5
06/06/00 11:20
GRAND PIER-RSSI

U-238	1.27	+/-	1.68
TH-232	2.99	+/-	.43
RA-226	2.91	+/-	.70
K-40	4.79	+/-	12.84

S1568
K-(-6) EPA #6
06/06/00 11:26
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: K-(-7.5)

Date of Verification Survey: 6/6/00

Time of Verification Survey 9:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guemmer Date 6/6/00

Dumarsais J. Guemmer (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/7/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 6/7/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.79	+/-	1.75
TH-232	2.11	+/-	.44
RA-226	1.87	+/-	.72
K-40	26.33	+/-	14.35

S1569
K-(-7.5) EPA #1
06/06/00 11:33
GRAND PIER-RSSI

U-238	-.21	+/-	1.52
TH-232	1.95	+/-	.38
RA-226	1.64	+/-	.63
K-40	24.47	+/-	12.58

S1570
K-(-7.5) EPA #2
06/06/00 11:39
GRAND PIER-RSSI

U-238	3.98	+/-	2.25
TH-232	2.45	+/-	.55
RA-226	1.15	+/-	.87
K-40	13.09	+/-	16.54

S1571
K-(-7.5) EPA #3
06/06/00 11:45
GRAND PIER-RSSI

U-238	2.36	+/-	1.52
TH-232	1.88	+/-	.37
RA-226	2.04	+/-	.62
K-40	14.95	+/-	11.86

S1572
K-(-7.5) EPA #4
06/06/00 11:51
GRAND PIER-RSSI

U-238	2.92	+/-	1.51
TH-232	1.70	+/-	.37
RA-226	2.06	+/-	.62
K-40	19.12	+/-	12.10

S1573
K-(-7.5) EPA #5
06/06/00 11:57
GRAND PIER-RSSI

U-238	-1.19	+/-	1.47
TH-232	2.41	+/-	.38
RA-226	1.32	+/-	.61
K-40	54.24	+/-	12.71

S1574
K-(-7.5) EPA #6
06/06/00 12:02
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: M-O

Date of Verification Survey: 6/14/00

Time of Verification Survey 10:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature]

Date 6/14/00

Duane F. Swanson (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: Fredrick A. Micke

Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	3.40	+/-	1.83
TH-232	2.34	+/-	.45
RA-226	2.40	+/-	.73
K-40	6.72	+/-	13.46

S1678
M-0 EPA #1
06/14/00 13:25
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.48	+/-	1.53
TH-232	2.55	+/-	.39
RA-226	1.96	+/-	.62
K-40	29.93	+/-	12.04

S1679
M-0 EPA #2
06/14/00 13:31
GRAND PIER-RSSI

U-238	1.36	+/-	1.57
TH-232	2.24	+/-	.39
RA-226	2.30	+/-	.65
K-40	22.49	+/-	12.35

S1680
M-0 EPA #3
06/14/00 13:37
GRAND PIER-RSSI

U-238	1.45	+/-	1.43
TH-232	2.39	+/-	.36
RA-226	2.26	+/-	.59
K-40	10.84	+/-	11.08

S1681
M-0 EPA #4
06/14/00 13:43
GRAND PIER-RSSI

U-238	2.16	+/-	1.78
TH-232	2.39	+/-	.44
RA-226	1.63	+/-	.71
K-40	22.33	+/-	13.84

S1682
M-0 EPA #5
06/14/00 13:50
GRAND PIER-RSSI

U-238	1.56	+/-	1.72
TH-232	3.12	+/-	.44
RA-226	2.54	+/-	.70
K-40	11.98	+/-	12.95

S1683
M-0 EPA #6
06/14/00 13:56
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: M-(-2)

Date of Verification Survey: 6-14-00

Time of Verification Survey 10:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/14/00

Dumarsais F. Guernier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.96	+/-	1.71
TH-232	1.79	+/-	.43
RA-226	1.07	+/-	.71
K-40	22.10	+/-	14.60

S1672
M-(-2) EPA #1
06/14/00 12:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.69	+/-	2.36
TH-232	4.99	+/-	.59
RA-226	3.36	+/-	.91
K-40	37.51	+/-	16.75

S1673
M-(-2) EPA #2
06/14/00 12:54
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.01	+/-	1.12
TH-232	1.30	+/-	.28
RA-226	1.78	+/-	.48
K-40	37.64	+/-	9.78

S1674
M-(-2) EPA #3
06/14/00 13:02
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.15	+/-	1.58
TH-232	1.56	+/-	.38
RA-226	2.13	+/-	.64
K-40	21.53	+/-	12.65

S1675
M-(-2) EPA #4
06/14/00 13:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.20	+/-	1.96
TH-232	1.81	+/-	.50
RA-226	1.36	+/-	.82
K-40	58.67	+/-	16.84

S1676
M-(-2) EPA #5
06/14/00 13:13
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.32	+/-	1.44
TH-232	1.43	+/-	.38
RA-226	1.75	+/-	.63
K-40	26.62	+/-	12.81

S1677
M-(-2) EPA #6
06/14/00 13:19
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: M-(-4)

Date of Verification Survey: 6-14-00

Time of Verification Survey 9:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/14/00

Dumarsais F. Gunning (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.77	+/-	1.72
TH-232	1.86	+/-	.44
RA-226	1.47	+/-	.72
K-40	19.15	+/-	14.38

S1660
M-(-4) EPA #1
06/14/00 11:32
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.06	+/-	1.97
TH-232	1.86	+/-	.49
RA-226	2.52	+/-	.81
K-40	-.28	+/-	15.45

S1661
M-(-4) EPA #2
06/14/00 11:42
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.31	+/-	1.06
TH-232	.97	+/-	.26
RA-226	2.84	+/-	.45
K-40	32.68	+/-	8.90

S1662
M-(-4) EPA #3
06/14/00 11:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.15	+/-	2.08
TH-232	2.16	+/-	.53
RA-226	1.91	+/-	.87
K-40	30.84	+/-	16.84

S1663
M-(-4) EPA #4
06/14/00 11:55
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.85	+/-	1.90
TH-232	2.52	+/-	.47
RA-226	1.11	+/-	.75
K-40	19.84	+/-	14.52

S1664
M-(-4) EPA #5
06/14/00 12:01
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.22	+/-	1.66
TH-232	1.41	+/-	.40
RA-226	1.94	+/-	.68
K-40	19.40	+/-	13.64

S1665
M-(-4) EPA #6
06/14/00 12:08
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: M-(-6)

Date of Verification Survey: 6/6/00

Time of Verification Survey 9:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/6/00

DUMARSAIS F. GUERRIER (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/7/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 6/7/00

VERNETA SIMON (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.08	+/-	1.71
TH-232	1.42	+/-	.42
RA-226	1.73	+/-	.70
K-40	17.24	+/-	13.87

S1581
M - (-6) EPA #1
06/06/00 12:45
GRAND PIER-RSSI

U-238	1.61	+/-	1.07
TH-232	1.88	+/-	.27
RA-226	.49	+/-	.43
K-40	34.21	+/-	9.18

S1582
M-(-6) EPA #2
06/06/00 12:52
GRAND PIER-RSSI

U-238	1.83	+/-	1.90
TH-232	1.36	+/-	.46
RA-226	2.46	+/-	.78
K-40	26.04	+/-	15.21

S1583
M-(-6) EPA #3
06/06/00 12:58
GRAND PIER-RSSI

U-238	1.12	+/-	1.89
TH-232	2.61	+/-	.47
RA-226	.80	+/-	.75
K-40	36.36	+/-	15.41

S1584
M-(-6) EPA #4
06/06/00 13:03
GRAND PIER-RSSI

U-238	.21	+/-	1.25
TH-232	2.00	+/-	.32
RA-226	1.41	+/-	.52
K-40	21.15	+/-	10.52

S1585
M-(-6) EPA #5
06/06/00 13:09
GRAND PIER-RSSI

U-238	-.11	+/-	1.36
TH-232	1.90	+/-	.35
RA-226	1.01	+/-	.57
K-40	27.18	+/-	11.66

S1586
M-(-6) EPA #6
06/06/00 13:15
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: M-(-7.5)

Date of Verification Survey: 6/6/00

Time of Verification Survey 9:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6/6/00

Dumarsais F. Guenrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/7/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 6/7/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	1.04	+/-	1.44
TH-232	.35	+/-	.34
RA-226	1.98	+/-	.61
K-40	26.30	+/-	12.34

S1575
M - (-7.5) EPA #1
06/06/00 12:08
GRAND PIER-RSSI

U-238	1.55	+/-	1.31
TH-232	.50	+/-	.31
RA-226	1.61	+/-	.55
K-40	13.15	+/-	11.06

S1576
M - (-7.5) EPA #2
06/06/00 12:14
GRAND PIER-RSSI

U-238	1.22	+/-	1.52
TH-232	.79	+/-	.37
RA-226	.71	+/-	.63
K-40	43.08	+/-	13.51

S1577
M - (-7.5) EPA #3
06/06/00 12:20
GRAND PIER-RSSI

U-238	2.18	+/-	1.31
TH-232	.64	+/-	.31
RA-226	1.42	+/-	.54
K-40	9.56	+/-	11.13

S1578
M - (-7.5) EPA #4
06/06/00 12:27
GRAND PIER-RSSI

U-238	1.18	+/-	1.53
TH-232	.55	+/-	.37
RA-226	2.83	+/-	.65
k-40	24.23	+/-	12.79

S1579
M - (-7.5) EPA #5
06/06/00 12:33
GRAND PIER-RSSI

U-238	2.13	+/-	1.96
TH-232	.62	+/-	.47
RA-226	1.48	+/-	.84
K-40	18.37	+/-	17.38

S1580
M - (-7.5) EPA #6
06/06/00 12:38
GRAND PIER-RSSI

ATTACHMENT 3

EXCAVATION LIFT SURVEY SHEETS

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 07/03/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 134512

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 2nd Lift (-4')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-4	-3	-2	-1	0	
					H
2760	3211	3540	3000		
					I
2640	2521	3010	3505		
					J
3300	3331	5200	4900		
					K
3216	2800	3499	4200		
					L

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 06/27/00 - 07/03/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 13452

INST. CALIBRATED (Y/N)? 03/31/00 LIFT ELEVATION: 2nd lift (-4')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-8	-7	-6	-5	-4	
					H
2881	1900	3311	1999		
					I
3102	2091	2770	4460		
					J
3422	3120	2666	3100		
					K
3407	3010	2860	2755		
					L

NORTH

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

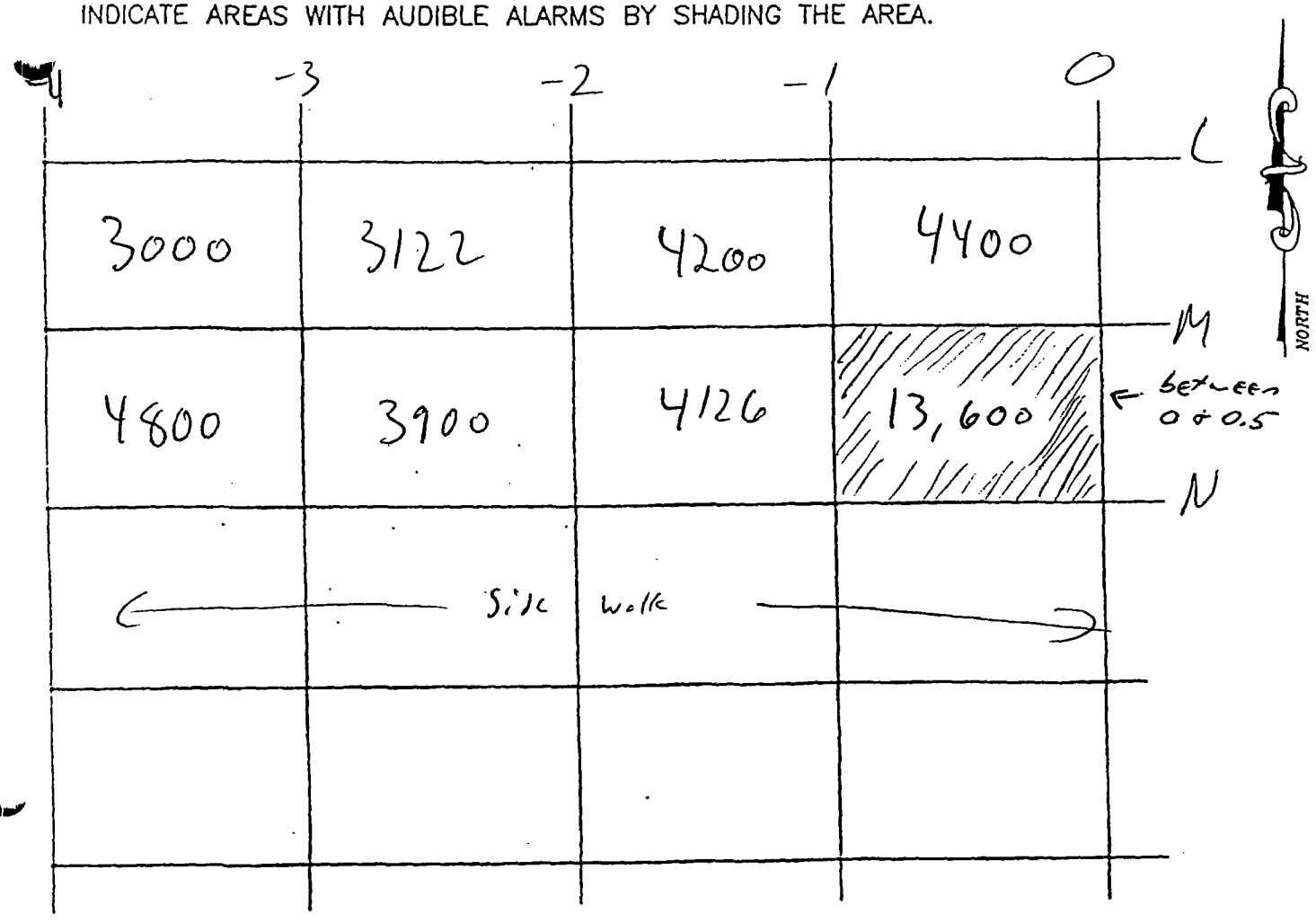
DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Sheman

INST. MODEL: 2221 SERIAL NO.: 134512

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 2nd lift (-4')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 06/27/00 - 07/03/00 TECHNICIAN: Toby Shevan

INST. MODEL: 2221 SERIAL NO.: 138542

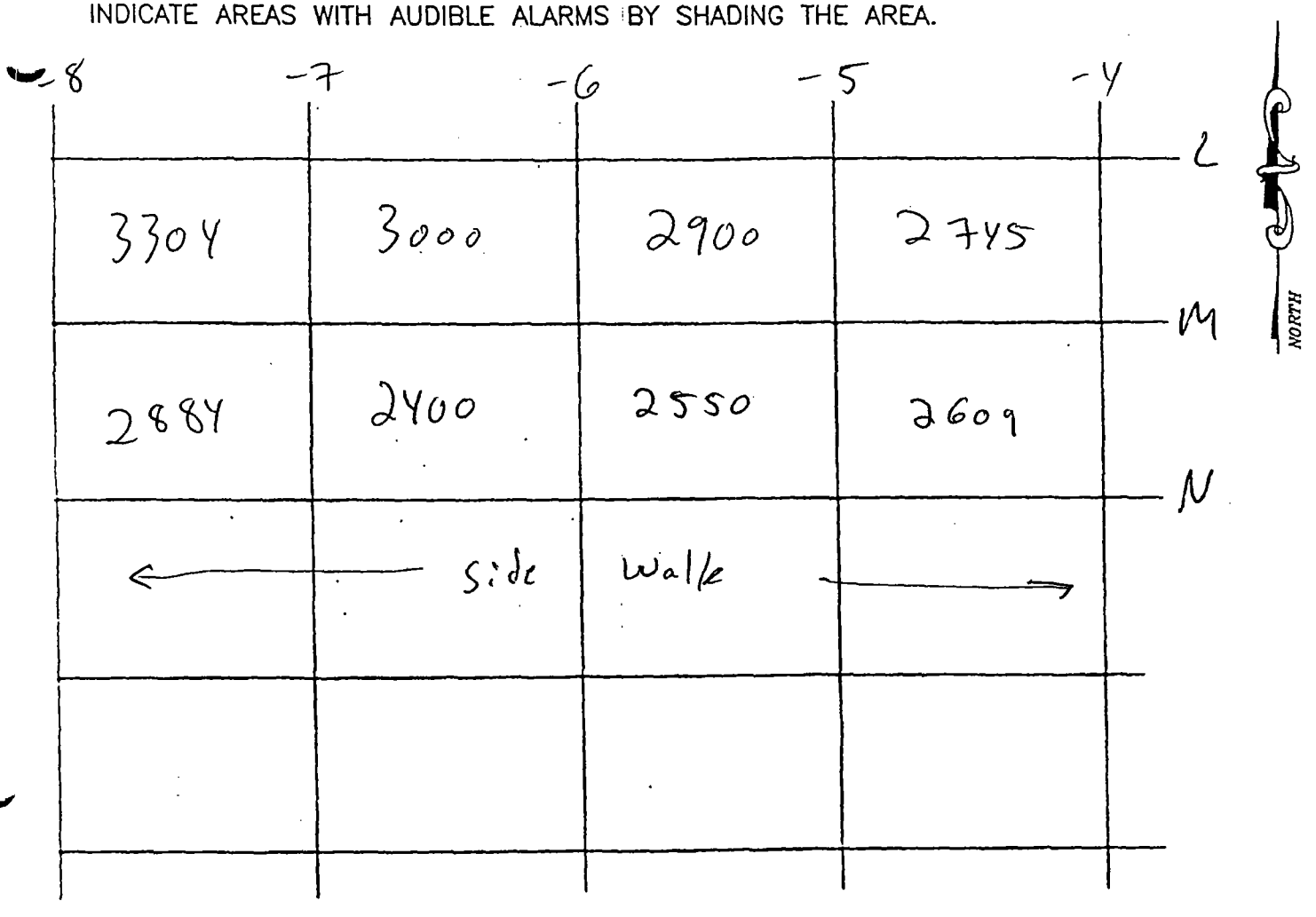
INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 2nd lift (4')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 3rd lift (-6')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-4	-3	-2	-1	0	
3241	3366	3820	4460		H
2960	3533	2999	4100		I
4400	3111	4000	4011		J
2600	3212	4320	3900		K
					L

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Shoman

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 3rd lift (-6')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-8	-7	-6	-5	-4	
3190	3009	2961	2550		H
2911	2600	1900	2916		I
2550	2591	2101	3100		J
3200	3164	2740	2900		K
					L

NORTH

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Sherman

INST. MODEL: 2221 SERIAL NO.: 134542

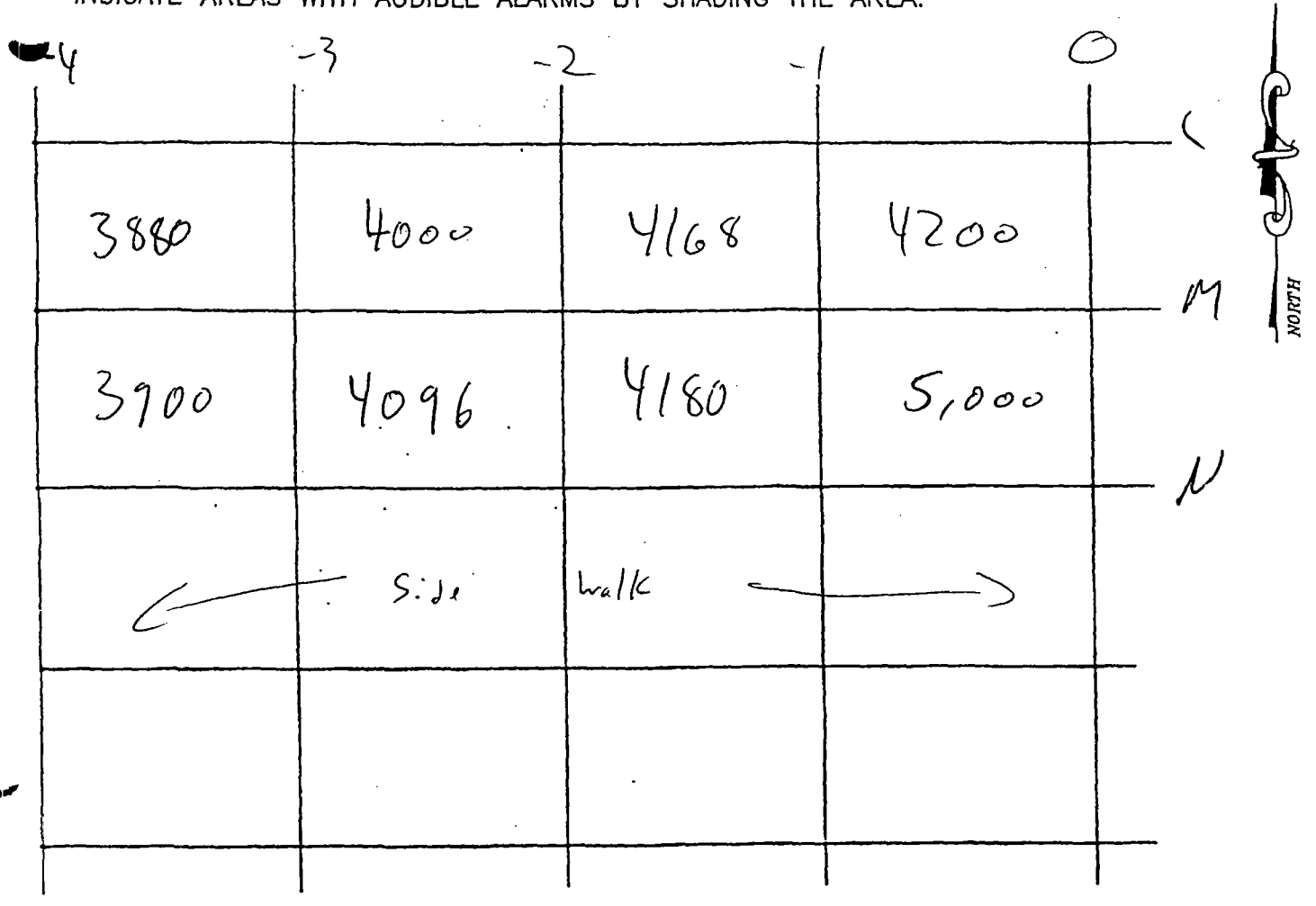
INST. CALIBRATED (Y/N)? 3/3/00 LIFT ELEVATION: 3rd Lift (G')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 06/27/00 - 07/03/00 TECHNICIAN: Toby Stewart

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 3rd Lift (61)

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-8	-7	-6	-5	-4	
3120	3010	2960	2844		L
3100	3662	3310	2800		M
					N

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

3 of 4

DATE: 6/27/00-7/3/00 TECHNICIAN: Toby Shomo

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 4th Lift (8')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-3	-2	-1	0	
3610	2431	2941	3313	H
3760	3006	3752	3569	I
4216	4020	3220	3609	J
4012	4270	3000	3210	K
				L

NORTH

X:\PROJECTS\24418\xk\

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 4th lift (-8')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-4	-3	-2	-1	0	
3770	3999	4190	4000		L
3700	3200	3150	3500		M
					N

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Sheean

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/31/00 LIFT ELEVATION: 4th lift (-8')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-8	-7	-6	-5	-4	
					H
2793	2400	2632	2445		
					J
2320	1776	1920	1888		
					J
5200	4972	5275	4200		
					K
3561	4531	4300	3500		
					L

NORTH

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00 - 7/3/00 TECHNICIAN: Toby Sherman

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 4th (8')

"Surveyed with shielded 2 x 2 probe.
Cleanup threshold 7,100 cpm."

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

-8	-7	-6	-5	-4	
3020	4200	2890	3100		L
4600	4500	4800	4300		M
←	Side	Walk	→		N

ATTACHMENT 4

EXCAVATION SAMPLES ANALYTICAL DATA

S1758.txt

U-238	2.01	+/-	1.73
TH-232	1.28	+/-	.43
RA-226	1.25	+/-	.72
K-40	-5.61	+/-	14.50

S1758
OVER BURDEN #1
06/26/00 13:08
GRAND PIER-RSSI

S1759.txt

U-238	3.09	+/-	1.72
TH-232	.42	+/-	.40
RA-226	.67	+/-	.70
K-40	8.67	+/-	14.41

S1759
OVER BURDEN #2
06/26/00 13:14
GRAND PIER-RSSI

S1760.txt

U-238	.16	+/-	1.43
TH-232	.54	+/-	.36
RA-226	1.80	+/-	.63
K-40	-2.15	+/-	12.88

S1760
OVER BURDEN #3
06/26/00 13:20
GRAND PIER-RSSI

S1761.txt

U-238	2.21	+/-	1.52
TH-232	.66	+/-	.37
RA-226	1.85	+/-	.64
K-40	-5.20	+/-	12.38

S1761
OVER BURDEN #4
06/26/00 13:26
GRAND PIER-RSSI

S1762.txt

U-238	1.91	+/-	1.09
TH-232	.42	+/-	.26
RA-226	1.05	+/-	.46
K-40	14.19	+/-	9.47

S1762
I-(-3.5)
06/26/00 15:14
GRAND PIER-RSSI

S1757.txt

U-238	-.38	+/-	1.28
TH-232	-.14	+/-	.31
RA-226	1.79	+/-	.57
K-40	28.01	+/-	12.03

S1757
I / -6.5 2ND LIFT
06/26/00 11:14
GRAND PIER-RSSI

S1763.txt

U-238	.15	+/-	1.71
TH-232	.80	+/-	.43
RA-226	.85	+/-	.75
K-40	1.44	+/-	15.49

S1763
I-(-5)
06/26/00 15:20
GRAND PIER-RSSI

S1756.txt

U-238	2.06	+/-	1.94
TH-232	.28	+/-	.47
RA-226	.47	+/-	.81
K-40	14.14	+/-	17.10

S1756
I / -7.5 2ND LIFT
06/26/00 11:09
GRAND PIER-RSSI

S1801.txt

U-238	-.26	+/-	1.63
TH-232	1.01	+/-	.41
RA-226	1.59	+/-	.70
K-40	12.89	+/-	13.81

S1801
J.5 - (-0.5) 2ND LIFT
06/28/00 14:57
GRAND PIER-RSSI
NUTRANL RESULTS

S1790.txt

U-238	3.60	+/-	1.68
TH-232	1.34	+/-	.40
RA-226	2.18	+/-	.68
K-40	.88	+/-	13.20

S1790
J.5 - (-3.5) 2ND LIFT
06/28/00 10:25
GRAND PIER-RSSI
NUTRANL RESULTS

S1802.txt

U-238	1.41	+/-	2.25
TH-232	.88	+/-	.55
RA-226	1.41	+/-	.95
K-40	16.24	+/-	18.96

S1802
J.5 - (-1.5) 2ND LIFT
06/28/00 15:03
GRAND PIER-RSSI
NUTRANL RESULTS

S1793.txt

U-238	.86	+/-	1.07
TH-232	1.50	+/-	.27
RA-226	1.08	+/-	.45
K-40	10.68	+/-	9.01

S1793
J.5 - (-3.5) 2ND LIFT
06/28/00 13:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.28	+/-	1.65
TH-232	.74	+/-	.41
RA-226	1.63	+/-	.72
K-40	2.37	+/-	14.25

S1791
J.5 - (-4) 2ND LIFT
06/28/00 10:31
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.34	+/-	1.92
TH-232	1.60	+/-	.48
RA-226	1.31	+/-	.79
K-40	-.49	+/-	15.20

S1795
J.5 - (-4.5) 2ND LIFT
06/28/00 13:21
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.30	+/-	1.67
TH-232	.98	+/-	.41
RA-226	2.02	+/-	.70
K-40	21.81	+/-	14.10

S1794
J.5 - (-4) 2ND LIFT
06/28/00 13:14
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.01	+/-	1.62
TH-232	.05	+/-	.38
RA-226	1.51	+/-	.69
K-40	2.82	+/-	13.70

S1792
J.5 - (-4.5) 2ND LIFT
06/28/00 10:37
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.66	+/-	1.73
TH-232	.29	+/-	.43
RA-226	1.62	+/-	.75
K-40	10.23	+/-	15.36

S1778
J.5 - (-6.5) 2ND LIFT
06/28/00 09:10
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.50	+/-	1.69
TH-232	.27	+/-	.42
RA-226	1.52	+/-	.76
K-40	-6.71	+/-	14.69

S1779
J.5 - (-7) 2ND LIFT
06/28/00 09:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.11	+/-	1.78
TH-232	.99	+/-	.44
RA-226	.67	+/-	.74
K-40	-5.71	+/-	14.80

S1780
J.5 - (-7.5) 2ND LIFT
06/28/00 09:23
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.45	+/-	1.34
TH-232	.87	+/-	.33
RA-226	1.62	+/-	.57
K-40	12.27	+/-	11.55

S1818
K.5 - (- 0.5) 2ND LIFT
06/30/00 09:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.94	+/-	1.57
TH-232	.42	+/-	.38
RA-226	1.43	+/-	.68
K-40	16.91	+/-	13.79

S1812
K - (-4) 2ND LIFT
06/29/00 14:01
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.13	+/-	1.85
TH-232	1.03	+/-	.46
RA-226	.13	+/-	.78
K-40	.77	+/-	16.06

S1804
K.5 - (-7) 2ND LIFT
06/29/00 12:59
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.58	+/-	1.60
TH-232	.61	+/-	.40
RA-226	1.45	+/-	.70
K-40	13.20	+/-	14.12

S1805
K.5 - (-5.5) 2ND LIFT
06/29/00 13:05
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.71	+/-	1.28
TH-232	.38	+/-	.33
RA-226	1.46	+/-	.58
K-40	22.18	+/-	12.01

S1815
L.5 - (-2.5) 2ND LIFT
06/29/00 16:05
GRAND PIER-RSSI
NUTRANL RESULTS

S1834.txt

U-238	.86	+/-	1.64
TH-232	1.82	+/-	.41
RA-226	.45	+/-	.66
K-40	28.84	+/-	13.58

S1834
M - (-1) 2ND LIFT
07/03/00 12:03
GRAND PIER-RSSI
NUTRANL RESULTS

S1822.txt

U-238	.83	+/-	1.77
TH-232	.85	+/-	.43
RA-226	-.21	+/-	.73
K-40	12.21	+/-	15.45

S1822
M - (- 6) 2ND LIFT
06/30/00 14:48
GRAND PIER-RSSI
NUTRANL RESULTS

S1823.txt

U-238	1.77	+/-	.83
TH-232	.46	+/-	.20
RA-226	.98	+/-	.35
K-40	17.94	+/-	7.33

S1823
M.5 - (- 4.5) 2ND LIFT
06/30/00 14:54
GRAND PIER-RSSI
NUTRANL RESULTS

S1824.txt

U-238	.05	+/-	1.42
TH-232	.12	+/-	.35
RA-226	1.73	+/-	.64
K-40	2.61	+/-	12.52

S1824
M.5 - (- 7.5) 2ND LIFT
06/30/00 15:00
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.86	+/-	1.00
TH-232	.82	+/-	.24
RA-226	.04	+/-	.42
K-40	5.98	+/-	8.95

S1774
H.5 - (-0.5) 3RD LIFT
06/27/00 16:16
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.38	+/-	1.67
TH-232	.62	+/-	.43
RA-226	1.21	+/-	.77
K-40	4.48	+/-	15.63

S1764
I - (-2) 3RD LIFT
06/27/00 11:33
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.95	+/-	1.31
TH-232	.48	+/-	.31
RA-226	.87	+/-	.55
K-40	37.31	+/-	11.75

S1775
H.5 - (-1.5) 3RD LIFT
06/28/00 08:51
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.49	+/-	1.71
TH-232	.77	+/-	.43
RA-226	1.11	+/-	.75
K-40	12.42	+/-	15.33

S1765
I - (-3) 3RD LIFT
06/27/00 11:39
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.99	+/-	1.76
TH-232	-.14	+/-	.41
RA-226	2.43	+/-	.76
K-40	5.91	+/-	14.96

S1772
I.5 - (-0.5) 3RD LIFT
06/27/00 16:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.41	+/-	1.46
TH-232	.52	+/-	.36
RA-226	1.25	+/-	.63
K-40	20.33	+/-	12.98

S1773
I.5 - (-1.5) 3RD LIFT
06/27/00 16:10
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.32	+/-	1.42
TH-232	.73	+/-	.35
RA-226	1.95	+/-	.61
K-40	9.07	+/-	12.17

S1807
I.5 - (-0.5) 3RD LIFT
06/29/00 13:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.34	+/-	1.66
TH-232	.82	+/-	.39
RA-226	.05	+/-	.66
K-40	27.38	+/-	14.11

S1808
J.5 - (-0.5) 3RD LIFT
06/29/00 13:23
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.99	+/-	1.46
TH-232	.11	+/-	.35
RA-226	1.58	+/-	.62
K-40	4.06	+/-	12.71

S1809
J.5 - (-1.5) 3RD LIFT
06/29/00 13:29
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.27	+/-	1.43
TH-232	1.72	+/-	.36
RA-226	.90	+/-	.59
K-40	-7.14	+/-	11.36

S1796
J.5 - (-3.5) 3RD LIFT
06/28/00 13:28
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.58	+/-	1.61
TH-232	.70	+/-	.38
RA-226	.91	+/-	.66
K-40	12.79	+/-	13.41

S1789
J.5 - (-3.5) 3RD LIFT
06/28/00 10:19
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.85	1.39
TH-232	.60	.34
RA-226	1.48	.60
K-40	17.58	11.99

S1797
J.5 - (-4) 3RD LIFT
06/28/00 13:33
GRAND PIER-RSSI
NUTRANL RESULTS

S1788.txt

U-238	-.85	+/-	1.40
TH-232	.38	+/-	.35
RA-226	1.45	+/-	.62
K-40	24.48	+/-	12.88

S1788
J.5 - (-4) 3RD LIFT
06/28/00 10:13
GRAND PIER-RSSI
NUTRANL RESULTS

S1819.txt

U-238	.60	+/-	1.73
TH-232	.01	+/-	.41
RA-226	2.68	+/-	.76
K-40	13.90	+/-	14.98

S1819
K.5 - (- 0.5) 3RD LIFT
06/30/00 09:27
GRAND PIER-RSSI
NUTRANL RESULTS

S1787.txt

U-238	.54	+/-	1.32
TH-232	-.11	+/-	.32
RA-226	1.52	+/-	.59
K-40	23.34	+/-	12.41

S1787
J.5 - (-4.5) 3RD LIFT
06/28/00 10:07
GRAND PIER-RSSI
NUTRANL RESULTS

S1816.txt

U-238	.37	+/-	1.36
TH-232	.71	+/-	.34
RA-226	.95	+/-	.58
K-40	4.10	+/-	12.09

S1816
K.5 - (-3.5) 3RD LIFT
06/29/00 16:11
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.07	+/-	1.42
TH-232	.52	+/-	.35
RA-226	1.77	+/-	.62
K-40	.10	+/-	12.29

S1813
K.5 - (-5.5) 3RD LIFT
06/29/00 14:07
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	8.58	+/-	3.44
TH-232	15.98	+/-	.88
RA-226	4.63	+/-	1.23
K-40	27.51	+/-	19.41

S1832
M - (0.5) 4.5 FEET
07/03/00 11:51
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.46	+/-	1.22
TH-232	.14	+/-	.30
RA-226	1.31	+/-	.54
K-40	23.34	+/-	11.33

S1806
K.5 - (-7) 3RD LIFT
06/29/00 13:11
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	12.76	+/-	2.49
TH-232	16.32	+/-	.62
RA-226	7.62	+/-	.89
K-40	18.01	+/-	13.51

S1833
M - (0.5) 5 FEET
07/03/00 11:57
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.30	+/-	1.16
TH-232	.69	+/-	.29
RA-226	3.26	+/-	.51
K-40	13.04	+/-	9.98

S1835
M - (-3) 3RD LIFT
07/03/00 12:09
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.23	+/-	1.42
TH-232	.32	+/-	.34
RA-226	.74	+/-	.58
K-40	24.77	+/-	12.40

S1825
M.5 - (- 4.5) 3RD LIFT
06/30/00 15:06
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.21	+/-	1.12
TH-232	2.52	+/-	.29
RA-226	1.66	+/-	.46
K-40	21.13	+/-	9.08

S1836
M.5 - (-1.5) 3RD LIFT
07/03/00 12:15
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.35	+/-	1.35
TH-232	.44	+/-	.34
RA-226	1.26	+/-	.59
K-40	16.29	+/-	12.19

S1827
M.5 - (- 6) 3RD LIFT
06/30/00 15:18
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.56	+/-	1.46
TH-232	.28	+/-	.36
RA-226	1.68	+/-	.63
K-40	13.88	+/-	12.92

S1826
M - (- 7.5) 3RD LIFT
06/30/00 15:11
GRAND PIER-RSSI
NUTRANL RESULTS

S1781.txt

U-238	1.23	+/-	1.30
TH-232	.28	+/-	.32
RA-226	.79	+/-	.55
K-40	10.64	+/-	11.74

S1781
H.5 - (-0.5) FLOOR
06/28/00 09:30
GRAND PIER-RSSI
NUTRANL RESULTS

S1766.txt

U-238	2.21	+/-	1.66
TH-232	.60	+/-	.40
RA-226	1.12	+/-	.69
K-40	11.76	+/-	13.76

S1766
H.5 - (-3) FLOOR
06/27/00 11:45
GRAND PIER-RSSI
NUTRANL RESULTS

S1776.txt

U-238	-.85	+/-	1.83
TH-232	-.16	+/-	.46
RA-226	1.30	+/-	.82
K-40	22.48	+/-	17.33

S1776
H.5 - (-1.5) FLOOR
06/28/00 08:57
GRAND PIER-RSSI
NUTRANL RESULTS

S1767.txt

U-238	1.51	+/-	1.61
TH-232	.52	+/-	.38
RA-226	.95	+/-	.68
K-40	8.75	+/-	13.82

S1767
H.5 - (-5) FLOOR
06/27/00 11:51
GRAND PIER-RSSI
NUTRANL RESULTS

S1771.txt

U-238	.77	+/-	1.51
TH-232	.81	+/-	.38
RA-226	.70	+/-	.64
K-40	2.27	+/-	12.94

S1771
I.5 - (-0.5) FLOOR
06/27/00 15:57
GRAND PIER-RSSI
NUTRANL RESULTS

S1769.txt

U-238	-1.23	+/-	1.31
TH-232	.63	+/-	.33
RA-226	1.16	+/-	.57
K-40	28.11	+/-	11.92

S1769
I.5 - (-2.5) FLOOR #1
06/27/00 13:12
GRAND PIER-RSSI
NUTRANL RESULTS

S1782.txt

U-238	1.12	+/-	1.56
TH-232	.36	+/-	.38
RA-226	.60	+/-	.65
K-40	22.58	+/-	13.90

S1782
I.5 - (-1.5) FLOOR
06/28/00 09:36
GRAND PIER-RSSI
NUTRANL RESULTS

S1770.txt

U-238	-.32	+/-	1.41
TH-232	.47	+/-	.36
RA-226	1.16	+/-	.63
K-40	7.91	+/-	12.99

S1770
I.5 - (-2.5) FLOOR #2
06/27/00 13:17
GRAND PIER-RSSI
NUTRANL RESULTS

S1810.txt

U-238	1.20	+/-	1.69
TH-232	.75	+/-	.41
RA-226	.81	+/-	.71
K-40	25.13	+/-	14.65

S1810
J.5 - (-0.5) FLOOR
06/29/00 13:34
GRAND PIER-RSSI
NUTRANL RESULTS

S1768.txt

U-238	1.94	+/-	1.44
TH-232	.79	+/-	.35
RA-226	1.22	+/-	.60
K-40	15.46	+/-	12.62

S1768
J.5 - (-2.5) FLOOR
06/27/00 13:06
GRAND PIER-RSSI
NUTRANL RESULTS

S1803.txt

U-238	3.67	+/-	1.32
TH-232	.76	+/-	.31
RA-226	2.09	+/-	.54
K-40	12.43	+/-	10.62

S1803
J.5 - (-2.5) FLOOR
06/28/00 15:08
GRAND PIER-RSSI
NUTRANL RESULTS

S1798.txt

U-238	1.80	+/-	1.98
TH-232	.81	+/-	.49
RA-226	1.61	+/-	.82
K-40	12.67	+/-	15.96

S1798
J.5 - (-3.5) FLOOR
06/28/00 13:39
GRAND PIER-RSSI
NUTRANL RESULTS

S1799.txt

U-238	1.29	+/-	1.13
TH-232	.11	+/-	.27
RA-226	3.75	+/-	.49
K-40	12.26	+/-	9.48

S1799
J.5 - (-4) FLOOR
06/28/00 13:45
GRAND PIER-RSSI
NUTRANL RESULTS

S1785.txt

U-238	.31	+/-	1.24
TH-232	.67	+/-	.31
RA-226	3.21	+/-	.54
K-40	13.52	+/-	10.64

S1785
J.5 - (-5.5) FLOOR
06/28/00 09:55
GRAND PIER-RSSI
NUTRANL RESULTS

S1800.txt

U-238	1.21	+/-	1.41
TH-232	.81	+/-	.34
RA-226	1.67	+/-	.59
K-40	16.12	+/-	11.94

S1800
J.5 - (-4.5) FLOOR
06/28/00 13:51
GRAND PIER-RSSI
NUTRANL RESULTS

S1786.txt

U-238	1.72	+/-	1.13
TH-232	1.20	+/-	.28
RA-226	1.29	+/-	.46
K-40	7.24	+/-	9.25

S1786
J.5 - (-6) FLOOR
06/28/00 10:01
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.11	+/-	1.53
TH-232	1.19	+/-	.38
RA-226	1.15	+/-	.64
K-40	21.81	+/-	12.91

S1777
J.5 - (-6.5) FLOOR
06/28/00 09:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.70	+/-	1.76
TH-232	.41	+/-	.42
RA-226	1.56	+/-	.75
K-40	28.20	+/-	15.37

S1783
J.5 - (-7.5) FLOOR
06/28/00 09:42
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.09	+/-	1.24
TH-232	.73	+/-	.30
RA-226	2.50	+/-	.52
K-40	-4.96	+/-	9.95

S1784
J.5 - (-7) FLOOR
06/28/00 09:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.22	+/-	1.71
TH-232	.48	+/-	.41
RA-226	.87	+/-	.70
K-40	24.67	+/-	14.81

S1828
K.5 - (- 0.5) FLOOR
06/30/00 15:23
GRAND PIER-RSSI
NUTRANL RESULTS

S1817.txt

U-238	1.85	+/-	1.60
TH-232	1.08	+/-	.39
RA-226	1.42	+/-	.66
K-40	29.02	+/-	13.71

S1817
K.5 - (-4) FLOOR
06/29/00 16:17
GRAND PIER-RSSI
NUTRANL RESULTS

S1820.txt

U-238	.88	+/-	1.35
TH-232	.82	+/-	.33
RA-226	2.29	+/-	.58
K-40	3.25	+/-	11.33

S1820
L - (- 2.5) FLOOR
06/30/00 09:33
GRAND PIER-RSSI
NUTRANL RESULTS

S1814.txt

U-238	2.73	+/-	1.41
TH-232	.28	+/-	.33
RA-226	2.33	+/-	.58
K-40	30.64	+/-	11.85

S1814
K.5 - (-5) FLOOR
06/29/00 14:13
GRAND PIER-RSSI
NUTRANL RESULTS

S1811.txt

U-238	.63	+/-	1.62
TH-232	.91	+/-	.39
RA-226	2.36	+/-	.68
K-40	26.58	+/-	13.23

S1811
L - (-7) FLOOR
06/29/00 13:40
GRAND PIER-RSSI
NUTRANL RESULTS

s1821.txt

U-238	-1.22	+/-	1.62
TH-232	.55	+/-	.40
RA-226	1.14	+/-	.71
K-40	33.04	+/-	14.70

S1821
L.5 - (- 2.5) FLOOR
06/30/00 09:39
GRAND PIER-RSSI
NUTRANL RESULTS

s1838.txt

U-238	.63	+/-	1.73
TH-232	.57	+/-	.42
RA-226	1.40	+/-	.75
K-40	9.54	+/-	14.86

31.60

S1838
M.5 - (-0.5) FLOOR
07/03/00 12:27
GRAND PIER-RSSI
NUTRANL RESULTS

s1829.txt

U-238	2.36	+/-	1.35
TH-232	.43	+/-	.31
RA-226	2.51	+/-	.56
K-40	32.39	+/-	11.27

S1829
M- (- 5) FLOOR
06/30/00 15:29
GRAND PIER-RSSI
NUTRANL RESULTS

s1837.txt

U-238	1.94	+/-	1.21
TH-232	.33	+/-	.29
RA-226	.83	+/-	.51
K-40	15.27	+/-	10.73

S1837
M.5 - (-1) FLOOR
07/03/00 12:21
GRAND PIER-RSSI
NUTRANL RESULTS

S1839.txt

U-238	-.11	+/-	1.50
TH-232	.55	+/-	.37
RA-226	2.12	+/-	.65
K-40	23.39	+/-	13.18

S1839
M.5 - (-3.5) FLOOR
07/03/00 12:32
GRAND PIER-RSSI
NUTRANL RESULTS

S1831.txt

U-238	.69	+/-	.99
TH-232	.77	+/-	.25
RA-226	1.94	+/-	.42
K-40	11.00	+/-	8.58

S1831
M.5 - (- 7.5) FLOOR
06/30/00 15:40
GRAND PIER-RSSI
NUTRANL RESULTS

S1830.txt

U-238	2.99	+/-	1.45
TH-232	.83	+/-	.35
RA-226	2.18	+/-	.60
K-40	11.13	+/-	11.72

S1830
M.5 - (- 5.5) FLOOR
06/30/00 15:35
GRAND PIER-RSSI
NUTRANL RESULTS

VERIFICATION TEST PIT SAMPLE ANALYSES

OCTOBER 31, 2000

U-238	-.08	+/-	1.31
TH-232	.34	+/-	.36
RA-226	1.73	+/-	.61
K-40	22.83	+/-	11.61

S2618
K-(-8)-8'
10/31/00 13:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.55	+/-	1.69
TH-232	.69	+/-	.46
RA-226	2.56	+/-	.77
K-40	13.23	+/-	13.87

S2617
L-(-7)-8'
10/31/00 13:02
GRAND PIER-RSSI
NUTRANL RESULTS

APPENDIX A

Closure Documentation (June 12, 2000)
Work Plan Modification (June 15, 2000)
Addendum to Closure Documentation (June 21, 2000)

STS Consultants, Ltd.
Solutions through Science & Engineering

June 12, 2000

Mr. Fred Micke, On-Scene Coordinator
Ms. Verneta Simon, Coordinator
U. S. Environmental Protection Agency
Region 5
77 W. Jackson Blvd., SE-5J
Chicago, Illinois 60604

RE: Closure Documentation for Area A, North Columbus Drive RV3 Site, Chicago, Illinois—STS Consultants Project No. 24418-XK

Dear Mr. Micke and Ms. Simon:

The removal of identified thorium impacted soil in Area A at the above referenced site is nearing completion. Figure 1 shows a scale plan of Area A and the site grids. Note that the majority of Area A exhibited some contamination at shallow depths. You may recall that the immediate construction effort is to continue on Areas B and C to the east. Area A may be delayed for several years before construction proceeds. It is the intent of the owner to obtain clean closure for Area A, as well as the other two areas, as soon a possible.

Construction is not going to proceed in the near future on Area A, and as such the exploration opportunities provided by caisson test pits, grade beam excavations and other excavation activities associated with construction will not be available. This letter is to request a position from the USEPA concerning what will be necessary with regards to documenting site conditions in order to allow for a sign-off by USEPA that the impacted soils in Area A have been remediated.

Current activities with regards to site characterization include the following:

- The entire surface of the site will have been surveyed for elevated gamma radiation.
- Any areas exhibiting elevated gamma readings indicative of material exceeding the 7.1pCi/g clean-up threshold will have been removed.
- Verification surveys and sampling by USEPA, and analysis of those samples by STS and USEPA contract laboratories will have been conducted.

It is critical that the necessary exploration be completed while the personnel and equipment are available on site. If necessary, a face-to-face meeting is proposed to discuss the objectives of the owner, the schedule for future development activities, and the agency's proposed closure documentation needs.

Please contact us at your earliest convenience, as this matter and the completion of the removal work in Area A are in need of prompt resolution.

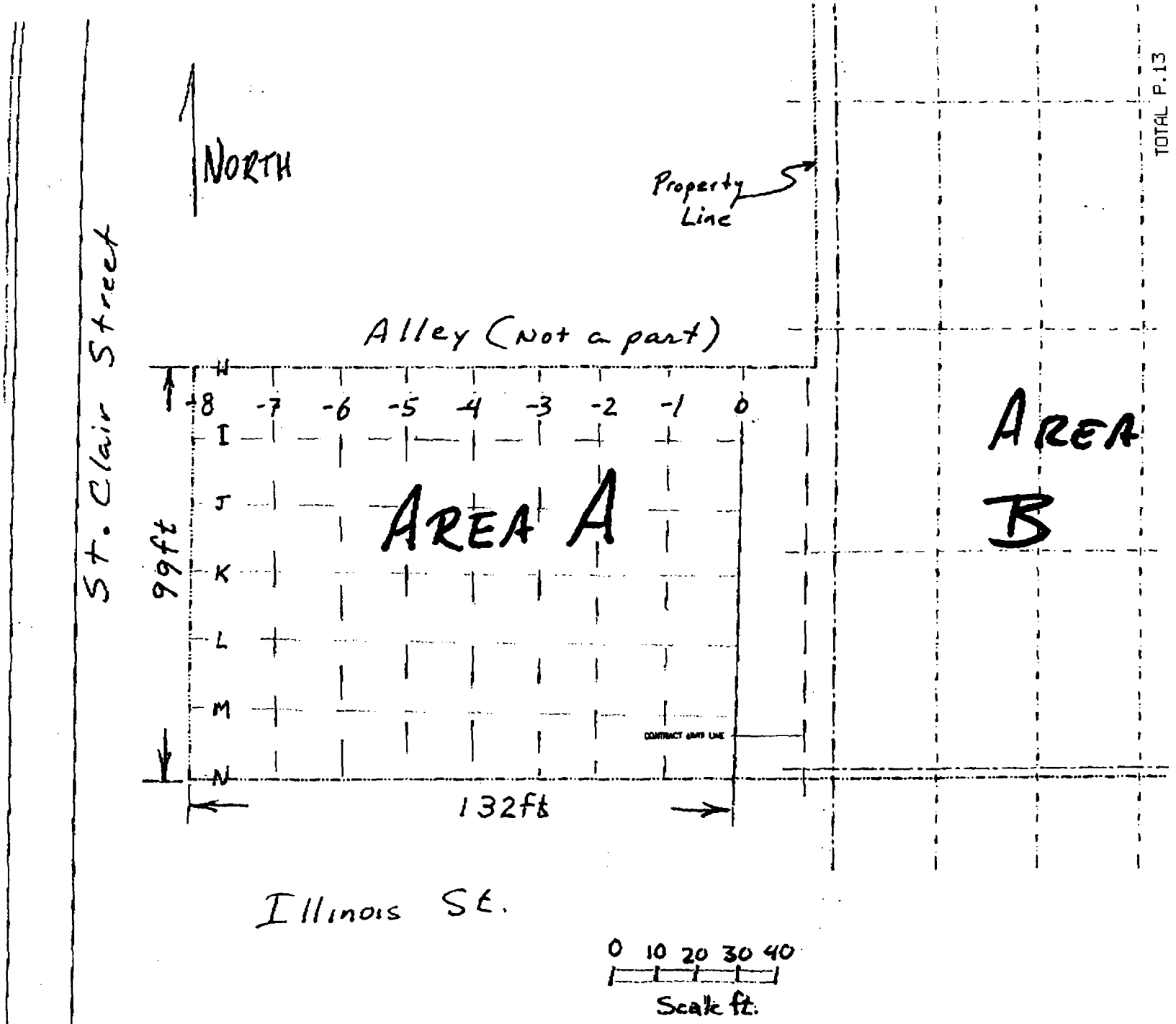
Regards,

STS CONSULTANTS, LTD.

Richard G. Berggreen, C.P.G.
Principal Geologist

cc: Mike Witte, Grand Pier Center, LLC
Rick Mueller, Bill Anaya, Johnson & Bell
Tom Dimond, Mayer Brown & Platt
Dan White, J. T. Smith, Kerr-McGee
Bernie Bono, Bono Consulting
Mark Placek, Torben Jensen, Morse-Diesel

Attachment: Figure 1 - Scale plan of Area A


NORTH
Property Line
Alley (Not a part)
St. Clair Street
H
I
J
K
L
M
N
-8 -7 -6 -5 -4 -3 -2 -1 0
AREA A
AREA B
99ft
132ft
CONTRACT GRID LINE
Illinois St.
0 10 20 30 40
Scale ft.

STS Consultants, Ltd.
Solutions through Science & Engineering

June 15, 2000

Mr. Fred Micke, On-Scene Coordinator
Ms. Verneta Simon, On-Scene Coordinator
U. S. Environmental Protection Agency
Region 5
77 W. Jackson Blvd., SE-5J
Chicago, Illinois 60604

RE: Work Plan Modification for Investigation of Area A, North Columbus Drive RV3 Site, Chicago, Illinois—STS Project No. 24418-XK

Dear Mr. Micke and Ms. Simon:

Attached please find a modification to the Work Plan for the above-referenced site. This modification describes the proposed investigation to document the portion of the North Columbus Drive RV3 site referred to as Area A, the westernmost parcel. That area will not be developed in the near future. As a result the construction activities which contribute to the ability to investigate and confirm the clean-up of the remainder of the site, Areas B and C, will not be available in the near term. This proposal describes the exploration which was discussed at a meeting between USEPA and STS June 13, 2000. The exploration program is to provide sufficient information to allow USEPA to sign off on this portion of the site and release Area A from further obligations for investigation and/or remediation in so far as the thorium impacted soils are concerned.

Please contact the undersigned with any questions you may have regarding this matter. We are anticipating completing work in this area as soon as possible and appreciate your prompt attention to this matter.

Regards,

STS CONSULTANTS, LTD.

Richard G. Berggreen C. P. G.
Principal Geologist

cc: Michael Witte, Grand Pier Center LLC
Rick Mueller, Bill Anaya, Johnson & Bell
Thomas Dimond, Mayer, Brown & Platt
Torben Jensen, Mark Placek, Morse-Diesel
Dan White, Kerr-McGee
Bernard Bono, Bono Consulting

WORK PLAN MODIFICATION
VERIFICATION EXPLORATION OF AREA A
NORTH COLUMBUS DRIVE RV3 SITE

INTRODUCTION

This Work Plan Modification covers the exploration of Area A, the westernmost portion of the North Columbus Drive RV3 site. The purpose of the work proposed is to document that all thorium impacted soil on the Area A parcel has been removed. This demonstration will allow USEPA to issue a letter confirming no further investigation or remediation is necessary for this parcel. This work is proposed because construction on this parcel may be delayed significantly relative to the other parcels which comprise the North Columbus Drive RV3 site. It is the owner's intention to obtain USEPA sign off as soon as practical, not waiting until site development activities on this parcel provide the opportunity to explore, remediate as necessary, and allow for closure verification.

Area A has already been surveyed and all identified thorium impacted soils removed. Figures 1a and 1b show the survey results for Area A. Figure 1a presents the readings immediately following the removal of the asphalt and base course gravel. Figure 1b shows the readings following the removal of identified thorium impacted material. Both figures show the depth of excavations completed for the removal.

Geotechnical borings completed in 1998 on Area A indicate an apparent basement floor slab at 7 to 7.5 feet below the site grade. Natural sand soil was encountered at 7.5 to 8 feet deep. Boring logs for the borings in Area A are included as Attachment 1 to this Work Plan modification

WORK SCOPE

The exploration is proposed to consist of the following three steps.

1. The clean backfill stone (used to fill the excavations where thorium impacted soil was removed) will be removed and stockpiled first. The resulting surface will be surveyed using the 2 X 2 NaI detectors. Any identified thorium impacted areas will be remediated. The site will be excavated in lifts not exceeding 2 feet thick to a total depth of 5 feet. Survey results will be recorded at the corners of a 5 X 5 meter grid, and the interior of the grids will be surveyed for anomalous readings. The survey record form is attached as Figure 2.

2. The second step will be to excavate through the remaining fill to the basement floor slab. The material excavated and the excavation walls and floor will be screened for elevated gamma radiation. Any material indicating exceedances of the clean-up threshold of 7.1 pCi/g will be removed. A total of five locations will be excavated to

the floor slab, one near the center of the parcel and one each at approximately half way between the center and the corners of the site.

3. The third exploration will be to break through the floor slab at two locations and sample the natural sand soil. These excavations will be located on the following basis:

   - If thorium impacted material was found extending to the basement floor slab, the floor slab will be penetrated and a sample of the underlying soil collected.

   - If no thorium impacted soil extended to the basement floor, two of the excavations in Step 2 above, which extended to the basement floor, will be used to sample beneath the floor. The locations should be at opposite sides of the site, to the extent possible.

With all of these explorations, any material encountered which exceeds the clean-up threshold of 7.1 pCi/g will be removed as contaminated. Clean up will extend to clean limits and will require USEPA verification sampling and sign off as with any other impacted location. All procedures specified in the approved Work Plan will continue to be followed, including air monitoring, equipment calibration, health and safety training, and closure verification sampling as modified to include 6 subsamples.

FIGURE 1A

GAMMA READINGS

AREA A AFTER ASPHALT REMOVAL

1A

⇒ Immediately after asphalt stripped, varying depths of gravel in place.

* All counts in shielded CPM

STS Consultants Ltd. CALCULATION SHEET	PROJECT: Canal Plan	STS JOB NO.: 24418KK
	SUBJECT: AFTER AREA "A" ASPHALT REMOVAL (5 Meter Grid)	SHEET NO.: 1a OF
	ORIGINATED BY	DATE: 6/13/00
	CHECKED BY	DATE
	CALC. NO.	REV. NO.

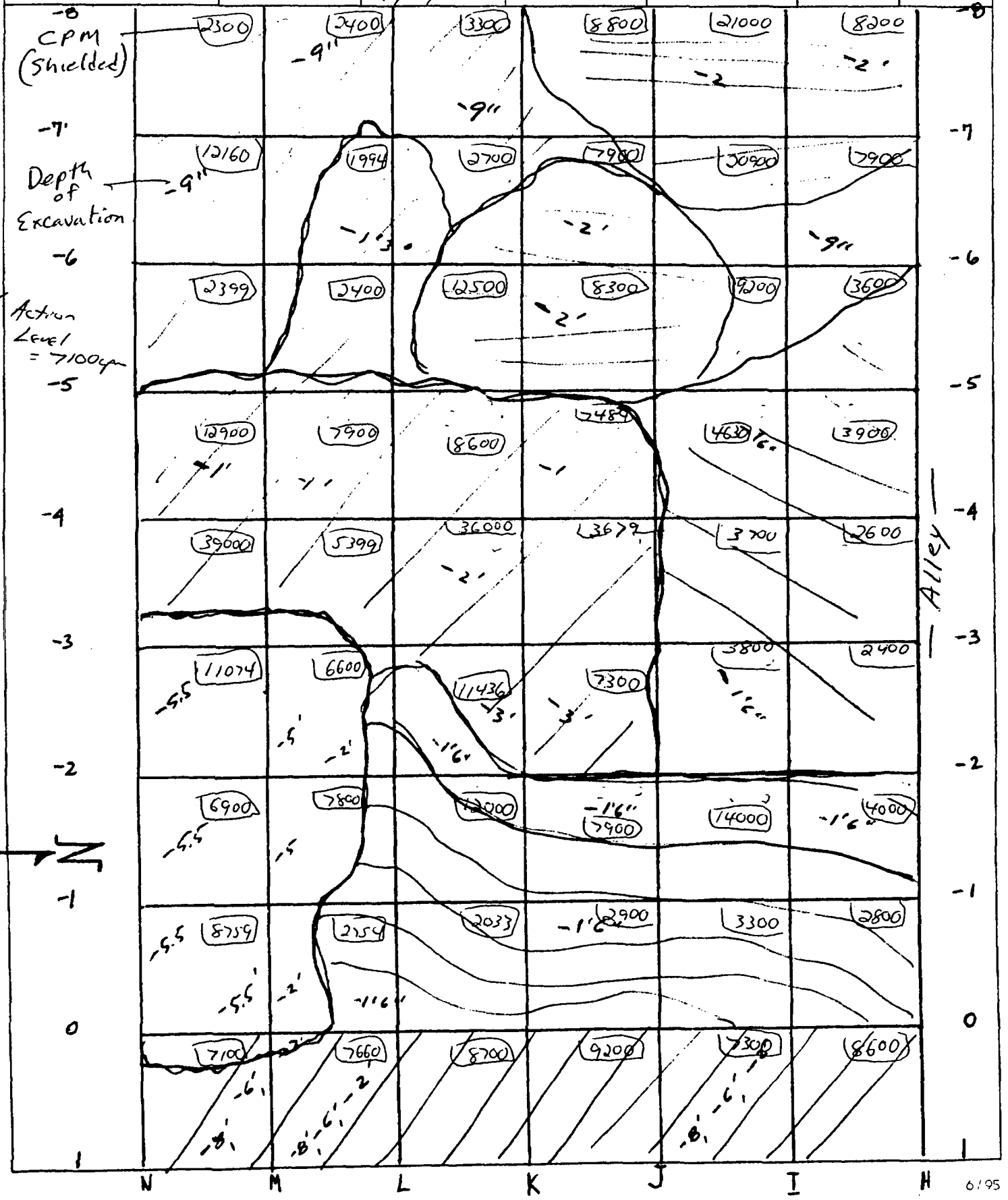


FIGURE 1B

GAMMA READINGS

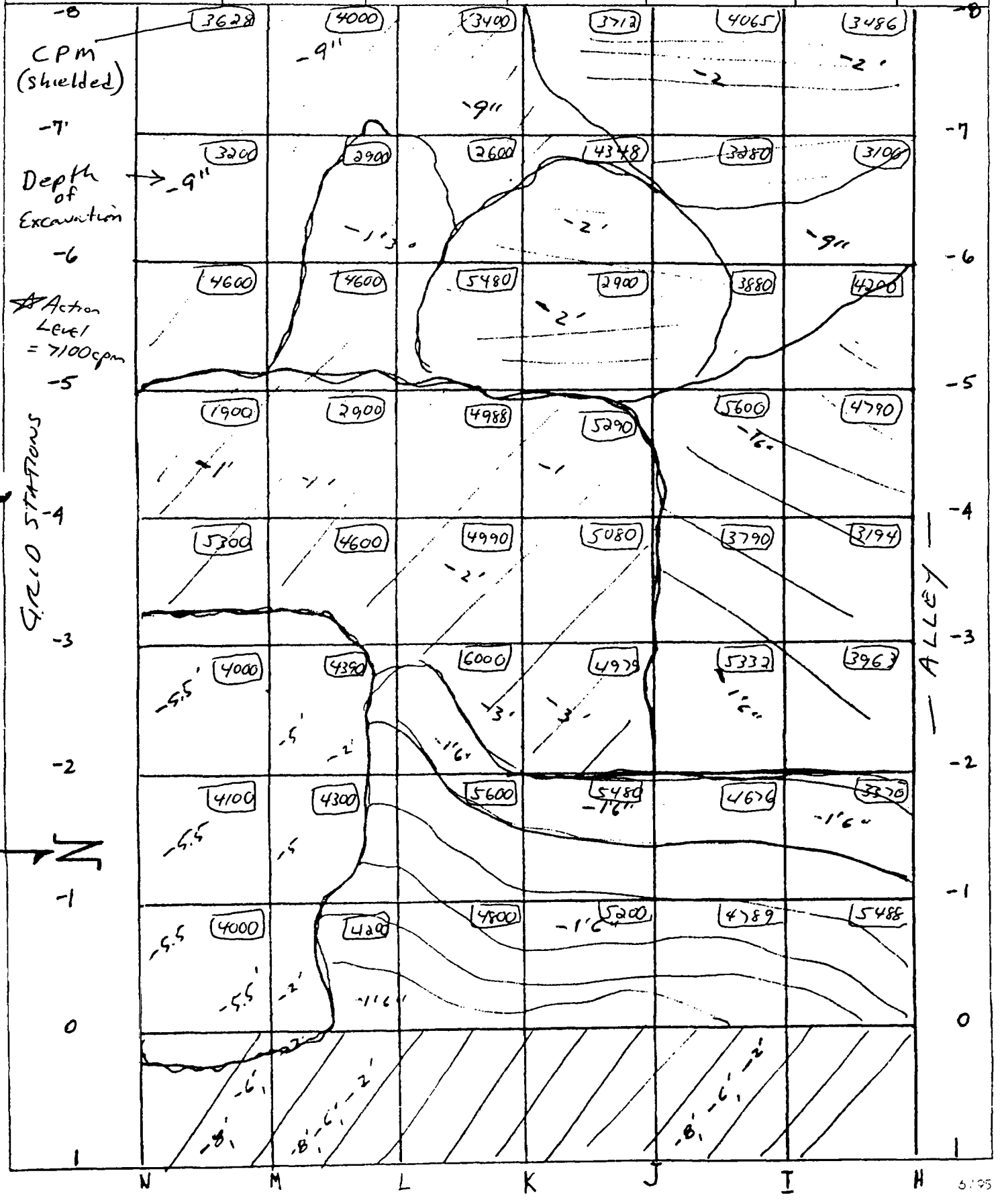
AREA A FOLLOWING REMEDIATION

1B

* All counts in shielded CPM

⇒ After remediation and gravel removal; clean areas.

STS Consultants Ltd. CALCULATION SHEET	PROJECT: GRAND PIER			STS JOB NO.: 24418*K	
	SUBJECT: AREA "A" Following Remediation (5 Meter Grid)			SHEET NO.: 1b OF	
	ORIGINATED BY	DATE: -VARIOUS-	CHECKED BY	DATE	CALC. NO. / REV. NO.



5/95

FIGURE 2

GAMMA SURVEY RECORD FORM

Project # _____ Project Name _____ Sheet _____ of _____

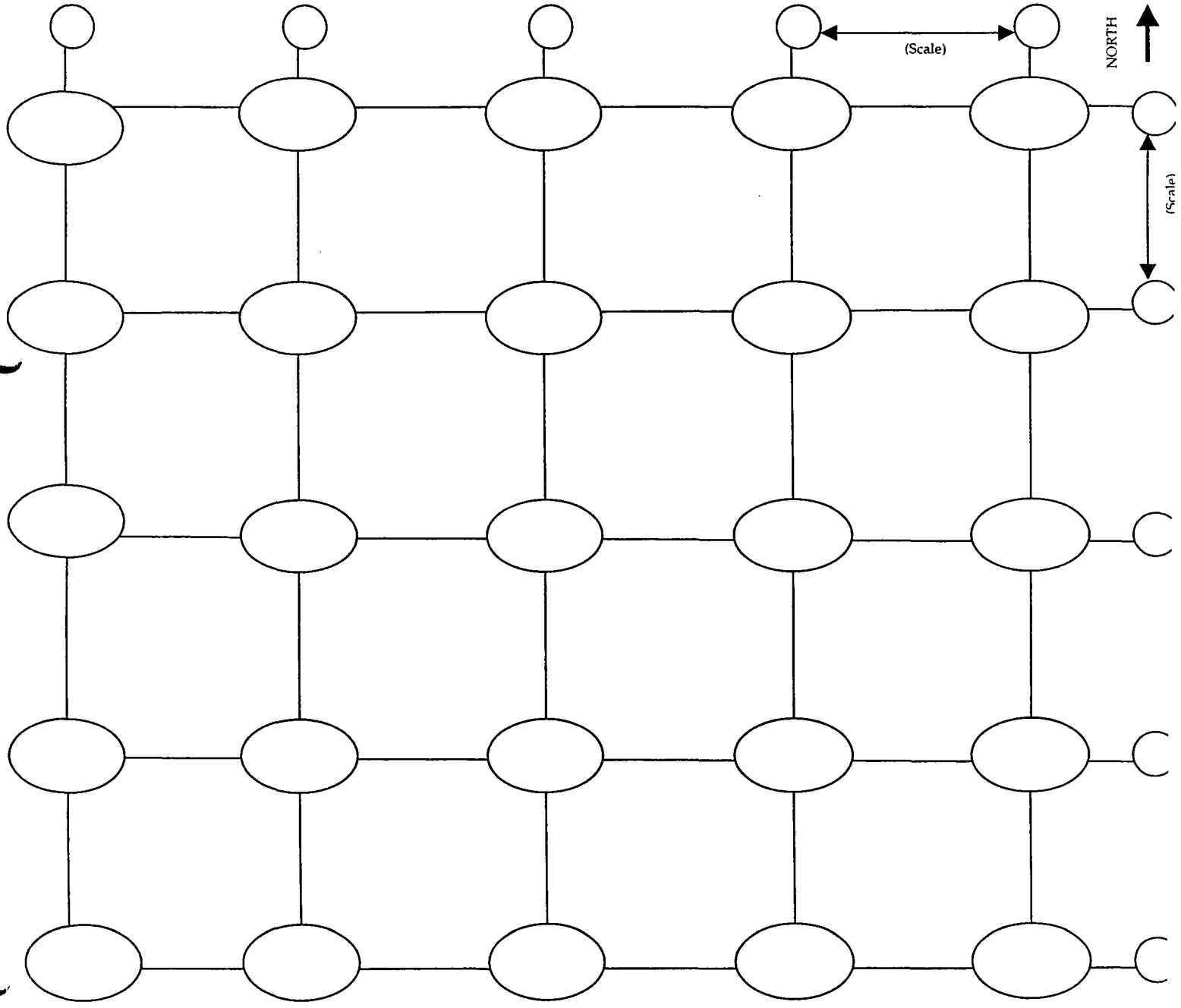
STS Consultants, Ltd.

Date _____ Technician _____

Inst. Model _____ Serial No. _____

Inst. Calibrated (Y/N)? _____ Lift Elevation _____

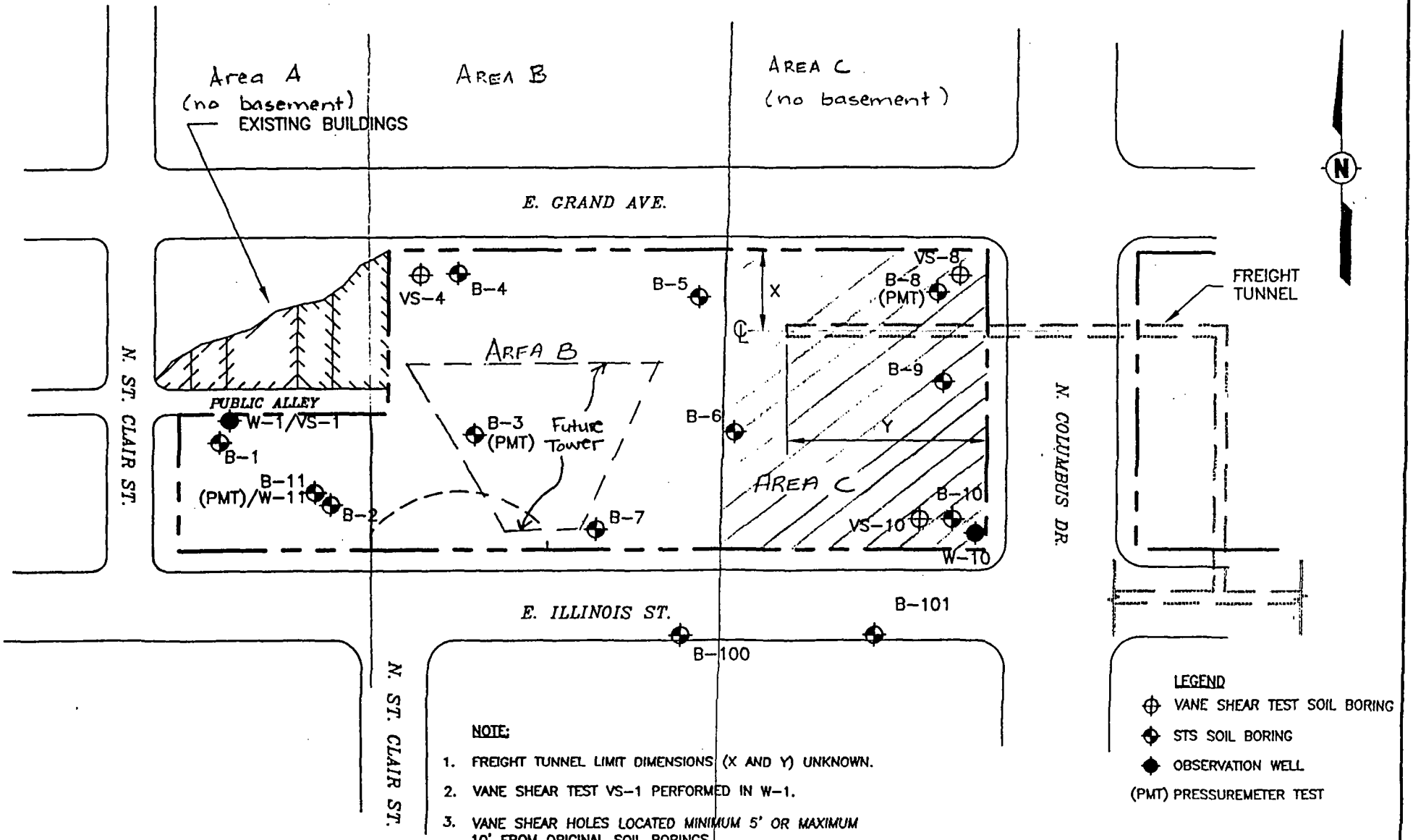
Write grid designations in circles. Indicate excavated area with heavy line. Record counts at intersections in CPM. Indicate areas with audible alarms by shading the area.



ATTACHMENT 1

BORING LOCATION PLAN

BORING LOGS FOR AREA A



NOTE:

1. FREIGHT TUNNEL LIMIT DIMENSIONS (X AND Y) UNKNOWN.
2. VANE SHEAR TEST VS-1 PERFORMED IN W-1.
3. VANE SHEAR HOLES LOCATED MINIMUM 5' OR MAXIMUM 10' FROM ORIGINAL SOIL BORINGS.

STS PROJECT NO. 24418-S
STS PROJECT FIL G1SS1.dwg
SCALE 1"=100'
FIGURE NO. 1

STS Consultants
Consulting Engin

SOIL BORING LOCATION DIAGRAM
PROPOSED GRAND PIER CENTER DEVELOPMENT
225 EAST ILLINOIS STREET
CHICAGO, ILLINOIS

DRAWN BY	KKB	DATE	6-12-98
CHECKED BY	DR	DATE	6-12-98
APPROVED BY	WHW	DATE	6-12-98

CADFILE X:\PROJECTS\24418\ss\G1SS1.dwg

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-1

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

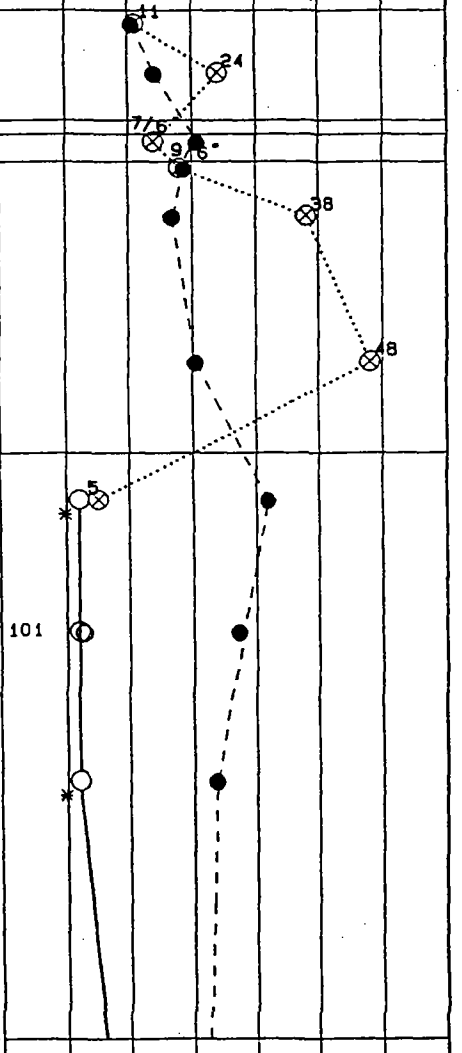
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT x — WATER CONTENT x — LIQUID LIMIT x (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
				SURFACE ELEVATION 12.0 CCD +/-	
		PA		Driller notes 3 in. asphalt Driller notes miscellaneous fill	
5.0	1	SS		Fill: Silty fine to coarse sand, little fine to coarse gravel, trace clay - brown to black - medium dense - moist to wet (SM)	
	2	SS		Trace brick from 5-7 ft.	
		RB			
	3	SS		Fill: Driller notes concrete slab	
	3A	SS		Fill: Silty gravelly medium to coarse sand - brown to black - medium dense - moist to wet (SM)	
10.0		RB			
	4	SS		Fine to coarse sand, trace fine to coarse gravel and silt - brown - dense - moist to saturated (SM)	
		RB			
15.0	5	SS			
		RB			
20.0	6	SS		Silty clay, trace gravel, sand and shale - gray - soft to medium (CL)	101
		RB			
25.0		ST			
		RB			
30.0	8	ST			
35.0		RB			
40.0					



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-1

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE / RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT., LBS./FT.3
				SURFACE ELEVATION 12.0 CCD +/-	
				Continued from previous page	
40.0	9	ST		Silty clay, trace gravel, sand and shale - gray - soft to medium (CL)	
45.0		RB			
50.0	10	ST			
55.0		RB		Silty clay, trace fine gravel, fine to coarse sand, and shale - gray - very stiff to hard (CL)	
60.0	11	ST		Silt seams in Sample 11.	
65.0		RB			
70.0	12	ST			
		RB			
75.0	13	ST			118
		PA			
	14	ST			
80.0		RB			

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2}: 1 2 3 4 5

PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT %: 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT.: 10 20 30 40 50

* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-1

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.3
					SURFACE ELEVATION 12.0 CCD +/-	
					Continued from previous page	
80.0	15	ST			Silty clay, trace fine gravel, fine to coarse sand, and shale - gray - hard to very stiff (CL)	127
		RB				
	16	ST				
		RB				
85.0	17	ST			Sand seams in Sample 17.	
		RB				
90.0					Silt seams in Sample 18.	
90.5	18	ST				
					End of Boring Borehole grouted upon completion. Asphalt patch at ground surface. Casing used: 25 ft. of 4 in. Automatic-Mobile Hammer used for Standard Penetration Tests.	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.2: 1 2 3 4 5

PLASTIC LIMIT % / WATER CONTENT % / LIQUID LIMIT %: 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT.: 10 20 30 40 50

7.0

*7+

*7+

* Calibrated Penetrometer

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

WL 8.5 ft. WS	BORING STARTED 1/9/98	STS OFFICE Chicago Area-01	
WL	BORING COMPLETED 1/9/98	ENTERED BY KKB	SHEET NO. 3 OF 3
WL	RIG/FOREMAN Rotary/Lehtinen	APP'D BY DR	STS JOB NO. 24418-SS

STS Consultants Ltd.

CLIENT: R.M. Chin & Associates, Inc.

LOG OF BORING NUMBER: B-2

PROJECT NAME: Grand Pier

ARCHITECT-ENGINEER: TT-CBM

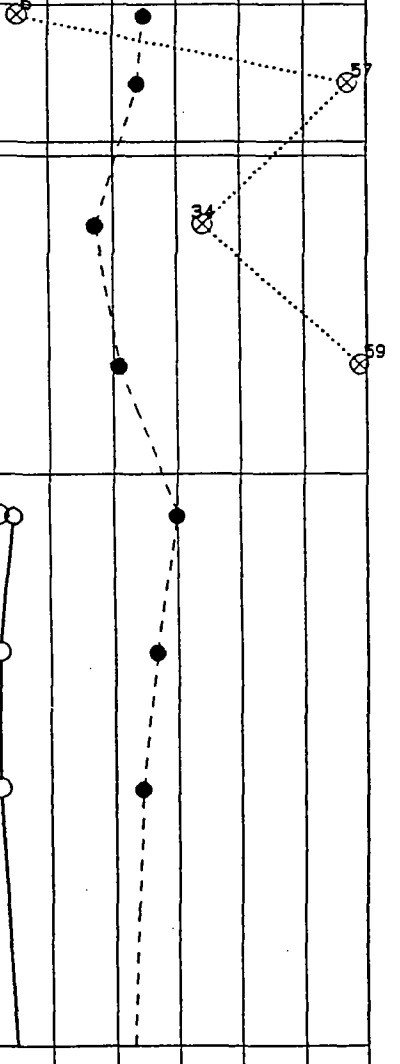
SITE LOCATION: NWC E. Illinois St. & N. Columbus Dr.; Chicago, IL

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.^{2} (1 2 3 4 5)

PLASTIC LIMIT x — WATER CONTENT x — LIQUID LIMIT x (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT. (10 20 30 40 50)

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.^{3}
					SURFACE ELEVATION 12.0 CCD +/-	
		PA			Driller notes 2 in. of asphalt.	
		PA			Driller notes 6 in. of crushed stone base course.	
	1	SS			Driller notes miscellaneous fill.	
5.0		PA			Fill: Silty sand and fractured bricks, trace fine to coarse gravel - dark brown to yellow brown - loose to very dense - moist (SM to GM)	
	2	SS				
		PA				
		RB			Driller notes 6 in. concrete slab	
10.0					Fine to medium sand, trace silt and fine gravel - brown - dense to very dense - moist to wet (SP)	
	4	SS				
		RB				
15.0	5	SS				
		RB				
20.0	6	ST			Silty clay, trace sand and shale - soft to medium (CL)	96
		RB				
25.0	7	ST				
		RB				
30.0	8	ST				
		RB				
35.0						
40.0						



* Calibrated Penetrometer

... continued

The stratification lines represent the approximate boundary lines between soil types: in-situ, the transition may be gradual.

STS JOB NO. 24418-SS | SHEET NO. 1 OF 3

STS Consultants, Ltd.
Solutions through Science & Engineering

June 21, 2000

Mr. Fred Micke, On-Scene Coordinator
Ms. Verneta Simon, On-Scene Coordinator
U. S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard, SE-5J
Chicago, Illinois 60604

RE: Addendum to Closure Documentation of Area A, North Columbus Drive RV3 Site, Chicago, Illinois — STS Project No. 24418-XK

Dear Mr. Micke and Ms. Simon:

This letter is submitted as a modification to our previously transmitted Closure Documentation proposal, dated June 16, 2000. Following discussions with Mr. Micke, we understand that two conditions constrain the confidence with which the determination of no residual contamination in Area A can be made by the USEPA. This letter proposes revisions to the proposed work scope to address these constraints.

Previous boring data indicate Area A is apparently underlain by a basement slab. This basement floor indicates the basement space is filled with miscellaneous rubble. In that it is unlikely that any type of sorting or separation of the rubble was done during the filling, the potential for thorium impacted material is as likely at the base of the basement space as near the top.

It is also the opinion of the USEPA representatives that the rubble fill can be more difficult to screen and survey than soil. The penetration of gamma radiation is attenuated by the concrete, brick and rubble fill, which limits the ability to confidently assess the lower parts of the basement fill debris.

As a result of the foregoing, the USEPA is requesting the excavation and screening of the materials proceed to the basement floor slab at a depth of 7 to 7.5 feet below former site grade. This will extend the excavation below the 5 feet previously proposed. It will, however, obviate the need to excavate the five test pits through the remaining rubble fill. It is still proposed to excavate two pits through the basement floor slab and screen the underlying soil.

With these changes incorporated into the work scope proposal, we request approval of this plan, in order that the work may proceed promptly. Thank you for your prompt attention to this matter. Please contact us with any questions you may have.

Regards,

STS CONSULTANTS, LTD.

Richard G. Berggreen, C.P.G.
Principal Geologist

K:\24418\XK\C118K040.doc

cc: Michael Witte, Grand Pier Center LLC
Rick Mueller, Bill Anaya, Johnson & Bell
Thomas Dimond, Mayer, Brown & Platt
Torben Jensen, Mark Placek, Morse-Diesel
John Curtiss, AIG
Dan White, Kerr-McGee
Bernard Bono, Bono Consulting

ATTACHMENT D

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
AUTHORIZATION TO DISCHARGE, WATER CHEMICAL DATA

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

INDUSTRIAL WASTE ENFORCEMENT / PRETREATMENT SECTION

POST OFFICE BOX 10654 CHICAGO, ILLINOIS 60610-0654 312·751·3044

RICHARD LANYON
Director of Research & Development

BOARD OF COMMISSIONERS
Terrence J. O'Brien
President
Kathleen Therese Meany
Vice President
Gloria Alitto Majewski
Chairman Of Finance
James "Jim" Harris
Barbara J. McGowan
Martin A. Sandoval
Cynthia M. Santos
Patricia Young
Harry "Bus" Yourell

September 8, 2000

Mr. Richard G. Berggreen, C.P.G.
Principal Geologist
STS Consultants, Ltd.
750 Corporate Woods Parkway
Vernon Hills, IL 60061-3153

Dear Mr. Berggreen:

Subject: Request for a Onetime Discharge of Accumulated Water from Grand Pier Center Site Located at St. Clair and Illinois Streets, Chicago, IL

The Metropolitan Water Reclamation District of Greater Chicago (District) acknowledges receipt of your letter dated August 22, 2000 regarding the subject matter.

In your letter, you requested permission to discharge approximately 2.0 million gallons of groundwater and stormwater which you expect to accumulate during the basement excavation and construction phase at the subject location. You also submitted site and sewer location maps, and analytical data for water samples collected from the excavation site. You further stated that a silt settling/filtration basin would be installed between the de-watering wells and the sewer discharge location to monitor the effluent prior to discharge to the sewer system. The District reviewed the analytical results you submitted and found them acceptable.

Subsequently, the District received your facsimile transmittal dated August 28, 2000, in which you indicated that you would obtain permission for the proposed discharge from the city of Chicago after the District has granted the approval for the subject discharge. In your letter, you also stated that all identified contamination has been removed from the site and that you are in receipt of United States Environmental Protection Agency (USEPA) signoff for all remediated locations. You further stated that you will pay all costs incurred in processing your request to discharge, including User Charges. The District also received your facsimile transmittal dated August 29, 2000 which included signed copies of the "Vertification Survey" letters issued by the USEPA, for the subject site.

Subject: Request for a Onetime Discharge of Accumulated Water from Grand Pier Center Site Located at St. Clair and Illinois Streets, Chicago, IL

The District has determined that the conditions required for approval of the subject request have been met. Therefore, the District hereby approves your request for a onetime discharge from the subject location.

Your discharge operations will be under the supervision of the District's on-site representative, Mr. Chester Kukielka, Supervisor of Field Operations, or his designee. Please contact Mr. Kukielka at (708) 588-4032 at least 24 hours prior to the commencement of discharge.

Called in 9/9/03

In the event that the District observes any conditions subsequent to commencement of discharge which are considered by the District to be unacceptable, the discharge to the sewerage system must be immediately suspended upon notification from the District. There shall be no resumption of discharge until you receive written notification from this office.

Finally, the District requires you to report the established volume of the discharge to the District within 30 days of the completion of the discharge operations for calculating User Charge liability.

If you have any questions regarding the subject matter, please contact Mr. Rattan Bamzai, Pollution Control Officer, at (312) 751-5952.

Very truly yours,

Richard C. Sustich
Assistant Director of Research and Development
Industrial Waste Division

RCS:RB:mmg
cc: C. Kukielka
R. Bamzai
U25721/EA61964

City of Chicago - Department of Sewers - Permits

PERMIT APPLICATION

CALL MUST BE MADE 48 HOURS PRIOR TO STARTING DATE

PLUMBING INSPECTIONS: (312) 744-7017 — MASON & HOUSE DRAIN INSPECTIONS: (312) 747-7047/8117

Date: SEPT. 8, 2000

Location: 200 EAST ILLINOIS STREET

Contractor's Name: GEORGE W. TROMPELAAR S. Lic. # 142 P. Lic # 1383 Phone: 773-489-0400

Type of Building Usage/Project No.: PUMPING STORM WATER

Pipe Material: Tile ☐ Iron ☐ Other ☐ See Attached Computation

TYPE OF WORK:

MAIN SEWER ____ CONNECTION ____ EXTENSION ____ PAVING ____ SUMP PUMP ____ FLOOD CONTROL ____

REPAIRS AND/OR ADDITIONS (Less than 20') ____ OTHER: ____

INSPECTION FEES & SPECIAL DEPOSITS:

____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ FEET OF ____	@	$ ____	PER FOOT	$
____ MANHOLES	@	$ 18.00	PER UNIT	$
____ CATCH BASINS/INLETS	@	$ 18.00	PER UNIT	$
____ WORK DONE (Spec. Hrs. Min. 4 hrs.)	@	$ 75.00	PER HR.	$
____ CONNECTIONS MADE BY DEPT. OF SEWERS	@	$ ____	____	$
____ GREASE BASIN/SEPARATOR	@	No Charge		
____ LINT BASIN	@	No Charge		
____ TRIPLE GARAGE BASIN/MUD BASIN	@	No Charge		
SPECIAL DEPOSITS SUB-TOTAL:				$

PERMIT FEES

1 (Pump In")	SEWER PERMITS	@ $ 1736.95	EACH	$	1736.95
____ (____")	SEWER PERMITS	@ $ ____	EACH	$	
____ (____")	SEWER PERMITS	@ $ ____	EACH	$	
____ (____")	SEWER PERMITS	@ $ ____	EACH	$	
MISCELLANEOUS CONNECTIONS ____	SEWER PERMIT	@ $ 350.00	EACH	$	
PERMIT FEES SUB-TOTAL:				$	
TOTAL: PERMIT FEES + SPECIAL DEPOSITS				$	1736.95

Issued by: [signature]

Approved by:

Estimated Cost of Underground Sewer: $ 20,000.00

Mason Inspector: Starting Date:

House Drain Inspector: Starting Date:

Plumbing Inspector: Starting Date:

PERMIT NUMBER: SPECIAL DEPOSIT NUMBER:

DEPARTMENT OF SEWERS
333 SOUTH STATE STE 410
CHICAGO IL 6060

DATE: FRIDAY, SEP 08, 2000 04:20 PM
ACCT#: 5417124850919477 EXP.: 09/02
UNIT: CHGD092261
CARD TYPE: MASTER CARD
TRANS TYPE: PURCHASE
REFERENCE #: 0186 AUTH #: 008258

TOTAL AMOUNT = $ 1736.95

I AGREE TO PAY ABOVE TOTAL AMOUNT
ACCORDING TO CARD ISSUER AGREEMENT

SIGNATURE

ATTACHMENT E

STOCKPILED SOIL ANALYSES

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Various

Date Sampled: 4/13/00

Number of Samples Required Per SOP 214: 5

PILE # : B-D/25-27 **Est. Volume of Lift in Cubic Yards:** 100

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1033	3.86				
S-1034	3.78				
S-1035	2.15				
S-1036	3.89				
S-1037	3.56				
S-1038	3.75				
S-1039QC		4.22	1.71	0.855	
Number of Samples (n)	6			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.09
Average (Mean of the sample population) (X bar)	3.50				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.67	
U_α (**True Mean**) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**4.05**	*"t" value* 2.015
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	3.26		
Mean + 3 S_{dup} =	6.8	**QC < (Mean + 3S_{dup})?**	**O.K.**
Mean - 3 S_{dup} =	0.2	**QC > (Mean - 3S_{dup})?**	**O.K.**

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: R.L.G. Bygren 4/14/00

Name/date

RKP 6.2-1

U-238	-1.13	+/- 2.40
TH-232	.86	+/- .60
RA-226	3.00	+/- 1.05
K-40	36.85	+/- 20.53

3.86

S1033
C-26 PILE SAMPLE
04/13/00 11:26
GRAND PIER-RSSI

S1033 - S1039
6 samples + QC
for overburden
stockpile release

B-D / 25-27

U-238	-1.16	+/- 2.37
TH-232	1.14	+/- .58
RA-226	2.64	+/- 1.00
K-40	72.66	+/- 20.23

B.78

S1034
B.2-25.5 PILE
04/13/00 11:32
GRAND PIER-RSSI

U-238	-1.72	+/-	2.07
TH-232	.97	+/-	.51
RA-226	1.18	+/-	.88
K-40	92.82	+/-	19.18

2.15

S1035
D-26 PILE
04/13/00 11:39
GRAND PIER-RSSI

U-238	-.75	+/-	2.20
TH-232	.58	+/-	.53
RA-226	3.31	+/-	.96
K-40	51.39	+/-	19.30

13.89

S1036
D.3-26.7 PILE
04/13/00 11:46
GRAND PIER-RSSI

U-238	-1.10	+/-	1.72
TH-232	.64	+/-	.43
RA-226	2.92	+/-	.76
K-40	35.58	+/-	15.26

) 3.56

S1037
D.2-25.5 PILE
04/13/00 11:54
GRAND PIER-RSSI

U-238	-3.61	+/-	2.34
TH-232	1.56	+/-	.60
RA-226	2.19	+/-	1.02
K-40	66.30	+/-	21.08

3.75

S1038
C.5-25.5 PILE
04/13/00 12:00
GRAND PIER-RSSI

U-238	-3.34	+/- 2.46
TH-232	1.06	+/- .62
RA-226	3.16	+/- 1.08
K-40	67.34	+/- 21.97

) 4.22

S1039 GC
C.5-25.5 PILE
04/13/00 12:07
GRAND PIER-RSSI

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Various

Date Sampled: 4/4/00, 4/10/00, 4/13/00

Number of Samples Required Per SOP 214: 6

PILE # : C-E/10-13

Est. Volume of Lift in Cubic Yards: 300

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1010	3.02				
S-1011	3.06				
S-1012	3.53				
S-1030	8.32				
S-1031	7.11				
S-1032	6.92				
S-1040	5.44				
S-1041	4.81				
S-1042	4.64				
S-1043QC		6.45	1.71	0.855	
Number of Samples (n)	9			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	2.53
Average (Mean of the sample population) (X bar)	5.33				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	2.38	
U_α (**True Mean**) = (X bar) + (t * (S_1/sqrt(n)))	**6.80**	*"t" value 1.86*
Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6		
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	7.59		
Mean + 3 S_{dup} =	12.9	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	-2.3	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: Richard G. Bygren 4/14/00

Name/date

RKP 6.2-1

U-238	2.02	+/-	1.67
TH-232	1.79	+/-	.41
RA-226	1.23	+/-	.67
K-40	35.66	+/-	13.69

3.02

S1010
D.5-12.5
04/04/00 09:44
GRAND PIER-RSSI

S1010
S1011
S1012
S1030
S1031
S1032
S1040
S1041
S1042
S1043 QC

9 samples + QC = 10

for overburden stockpile release

C-E/10-13

9 1.860
10 1.833
11 1.812

U-238	1.06	+/-	1.19
TH-232	1.54	+/-	.30
RA-226	1.52	+/-	.49
K-40	20.94	+/-	10.24

) 3.06

S1011
E-12
04/04/00 09:50
GRAND PIER-RSSI

U-238	.97	+/-	1.34
TH-232	.94	+/-	.33
RA-226	2.59	+/-	.58
K-40	29.29	+/-	11.78

) 3.53

S1012
D-12
04/04/00 09:55
GRAND PIER-RSSI

U-238	-2.45	+/-	1.95
TH-232	2.84	+/-	.50
RA-226	5.48	+/-	.84
K-40	57.12	+/-	15.75

8.32

S1030
D.5-11
04/10/00 16:27
GRAND PIER-RSSI

U-238	-1.67	+/-	3.14
TH-232	2.94	+/-	.78
RA-226	4.17	+/-	1.30
K-40	110.27	+/-	25.86

7.11

S1031
E-11.5
04/10/00 16:33
GRAND PIER-RSSI

U-238	-2.84	+/-	2.68
TH-232	2.89	+/-	.68
RA-226	4.03	+/-	1.13
K-40	80.36	+/-	21.79

) 6.92

S1032
D-10
04/10/00 16:38
GRAND PIER-RSSI

U-238	-.97	+\- 2.52
TH-232	2.27	+\- .64
RA-226	3.17	+\- 1.05
K-40	37.29	+\- 19.88

) 5.44

S1040
C-12.5 PILE
04/13/00 15:02
GRAND PIER-RSSI

U-238	-2.69	+\-	2.59
TH-232	2.67	+\-	.66
RA-226	2.14	+\-	1.09
K-40	77.13	+\-	21.59

) 4.81

S1041
C-13 PILE
04/13/00 15:09
GRAND PIER-RSSI

U-238	.51	+\-	2.43
TH-232	2.48	+\-	.59
RA-226	2.16	+\-	.96
K-40	90.44	+\-	19.76

) 4.64

S1042
E-13 PILE
04/13/00 15:16
GRAND PIER-RSSI

U-238	-.05	+/-	2.55
TH-232	1.74	+/-	.63
RA-226	4.71	+/-	1.08
K-40	45.27	+/-	20.50

) 6.45

S1043
E-13 PILE QC
04/13/00 15:22
GRAND PIER-RSSI

ATTACHMENT F

EXCLUSION ZONE VERIFICATION ANALYSES AND USEPA SIGN-OFF FORMS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-1

Date of Verification Survey: 4-27-00

Time of Verification Survey 1:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 4-27-00

Dumarsais F. Guerrier (Print Name)

Senior Technician (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/28/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 4/28/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-4.38	+\-	1.80
TH-232	2.61	+\-	.47
RA-226	2.34	+\-	.77
K-40	51.36	+\-	15.28

S1124
A-1
04/27/00 13:35
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-3

Date of Verification Survey: 5-3-00

Time of Verification Survey 11:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 5-3-00

DUMARSAN F. GUERRIER (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 5/4/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 5/4/00

VERNETA Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.95 +\-	1.35
TH-232	2.24 +\-	.35
RA-226	2.76 +\-	.58
K-40	12.35 +\-	11.29

S1156
A-3 #5 EPA VERIFICATION
05/03/00 13:49
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-4.5

Date of Verification Survey: 8.21-00

Time of Verification Survey 9:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guerrier Date 8/21/00

Dumarsais J. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/21/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verweta Simon Date 8/21/00

Verweta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.60	+/-	1.55
TH-232	1.09	+/-	.43
RA-226	1.23	+/-	.71
K-40	19.33	+/-	13.13

S2126
A - (4.5) EPA #1
08/21/00 12:06
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.90	+/-	1.07
TH-232	1.16	+/-	.30
RA-226	1.58	+/-	.49
K-40	18.14	+/-	9.10

S2127
A - (4.5) EPA #2
08/21/00 12:18
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.99	+/-	1.72
TH-232	.88	+/-	.47
RA-226	2.34	+/-	.78
K-40	9.54	+/-	14.59

S2128
A - (4.5) EPA #3
08/21/00 12:24
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.55	+/-	1.71
TH-232	1.36	+/-	.48
RA-226	1.55	+/-	.81
K-40	21.49	+/-	14.86

S2129
A - (4.5) EPA #4
08/21/00 12:29
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.36	+/-	1.34
TH-232	.50	+/-	.37
RA-226	2.61	+/-	.64
K-40	8.96	+/-	11.72

S2130
A - (4.5) EPA #5
08/21/00 12:35
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	4.87	+/-	1.73
TH-232	.59	+/-	.46
RA-226	2.00	+/-	.77
K-40	18.22	+/-	14.44

S2131
A - (4.5) EPA #6
08/21/00 12:01
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-5.5

Date of Verification Survey: 8-21-00

Time of Verification Survey 9:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 8-21-00

(Print Name)

(Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/21/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Date 8/21/00

Venetta Simon

(Print Name)

On Scene Coordinator

(Print Title)

For U.S. EPA Region V

U-238	-.07	+/-	1.48
TH-232	.20	+/-	.41
RA-226	3.97	+/-	.71
K-40	-6.79	+/-	12.63

S2132
A - (5.5) EPA #1
08/21/00 12:40
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.99	+/-	1.41
TH-232	1.27	+/-	.41
RA-226	1.39	+/-	.66
K-40	13.96	+/-	12.69

S2133
A - (5.5) EPA #2
08/21/00 12:46
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.24	+/-	1.34
TH-232	.59	+/-	.37
RA-226	1.70	+/-	.64
K-40	31.48	+/-	11.88

S2134
A - (5.5) EPA #3
08/21/00 12:52
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.34	+/-	1.05
TH-232	.04	+/-	.28
RA-226	1.34	+/-	.49
K-40	35.65	+/-	9.57

S2135
A - (5.5) EPA #4
08/21/00 12:58
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.01	+/-	1.76
TH-232	.67	+/-	.50
RA-226	1.92	+/-	.83
K-40	10.40	+/-	15.29

S2136
A - (5.5) EPA #5
08/21/00 13:04
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.28	+/-	1.45
TH-232	.94	+/-	.40
RA-226	1.05	+/-	.66
K-40	5.56	+/-	12.37

S2137
A - (5.5) EPA #6
08/21/00 13:09
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-17

Date of Verification Survey: 8-21-00

Time of Verification Survey 10:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Demarsais J. Surrier Date 8/21/00

Demarsais J. Surrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/21/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 8/21/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.85	+/-	1.75
TH-232	1.46	+/-	.50
RA-226	2.44	+/-	.81
K-40	14.51	+/-	14.80

S2120
A - (7) EPA #1
08/21/00 10:53
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.80	+/-	1.37
TH-232	4.23	+/-	.39
RA-226	2.73	+/-	.61
K-40	14.78	+/-	10.30

S2121
A - (7) EPA #2
08/21/00 10:58
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.79	+/-	1.64
TH-232	1.84	+/-	.46
RA-226	2.22	+/-	.74
K-40	6.27	+/-	13.10

S2122
A - (7) EPA #3
08/21/00 11:04
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.16	+/-	1.35
TH-232	1.53	+/-	.38
RA-226	2.60	+/-	.62
K-40	11.11	+/-	11.17

S2123
A - (7) EPA #4
08/21/00 11:11
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.23	+/-	1.72
TH-232	1.50	+/-	.47
RA-226	1.68	+/-	.78
K-40	35.70	+/-	14.33

S2124
A - (7) EPA #5
08/21/00 11:18
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.72	+/-	1.39
TH-232	2.01	+/-	.39
RA-226	2.43	+/-	.63
K-40	5.69	+/-	11.24

S2125
A - (7) EPA #6
08/21/00 11:25
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A.26

Date of Verification Survey: 6/22/00

Time of Verification Survey 9:00 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature]

Date 6/22/00

DUMARSAIS F. GUERRERO (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/22/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: [signature]

Date 6/22/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.44	+/-	2.21
TH-232	2.10	+/-	.57
RA-226	2.75	+/-	.94
K-40	13.55	+/-	17.83

S1738
A-26 EPA #1
06/22/00 09:29
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	5.54	+/-	1.40
TH-232	1.37	+/-	.33
RA-226	2.31	+/-	.55
K-40	16.11	+/-	10.91

S1739
A-26 EPA #2
06/22/00 09:34
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.98	+/-	1.36
TH-232	2.21	+/-	.34
RA-226	.75	+/-	.55
K-40	41.87	+/-	11.49

S1740
A-26 EPA #3
06/22/00 09:42
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.08	+/-	1.87
TH-232	2.10	+/-	.46
RA-226	.85	+/-	.76
K-40	39.08	+/-	15.16

S1741
A-26 EPA #4
06/22/00 09:50
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.09	+/-	2.14
TH-232	2.29	+/-	.54
RA-226	.67	+/-	.88
K-40	12.67	+/-	17.05

S1742
A-26 EPA #5
06/22/00 09:56
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.23	+/-	1.56
TH-232	1.90	+/-	.39
RA-226	1.54	+/-	.65
K-40	23.47	+/-	12.76

S1743
A-26 EPA #6
06/22/00 10:02
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A-27

Date of Verification Survey: 7/20/00

Time of Verification Survey 8:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 7/20/00

Dumarsais J. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 7/20/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 7/20/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	3.20	+/-	1.49
TH-232	.58	+/-	.35
RA-226	1.83	+/-	.61
K-40	10.58	+/-	11.88

S1909
A - (27) EPA #1
07/20/00 10:37
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.48	+/-	1.70
TH-232	.98	+/-	.41
RA-226	1.12	+/-	.71
K-40	19.84	+/-	14.27

S1910
A - (27) EPA #2
07/20/00 10:43
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.35	+/-	1.83
TH-232	1.21	+/-	.46
RA-226	1.41	+/-	.78
K-40	13.24	+/-	15.53

S1911
A - (27) EPA #3
07/20/00 10:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.06	+/-	1.87
TH-232	.37	+/-	.44
RA-226	1.97	+/-	.77
K-40	16.85	+/-	15.29

S1912
A - (27) EPA #4
07/20/00 10:55
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.52	+/-	1.38
TH-232	.67	+/-	.34
RA-226	2.40	+/-	.60
K-40	27.82	+/-	11.84

S1913
A - (27) EPA #5
07/20/00 11:00
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.90	+/-	1.38
TH-232	1.02	+/-	.33
RA-226	1.95	+/-	.57
K-40	4.79	+/-	11.00

S1914
A - (27) EPA #6
07/20/00 11:06
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: A.S-26.5 (floor)

Date of Verification Survey: 4/10/00

Time of Verification Survey 2 55 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Berggreen Date 4/14/00

RICHARD G. BERGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Vernetta J Simon Date 4/14/00

VERNETTA J SIMON (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.47	+/-	1.95
TH-232	3.40	+/-	.49
RA-226	3.38	+/-	.80
K-40	41.66	+/-	15.22

S1028
A.5-26.5
04/10/00 16:00
GRAND PIER-RSSI

floor

2 55 pm

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: B-17.5

Date of Verification Survey: 10/27/00

Time of Verification Survey 8:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 10/27/00

Dumarsais F. Guernier (Print Name)

Field Coordinator (Print Title)

BTS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 10/27/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 10/27/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.77	+/-	1.72
TH-232	-.37	+/-	.46
RA-226	1.95	+/-	.81
K-40	19.59	+/-	15.66

S2607
B-17.5 EPA #1
10/27/00 09:38
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.07	+/-	1.26
TH-232	.14	+/-	.35
RA-226	.56	+/-	.59
K-40	26.03	+/-	11.73

S2608
B-17.5 EPA #2
10/27/00 09:44
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.66	+/-	1.46
TH-232	-.04	+/-	.40
RA-226	1.70	+/-	.68
K-40	9.25	+/-	13.26

S2609
B-17.5 EPA #3
10/27/00 09:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.24	+/-	1.79
TH-232	-.20	+/-	.48
RA-226	1.59	+/-	.83
K-40	24.88	+/-	16.12

S2610
B-17.5 EPA #4
10/27/00 09:55
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.06	+/-	1.35
TH-232	.29	+/-	.38
RA-226	1.60	+/-	.64
K-40	-2.34	+/-	11.88

S2611
B-17.5 EPA #5
10/27/00 10:00
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.60	+/-	1.42
TH-232	-.30	+/-	.38
RA-226	2.46	+/-	.67
K-40	13.84	+/-	12.71

S2612
B17.5 EPA #6
10/27/00 10:06
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: B - 18.5

Date of Verification Survey: 4/14/00

Time of Verification Survey 11 30 (am)pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Berggreen Date 4/14/00

RICHARD G. BERGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Vernetta S. Simer Date 4/14/00

VERNETTA J SIMER (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-1.85	+/-	2.35
TH-232	2.37	+/-	.60
RA-226	2.93	+/ -	.99
K-40	28.55	+/-	18.51

) 5.30

S1052
B-18.5
04/14/00 14:48
GRAND PIER-RSSI

1/30 Am

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: B.5-15

Date of Verification Survey: 9-22-00

Time of Verification Survey 10:00 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 9-22-00

DUMARSAIS J. GUERRIER (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/22/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 9/22/00

VERNETTA SIMON (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.17	+/-	1.43
TH-232	.50	+/-	.40
RA-226	2.09	+/-	.67
K-40	7.38	+/-	12.54

S2406
B.5-15 EPA #1
09/22/00 10:54
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.17	+/-	1.91
TH-232	.78	+/-	.53
RA-226	2.17	+/-	.87
K-40	2.45	+/-	16.06

S2407
B.5-15 EPA #2
09/22/00 11:00
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.94	+/-	1.42
TH-232	.66	+/-	.39
RA-226	2.26	+/-	.65
K-40	7.83	+/-	11.97

S2408
B.5-15 EPA #3
09/22/00 11:06
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.70	+/-	1.48
TH-232	.69	+/-	.41
RA-226	2.21	+/-	.69
K-40	3.75	+/-	12.74

S2410
B.5-15 EPA #4
09/22/00 11:11
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.93	+/-	1.21
TH-232	1.31	+/-	.33
RA-226	1.11	+/-	.54
K-40	4.94	+/-	9.87

S2410
B.5-15 EPA #5
09/22/00 11:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.72	+/-	1.66
TH-232	.38	+/-	.45
RA-226	1.59	+/-	.78
K-40	25.00	+/-	14.81

S2411
B.5-15 EPA #6
09/22/00 11:22
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: B-5-20

Date of Verification Survey: 8-10-00

Time of Verification Survey 2:00 am/(pm)

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 8/10/00

(Print Name)

(Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/10/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Date 8/10/00

(Print Name)

(Print Title)

For U.S. EPA Region V

U-238	1.11	+/-	1.37
TH-232	3.41	+/-	.39
RA-226	2.02	+/-	.61
K-40	30.17	+/-	10.78

S2038
B.5 - (20) EPA #1
08/10/00 14:58
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	5.42	+/-	1.54
TH-232	1.71	+/-	.42
RA-226	1.65	+/-	.69
K-40	28.13	+/-	12.60

S2039
B.5 - (20) EPA #2
08/10/00 15:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.67	+/-	1.76
TH-232	1.88	+/-	.49
RA-226	1.93	+/-	.79
K-40	42.25	+/-	14.78

S2040
B.5 - (20) EPA #3
08/10/00 15:09
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.63	+/-	1.40
TH-232	2.17	+/-	.40
RA-226	1.74	+/-	.64
K-40	26.94	+/-	11.68

S2041
B.5 - (20) EPA #4
08/10/00 15:14
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	4.99	+/-	1.47
TH-232	1.83	+/-	.40
RA-226	1.36	+/-	.65
K-40	32.03	+/-	12.00

S2042
B.5 - (20) EPA #5
08/10/00 15:20
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.48	+/-	1.82
TH-232	2.15	+/-	.51
RA-226	1.84	+/-	.81
K-40	16.34	+/-	14.83

S2043
B.5 - (20) EPA #6
08/10/00 15:25
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: C-77

Date of Verification Survey: 9-15-00

Time of Verification Survey 8:39 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 9/15/00

[signature] (Print Name)

[signature] (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/15/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 9/15/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

SEP-18-00 10:10 FROM: ID: PAGE 2/2

U-238	-10.15	+/-	3.24
TH-232	1.36	+/-	.90
RA-226	2.47	+/-	1.53
K-40	129.30	+/-	29.14

S2383
C - 7 EPA #1
09/15/00 09:07
GRAND PIER-RSSI

U-238	-9.58	+/-	3.37
TH-232	1.22	+/-	.93
RA-226	3.24	+/-	1.59
K-40	125.12	+/-	29.72

S2384
C - 7 EPA #2
09/15/00 09:12
GRAND PIER-RSSI

U-238	3.35	+/-	1.47
TH-232	-.16	+/-	.39
RA-226	2.74	+/-	.68
K-40	19.39	+/-	12.87

S2385
C - 7 EPA #3
09/15/00 09:18
GRAND PIER-RSSI

U-238	3.36	+/-	1.41
TH-232	.47	+/-	.39
RA-226	1.96	+/-	.66
K-40	-1.46	+/-	11.91

S2386
C - 7 EPA #4
09/15/00 09:24
GRAND PIER-RSSI

U-238	3.52	+/-	1.80
TH-232	-.19	+/-	.48
RA-226	2.40	+/-	.84
K-40	18.67	+/-	15.75

S2387
C - 7 EPA #5
09/15/00 09:30
GRAND PIER-RSSI

U-238	-.47	+/-	1.26
TH-232	.48	+/-	.35
RA-226	1.59	+/-	.59
K-40	28.76	+/-	11.22

S2388
C - 7 EPA #6
09/15/00 09:36
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: C-22.5

Date of Verification Survey: 4/14/00

Time of Verification Survey 11^00 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Berggreen Date 4/14/00

RICHARD G. BERGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on _____. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta S. Simon Date 4/14/00

VERNETA J SIMON (Print Name)

On Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.66	+/-	2.15
TH-232	2.53	+/-	.54
RA-226	2.97	+/-	.89
K-40	53.32	+/-	17.34

S1047
C-22.5
04/14/00 11:57
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: C.S-10.5

Date of Verification Survey: 9/26/00

Time of Verification Survey 1120 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature] Date 9/26/00

Dominador F. Serrano (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/26/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: [signature] Date 9/26/00

Veronica Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.30	+/-	1.25
TH-232	.19	+/-	.35
RA-226	2.67	+/-	.60
K-40	-3.76	+/-	10.92

S2426
C.5 - 10.5 EPA #1
09/26/00 10:54
GRAND PIER-RSSI

U-238	-.01	+/-	1.31
TH-232	-.49	+/-	.36
RA-226	3.13	+/-	.64
K-40	-2.11	+/-	11.77

S2427
C.5 - 10.5 EPA #2
09/26/00 10:59
GRAND PIER-RSSI

U-238	2.00	+/-	1.26
TH-232	-.54	+/-	.34
RA-226	2.56	+/-	.60
K-40	13.52	+/-	11.25

S2428
C.5 - 10.5 EPA #3
09/26/00 11:05
GRAND PIER-RSSI

U-238	1.18	+/-	1.06
TH-232	-.10	+/-	.28
RA-226	1.88	+/	-.50
K-40	13.12	+/-	9.45

S2429
C.5 - 10.5 EPA #4
09/26/00 11:11
GRAND PIER-RSSI

U-238	.59	+/-	1.84
TH-232	-.30	+/-	.51
RA-226	1.55	+/-	.87
K-40	25.30	+/-	17.20

S2430
C.5 - 10.5 EPA #5
09/26/00 11:16
GRAND PIER-RSSI

U-248	1.05	+/-	1.04
TH-232	.70	+/-	.29
RA-226	1.02	+/-	.48
K-40	-4.74	+/-	9.01

S2431
C.5 - 10.5 EPA #6
09/26/00 11:22
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: C. 5-18

Date of Verification Survey: 8-18-00

Time of Verification Survey 12:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarian J. Guerrier Date 8/18/00

Dumarian J. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/18/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 8/18/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	3.72	+/-	1.90
TH-232	.94	+/-	.53
RA-226	2.94	+/-	.88
K-40	7.64	+/-	16.14

S2102
C.5 - (18) EPA #1
08/18/00 13:30
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.85	+/-	1.43
TH-232	2.00	+/-	.40
RA-226	1.07	+/-	.64
K-40	6.11	+/-	11.82

S2103
C.5 - (18) EPA #2
08/18/00 13:36
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.22	+/-	.94
TH-232	1.15	+/-	.27
RA-226	2.82	+/-	.44
K-40	8.28	+/-	7.87

S2104
C.5 - (18) EPA #3
08/18/00 13:42
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.50	+/-	1.47
TH-232	1.25	+/-	.40
RA-226	2.05	+/-	.66
K-40	26.32	+/-	12.25

S2105
C.5 - (18) EPA #4
08/18/00 13:47
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.43	+/-	1.37
TH-232	1.28	+/-	.38
RA-226	2.89	+/-	.63
K-40	15.02	+/-	11.42

S2106
C.5 - (18) EPA #5
08/18/00 13:54
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.21	+/-	1.71
TH-232	1.63	+/-	.47
RA-226	1.26	+/-	.76
K-40	15.06	+/-	14.11

S2107
C.5 - (18) EPA #6
08/18/00 14:00
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D-6.5

Date of Verification Survey: 9-15-00

Time of Verification Survey 8:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 9/15/00

[signature] (Print Name)

[signature] (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/15/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta S. Simon Date 9/15/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

SEP-15-00 18:11 FROM: ID: PAGE 3/3

U-238	1.99	+/-	1.45
TH-232	.95	+/-	.40
RA-226	2.88	+/-	.68
K-40	-5.74	+/-	11.69

S2389
D - 6.5 EPA #1
09/15/00 09:42
GRAND PIER-RSSI

U-238	3.35	+/-	1.43
TH-232	1.33	+/-	.39
RA-226	1.11	+/-	.64
K-40	20.64	+/-	12.08

S2390
D - 6.5 EPA #2
09/15/00 09:48
GRAND PIER-RSSI

U-238	-3.42	+/-	1.58
TH-232	.51	+/-	.45
RA-226	2.12	+/-	.75
K-40	40.81	+/-	14.88

S2391
D - 6.5 EPA #3
09/15/00 09:54
GRAND PIER-RSSI

U-238	1.56	+/-	1.62
TH-232	.26	+/-	.45
RA-226	2.67	+/-	.76
K-40	4.60	+/-	13.87

S2392
D - 6.5 EPA #4
09/15/00 09:59
GRAND PIER-RSSI

U-238	.27	+/-	1.53
TH-232	.67	+/-	.43
RA-226	2.14	+/-	.73
K-40	10.58	+/-	13.10

S2393
D - 6.5 EPA #5
09/15/00 10:05
GRAND PIER-RSSI

U-238	3.69	+/-	1.76
TH-232	.83	+/-	.48
RA-226	1.83	+/-	.79
K-40	13.52	+/-	14.64

S2394
D - 6.5 EPA #6
09/15/00 10:10
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D-7

Date of Verification Survey: 9-26-00

Time of Verification Survey 10:45 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 9/26/00

(Print Name)

(Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/26/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Date 9/26/00

(Print Name)

(Print Title)

For U.S. EPA Region V

U-248	3.51	+/-	1.26
TH-232	.31	+/-	.34
RA-226	2.09	+/-	.58
K-40	5.73	+/-	10.51

S2432A
D - 7 EPA #1
09/26/00 11:35
GRAND PIER-RSSI

U-248	2.26	+/-	1.64
TH-232	.27	+/-	.45
RA-226	2.64	+/-	.76
K-40	-3.63	+/-	13.83

S2433
D - 7 EPA #2
09/26/00 11:41
GRAND PIER-RSSI

U-248	3.04	+/-	1.46
TH-232	.42	+/-	.40
RA-226	1.72	+/-	.66
K-40	10.50	+/-	12.44

S2434
D - 7 EPA #3
09/26/00 11:47
GRAND PIER-RSSI

U-248	1.01	+/-	1.47
TH-232	.98	+/-	.41
RA-226	1.37	+/-	.68
K-40	20.02	+/-	12.54

S2435
D - 7 EPA #4
09/26/00 11:53
GRAND PIER-RSSI

U-248	-.53	+/-	1.50
TH-232	.52	+/-	.42
RA-226	1.96	+/-	.70
K-40	15.97	+/-	13.16

S2436
D - 7 EPA #5
09/26/00 11:59
GRAND PIER-RSSI

U-248	2.70	+/-	1.35
TH-232	.34	+/-	.36
RA-226	2.03	+/-	.62
K-40	24.99	+/-	11.68

S2437
D - 7 EPA #6
09/26/00 12:05
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D-13.5

Date of Verification Survey: 8-31-00

Time of Verification Survey 10:00 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8-31-00

Dimarcais F. Guerrero (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/31/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 8/31/00

Veneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.38	+/-	1.44
TH-232	1.63	+/-	.40
RA-226	.59	+/-	.65
K-40	23.25	+/-	12.31

S2277
D - 13.5 EPA #1
08/31/00 10:42
GRAND PIER-RSSI

U-238	2.17	+/-	1.55
TH-232	1.11	+/-	.43
RA-226	2.55	+/-	.72
K-40	-5.52	+/-	12.56

S2278
D - 13.5 EPA #2
08/31/00 10:48
GRAND PIER-RSSI

U-238	1.16	+/-	1.24
TH-232	.78	+/-	.34
RA-226	2.06	+/-	.57
K-40	24.99	+/-	10.59

S2279
D - 13.5 EPA #3
08/31/00 10:54
GRAND PIER-RSSI

U-238	-.30	+/-	1.31
TH-232	.47	+/-	.36
RA-226	2.82	+/-	.62
K-40	30.14	+/-	11.46

S2280
D - 13.5 EPA #4
08/31/00 11:00
GRAND PIER-RSSI

U-238	.32	+/-	1.70
TH-232	.57	+/-	.47
RA-226	3.35	+/-	.82
K-40	7.59	+/-	14.35

S2281
D - 13.5 EPA #5
08/31/00 11:06
GRAND PIER-RSSI

U-238	1.19	+/-	1.57
TH-232	.87	+/-	.43
RA-226	2.37	+/-	.73
K-40	19.92	+/-	13.34

S2282
D - 13.5 EPA #6
08/31/00 11:12
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D-18.5

Date of Verification Survey: 4-19-00

Time of Verification Survey 10:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature] Date 4-24-00

DUNARIAIS F. GUERRIER (Print Name)

SENIOR TECHNICIAN (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/24/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: [signature] Date 4/24/00

Venetta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-0.15	+\-	1.98
TH-232	3.10	+\-	0.50
RA-226	2.95	+\-	0.81
K-40	48.68	+\-	15.78

S1066
D 18.5
04/19/00 10:44
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D-21.5

Date of Verification Survey: 10-20-00

Time of Verification Survey 9:00 (am)pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature]

Date 10/20/00

[signature] (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 10/20/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: Fredrick A. Micke

Date 10/20/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	-1.12	+/-	1.46
TH-232	-.17	+/-	.40
RA-226	1.73	+/-	.71
K-40	19.48	+/-	13.37

S2584
D-21.5 EPA #1
10/20/00 09:37
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.23	+/-	1.21
TH-232	-.22	+/-	.33
RA-226	1.22	+/-	.58
K-40	12.89	+/-	11.33

S2585
D-21.5 EPA #2
10/20/00 09:43
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-2.77	+/-	1.32
TH-232	-.15	+/-	.37
RA-226	2.14	+/-	.65
K-40	6.79	+/-	12.04

S2586
D-21.5 EPA #3
10/20/00 09:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.70	+/-	1.52
TH-232	.10	+/-	.41
RA-226	.56	+/-	.70
K-40	8.64	+/-	13.80

S2587
D-21.5 EPA #4
10/20/00 09:55
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.26	+/-	1.29
TH-232	-.28	+/-	.35
RA-226	2.07	+/-	.61
K-40	15.11	+/-	11.76

S2588
D-21.5 EPA #5
10/20/00 10:06
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.37	+/-	1.01
TH-232	-.51	+/-	.27
RA-226	1.18	+/-	.49
K-40	19.35	+/-	9.62

S2589
D-21.5 EPA #6
10/20/00 10:12
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: D.5-25.5

Date of Verification Survey: 7-18-00

Time of Verification Survey 9:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 7-18-00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 7/18/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 7/18/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.15	+/-	1.76
TH-232	1.98	+/-	.44
RA-226	1.40	+/-	.73
K-40	14.44	+/-	14.43

S1879
D.5 - (25.5) EPA #1
07/18/00 11:12
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.44	+/-	1.91
TH-232	1.01	+/-	.47
RA-226	2.10	+/-	.80
K-40	12.36	+/-	15.84

S1880
D.5 - (25.5) EPA #2
07/18/00 11:18
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.35	+/-	1.57
TH-232	1.06	+/-	.38
RA-226	1.81	+/-	.65
K-40	26.35	+/-	13.01

S1881
D.5 - (25.5) EPA #3
07/18/00 11:24
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.81	+/-	1.64
TH-232	1.60	+/-	.40
RA-226	1.50	+/-	.67
K-40	15.72	+/-	13.18

S1882
D.5 - (25.5) EPA #4
07/18/00 11:29
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.88	+/-	2.21
TH-232	1.99	+/-	.56
RA-226	1.42	+/-	.92
K-40	6.99	+/-	17.63

S1883
D.5 - (25.5) EPA #5
07/18/00 11:35
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.13	+/-	1.68
TH-232	1.66	+/-	.41
RA-226	1.79	+/-	.68
K-40	13.84	+/-	13.46

S1884
D.5 - (25.5) EPA #6
07/18/00 11:40
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: E-75

Date of Verification Survey: 9-26-00

Time of Verification Survey 11:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 9-26-00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/26/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 9/26/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-248	-.26	+/-	1.27
TH-232	.83	+/-	.35
RA-226	.74	+/-	.59
K-40	34.28	+/-	11.35

S2438
E - 7.5 EPA #1
09/26/00 12:11
GRAND PIER-RSSI

U-248	-.20	+/-	1.19
TH-232	.36	+/-	.34
RA-226	2.31	+/-	.56
K-40	-7.66	+/-	10.47

S2439
E - 7.5 EPA #2
09/26/00 12:18
GRAND PIER-RSSI

U-248	1.41	+/-	1.06
TH-232	.45	+/-	.29
RA-226	.53	+/-	.49
K-40	17.76	+/-	9.53

S2440
E - 7.5 EPA #3
09/26/00 12:24
GRAND PIER-RSSI

U-248	3.37	+/-	1.23
TH-232	.12	+/-	.33
RA-226	2.40	+/-	.57
K-40	-10.12	+/-	10.29

S2441
E - 7.5 EPA #4
09/26/00 12:30
GRAND PIER-RSSI

U-248	.27	+/-	1.20
TH-232	.42	+/-	.33
RA-226	.83	+/-	.56
K-40	41.43	+/-	10.90

S2442
E - 7.5 EPA #5
09/26/00 12:35
GRAND PIER-RSSI

U-248	.90	+/-	1.16
TH-232	.30	+/-	.32
RA-226	1.40	+/-	.54
K-40	12.08	+/-	10.43

S2443
E - 7.5 EPA #6
09/26/00 12:41
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: E.5-20

Date of Verification Survey: 8-10-00

Time of Verification Survey 9:00 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Alejandro J. Guerrero Date 8/10/00

Alejandro J. Guerrero (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/10/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta S Simon Date 8/10/00

Verneta J Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.64	+/-	1.70
TH-232	1.15	+/-	.47
RA-226	2.63	+/-	.79
K-40	-1.81	+/-	13.93

S2020
E.5 - (20) EPA #1
08/10/00 10:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.08	+/-	1.42
TH-232	.79	+/-	.39
RA-226	2.64	+/-	.66
K-40	29.75	+/-	12.00

S2021
E.5 - (20) EPA #2
08/10/00 10:23
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.43	+/-	1.28
TH-232	1.72	+/-	.36
RA-226	2.80	+/-	.58
K-40	5.94	+/-	10.22

S2022
E.5 - (20) EPA #3
08/10/00 10:28
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	5.92	+/-	1.61
TH-232	.81	+/-	.43
RA-226	2.39	+/-	.73
K-40	10.97	+/-	13.40

S2023
E.5 - (20) EPA #4
08/10/00 10:46
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.00	+/-	1.70
TH-232	1.35	+/-	.48
RA-226	1.72	+/-	.77
K-40	27.28	+/-	14.52

S2024
E.5 - (20) EPA #5
08/10/00 10:40
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.75	+/-	1.29
TH-232	1.11	+/-	.35
RA-226	.81	+/-	.58
K-40	32.77	+/-	11.10

S2025
E.5 - (20) EPA #6
08/10/00 10:52
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: E.5 - E5.5

Date of Verification Survey: 7-18-00

Time of Verification Survey 9:45 (am) pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 7-18-00

(Print Name)

(Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 7/18/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed

Date 7/18/00

Veronica J Simon

(Print Name)

On-Scene Coordinator

(Print Title)

For U.S. EPA Region V

U-238	3.86	+/-	1.71
TH-232	.86	+/-	.41
RA-226	2.84	+/-	.70
K-40	12.89	+/-	13.70

S1885
E.5 - (25.5) EPA #1
07/18/00 11:46
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.19	+/-	1.89
TH-232	1.50	+/-	.46
RA-226	1.33	+/-	.77
K-40	44.65	+/-	15.92

S1886
E.5 - (25.5) EPA #2
07/18/00 11:52
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.59	+/-	1.44
TH-232	.72	+/-	.35
RA-226	3.13	+/-	.61
K-40	19.60	+/-	12.00

S1887
E.5 - (25.5) EPA #3
07/18/00 11:57
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.52	+/-	2.18
TH-232	1.00	+/-	.52
RA-226	1.65	+/-	.88
K-40	33.29	+/-	17.82

S1888
E.5 - (25.5) EPA #4
07/18/00 12:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.75	+/-	1.50
TH-232	1.14	+/-	.37
RA-226	1.82	+/-	.63
K-40	29.95	+/-	12.61

S1889
E.5 - (25.5) EPA #5
07/18/00 12:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.69	+/-	2.02
TH-232	1.46	+/-	.49
RA-226	1.68	+/-	.83
K-40	25.49	+/-	16.80

S1890
E.5 - (25.5) EPA #6
07/18/00 12:14
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-8.5

Date of Verification Survey: 9-6-00

Time of Verification Survey 1000 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais F. Guerrier Date 9-6-00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 9/6/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.84	+/-	1.20
TH-232	.66	+/-	.33
RA-226	2.60	+/-	.56
K-40	.84	+/-	10.11

S2336A
F - 8.5 EPA #1
09/06/00 12:13
GRAND PIER-RSSI

U-238	2.78	+/-	1.37
TH-232	.63	+/-	.38
RA-226	1.45	+/ -	.63
K-40	6.45	+/-	11.80

S2337
F - 8.5 EPA #2
09/06/00 12:18
GRAND PIER-RSSI

U-238	3.59	+/-	1.61
TH-232	.74	+/-	.44
RA-226	.90	+/-	.72
K-40	24.80	+/-	13.87

S2338
F - 8.5 EPA #3
09/06/00 12:24
GRAND PIER-RSSI

U-238	2.47	+/-	1.40
TH-232	.71	+/-	.39
RA-226	1.68	+/-	.65
K-40	6.67	+/-	12.00

S2339
F - 8.5 EPA #4
09/06/00 12:30
GRAND PIER-RSSI

U-238	2.43	+/-	1.17
TH-232	.53	+/-	.32
RA-226	1.35	+/-	.54
K-40	24.65	+/-	10.32

S2340
F - 8.5 EPA #5
09/06/00 12:36
GRAND PIER-RSSI

U-238	2.52	+/-	1.02
TH-232	.14	+/-	.28
RA-226	1.83	+/-	.47
K-40	12.56	+/-	8.94

S2341
F - 8.5 EPA #6
09/06/00 12:41
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-15

Date of Verification Survey: 8/22/00

Time of Verification Survey 8:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guernier Date 8/22/00

Dumarsais F. Guernier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/22/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 8/22/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	4.20	+/-	1.10
TH-232	.37	+/-	.30
RA-226	2.23	+/-	.50
K-40	11.22	+/-	9.26

S2141
F - (15) EPA #1
08/22/00 08:45
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.46	+/-	1.24
TH-232	1.02	+/-	.35
RA-226	1.97	+/-	.57
K-40	1.32	+/-	10.32

S2142
F - (15) EPA #2
08/22/00 08:52
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.51	+/-	1.43
TH-232	.53	+/-	.39
RA-226	2.46	+/-	.66
K-40	12.52	+/-	12.31

S2143
F - (15) EPA #3
08/22/00 08:57
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.34	+/-	1.39
TH-232	.45	+/-	.38
RA-226	2.89	+/-	.65
K-40	14.80	+/-	11.79

S2144
F - (15) EPA #4
08/22/00 09:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	4.19	+/-	1.15
TH-232	.91	+/-	.31
RA-226	1.60	+/-	.51
K-40	18.03	+/-	9.60

S2145
F - (15) EPA #5
08/22/00 09:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.77	+/-	1.28
TH-232	.48	+/-	.35
RA-226	2.57	+/-	.60
K-40	28.59	+/-	11.20

S2146
F - (15) EPA #6
08/22/00 09:14
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-15

Date of Verification Survey: 8-30-00

Time of Verification Survey 9:45 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8/30/00

Duncan F. Guerrero (Print Name)

Field Coordinator (Print Title)

BTS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/30/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 8/30/00

VERNETA SIMON (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-1.82	+/-	1.24
TH-232	.44	+/-	.35
RA-226	1.36	+/-	.61
K-40	14.55	+/-	11.53

S2245
F - 15 EPA #1
08/30/00 11:06
GRAND PIER-RSSI

U-238	-1.05	+/-	1.61
TH-232	.48	+/-	.46
RA-226	.73	+/-	.78
K-40	10.47	+/-	14.93

S2246
F - 15 EPA #2
08/30/00 11:12
GRAND PIER-RSSI

U-238	2.67	+/-	1.48
TH-232	-.16	+/-	.40
RA-226	1.72	+/-	.69
K-40	8.06	+/-	13.20

S2247
F - 15 EPA #3
08/30/00 11:56
GRAND PIER-RSSI

U-238	.66	+/-	1.30
TH-232	.23	+/-	.36
RA-226	.21	+/-	.61
K-40	21.96	+/-	11.98

S2248
F - 15 EPA #4
08/30/00 12:03
GRAND PIER-RSSI

U-238	1.16	+/-	1.48
TH-232	.00	+/-	.41
RA-226	1.45	+/-	.70
K-40	12.59	+/-	13.39

S2249
F - 15 EPA #5
08/30/00 12:09
GRAND PIER-RSSI

U-238	.75	+/-	1.35
TH-232	-.05	+/-	.37
RA-226	1.32	+/-	.64
K-40	24.82	+/-	12.50

S2250
F - 15 EPA #6
08/30/00 12:15
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-18.5

Date of Verification Survey: 6/22/00

Time of Verification Survey 8:30 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Domarsais F. Guennien Date 6/22/00

Domarsais F. Guennien (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/22/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Veronica Simon Date 6/22/00

On-Sce Veronica Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.97	+/-	1.79
TH-232	.69	+/-	.42
RA-226	1.11	+/-	.73
K-40	9.23	+/-	14.60

S1750
F-18.5 EPA #1
06/22/00 10:43
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.33	+/-	1.46
TH-232	.71	+/-	.36
RA-226	1.54	+/-	.61
K-40	12.76	+/-	12.30

S1751
F-18.5 EPA #2
06/22/00 10:49
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.81	+/-	1.50
TH-232	.35	+/-	.36
RA-226	1.79	+/-	.65
K-40	29.61	+/-	13.66

S1752
F-18.5 EPA #3
06/22/00 10:56
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.53	+/-	1.30
TH-232	.63	+/-	.31
RA-226	1.06	+/-	.54
K-40	44.27	+/-	11.32

S1753
F-18.5 EPA #4
06/22/00 11:02
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.67	+/-	1.47
TH-232	.96	+/-	.35
RA-226	.72	+/-	.60
K-40	25.93	+/-	12.47

S1754
F-18.5 EPA #5
06/22/00 11:07
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.56	+/-	1.67
TH-232	.39	+/-	.40
RA-226	1.36	+/-	.70
K-40	33.44	+/-	14.68

S1755
F-18.5 EPA #6
06/22/00 11:13
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-18.5 WALL

Date of Verification Survey: 6/22/00

Time of Verification Survey 8:45 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed: [signature] Date 6/22/00

D. MARSAIS E. GUERRIER (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/22/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed: [signature] Date 6/22/00

Venetta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	3.79	+/-	1.56
TH-232	.61	+/-	.36
RA-226	3.71	+/-	.65
K-40	33.98	+/-	12.75

S1744
F-18.5 WALL EPA #1
06/22/00 10:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.00	+/-	1.80
TH-232	1.23	+/-	.44
RA-226	3.72	+/-	.75
K-40	2.09	+/-	14.09

S1745
F-18.5 WALL EPA #2
06/22/00 10:14
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.36	+/-	1.33
TH-232	.60	+/-	.32
RA-226	5.88	+/-	.58
K-40	5.67	+/-	10.66

S1746
F-18.5 WALL EPA #3
06/22/00 10:20
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.53	+/-	1.42
TH-232	1.04	+/-	.34
RA-226	5.38	+/-	.60
K-40	15.76	+/-	11.21

S1747
F-18.5 WALL EPA #4
06/22/00 10:26
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.57	+/-	1.89
TH-232	.89	+/-	.45
RA-226	3.39	+/-	.80
K-40	28.69	+/-	15.41

S1748
F-18.5 WALL EPA #5
06/22/00 10:32
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.75	+/-	1.56
TH-232	.93	+/-	.38
RA-226	4.49	+/-	.67
K-40	10.30	+/-	12.34

S1749
F-18.5 WALL EPA #6
06/22/00 10:38
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-22.5

Date of Verification Survey: 8-3-00

Time of Verification Survey 12:50 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8-8-00

[signature] (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/8/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Veneta S. Simon Date 8/8/00

Veneta S. Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.22	+/-	1.73
TH-232	1.14	+/-	.49
RA-226	4.76	+/-	.82
K-40	9.55	+/-	14.29

S1994
F - (22.5) EPA #6A
08/07/00 14:27
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	9.43	+/-	2.01
TH-232	1.03	+/-	.54
RA-226	4.72	+/-	.90
K-40	25.62	+/-	16.01

S1993
F - (22.5) EPA #5A
08/07/00 14:20
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.17	+/-	1.81
TH-232	1.60	+/-	.51
RA-226	3.64	+/-	.85
K-40	15.32	+/-	14.85

S1992
F - (22.5) EPA #4A
08/07/00 14:15
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.64	+/-	1.99
TH-232	1.41	+/-	.55
RA-226	2.43	+/-	.91
K-40	24.56	+/-	16.73

S1991
F - (22.5) EPA #3A
08/07/00 14:09
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	5.23	+/-	.99
TH-232	.90	+/-	.27
RA-226	3.07	+/-	.45
K-40	22.79	+/-	8.23

S1990
F - (22.5) EPA #2A
08/07/00 14:04
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	6.38	+/-	1.58
TH-232	.45	+/-	.42
RA-226	3.98	+/-	.73
K-40	19.48	+/-	12.98

S1989
F - (22.5) EPA #1A
08/07/00 13:58
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: F-J-27.5

Date of Verification Survey: 7-25-00

Time of Verification Survey 1:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dimarcis F. Guzman Date 7-26-00

Dimarcis F. Guzman (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 7/26/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 7/26/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	3.83	+/-	1.63
TH-232	1.05	+/-	.38
RA-226	1.90	+/-	.67
K-40	.50	+/-	12.70

S1942
F-J - (27.5) EPA #1
07/25/00 14:57
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.17	+/-	1.75
TH-232	.98	+/-	.42
RA-226	1.21	+/-	.71
K-40	11.53	+/-	14.20

S1943
F-J - (27.5) EPA #2
07/25/00 15:02
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.99	+/-	1.57
TH-232	.86	+/-	.38
RA-226	2.16	+/-	.66
K-40	7.63	+/-	12.89

S1944
F-J - (27.5) EPA #3
07/25/00 15:08
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.55	+/-	1.67
TH-232	.74	+/-	.40
RA-226	1.49	+/-	.69
K-40	17.11	+/-	14.24

S1945
F-J - (27.5) EPA #4
07/25/00 15:14
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.44	+/-	1.41
TH-232	.36	+/-	.33
RA-226	3.91	+/-	.61
K-40	-8.93	+/-	11.19

S1946
F-J - (27.5) EPA #5
07/25/00 15:19
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.10	+/-	1.80
TH-232	.65	+/-	.45
RA-226	2.38	+/-	.78
K-40	12.87	+/-	15.61

S1947
F-J - (27.5) EPA #6
07/25/00 15:25
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-2

Date of Verification Survey: 5-31-00

Time of Verification Survey 10:05 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais F. Guernier Date 6-1-00

Dumarsais F. Guernier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on June 2, 2000. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/2/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.80	+/-	1.05
TH-232	1.36	+/-	.27
RA-226	1.01	+/-	.44
K-40	11.20	+/-	9.09

S1497
G-2 EPA #1
05/31/00 16:30
GRAND PIER-RSSI

U-238	.04	+/-	2.10
TH-232	.75	+/-	.52
RA-226	1.51	+/-	.89
K-40	40.55	+/-	18.66

S1498
G-2 EPA #2
06/01/00 09:32
GRAND PIER-RSSI

U-238	1.48	+/-	1.06
TH-232	.50	+/-	.25
RA-226	1.64	+/-	.44
K-40	45.80	+/-	9.52

S1499
G-2 EPA #3
06/01/00 09:38
GRAND PIER-RSSI

U-238	**1.92**	**+/-**	**1.90**
TH-232	**.84**	**+/-**	**.46**
RA-226	**1.57**	**+/-**	**.78**
K-40	**31.46**	**+/-**	**15.72**

S1500
G-2 EPA #4
06/01/00 09:47
GRAND PIER-RSSI

U-238	1.32	+/-	1.11
TH-232	1.07	+/-	.27
RA-226	1.47	+/-	.46
K-40	10.59	+/-	9.33

S1501
G-2 EPA #5
06/01/00 09:54
GRAND PIER-RSSI

U-238	1.57	+/-	1.18
TH-232	.68	+/-	.29
RA-226	2.47	+/-	.50
K-40	-.65	+/-	9.84

S1502
G-2 EPA #6
06/01/00 10:01
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G - 7

Date of Verification Survey: 6/14/00

Time of Verification Survey 10:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Domarsais F. Guerrier Date 6/14/00

Domarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

Verification Survey Procedure 223-1

Pa

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ ~~8~~ 8

To Rich Berggren	From Fred Micke
Dept./Agency STS	Phone # (312) 886-5123
Fax # (847) 279-2510	Fax # 353-9176

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

U-238	1.33	+/-	2.04
TH-232	1.50	+/-	.50
RA-226	1.54	+/-	.84
K-40	27.91	+/-	16.42

S1696
G-7 EPA #1
06/14/00 15:10
GRAND PIER-RSSI

U-238	**-.36**	**+/-**	**1.58**
TH-232	**1.76**	**+/-**	**.40**
RA-226	**1.45**	**+/-**	**.67**
K-40	**27.17**	**+/-**	**13.33**

S1697
G-7 EPA #2
06/14/00 15:15
GRAND PIER-RSSI

U-238	3.58	+/-	1.54
TH-232	1.61	+/-	.37
RA-226	2.10	+/-	.61
K-40	13.91	+/-	11.91

S1698
G-7 EPA #3
06/14/00 15:21
GRAND PIER-RSSI

U-238	.39	+/-	1.91
TH-232	2.06	+/-	.48
RA-226	1.47	+/-	.78
K-40	13.90	+/-	15.14

S1699
G-7 EPA #4
06/14/00 15:26
GRAND PIER-RSSI

U-238	3.65	+/-	1.72
TH-232	1.00	+/-	.41
RA-226	1.98	+/-	.70
K-40	10.24	+/-	13.52

S1700
G-7 EPA #5
06/14/00 15:32
GRAND PIER-RSSI

U-238	.87	+/-	1.95
TH-232	1.66	+/-	.49
RA-226	2.20	+/-	.82
K-40	-9.73	+/-	15.15

S1701
G-7 EPA #6
06/14/00 15:37
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-21.5

Date of Verification Survey: 8/26/00

Time of Verification Survey 7:05 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8/26/00

[signature] (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/26/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 8/26/00

Veneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	3.93	+/-	1.31
TH-232	.57	+/-	.36
RA-226	2.01	+/-	.60
K-40	23.74	+/-	11.32

S2206
G - 21.5 EPA #1
08/26/00 07:59
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.19	+/-	1.54
TH-232	.24	+/-	.41
RA-226	2.96	+/-	.71
K-40	25.10	+/-	12.97

S2207
G - 21.5 EPA #2
08/26/00 08:05
GRAND PIER-RSSI
NTRANL RESULTS

U-238	1.99	+/-	1.40
TH-232	1.10	+/-	.39
RA-226	2.36	+/-	.64
K-40	3.59	+/-	11.68

S2208
G - 21.5 EPA #3
08/26/00 08:10
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.82	+/-	1.83
TH-232	1.11	+/-	.51
RA-226	3.14	+/-	.85
K-40	-14.12	+/-	14.82

S2209
G - 21.5 EPA #4
08/26/00 08:16
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.22	+/-	1.32
TH-232	.56	+/-	.36
RA-226	2.56	+/-	.60
K-40	29.58	+/-	11.18

S2210
G - 21.5 EPA #5
08/26/00 08:22
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.14	+/-	1.46
TH-232	.57	+/-	.40
RA-226	2.25	+/-	.68
K-40	27.29	+/-	12.66

S2211
G - 21.5 EPA #6
08/26/00 08:27
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-22 (PARTIAL EXCAVATION)

Date of Verification Survey: 4/14/00

Time of Verification Survey 1:20 am/(pm)

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Boggreen Date 4/14/00

RICHARD G. BOGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 4/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR, USEPA (Print Title)

For U.S. EPA Region V

U-238	-1.98	+/-	1.89
TH-232	2.58	+/-	.48
RA-226	2.62	+/-	.79
K-40	66.22	+/-	15.58

5.20

S1050
G-22
04/14/00 13:16
GRAND PIER-RSSI

1:20 pm

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-24 (PARTIAL EXCAVATION)

Date of Verification Survey: 4/14/00

Time of Verification Survey 1:10 pm am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Berggreen Date 4/14/00

RICHARD G. BERGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta S. Simon Date 4/14/00

Verneta S Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.16	+/-	1.91
TH-232	1.16	+/-	.47
RA-226	2.14	+/-	.81
K-40	36.26	+/-	15.98

) 3.30

S1051
G-24
04/14/00 14:41
GRAND PIER-RSSI

1:10 pm

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-25

Date of Verification Survey: 4-27-00

Time of Verification Survey 1130 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 4-27-00

[signature] (Print Name)

[signature] (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/28/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 4/28/00

Vernetta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-.51	+\-	2.03
TH-232	.82	+\-	.50
RA-226	3.53	+\-	.89
K-40	49.19	+\-	17.60

S1119
G-25 EPA VERIFICATION
04/27/00 13:03
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-27 (Excavation)

Date of Verification Survey: 5/12/00

Time of Verification Survey 9:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 5/12/00

Dumas F. Guernier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on _____. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 5/12/00

Veeneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.74	+\-	1.57
TH-232	.65	+\-	.39
RA-226	.91	+\-	.66
K-40	22.02	+\-	13.80

S1242
G-27 EPA #1
05/12/00 11:09
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.55	+\-	1.07
TH-232	.31	+\-	.27
RA-226	1.62	+\-	.47
K-40	24.01	+\-	9.86

S1243
G-27 EPA #2
05/12/00 11:14
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.33	+\-	1.55
TH-232	.40	+\-	.38
RA-226	1.47	+\-	.67
K-40	25.42	+\-	13.98

S1244
G-27 EPA #3
05/12/00 11:20
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.88	+\-	1.48
TH-232	.60	+\-	.37
RA-226	.33	+\-	.63
K-40	31.11	+\-	13.95

S1245
G-27 EPA #4
05/12/00 11:26
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.52	+\-	1.68
TH-232	.69	+\-	.41
RA-226	.53	+\-	.69
K-40	36.73	+\-	14.88

S1246
G-27 EPA #5
05/12/00 11:31
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.90	+\-	.97
TH-232	1.89	+\-	.25
RA-226	2.50	+\-	.41
K-40	16.94	+\-	8.07

S1247
G-27 EPA #6
05/12/00 11:37
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G-5-17

Date of Verification Survey: 4-24-00

Time of Verification Survey 2:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 4-24-00

Thomas F. Guerrier (Print Name)

Senior Technician (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/25/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 4/25/00

Venetta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-2.99	+\-	3.12
TH-232	3.00	+\-	.80
RA-226	2.85	+\-	1.31
K-40	78.05	+\-	26.17

S1075
G.5-17
04/24/00 14:50
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G.S-19

Date of Verification Survey: 4-24-00

Time of Verification Survey 2:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 4-24-00

Dennis F. Lucarelli (Print Name)

Senior Technician (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 4/25/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 4/25/00

Vernetta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	-1.65	+\-	3.28
TH-232	1.32	+\-	.81
RA-226	3.40	+\-	1.42
K-40	44.31	+\-	27.25

S1076
G.5-19
04/24/00 14:56
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: G.5-23

Date of Verification Survey: 8-10-00

Time of Verification Survey 10:15 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guernier Date 8-10-00

Dumarsais J. Guernier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/10/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 8/10/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.88	+/-	1.14
TH-232	-.30	+/-	.31
RA-226	2.18	+/-	.54
K-40	8.84	+/-	10.42

S2026
G.5 - (23) EPA #1
08/10/00 10:58
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.24	+/-	1.42
TH-232	.66	+/-	.40
RA-226	1.81	+/-	.65
K-40	7.76	+/-	12.58

S2027
G.5 - (23) EPA #2
08/10/00 11:04
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.06	+/-	1.41
TH-232	.44	+/-	.38
RA-226	1.96	+/-	.66
K-40	11.59	+/-	12.12

S2028
G.5 - (23) EPA #3
08/10/00 11:10
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.55	+/-	1.03
TH-232	.19	+/-	.29
RA-226	2.42	+/-	.50
K-40	20.90	+/-	9.42

S2029
G.5 - (23) EPA #4
08/10/00 11:16
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.12	+/-	1.30
TH-232	.17	+/-	.35
RA-226	1.20	+/-	.60
K-40	29.11	+/-	11.71

S2030
G.5 - (23) EPA #5
08/10/00 11:22
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-1.57	+/-	1.58
TH-232	.90	+/-	.45
RA-226	1.20	+/-	.76
K-40	22.58	+/-	14.19

S2031
G.5 - (23) EPA #6
08/10/00 11:28
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H - 2

Date of Verification Survey: 5/31/00

Time of Verification Survey 9:30 (am) ~~pm~~

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Bergeron Date 5/31/00

RICHARD G. BERGERON (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 5/31/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Veneta Simon Date 5/31/00

Veneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.50	+/-	1.32
TH-232	1.59	+/-	.33
RA-226	2.13	+/-	.55
K-40	24.75	+/-	10.97

S1473
H-2 EPA #1
05/31/00 13:55
GRAND PIER-RSSI

U-238	3.61	+/-	1.51
TH-232	1.94	+/-	.37
RA-226	1.16	+/-	.60
K-40	5.33	+/-	11.66

S1474
H-2 EPA #2
05/31/00 14:00
GRAND PIER-RSSI

U-238	-.76	+/-	1.19
TH-232	1.99	+/-	.31
RA-226	1.70	+/-	.51
K-40	25.20	+/-	10.25

S1475
H-2 EPA #3
05/31/00 14:06
GRAND PIER-RSSI

U-238	.07	+/-	1.56
TH-232	2.21	+/-	.41
RA-226	1.42	+/-	.66
K-40	4.07	+/-	12.65

S1476
H-2 EPA #4
05/31/00 14:12
GRAND PIER-RSSI

U-238	2.37	+/-	1.85
TH-232	1.89	+/-	.45
RA-226	1.52	+/-	.74
K-40	21.32	+/-	14.61

S1477
H-2 EPA #5
05/31/00 14:18
GRAND PIER-RSSI

U-238	2.12	+/-	2.30
TH-232	1.21	+/-	.55
RA-226	1.57	+/-	.92
K-40	41.05	+/-	18.42

S1478
H-2 EPA #6
05/31/00 14:24
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H-8.5

Date of Verification Survey: 5-31-00

Time of Verification Survey 10:45 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6-1-00

Francois F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on June 2, 2000. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A Micke Date 6/2/00

FREDRICK A MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

Verification Survey Procedure 223-1

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 3

To Rich Berggren	From Fred Micke
Dept./Agency STS	Phone # (312) 886-5123
Fax # (847) 279-2510	Fax # 353-9176

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

U-238	-.59	+/-	1.43
TH-232	1.81	+/-	.36
RA-226	2.65	+/-	.60
K-40	28.80	+/-	11.69

S1509
H-8.5 EPA #1
06/01/00 12:34
GRAND PIER-RSSI

U-238	2.03	+/-	1.60
TH-232	2.13	+/-	.40
RA-226	1.01	+/-	.64
K-40	21.10	+/-	13.02

S1510
H-8.5 EPA #2
06/01/00 12:48
GRAND PIER-RSSI

U-238	1.35	+/-	1.86
TH-232	2.15	+/-	.46
RA-226	1.17	+/-	.75
K-40	16.02	+/-	14.68

S1511
H-8.5 EPA #3
06/01/00 12:55
GRAND PIER-RSSI

U-238	2.10	+/-	1.61
TH-232	1.55	+/-	.39
RA-226	2.63	+/-	.66
K-40	12.36	+/-	12.57

S1512
H-8.5 EPA #4
06/01/00 13:01
GRAND PIER-RSSI

U-238	-1.10	+/-	1.87
TH-232	1.66	+/-	.47
RA-226	2.12	+/-	.80
K-40	40.37	+/-	15.87

S1513
H-8.5 EPA #5
06/01/00 13:47
GRAND PIER-RSSI

U-238	1.85	+/-	1.60
TH-232	1.03	+/-	.39
RA-226	3.04	+/-	.67
K-40	12.36	+/-	12.72

S1514
H-8.5 EPA #6
06/01/00 13:55
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H-145

Date of Verification Survey: 8/29/00

Time of Verification Survey 10:00 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8/29/00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/29/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Vernetta S. Simon Date 8/29/00

Vernetta J Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	.87	+/-	1.39
TH-232	.31	+/-	.38
RA-226	1.06	+/-	.66
K-40	17.07	+/-	12.59

S2218
H-14.5 EPA #1
08/29/00 10:40
GRAND PIER-RSSI

U-238	-.61	+/-	1.00
TH-232	.56	+/-	.28
RA-22 6	.89	+/-	.47
K-40	13.58	+/-	9.15

S2219
H-14.5 EPA #2
08/29/00 10:46
GRAND PIER-RSSI

U-238	3.44	+/-	1.25
TH-232	-.60	+/-	.33
RA-226	2.12	+/-	.60
K-40	-2.78	+/-	11.26

S2220
H-14.5 EPA #3
08/29/00 10:52
GRAND PIER-RSSI

U-238	1.39	+/-	1.53
TH-232	.49	+/-	.43
RA-226	.60	+/-	.71
K-40	22.85	+/-	13.96

S2221
H-14.5 EPA #4
08/29/00 10:57
GRAND PIER-RSSI

U-238	-.06	+/-	1.31
TH-232	.34	+/-	.36
RA-226	1.93	+/-	.63
K-40	6.21	+/-	11.74

S2222
H-14.5 EPA #5
08/29/00 11:04
GRAND PIER-RSSI

U-238	1.33	+/-	1.21
TH-232	.04	+/-	.33
RA-226	.99	+/-	.57
K-40	27.34	+/-	11.29

S2223
H-14.5 EPA #6
08/29/00 11:10
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H-16

Date of Verification Survey: 8/18/00

Time of Verification Survey 1230 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 8/18/00

[illegible] (Print Name)

[illegible] (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/18/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 8/18/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	3.02	+/-	1.55
TH-232	.39	+/-	.42
RA-226	1.84	+/-	.71
K-40	33.29	+/-	13.56

S2090
H - (16) EPA #1
08/18/00 12:52
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.99	+/-	1.38
TH-232	.52	+/-	.37
RA-226	2.50	+/-	.63
K-40	10.69	+/-	11.39

S2091
H - (16) EPA #2
08/18/00 12:57
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.72	+/-	1.25
TH-232	.67	+/-	.33
RA-226	1.72	+/-	.57
K-40	28.86	+/-	10.66

S2092
H - (16) EPA #3
08/18/00 13:03
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.26	+/-	1.53
TH-232	1.20	+/-	.43
RA-226	1.91	+/-	.71
K-40	9.28	+/-	13.07

S2093
H - (16) EPA #4
08/18/00 13:11
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.49	+/-	1.67
TH-232	.83	+/-	.45
RA-226	2.16	+/-	.76
K-40	14.97	+/-	13.84

S2094
H - (16) EPA #5
08/18/00 13:17
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	5.67	+/-	1.75
TH-232	.84	+/-	.47
RA-226	2.36	+/-	.79
K-40	12.68	+/-	14.35

S2095
H - (16) EPA #6
08/18/00 13:24
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H.5-9

Date of Verification Survey: 9-5-00

Time of Verification Survey 9:45 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais J. Guerrier Date 9-5-00

Dumarsais J. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/6/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Verneta Simon Date 9/6/00

Verneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

SEP-06-00 05:30 FROM: ID: PAGE 3/3

U-238	2.85	+/-	.83
TH-232	2.03	+/-	.23
RA-226	1.44	+/-	.37
K-40	23.53	+/-	6.83

S2315
H.5 - 9 EPA #1
09/05/00 10:31
GRAND PIER-RSSI

U-238	4.71	+/-	1.44
TH-232	1.53	+/-	.40
RA-226	2.06	+/-	.65
K-40	3.00	+/-	11.47

S2316
H.5 - 9 EPA #2
09/05/00 10:37
GRAND PIER-RSSI

U-238	5.25	+/-	1.73
TH-232	2.23	+/-	.48
RA-226	1.70	+/-	.76
K-40	3.42	+/-	13.67

S2317
H.5 - 9 EPA #3
09/05/00 10:43
GRAND PIER-RSSI

U-238	4.21	+/-	1.67
TH-232	.92	+/-	.45
RA-226	3.90	+/-	.76
K-40	8.86	+/-	13.41

S2318
H.5 - 9 EPA #4
09/05/00 10:48
GRAND PIER-RSSI

U-238	-.29	+/-	1.54
TH-232	1.16	+/-	.43
RA-226	3.30	+/-	.72
K-40	3.58	+/-	12.62

S2319
H.5 - 9 EPA #5
09/05/00 10:54
GRAND PIER-RSSI

U-238	3.49	+/-	1.14
TH-232	1.75	+/-	.32
RA-226	2.62	+/-	.52
K-40	8.66	+/-	9.10

S2320
H.5 - 9 EPA #6
09/05/00 11:00
GRAND PIER-RSSI
□

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H.5-10

Date of Verification Survey: 9-1-00

Time of Verification Survey 11:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 9-1-00

Dumarsais F. Gusarian (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 9/1/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

[signature] Date 9/1/00

Verneda Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	1.31	+/-	1.25
TH-232	1.49	+/-	.35
RA-226	2.80	+/-	.57
K-40	12.94	+/-	10.18

S2308
H.5 - (10) EPA #1
09/01/00 13:18
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.03	+/-	1.15
TH-232	1.68	+/-	.32
RA-226	2.71	+/-	.53
K-40	-14.50	+/-	9.12

S2309
H.5 - (10) EPA #2
09/01/00 13:24
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.02	+/-	1.45
TH-232	1.23	+/-	.41
RA-226	3.39	+/-	.67
K-40	-6.79	+/-	11.71

S2310
H.5 - (10) EPA #3
09/01/00 13:30
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	3.29	+/-	1.36
TH-232	1.30	+/-	.37
RA-226	2.20	+/-	.61
K-40	22.60	+/-	11.21

S2311
H.5 - (10) EPA #4
09/01/00 13:37
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.14	+/-	1.32
TH-232	1.92	+/-	.38
RA-226	2.04	+/-	.60
K-40	28.31	+/-	11.18

S2312
H.5 - (10) EPA #5
09/01/00 13:43
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.15	+/-	1.54
TH-232	1.17	+/-	.43
RA-226	3.13	+/-	.73
K-40	18.20	+/-	12.88

S2313
H.5 - (10) EPA #6
09/01/00 13:49
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H.S-23

Date of Verification Survey: 8-10-00

Time of Verification Survey 9:15 (am)/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Date 8/10/00

(Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/10/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Date 8/10/00

(Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	4.24	+/-	1.66
TH-232	.87	+/-	.45
RA-226	.87	+/-	.75
K-40	27.03	+/-	14.35

S2032
H.5 - (23) EPA #1
08/10/00 11:34
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.07	+/-	1.25
TH-232	1.66	+/-	.35
RA-226	1.02	+/-	.57
K-40	20.60	+/-	10.65

S2033
H.5 - (23) EPA #2
08/10/00 11:41
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	1.30	+/-	1.58
TH-232	.78	+/-	.44
RA-226	1.63	+/-	.73
K-40	27.64	+/-	13.78

S2034
H.5 - (23) EPA #3
08/10/00 11:53
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	4.27	+/-	1.52
TH-232	.76	+/-	.41
RA-226	1.65	+/-	.69
K-40	-3.08	+/-	12.57

S2035
H.5 - (23) EPA #4
08/10/00 11:59
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.88	+/-	1.73
TH-232	.40	+/-	.47
RA-226	3.19	+/-	.80
K-40	5.02	+/-	14.92

S2036
H.5 - (23) EPA #5
08/10/00 12:04
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	-.16	+/-	1.49
TH-232	1.18	+/-	.42
RA-226	1.80	+/-	.70
K-40	2.76	+/-	12.59

S2037
H.5 - (23) EPA #6
08/10/00 12:10
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: H-8-26

Date of Verification Survey: 8-2-00

Time of Verification Survey 10:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais F. Guerrier Date 8-8-00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 8/8/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Veneta S Simon Date 8/8/00

Veneta S Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	2.14	+/-	2.62
TH-232	5.13	+/-	.66
RA-226	2.65	+/-	1.01
K-40	32.19	+/-	18.26

S1975
H.8 - (26) EPA #1
08/02/00 15:21
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.86	+/-	2.08
TH-232	1.78	+/-	.50
RA-226	2.17	+/-	.84
K-40	18.32	+/-	15.89

S1976
H.8 - (26) EPA #2
08/02/00 15:26
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.15	+/-	2.02
TH-232	1.53	+/-	.49
RA-226	2.05	+/-	.82
K-40	22.43	+/-	16.06

S1977
H.8 - (26) EPA #3
08/02/00 15:32
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.64	+/-	1.31
TH-232	1.64	+/-	.31
RA-226	1.09	+/-	.52
K-40	30.26	+/-	10.43

S1978
H.8 - (26) EPA #4
08/02/00 15:38
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	.24	+/-	1.60
TH-232	1.10	+/-	.40
RA-226	1.78	+/-	.68
K-40	33.74	+/-	13.87

S1979
H.8 - (26) EPA #5
08/02/00 15:43
GRAND PIER-RSSI
NUTRANL RESULTS

U-238	2.69	+/-	1.92
TH-232	1.37	+/-	.47
RA-226	1.55	+/-	.78
K-40	20.58	+/-	15.33

S1980
H.8 - (26) EPA #6
08/02/00 15:49
GRAND PIER-RSSI
NUTRANL RESULTS

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-Ø

Date of Verification Survey: 6/14/00

Time of Verification Survey 10:50 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Dumarsais P. Guernica Date 6/14/00

Dumarsais P. Guernica (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 6/14/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/14/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	1.90	+/-	1.57
TH-232	3.41	+/-	.40
RA-226	1.89	+/-	.63
K-40	16.99	+/-	12.20

S1690
I-0 EPA #1
06/14/00 14:36
GRAND PIER-RSSI

U-238	1.26	+/-	1.34
TH-232	3.56	+/-	.34
RA-226	2.75	+/-	.54
K-40	2.65	+/-	9.88

S1691
I-0 EPA #2
06/14/00 14:42
GRAND PIER-RSSI

U-238	2.44	+/-	1.62
TH-232	2.84	+/-	.40
RA-226	2.29	+/-	.65
K-40	29.96	+/-	12.48

S1692
I-0 EPA #3
06/14/00 14:47
GRAND PIER-RSSI

U-238	2.89	+/-	1.63
TH-232	3.59	+/-	.40
RA-226	1.39	+/-	.63
K-40	43.46	+/-	12.38

S1693
I-0 EPA #4
06/14/00 14:53
GRAND PIER-RSSI

U-238	-.69	+/-	1.52
TH-232	3.66	+/-	.40
RA-226	2.07	+/-	.62
K-40	20.66	+/-	11.90

S1694
I-0 EPA #5
06/14/00 14:58
GRAND PIER-RSSI

U-238	3.09	+/-	1.49
TH-232	2.93	+/-	.37
RA-226	1.83	+/-	.59
K-40	38.59	+/-	11.52

S1695
I-0 EPA #6
06/14/00 15:04
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-2

Date of Verification Survey: 5/31/00

Time of Verification Survey 9:00 (am) ~~pm~~

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

Richard G. Berggren Date 5/31/00

RICHARD G. BERGGREEN (Print Name)

PROJECT COORDINATOR (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on 5/31/00. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Veneta Simon Date 5/31/00

Veneta Simon (Print Name)

On-Scene Coordinator (Print Title)

For U.S. EPA Region V

U-238	1.24	+/-	1.41
TH-232	.23	+/-	.33
RA-226	1.15	+/-	.60
K-40	27.69	+/-	12.46

S1449
I-2 EPA #1
05/31/00 11:38
GRAND PIER-RSSI

U-238	1.86	+/-	1.43
TH-232	.45	+/-	.34
RA-226	.47	+/-	.59
K-40	26.73	+/-	12.49

S1450
I-2 EPA #2
05/31/00 11:43
GRAND PIER-RSSI

U-238	-.76	+/-	1.47
TH-232	.35	+/-	.37
RA-226	1.85	+/-	.65
K-40	8.38	+/-	13.21

S1451
I-2 EPA #3
05/31/00 11:49
GRAND PIER-RSSI

U-238	-.55	+/-	1.28
TH-232	.15	+/-	.32
RA-226	1.52	+/-	.57
K-40	29.49	+/-	12.02

S1452
I-2 EPA #4
05/31/00 11:55
GRAND PIER-RSSI

U-238	-1.54	+/-	1.42
TH-232	1.15	+/-	.36
RA-226	2.07	+/-	.62
K-40	53.52	+/-	12.63

S1453
I-2 EPA #5
05/31/00 12:01
GRAND PIER-RSSI

U-238	-1.54	+/-	1.26
TH-232	.26	+/-	.32
RA-226	.86	+/-	.56
K-40	37.76	+/-	12.31

S1454
I-2 EPA #6
05/31/00 12:06
GRAND PIER-RSSI

FORM 223-1
NOTIFICATION OF SUCCESSFUL VERIFICATION SURVEY

Area Identification: I-5

Date of Verification Survey: 5-31-00

Time of Verification Survey 10:30 am/pm

The above-described excavation was surveyed at the time and date indicated above. The survey indicated that all soils have been removed as required by the Site Removal Action Criteria.

Documents pertaining to this survey are attached for review and approval by the U.S. EPA.

Signed:

[signature] Date 6-1-00

Dumarsais F. Guerrier (Print Name)

Field Coordinator (Print Title)

STS Consultants, Ltd.
Solutions through Science & Engineering

The attached Verification Survey documents were reviewed by U.S. EPA, Region V on June 2, 2000. The results of this survey indicate that the verification criteria as contained in the UAO, have been met.

Authorization is hereby granted to commence backfill and restoration work at this excavation.

Signed:

Fredrick A. Micke Date 6/2/00

FREDRICK A. MICKE (Print Name)

ON-SCENE COORDINATOR (Print Title)

For U.S. EPA Region V

U-238	.57	+/-	1.58
TH-232	1.34	+/-	.39
RA-226	1.48	+/-	.66
K-40	34.06	+/-	13.34

S1503
I-5 EPA #1
06/01/00 10:07
GRAND PIER-RSSI

U-238	.61	+/-	1.67
TH-232	1.94	+/-	.42
RA-226	.65	+/-	.67
K-40	35.91	+/-	13.88

S1504
I-5 EPA #2
06/01/00 10:25
GRAND PIER-RSSI

U-238	-.46	+/-	1.65
TH-232	1.84	+/-	.41
RA-226	1.58	+/-	.69
K-40	31.11	+/-	13.76

S1505
I-5 EPA #3
06/01/00 11:32
GRAND PIER-RSSI

U-238	1.49	+/-	1.48
TH-232	2.24	+/-	.37
RA-226	.73	+/-	.60
K-40	27.83	+/-	12.01

S1506
I-5 EPA #4
06/01/00 11:38
GRAND PIER-RSSI

U-238	-2.13	+/-	1.53
TH-232	1.65	+/-	.40
RA-226	1.20	+/-	.66
K-40	47.11	+/-	13.41

S1507
I-5 EPA #5
06/01/00 12:19
GRAND PIER-RSSI

U-238	3.24	+/-	1.86
TH-232	1.30	+/-	.44
RA-226	1.42	+/-	.75
K-40	19.08	+/-	14.98

S1508
I-5 EPA #6
06/01/00 12:25
GRAND PIER-RSSI

ATTACHMENT G

LABORATORY REPORTS

March 9, 2000

A survey was made of the site and 3 soil samples taken. Splits were by the U.S. Environmental Protection Agency (USEPA) with Stan A. Huber Consultants, Inc. Samples were analyzed at Argonne National Laboratory (ANL) for the USEPA and at Radiation Safety Services, Inc. (RSSI) for Huber. The results are summarized below. Reports from these facilities are attachments #1 and #2, respectively.

The designations used may not be clear. Hole 1, Open Area background, is for the sample taken near the center of the landfilled area, in a region that seemed to be representative of the lowest levels found. Control, Hole 1 is not a control sample but a sample taken at a point of elevated gamma exposure rate, near the water, to the east side of the landfill. Hole 1, West Sample is a sample taken at a point of elevated gamma exposure rate, near the water, to the west side of the landfill.

	Radium-226 (picocuries per gram, pCi/g)	**Radium-228 (pCi/g)**
	Argonne National Lab Beverly Gravel (1st Set)	
Hole 1 Open Area background	0.60	0.55
Control Hole 1	1.01	0.98
Hole 1 West Sample	0.77	1.42
	RSSI Beverly Gravel (1st Set)	
Hole 1 Open Area background	0.689	0.518
Control Hole 1	0.703	0.478
Hole 1 West Sample	0.615	0.922

March 27, 2000

Because results from the March 9 samples did not seem to be representative of the elevated gamma exposure rates, samples were retaken at the same locations. These samples, again, were split between USEPA and Huber. USEPA had its samples analyzed at ANL, with results summarized below. Apparently, the sample was not homogeneous and the lab's first measurement missed the "hot" aliquot. USEPA requested a re-analysis that did include a "hot" aliquot. Huber had its samples analyzed by RSSI. These are reported below. RSSI and ANL were to exchange samples for cross comparisons but STS instructed RSSI not to make an analysis because of different counting geometries (ANL's measurements on an aliquot of RSSI's sample is attached). These reports are labeled attachments #3 - #6

	Radium-226 (picocuries per gram, pCi/g)	**Radium-228 (pCi/g)**
	Argonne National Lab Beverly Gravel 2nd Set, 1st Analysis	
Background	0.51	0.64
East Hole	1.51	1.14
West Hole	2.34	9.28
	Argonne National Lab Beverly Gravel 2nd Set, Re-Analysis	
East Hole	2110	<0.2
	RSSI Beverly Gravel 2nd Set, 1st Analysis	
Background	0.67 - 2.3	0.60
East Hole	5.2 - 7.8	0.61
West Hole	2.3 - 4.3	8.3
	Argonne National Lab Beverly Gravel Recount of Aliquot of RSSI Sample	
East Hole	2.02	0.58

#1

FIRST SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY ARGONNE NATIONAL LABORATORY USING GAMMA SPECTROMETRY

Beverly Gravel (1ST Set)

ANALYTICAL CHEMISTRY LABORATORY
Argonne National Laboratory
Argonne, IL 60439

REPORT OF ANALYTICAL RESULTS Revised 3/22/00

Sample Material: Beverly Gravel/Grand Pier Samples
Date Received: 3/16/00
Submitted by: Larry Jensen, U.S. EPA
Date Reported: 3/21/00

Submitter's Sample No.	ACL Sample No.	Gamma Spec.; (pCi/g)		
		^{40}K	^{226}Ra	^{228}Ra
Hole 1 Open Area background	00-8128-01	<4.54	0.60 ± 0.06	0.55 ± 0.06
Control Hole 1	-02	13.2 ± 0.2	1.01 ± 0.07	0.98 ± 0.03
Hole 1 West Sample	-03	12.1 ± 0.4	0.77 ± 0.11	1.42 ± 0.13

[redacted]

Reason for Revison:
^{40}K results were included.

NOTE: Unused sample material will be returned to the Client. Prepared samples will be discarded one (1) month after the date of this report unless other arrangements are made. When making future inquiries regarding this report, please reference the ACL sample number(s) above. For further information about the results reported here, please call T. TenKate at 2- 4291.

Reference(s): CMT Logbook # 1110, Det 2, 4, 7, 11, p. 163; CMT Logbook # 1498, p. 175
CMT Logbook # 1638, Det. 3, pp. 21, 23

Copies To: L. Jensen, T. TenKate, D. Green, D. Bowers, F. Martino, F. Markun
ttw
3/21/00

Analyst(s): T. TenKate

T 2

Hole 1, Open area, background

03/20/00

Argonne National Laboratory/ Analytical Chemistry Laboratory

ACL # : 00-8128-01
Your # :

Height,cm: 6.4
Weight,g : 175.5023
% Dry Wt.: 100
or
Vol. mls
Density: 1.463

Date Bottled: 03/11/00
Days Storage 6
Detector: 3
Serial #: 3635
Shelf,cm,___ : 20 2.5 Horizontal
Cnt. Date : 03/17/00
Cnt. Time,m: 960
TOTAL CPM: 407.5

Nuclide	keV	GrossDPM @ zero Time	% error DPM	Gross CPM	Bkgd 3627 CPM	%error, Bkgd CPM	pCi/g	+1σ	LLD
214-Bi	609	323.1	3.4	1.400	0.517	3.3	5.73e-01	3.28e-02	
	1120	426.6	8.2	0.360	0.155	7.3	6.66e-01	1.03e-01	0.60 ± 0.06 pCi/g
	1764	507.0	6.4	0.324	0.183	4.4	5.94e-01	9.37e-02	
226-Ra	295	261.4	5.3	1.020	0.272	7.7	5.55e-01	4.30e-02	
	352	293.5	3.2	1.895	0.470	4.1	6.35e-01	2.84e-02	
232-Th	338	210.8	9.4	0.457	0.134	15.3	4.29e-01	6.32e-02	
(228-Ac)	911	316.2	6.9	0.615	0.222	6.5	5.59e-01	6.37e-02	
	969	330.6	8.7	0.380	0.110	9.6	6.48e-01	8.33e-02	0.55 ± 0.06 pCi/g
228-Th	239	254.2	4.6	2.765	0.602	5.1	5.81e-01	3.55e-02	
	583	294.9	5.2	0.841	0.254	5.1	5.50e-01	4.55e-02	
	727	0	0	0.198	0.066	15.9			
137-Cs	662	39.9	9.3	0.349	0.000	0.0	1.12e-01	1.04e-02	
238-U	1001	0.0	0	0.000	0.000	0.0			
235-U	94	0.0	0	0.000	0.000	0.0			
	143.8	0.0	0	0.000	0.000	0.0			
	185	0.0	0	0.000	0.407	7.6			
	205	0.0	0	0.000	0.000	0.0			
40-K	1460	7568.0	1.7	0.324	1.550	1.4			< 4.54e+00
60-Co	1173	49.2	11.1	0.262	0.000	0.0	1.35e-01	1.50e-02	
	1332	44.2	10.5	0.224	0.000	0.0	1.20e-01	1.26e-02	
241-Am	59.5	122.9	4.8	1.973	0.000	0.0	3.80e-01	1.83e-02	
7-Be	477.6	0.0	0	0.000	0.000	0.0			
134-Cs	604	0.0	0	0.000	0.000	0.0			
	795	0.0	0	0	0.000	0.0			
234-Th	63.3	0.0	0	0.000	0.000	0			
	92.98	0		0	0	0			

03/22/00 WED 10:41 FAX 630 252 5655 CMT/ACL 003

Hole 1, Control

03/20/00

Argonne National Laboratory/ Analytical Chemistry Laboratory

ACL # : 00-8128-02
Your # : CONTROL,HOLE 1

Date Bottled:03/09/00
Days Storage 11
Detector: 3
Serial #: 3640
Shelf,cm,___ : 20 2.5 Horizontal
Cnt. Date :03/20/00
Cnt. Time,m: 1222.83
TOTAL CPM: 477.2

Height,cm: 6.4
Weight,g : 181.7761
% Dry Wt.: 100
or
Vol. mLs
Density: 1.515

Nuclide	keV	GrossDPM @ zero Time	% error DPM	Gross CPM	Bkgd 3627 CPM	%error, Bkgd CPM	pCi/g	+1σ	LLD
214-Bi	609	501.5	2.4	2.173	0.517	3.3	1.05e+00	3.47e-02	
	1120	563.0	7.4	0.475	0.155	7.3	1.01e+00	1.17e-01	
	1764	635.5	5.8	0.407	0.183	4.4	9.13e-01	1.02e-01	
226-Ra	295	449.1	3.2	1.751	0.272	7.7	1.07e+00	4.34e-02	
	352	437.3	2.2	2.824	0.470	4.1	1.02e+00	2.83e-02	
232-Th	338	386.7	6.1	0.837	0.134	15.3	9.14e-01	7.15e-02	
(228-Ac)	911	459.7	3.9	0.894	0.222	6.5	9.30e-01	5.22e-02	
	969	472.4	6.5	0.544	0.110	9.6	1.01e+00	8.60e-02	
228-Th	239	349.3	2.6	3.799	0.602	5.1	8.40e-01	2.72e-02	
	583	467.2	3.2	1.331	0.284	5.1	1.01e+00	4.33e-02	
	727	550.5	9.8	0.299	0.066	15.8	1.17e+00	1.56e-01	
137-Cs	662	0.0	0	0.000	0.000	0.0			
238-U	1001	0.0	0	0.000	0.000	0.0			
235-U	94	0.0	0	0.000	0.000	0.0			
	143.8	0.0	0	0.000	0.000	0.0			
	185	0.0	0	0.000	0.407	7.6			
	205	0.0	0	0.000	0.000	0.0			
40-K	1460	8337.0	1.4	4.296	1.550	1.4			
60-Co	1173	0.0	0	0.000	0.000	0.0			
	1332	0.0	0	0.000	0.000	0.0			
241-Am	59.5	0.0	0	0.000	0.000	0.0			
7-Be	477.6	0.0	0	0.000	0.000	0.0			
134-Cs	604	0.0	0	0.000	0.000	0.0			
	795	0.0	0	0.000	0.000	0.0			
234-Th	63.3	0.0	0	0.000	0.000	0			
	92.38	0		0	0	0			

1.01 ± 0.07 pCi/g

0.98 ± 0.07 pCi/g

13.2 ± 0.2 pCi/g

*** CMT/ACL

03/22/00 WED 10:42 FAX 630 252 5655

004

Hole 1, West Sample

03/20/00

Argonne National Laboratory/ Analytical Chemistry Laboratory

ACL # : 00-8128-03
Your # : WEST SAMPLE HOLE 1

Height,cm: 6.4
Weight,g : 179.6545
% Dry Wt.: 100
cl
Vol. mLs
Density: 1.497

Date Bottled:03/09/00
Days Storage 12
Detector: 3
Serial #: 3641
Shelf,cm,___ : 20 2.5 Horizontal
Cnt. Date :03/21/00
Cnt. Time,m: 226
TOTAL CPM: 498.5

Nuclide	keV	GrossDPM @ zero Time	% error DPM	Gross CPM	Bkgd 3627 CPM	%error, Bkgd CPM	pCi/g	-1σ	LLD	
214-Bi	609	422.5	7.4	1.831	0.517	3.3	8.38e-01	8.71e-02		
	1120	426.9	16.4	0.360	0.155	7.3	6.54e-01	1.92e-01		
	1764	518.9	13.9	0.332	0.183	4.4			< 6.35e-01	0.77 ± 0.11 pCi/g
226-Pa	295	354.5	8.8	1.382	0.272	7.7	8.12e-01	9.03e-02		
	352	350.2	6.5	2.261	0.470	4.1	7.85e-01	6.59e-02		
232-Th	338	541.4	9.4	1.173	0.134	15.3	1.36e+00	1.47e-01		
228-Ac)	911	618.4	7.9	1.203	0.222	6.5	1.37e+00	1.34e-01		
	969	595.3	10.6	0.685	0.110	9.6	1.35e+00	1.73e-01		1.42 ± 0.13 pCi/g
228-Th	239	563.4	3.9	6.116	0.602	5.1	1.46e+00	6.17e-02		
	[illegible]	[illegible]	6	1.988	0.284	5.1	1.56e+00	1.11e-01		
	727	0	0	0.426	0.066	15.8				
137-Cs	662	0.0	0	0.000	0.000	0.0				
238-U	1001	0.0	0	0.000	0.000	0.0				
235-U	94	0.0	0	0.000	0.000	0.0				
	143.8	0.0	0	0.000	0.000	0.0				
	185	0.0	0	0.000	0.407	7.6				
	205	0.0	0	0.000	0.000	0.0				
40-K	1460	7829.0	3.7	4.034	1.550	1.4				12.1 ± 0.4 pCi/g
60-Co	1173	0.0	0	0.000	0.000	0.0				
	1332	0.0	0	0.000	0.000	0.0				
241-Am	59.5	0.0	0	0.000	0.000	0.0				
7-Be	477.6	0.0	0	0.000	0.000	0.0				
134-Cs	604	0.0	0	0.000	0.000	0.0				
	795	0.0	0	0	0.000	0.0				
234-Th	63.3	0.0	0	0.000	0.000	0				
	92.98	0		0	0	0				

03/22/00 WED 10:42 FAX 630 252 5655 CMT/ACL 005

#2

FIRST SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY RSSI USING GAMMA SPECTROMETRY

Beverly Gravel (1st Set)

TABLE 2
LANDFILL SAMPLES
GRAND PIER CENTER

Sample ID	Location	Ra-226		Ra-228 (Ac-228 Surrogate)	Total Ra-226 + Ra-228
		186.21 keV	351.92 keV		
[redacted]	--	[redacted]	[redacted]	[redacted]	[redacted]
Beverly Gravel	Hole 1, [redacted] Open Area Background	--	0.689	0.518	1.207
Beverly Gravel	Control Sample Hole 1	--	0.703	0.478	1.181
Beverly Gravel	West Sample Hole 1	--	0.615	0.922	1.537
[redacted]	[redacted]	--	[redacted]	[redacted]	[redacted]

RSSI Analytical Services
6312 West Oakton, Morton Grove, IL 60053
847-965-1999

NUCLIDE IDENTIFICATION REPORT

Sample Title: Beverly Gravel, Hole 1, Open Area Bkgd.
Nuclide Library Used: C:\GENIE2K\CAMFILES\2Ra-a.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
RA-226	0.958	351.92*	37.20	6.88782E-001	2.27140E-001
Ra-228	0.978	911.60*	27.70	5.18055E-001	5.96146E-002

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 2.000 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

RSSI Analytical Services
6312 West Oakton, Morton Grove, IL 60053
847-965-1999

NUCLIDE IDENTIFICATION REPORT

Sample Title: Beverly Gravel, Control Sample, Hole 1
Nuclide Library Used: C:\GENIE2K\CAMFILES\2Ra-a.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
RA-226	0.958	351.92*	37.20	7.02909E-001	2.31868E-001
Ra-228	0.972	911.60*	27.70	4.78371E-001	6.57955E-002

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 2.000 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

RSSI Analytical Services
6312 West Oakton, Morton Grove, IL 60053
847-965-1999

NUCLIDE IDENTIFICATION REPORT

Sample Title: Beverly Gravel, West Sample, Hole 1
Nuclide Library Used: C:\GENIE2K\CAMFILES\2Ra-a.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (pCi/g)	Activity Uncertainty
RA-226	0.995	351.92*	37.20	6.15132E-001	2.04709E-001
Ra-228	0.999	911.60*	27.70	9.22015E-001	7.68708E-002

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 2.000 keV
Nuclide confidence index threshold = 0.30
Errors quoted at 1.000 sigma

#3

SECOND SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY ARGONNE NATIONAL LABORATORY USING GAMMA SPECTROMETRY

Beverly Gravel (2nd Set)
1st Analysis

ANALYTICAL CHEMISTRY LABORATORY
Argonne National Laboratory
Argonne, IL 60439

REPORT OF ANALYTICAL RESULTS

Sample Material: Soil and Gravel, Lindsay Light II, U.S. EPA Date Received: 3/28/00
Submitted by: Larry Jensen, U.S EPA Date Reported: 3/31/00

Submitter's Sample No.	ACL Sample No.	Gamma Spec.; (pCi/g)		
		^{40}K	^{226}Ra	^{228}Ra
Beverly Gravel West Hole	00-8134-01	9.40 ± 0.49	2.34 ± 0.14	9.28 ± 0.52
Beverly Gravel East Hole	-02	12.0 ± 0.4	1.5 ± 0.06	1.14 ± 0.11 TO BE REDONE
Beverly Gravel Background	-03	13.0 ± 0.4	0.51 ± 0.03	0.64 ± 0.04

NOTE: Samples will be discarded one (1) month after date of report unless otherwise arranged. When making future inquiries regarding this work, you must reference ACL sample number(s) above. For further information about the results reported here, please call T. TENKATE at 2-4291

Reference(s): CMT Logbook # 1498, p. 178; CMT Logbook # 1110 Dec. 2 4, 7 11, p. 165.

Copies To: L. Jensen, D. Green, D. Bowers, F. Markun, L. Smith, T. TenKate

Analyst(s): T. TenKate

#4

SECOND SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY ARGONNE NATIONAL LABORATORY USING GAMMA SPECTROMETRY

Beverly Gravel (2nd Set)
Re-Analysis

ANALYTICAL CHEMISTRY LABORATORY
Argonne National Laboratory
Argonne, IL 60439

REPORT OF ANALYTICAL RESULTS

Sample Material: Soil and Gravel, Lindsay Light ∏, U.S. EPA
Date Received: 3/28/00

Submitted by: Larry Jensen, U.S. EPA
Date Reported: 3/31/00

Submitter's Sample No.	ACL Sample No.	Gamma Spec.; (pCi/g)		
		^{40}K	^{226}Ra	^{228}Ra
Beverly Gravel West Hole	00-8134-01	9.40 ± 0.49	2.34 ± 0.14	9.28 ± 0.52
Beverly Gravel East Hole	-02	24.1 ± 4.7	(2.11 ± 0.02) x10^3	<0.2
Beverly Gravel Background	-03	13.0 ± 0.4	0.51 ± 0.03	0.64 ± 0.04

NOTE: Unused sample material will be returned to the Client. Prepared samples will be discarded one (1) month after the date of this report unless other arrangements are made. When making future inquiries regarding this report, please reference the ACL sample number(s) above. For further information about the results reported here, please call T. TenKate at 2- 4291.

Reference(s): CMT Logbook # 1498, p. 178; CMT Logbook # 1110, Det. 2, 4, 7, 11, p. 165.

Copies To: L. Jensen, D. Green, D. Bowers, F. Martino, F. Markun, L. Smith, T. TenKate

Analyst(s): T. TenKate

ttw
3/31/00

CMT-84 (9-96)

#5

SECOND SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY RSSI USING GAMMA SPECTROMETRY

Beverly Gravel (2nd Set)
1st Analysis

RSSI, Morton Grove, Illinois 847-965-1999

Quantum Technology
GDR_C Nuclide Activity Summary

Sample ID: 000776b REREAD Beverly Gravel East Hole

Sample Size . . . . . 9.36e+002 g	Spectrum File . c:\specfile\000776b.spm
Sampling Start. 00-00-00 00:00	Counting Start. 00-00-00 00:00
Sampling Stop 00-00-00 00:00	Buildup Time. . . . . 0.00e+000 Hrs
Current Date. 00-00-00 00:00	Decay Time [OFF]. . . . . 0.00e+000 Hrs
Efficiency Filec:\specfile\500mar.eff	Library File. . .c:\specfile\U_Th_K.lib
ID. 500mar	ID. . . . . .U & Th SERIES & K-40

Eff.= 1/[9.24e-002*En^-2.35e+000 + 1.17e+002*En^9.43e-001] 03-30-99 12:00

Gamma Fraction Limit >= . . . 10.00 %	Decay Limit <=. . . . 8.000 Halflives
Library Energy Tolerance. . . 6.00	

FINAL ACTIVITY REPORT

Nuclide	Energy (keV)	Conc +- 1.00sigma (uCi/g)	Halflife (hrs)	Peaks Found
Pb-214	Average:	5.35e-006 +-6.71e-008	4.47e-001	6 of 6
	74.82	5.57e-006 +-5.38e-007		
	77.11	2.03e-006 +-3.19e-007		
	87.30	3.72e-006 +-5.69e-007		
	241.98	5.57e-006 +-2.80e-007		
	295.21	5.43e-006 +-1.32e-007		
	351.92	5.56e-006 +-8.60e-008		
Tl-208	Average:	1.96e-007 +-2.59e-008	5.09e-002	2 of 5
	74.97	1.94e-007 +-9.74e-007		
	583.14	1.96e-007 +-2.59e-008		
Ra-226	186.21	7.78e-006 +-6.29e-007	1.40e+007	1 of 1
Ac-228	911.07	6.09e-007 +-1.01e-007	6.13e+000	1 of 10
Bi-214	Average:	5.18e-006 +-8.42e-008	3.32e-001	6 of 6
	609.31	5.00e-006 +-9.20e-008		
	768.36	4.76e-006 +-5.20e-007		
	934.06	5.00e-006 +-8.83e-007		
	1120.30	6.33e-006 +-2.75e-007		
	1238.10	6.57e-006 +-5.94e-007		
	1377.70	6.81e-006 +-7.50e-007		
K-40	1460.80	1.66e-005 +-5.33e-007	1.12e+013	1 of 1
TOTAL:		3.57e-005 uCi/g		

UNKNOWN PEAKS

Energy (keV)	Centroid Channel	Net Counts	Un-Certainty	C.L. Counts	Bkg. Counts	FWHM (keV)	Net Gamma/sec

RSSI, Morton Grove, Illinois 847-965-1999

Quantum Technology
GDR_C Nuclide Activity Summary

Sample ID: 000777 Beverly Gravel West Hole

Sample Size . . . . . 1.08e+003 g	Spectrum File . .c:\specfile\000777.spm
Sampling Start. 00-00-00 00:00	Counting Start. 00-00-00 00:00
Sampling Stop 00-00-00 00:00	Buildup Time. . . . . 0.00e+000 Hrs
Current Date. 03-30-99 17:41	Decay Time [OFF]. . . . . 0.00e+000 Hrs
Efficiency Filec:\specfile\500mar.eff	Library File. . .c:\specfile\U_Th_K.lib
ID. 500mar	ID. . . . . .U & Th SERIES & K-40

Eff.= 1/[9.24e-002*En^-2.35e+000 + 1.17e+002*En^9.43e-001] 03-30-99 12:00

Gamma Fraction Limit >= . . . 10.00 %	Decay Limit <=. . . . 8.000 Halflives
Library Energy Tolerance. . . 6.00	

FINAL ACTIVITY REPORT

Nuclide	Energy (keV)	Conc +- 1.00sigma (uCi/g)	Halflife (hrs)	Peaks Found
Th-232	125.00	3.38e-004 +-6.59e-005	1.23e+014	1 of 2
Th-234	Average:	1.29e-005 +-9.65e-007	5.78e+002	2 of 3
	92.38	1.28e-005 +-1.36e-006		
	92.80	1.30e-005 +-1.37e-006		
Pb-212	Average:	1.06e-006 +-5.06e-008	1.06e+001	4 of 5
	74.82	8.32e-006 +-4.32e-007		
	77.11	4.94e-006 +-2.57e-007		
	87.30	2.24e-006 +-3.51e-007		
	238.63	7.65e-007 +-5.26e-008		
Pb-214	Average:	2.18e-006 +-6.16e-008	4.47e-001	6 of 6
	74.82	2.41e-006 +-7.44e-007		
	77.11	2.41e-006 +-4.42e-007		
	87.30	2.41e-006 +-6.03e-007		
	241.98	2.41e-006 +-3.14e-007		
	295.21	1.38e-006 +-1.31e-007		
	351.92	2.41e-006 +-7.35e-008		
Tl-208	Average:	3.15e-006 +-4.92e-008	5.09e-002	5 of 5
	74.97	3.13e-006 +-1.35e-006		
	277.35	1.94e-006 +-3.32e-007		
	510.84	3.41e-006 +-1.49e-007		
	583.14	3.13e-006 +-5.39e-008		
	860.37	3.48e-006 +-2.68e-007		
Th-228	84.37	1.49e-005 +-2.33e-006	1.68e+004	1 of 2
Pa-234	Average:	1.16e-006 +-8.93e-008	6.70e+000	3 of 14
	94.66	2.23e-006 +-2.35e-007		
	98.44	1.37e-006 +-1.45e-007		
	131.20	6.63e-007 +-1.29e-007		
Ra-226	186.21	4.31e-006 +-7.56e-007	1.40e+007	1 of 1
Ac-228	Average:	8.83e-006 +-1.19e-007	6.13e+000	10 of 10
	209.28	7.31e-006 +-5.88e-007		

	270.23	8.61e-006 +-6.40e-007			
	327.64	6.51e-006 +-7.39e-007			
	338.32	8.66e-006 +-2.61e-007			
	409.51	7.73e-006 +-1.10e-006			
	463.00	8.19e-006 +-5.94e-007			
	794.70	8.45e-006 +-6.83e-007			
	911.07	1.00e-005 +-1.91e-007			
	964.60	1.00e-005 +-8.32e-007			
	969.11	7.51e-006 +-2.61e-007			
Ra-224	240.98	8.65e-006 +-5.95e-007	8.69e+001	1 of 1	
Bi-212	727.17	6.40e-006 +-3.06e-007	1.01e+000	1 of 2	
Bi-214	Average:	2.36e-006 +-7.43e-008	3.32e-001	2 of 6	
	609.31	2.36e-006 +-7.87e-008			
	1120.30	2.39e-006 +-2.25e-007			
K-40	1460.80	1.06e-005 +-4.65e-007	1.12e+013	1 of 1	
TOTAL:		4.15e-004 uCi/g			

UNKNOWN PEAKS

Energy (keV)	Centroid Channel	Net Counts	Un-Certainty	C.L. Counts	Bkg. Counts	FWHM (keV)	Net Gamma/sec

RSSI, Morton Grove, Illinois 847-965-1999

Quantum Technology
GDR_C Nuclide Activity Summary

Sample ID: 000778 Beverly Gravel Background

Sample Size . . . . . 6.76e+002 g	Spectrum File . .c:\specfile\000778.spm
Sampling Start. 00-00-00 00:00	Counting Start. 00-00-00 00:00
Sampling Stop 00-00-00 00:00	Buildup Time. . . . . 0.00e+000 Hrs
Current Date. 03-30-99 17:41	Decay Time [OFF]. . . . . 0.00e+000 Hrs
Efficiency Filec:\specfile\500mar.eff	Library File. . .c:\specfile\U_Th_K.lib
ID. 500mar	ID. . . . . .U & Th SERIES & K-40

Eff.= 1/[9.24e-002*En^-2.35e+000 + 1.17e+002*En^9.43e-001] 03-30-99 12:00

Gamma Fraction Limit >= . . . 10.00 %	Decay Limit <=. . . . 8.000 Halflives
Library Energy Tolerance. . . 6.00	

FINAL ACTIVITY REPORT

Nuclide	Energy (keV)	Conc +- 1.00sigma (uCi/g)	Halflife (hrs)	Peaks Found
Pb-212	238.63	4.21e-007 +-4.05e-008	1.06e+001	1 of 5
Pb-214	Average:	6.49e-007 +-4.02e-008	4.47e-001	3 of 6
	241.98	6.51e-007 +-2.42e-007		
	295.21	6.48e-007 +-7.91e-008		
	351.92	6.49e-007 +-4.75e-008		
Tl-208	583.14	2.43e-007 +-2.29e-008	5.09e-002	1 of 5
Ra-226	186.21	2.25e-006 +-5.18e-007	1.40e+007	1 of 1
Ac-228	Average:	5.86e-007 +-7.01e-008	6.13e+000	2 of 10
	338.32	6.61e-007 +-1.16e-007		
	911.07	5.42e-007 +-8.81e-008		
Ra-224	240.98	4.75e-006 +-4.58e-007	8.69e+001	1 of 1
Bi-214	609.31	7.34e-007 +-4.80e-008	3.32e-001	1 of 6
K-40	1460.80	1.63e-005 +-6.24e-007	1.12e+013	1 of 1
TOTAL:		2.60e-005 uCi/g		

UNKNOWN PEAKS

Energy (keV)	Centroid Channel	Net Counts	Un-Certainty	C.L. Counts	Bkg. Counts	FWHM (keV)	Net Gamma/sec

None

TOTAL P.05

#6

SECOND SET OF SAMPLES FOR LANDFILL MATERIAL SENT OFFSITE FROM NORTH COLUMBUS DRIVE

ANALYZED BY ARGONNE NATIONAL LABORATORY USING GAMMA SPECTROMETRY

Beverly Gravel (2nd Set)
Recount of RSSI Aliquot

ANALYTICAL CHEMISTRY LABORATORY
Argonne National Laboratory
Argonne, IL 60439

REPORT OF ANALYTICAL RESULTS

Sample Material: Soil and Gravel, Lindsay light II, U.S. EPA Date Received: 4/4/00
Submitted by: Larry Jensen, U.S. EPA Date Reported: 4/5/00

Submitter's Sample No.	ACL Sample No.		Gamma Spec.; (pCi/g)		
			^{40}K	^{226}Ra	^{228}Ra
Beverly Gravel, East Hole	00-8134-02	B	14.3 ± 0.2	2.02 ± 0.09	0.58 ± 0.08

Note: Sample 00-8134-02B is an aliquot of 00-8134-02 which was shipped to MS on 4/4/00. Sample was counted over night. Results were used for comparison purpose.

NOTE: Samples will be discarded one (1) month after date of report unless otherwise arranged. When making future inquiries regarding this work, you must reference ACL sample number(s) above. For further information about the results reported here, please call T. TENKATE at 2-4271

Reference(s): CMT Logbook #1638, DET 3, p. 23
CMT Logbook #1498, p. 178

Copies To: L. Jensen, F. Marcus, D. Green, L. Smith, D. Bowles, T. Ten Kate

Analyst(s): T. Ten Kate

04/05/00

Argonne National Laboratory/ Analytical Chemistry Laboratory

ACL # : 00-8134-02B
Your # : BG EAST HOLE

Date Bottled:04/04/00
Days Storage 9.5
Detector: 3
Serial #: 3658
Shelf,cm,___ : 20 2.5 Horizontal
Cnt. Date :04/04/00
Cnt. Time,m: 1023.25
TOTAL CPM: 466.7

Height,cm: 6.4
Weight,g : 151.0341
% Dry Wt.: 100
or
Vol. mLs
Density: 1.250

Nuclide	keV	GrossDPM @ zero Time	% error DPM	Gross CPM	Bkgd 3627 CPM	%error, Bkgd CPM	pCi/g	+1σ	LLD
214-Bi	609	814.6	1.9	3.530	0.517	3.3	2.19e+00	5.03e-02	
	1120	780.0	5.2	0.658	0.155	7.3	1.85e+00	1.33e-01	
	1764	923.6	4.7	0.591	0.183	4.4	1.95e+00	1.39e-01	
226-Ra	295	713.3	3.1	2.781	0.272	7.7	2.07e+00	7.31e-02	
	352	718.4	1.7	4.639	0.470	4.1	2.06e+00	4.02e-02	
232-Th	339	227.2	8.9	0.492	0.134	15.3	5.29e-01	7.14e-02	
(228-Ac)	911	307.2	5.5	0.599	0.222	6.5	6.02e-01	5.75e-02	
	969	277.8	8.8	0.320	0.110	9.6	5.68e-01	8.13e-02	
228-Th	239	353.5	27.1	2.933	0.602	5.1			< 1.02e+00
	583	267.6	5.2	0.780	0.284	5.1	5.30e-01	1.67e-02	
	727	330.3	15.1	0.179	0.066	15.8	6.34e-01	1.38e-01	
137-Cs	662	41.2	8.7	0.361	0.584	2.8			< 4.19e-02
238-U	1001	0.0	0	0.000	0.000	0.0			
235-U	94	0.0	0	0.000	0.000	0.0			
	143.8	0.0	0	0.000	0.000	0.0			
	185	78.7	5.4	1.424	0.407	7.6	1.83e-01	1.49e-02	
	205	0.0	0	0.000	0.000	0.0			
40-K	1460	7794.0	1.6	4.014	1.550	1.4	→ 14.3 ± 0.2 pCi/g		
60-Co	1173	0.0	0	0.000	0.000	0.0			
	1332	0.0	0	0.000	0.000	0.0			
241-Am	59.5	130.9	4.8	2.093	2.083	1.7			< 7.33e-02
7-Be	477.6	0.0	0	0.000	0.000	0.0			
134-Cs	604	0.0	0	0.000	0.000	0.0			
	795	0.0	0	0	0.000	0.0			
234-Th	63.3	0.0	0	0.000	0.000	0			
	92.38	0	0	0	0	0			

2.02 ± 0.09 pCi/g

0.58 ± 0.08 pCi/g

04/05/00 WED 13:17 FAX 630 252 5655 CMT/ACL 003

HEALTH AND SAFETY PLAN

(under separate cover)

LINDSAY LIGHT II

SOP 210

REVISION 1

LINDSAY LIGHT II PROJECT

Gamma Radiological Surveys

Title: Gamma Radiological Surveys

Document Number: SOP-210

Revision Number: 1

Approved By:

Date: October 23, 1996 **Replaces:** 0

Gamma Radiological Surveys

1. PURPOSE

This procedure provides protocols for pre-verification or verification gamma radiological surveys.

2. SCOPE

Radiological surveys will be performed at the designated Site as part of the pre-excavation, excavation, pre-verification, and/or verification surveying programs.

3. REFERENCES

3.1 None.

4. EQUIPMENT AND MATERIALS

The following equipment may be used as part of the survey programs. Other equipment may be substituted if necessary because of availability of the items listed or the conditions encountered at the site.

4.1 Trimble Pathfinder Pro XL 4.1 GPS (optional).

4.2 2-inch by 2-inch NaI (T1) gamma detector.

4.3 Ludlum Model 2221 portable scaler ratemeter analyzer.

5. INSTRUCTIONS FOR RADIOLOGICAL SURVEY

5.1 Land Survey Procedure

5.1.1 Two perpendicular baselines will be established.

5.1.2 A grid along the baseline will be established using cloth or steel tape and a compass, if necessary. Stakes, survey flags, or paint will be placed as needed to delineate grid or traverse lines. The grids will be spaced about one (1) meter apart.

5.1.3 The baseline, permanent structures, areas of remediation, and other areas of interest will be illustrated in the field logbook.

5.2 Gamma Survey Procedure

5.2.1 The Ludlum ratemeter is set for 2-second time-weighted average count rate.

5.2.2 Hold the survey meter probe parallel to the ground surface at a height of approximately two to six inches.

5.2.3 Walk along grid lines at a maximum speed of about 0.5 meters per second (1 mile per hour).

5.2.4 Continue surveying until all survey grids have been traversed.

5.3. Radiological Survey of On-Site Materials

5.3.1 Material that is excavated and placed in the clean stockpile will be surveyed two times. The first survey will be performed prior to excavation activities.

5.3.2 The second survey will be performed during the excavation of the non-contaminated soil.

The soils will be surveyed before they are placed in the stockpile. Based on the gamma scan, the material will either be designated as contaminated material and immediately loaded for transportation and disposal or tentatively designated as clean and stockpiled for subsequent soil sampling per SOP-214.

5.4. Daily Surveys

5.4.1 Routine daily surveys shall be performed for each day of operations at the site.

5.4.2 The routine surveys will monitor areas in the immediate vicinity of excavations and along soil movement paths to ensure that radiation levels are not affected by activities.

5.4.3 Routine surveys shall be documented by preparing a drawing of the survey results in the field logbook, indicating either the location and value of individual measurements, or contours of the measured gamma field.

5.4.4 Surveys of excavation areas will be made at the request of the Field Team Leader to assess the progress of the removal. These surveys will not be documented, but will be used by the Field Team Leader to manage the excavation.

5.5 Pre-Verification or Verification Survey

5.5.1 Upon completion of excavation activities, either a pre-verification survey shall be performed to ensure that the excavation is ready for a final verification survey by U.S. EPA or a verification survey shall be performed to ensure that the excavation ~~that the excavation~~ is ready for backfill based on U.S. EPA approval.

5.5.2 The survey is conducted at the same time as the excavation work phase. The survey method is performed as specified in Sections 5.1 and 5.2. Upon completion of the survey and excavation phase, a Notification of Successfull Pre-Verification or Verification is sent to the U.S. EPA requesting a final verification survey or approval to backfill.

ATTACHMENT H

RIGHT-OF-WAY AGREEMENT

No P.I.N. applicable
Document affects public way.

99924673

RIGHT-OF-WAY AGREEMENT

This Right-of-Way Agreement ("Agreement") is entered into this 27th day of Sept., 1999 by and among River East, L.L.C. ("River East") and Kerr-McGee Chemical L.L.C. ("Kerr-McGee"), together referred to herein as the Obligors ("Obligors"), and the City of Chicago ("City"), as follows:

1. This Agreement is not binding on the City until it is executed by a duly authorized representative of the City. Prior to execution, this Agreement constitutes an offer by the Obligors. The duly authorized representatives of the Obligors have signed this Agreement, and this Agreement is binding upon them and their successors by merger or reorganization, upon execution by the City.

2. The Obligors stipulate:

   a. The Site is located at 316 E. Illinois Street, Chicago, Illinois ("the Site"). The Site is and has been for multiple decades, used as an asphalt-paved parking lot. The Site is bounded by Grand Avenue, McClurg Court, Illinois Street and Columbus Drive.

   b. On June 3, 1993, the United States Environmental Protection Agency ("USEPA") and the Illinois Department of Nuclear Safety ("IDNS") conducted a joint investigation at the Site and verified the presence of radioactivity below the asphalt surface of the Site at levels above natural background. USEPA determined that the use of the Site as a parking lot posed a negligible risk to the public.

   c. A historical search determined that in the 1920s and 1930s a company known as the Lindsay Light Company leased the Site for the processing of thorium ores. Lindsay Light is a predecessor of Kerr-McGee. An ingredient in gas mantel manufacturing is thorium extracted from sand and formed into a solution into which mantels were dipped during the manufacturing process. It is believed that Section 11(e) (2) material, 42 U.S.C. §2014(e)(2) from this processing process is found at and around the Site ("Thorium Residuals").

   d. On January 27, 1994, the Chicago Dock & Canal Trust ("Chicago Dock") (a predecessor to River East), entered into an Administrative Order by Consent ("AOC") with USEPA to investigate and study the extent of Thorium Residuals at

the Site. The study was completed in May, 1994. A final report concerning the extent of contamination was delivered to USEPA on October 17, 1995, and the study was approved by USEPA on March 13, 1996. The final report concluded, inter alia, that there were twelve subsurface areas at the Site which exhibited elevated gamma radiation levels. The AOC is Attachment B.

e. On June 6, 1996, the USEPA issued a Unilateral Administrative Order ("UAO") to Chicago Dock and Kerr-McGee directing that a removal action be conducted at the Site pursuant to Section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §9606(a). The UAO established criteria (the "Cleanup Criteria") for Thorium Residuals of 7.1 picoCuries per gram total radium – 5 picoCuries per gram total radium above background. The UAO is attached as Attachment C.

f. Pursuant to the UAO and with approval of USEPA, Chicago Dock and Kerr-McGee conducted and completed a removal action at the Site. This remediation took several months during CY1996 and 1997 and involved the removal and disposal of soils from the Site.

g. During the removal action, testing along Illinois Street and Columbus Drive revealed deposits of Thorium Residuals which could not be readily excavated. Information regarding the known location of this contamination was provided to the City during a meeting on June 26, 1997, and in subsequent correspondence dated July 14, 1997. Attachment D depicts the portions of Grand Avenue, Illinois Street , McClurg Court and Columbus Drive rights-of-way adjacent to the Site that are the subject of this Agreement ("designated rights-of-way"). The impacted areas of the designated rights-of-way adjacent to the Site where Thorium Residuals are known to be located ("impacted rights-of-way") are described on Attachment E. If subsequent sampling and analysis indicates the presence of contaminants associated with Thorium Residuals beneath the designated rights-of-way, then those areas shall be subject to and covered by this Agreement.

h. Attached as Attachment E is a site map showing the known areas of Thorium Residuals in the impacted rights-of-way, and the relative concentration of the Thorium Residuals governed by the UAO.

3. The City stipulates that it holds the designated rights-of-way adjacent to the Site in trust for the public and has jurisdiction over the designated rights-of-way.

4. The parties stipulate that:

a. This Agreement is intended to meet the requirements of the United States Environmental Protection Agency regarding Thorium Residuals.

b. This Agreement shall run with the land constituting the designated rights-of-way and shall be recorded by the Obligors at their expense with the Cook County

Recorder of Deeds on the property described in Attachment D (the designated rights-of-way). Within thirty (30) days of such recording with the Cook County Recorder of Deeds, the Obligors shall provide the City a copy of the Agreement that has been stamped by the Cook County Recorder of Deeds to indicate that it has been recorded with that office. No filing or notice will be referenced against the Site.

c. This Agreement shall be null and void should the United States Environmental Protection Agency not approve it.

5. The City agrees that it will limit access to soil as described herein under portions of the impacted rights-of way described in Attachment E and in any supplemental exhibits as provided in ¶2(g) that exceed USEPA Cleanup Criteria, as provided in Code Section 10-20-100, et.seq. subject to the following conditions:

a. Where the pavement and sidewalk in the impacted rights-of-way are to be considered engineered barriers to gamma radiation emanating from Thorium Residuals, the Obligors agree to reimburse the City for maintenance activities requested by the Obligors. The City does not agree to maintain the designated rights-of-way, nor does it guarantee that the designated rights-of-way will continue as a roadway or sidewalk, or that the impacted rights-of-way will always be maintained as an engineered barrier.

b. This Agreement does not in any way limit the City's authority to construct, reconstruct, repair or maintain and operate the designated rights-of-way upon the property or other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals, or to allow others to use the designated rights-of-way. To that extent, the City reserves the right to identify, investigate, and remove soil contaminated with Thorium Residuals above the Cleanup Criteria from the impacted rights-of-way or from other portions of the designated rights-of-way adjacent to the Site subsequently identified as containing contaminants associated with Thorium Residuals and to dispose of them in accordance with applicable environmental regulations so as to avoid causing a further release of the contaminants and to protect human health and the environment. The Obligors shall reimburse the reasonable actual costs incurred by the City or its contractors or agents in so identifying, investigating, removing, storing, handling or disposing of soil contaminated with Thorium Residuals above the Cleanup Criteria, and it shall not be a defense for the Obligors that those costs were not consistent with or required by United States Environmental Protection Agency regulations, guidelines or policies. Prior to incurring any such costs, the City shall first give the Obligors thirty days notice, unless there is an urgent reason otherwise, to remove or dispose of soil contaminated with Thorium Residuals above the Cleanup Criteria to the extent necessary for the City's work. The City will cooperate with the Obligors in the conduct of the work including providing reasonable and appropriate access. USEPA shall also be forwarded a copy of this notice. Failure to give this

opportunity to the Obligors shall not be a defense to a claim for reimbursement or that the work should not have been done. If no such notice and opportunity are provided by the City to the Obligors and there was no urgent reason otherwise, the City's claim for reimbursement against the Obligors for such costs shall not exceed $10,000.00. For the purpose of this Agreement only, there is a rebuttable presumption that Thorium Residuals found in the portions of the impacted rights-of-way or in other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals arose from the release of Thorium Residuals from the Site. Should the Obligors not reimburse the costs identified here, this Agreement shall be null and void in addition to such other remedies as may be available to the City.

6. The Obligors agree to indemnify and hold harmless the City, its agents and employees, and contractors, for all obligations asserted against or costs incurred by them associated with the release of contaminants associated with Thorium Residuals in the impacted rights-of-way or in other portions of the designated rights-of-way subsequently identified as containing Thorium Residuals.

7. Violation of the terms of this Agreement by the Obligors, or their successor(s) in interest, may be grounds for voidance of this Agreement.

8. No violation of a permit by a third party shall constitute a breach of this Agreement by the City. The Obligors also agree that their personnel, if any, at the Site will exercise due diligence in notifying those accessing contaminated soil in the impacted rights-of-way of their rights and responsibilities under this Agreement.

9. Should the City breach this Agreement, the Obligors' sole remedy is for an action for damages in the Circuit Court of Cook County. Any and all claims for damages against the City, its agents, contractors, employees or its successors in interest arising at any time are limited to an aggregate maximum of $20,000.00. No other breach by the City, its agents, contractors, employees or its successors in interest of a provision of this Agreement is actionable in either law or equity by the Obligors against the City or them and the Obligors hereby release the City, its agents, contractors, employees and its successors in interest for any cause of action it may have against them, other than as allowed in this paragraph, arising under this Agreement or environmental laws, regulations or common law governing contaminated soil in the designated rights-of-way. Should the City convey, vacate or transfer jurisdiction of the designated rights-of-way, the Obligors may pursue an action under this Agreement, not limited in amount, against the successors in interest, other than the City, or any of its departments, or State agency, in a Court of Law.

10. The City will limit access to the rights-of-way as follows:

    a. Normal Access: The City will limit access to designated rights-of-way via the City Department of Transportation ("CDOT"), or its successor entity. Pursuant to §§10-20-100 and 10-20-150 of the Municipal Code of Chicago, a permit must be

issued by CDOT to any party, including the City, requesting to perform subsurface work in a City right-of-way. CDOT maintains and will maintain a permit database which, in conjunction with the City Department of Environment ("DOE"), tracks City rights-of-way with reported subsurface contamination. CDOT will consult the database whenever a party requests such a permit. The CDOT permit database will indicate the reported contamination under the impacted rights-of-way and it will indicate that radiation surveillance must be performed before and during excavations performed on other impacted rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals through sampling and analysis. The permit database will also indicate that radiation surveillance must be performed during excavation or other work that disturbs or exposes the soil beneath the designated right-of-way. The CDOT database will direct the permit applicant to DOE to obtain detailed information on the nature and extent of the contamination and of the radiation surveillance requirements for any excavation near other impacted rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals. After the permit applicant consults with DOE, the applicant must complete a form where the applicant acknowledges that it is aware of the contamination, will take appropriate steps to ensure the health and safety of people working in the impacted rights-of-way, and agrees to follow the health and safety plan for Thorium Residuals for these rights-of-way ("Health and Safety Plan"), attached as Attachment F, or other plan reviewed by USEPA that provides equal or greater health and safety protections, and to dispose of Thorium Residuals as required by law. DOE will provide written notice to River East, Kerr-McGee and USEPA at the time permit applicants contact DOE about the designated rights-of-ways and the radiation surveillance requirements.

b. Emergency Access: The City Board of Underground ("BOU"), the City Department of Buildings, and the Chicago Fire Department, or their successor entities, will be notified of the contamination at the impacted rights-of-way and will be forwarded copies of all available environmental data regarding the impacted rights-of-way, including the Health and Safety Plan. BOU will provide this information to all utilities in the area. In the event of an emergency that occurs outside of CDOT business hours, this will enable utilities to provide their personnel with the appropriate information to ensure that proper health and safety precautions are taken.

11. The City will place and maintain placards in any underground access in the rights-of-way that state "Before Work, Contact Chicago Department of Transportation."

12. Notice for purposes of this Agreement should go to the following:

City of Chicago:
Commissioner
Department of Environment
30 N. LaSalle Street
25th Floor
Chicago, IL 60602
312/744-7606

River East LLC
contact Kevin Augustyn
Randy Grueb
Charles Langenfeld
455 East Illinois
Suite 565
Chicago, IL 60611
Telephone: 312/321-8900
Facsimile: 312/755-2750

and:

Vincent S. Oleszkiewicz
counsel for River East LLC/MCL Companies
Baker & McKenzie
130 East Randolph Drive
Chicago, IL 60601
Telephone: 312/861-3737
Facsimile: 312/861-2899

Kerr-McGee
contact: Dan White
Kerr-McGee Center
Oklahoma City, OK 73125
Telephone: 405/270-3792
Facsimile: 405/270-3787

and:

Richard Meserve
counsel for Kerr-McGee
Covington & Burling
1201 Pennsylvania Ave., N.W.

Washington, D.C. 20044
Telephone: 202/662-5304
Facsimile: 202/662-6291

U.S. EPA Region 5
Lindsay Light II Site, Office of Regional Counsel
contact: Mary Fulghum
77 West Jackson Boulevard
Chicago, IL 60604-3590
Telephone: 312/886-4683
Facsimile: 312/886-0747

13. Obligors, and any of their successor(s) by merger or reorganization pursuant to paragraph 1 of this Agreement, shall, at least 15 days prior to such subsequent merger or reorganization, give written notice and a copy of this Agreement to subsequent successor entity(ies), and provide written notice thereof to the City. The notice to the City shall include the name and address of the successor entity(ies).

14. If any provision of this Agreement is determined to exceed the authority of the City, or if any provision of this Agreement is declared null and void or unenforceable by any court or tribunal having jurisdiction, then this Agreement shall be null and void. If this Agreement is declared null and void, the information about the contamination will remain in the CDOT database and all permit applicants will be required to consult with DOE as described above. Similarly, the Emergency Access procedures described above will remain in force if the Agreement is declared null and void.

15. This Agreement shall continue in effect from the date of the Agreement until the Thorium Residuals in the soil are subsequently reduced through active remediation to levels approved by USEPA, such that unrestricted access to the impacted rights-of-way or other portions of the designated rights-of-way subsequently identified as containing contaminants associated with Thorium Residuals is demonstrated to be appropriate and there is no longer a need for this Agreement, and USEPA has, upon written request to the USEPA and notice to the City, provided a written determination authorizing unencumbered access to the impacted rights-of way.

16. Nothing in this Agreement shall be deemed to create any right or obligation in any person not a party hereto and this Agreement shall not be construed in any respect to be a contract in whole or in part for the benefit of any third party nor an admission of any fact, condition or obligation by or for the benefit of any third party, nor shall any statement herein be considered an admission of fact for any purpose or use outside this Agreement. Nothing in this Agreement shall preclude the City, Kerr-McGee or River East from petitioning U.S. EPA for a relaxation of the Cleanup Criteria, if circumstances so warrant.

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____
Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, L.L.C.
Its: Sole Member
By: River East, L.L.C.
Its: Manager

By: _____
Its: _____

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date: 09/24/99
George D. Christiansen
Vice President

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____
Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, ~~L.L.C.~~ Inc.
Its: ~~Sole Member~~
~~By: River East, L.L.C.~~
Its: Manager

By: _____ 9/27/99
Its: Manager

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY:_____ Date:_____

IN WITNESS WHEREOF, the City of Chicago caused this Agreement to be signed by its duly authorized representative:

BY: _____ Date: 9/24/99
Commissioner
Department of Environment
City of Chicago

IN WITNESS WHEREOF, River East, L.L.C. has caused this Agreement to be signed by its duly authorized representative:

River East, L.L.C.
By: River East, L.L.C.
Its: Sole Member
By: River East, L.L.C.
Its: Manager

By: _____
Its: _____

IN WITNESS WHEREOF, Kerr McGee Chemical L.L.C. has caused this Agreement to be signed by its duly authorized representative:

BY: _____ Date: _____

ATTACHMENT I

COMPREHENSIVE NUTRANL ANALYSIS RESULTS

Explanation

1. Location designations refer to the 5 meter site grid (A to N north to south and 1 to 27 west to east).

2. Sample sets designated EPA #1 through #6 represent exclusion zone verification sample sets. See Attachment F for analysis and USEPA sign-off forms.

3. Sample sets designated OB and OBQC represent analysis of apparently clean overburden material for use as clean backfill.

4. Lift designations refer to samples taken as 2 foot incremental excavation proceeds with depth, i.e., Lift 1 at minus 2 feet, Lift 2 at minus 4 feet, Lift 3 at minus 6 feet.

5. "Pile" designations refer to stockpiled soil which was present on-site at the start of survey work. On-site excavation spoil surveyed/sampled for use as backfill. Subsequent excavation spoil may be designated "OB" (see Explanation 3 above), "stockpile" or "scrape".

6. Samples not associated with grid coordinates i.e., equipment, off-site source, etc. are presented under Miscellaneous.

7. Samples designated "EZ" are from exclusion zones.

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1114	4/26/00	4/27/00	28.5	A - 1 #1 Caisson Pothole Before Dig	1.83	2.31	5.03	0.56	2.64	0.9	42.06	17.06
S1117	4/27/00	4/27/00	31.5	A - 1 #1 SET 2 Caisson Pothole After Dig	0.1	2.1	3.74	0.53	2.57	0.85	47.13	16.61
S2365	9/12/00	9/12/00	37.2	A - 1 Caisson Pothole	1.33	1.41	0.18	0.4	1.57	0.67	-8.21	12.57
S1124	4/27/00	4/27/00	26.9	A - 1 Caisson Pothole	-4.38	1.8	2.61	0.47	2.34	0.77	51.36	15.28
S1622	6/9/00	6/9/00	32	A - 1 to A - 4 COMP #1	0.43	1.18	4.99	0.31	2.86	0.48	-4.27	8.51
S1623	6/9/00	6/9/00	33.4	A - 1 to A - 4 COMP #2	1.26	1.14	0.76	0.27	1.53	0.45	37.4	9.69
S1624	6/9/00	6/9/00	30.8	A - 1 to A - 4 COMP #3	1.42	1.64	2.75	0.46	1.93	0.74	25.35	14.59
S1625	6/9/00	6/9/00	33.8	A - 1 to A - 4 COMP #4	2.13	2.17	4.49	0.55	2.53	0.85	11.2	15.42
S1626	6/9/00	6/9/00	32.7	A - 1 to A - 4 COMP #5	0.95	1.85	1.89	0.46	1.99	0.76	43.81	15.3
S1627	6/9/00	6/9/00	33.5	A - 1 to A - 4 COMP #6	3.32	1.95	5.65	0.49	3.39	0.75	38.25	14.07
S1628	6/9/00	6/9/00	33.6	A - 1 to A - 4 COMP #7	3.09	2.13	4.9	0.54	3.71	0.84	5.27	14.44
S2366	9/12/00	9/12/00	37.8	A - 2 Caisson Pothole	1.37	1.3	0.14	0.36	1.69	0.61	1.13	11.37
S1100	4/26/00	4/26/00	32.3	A - 2.8	-1.04	1.47	4.06	0.39	2.19	0.61	30.13	11.79
S1115	4/26/00	4/27/00	33.1	A - 3 #1 Pothole	0.32	2.14	4.19	0.54	2.79	0.85	62.96	16.71
S1116	4/27/00	4/27/00	37.1	A - 3 #1 SET 2 Pothole	-0.41	1.6	5.84	0.42	1.67	0.63	54.1	12
S1122	4/27/00	4/27/00	30.1	A - 3 EPA	-1.93	2.04	3.26	0.52	2.43	0.84	64.57	17.03
S1123	4/27/00	4/27/00	32.1	A - 3 SPOT EPA	-1.82	2.67	8.44	0.71	3.33	1.04	46.2	16.89
S1126	4/27/00	4/27/00	35.7	A - 3 #2 Pre-Verification	-0.38	2.11	4.22	0.53	3.64	0.85	70.67	16.99
S1129	4/28/00	4/28/00	29.2	A - 3 Pothole	-1.3	2.33	2.46	0.58	3.6	0.97	54.87	16.33
S1130	4/28/00	4/28/00	34.7	A - 3 STREET WALL	-1.2	2.27	4.59	0.59	4.18	0.92	30.83	16.62
S1152	5/3/00	5/3/00	28.3	A - 3 #1 EPA	-0.32	1.74	2.67	0.45	1.02	0.71	20.23	14.21
S1153	5/3/00	5/3/00	30.9	A - 3 #2 EPA	0.4	1.45	1.92	0.36	1.9	0.6	44.18	12.11
S1154	5/3/00	5/3/00	29.7	A - 3 #3 EPA	1.11	1.56	2.35	0.39	1.25	0.63	35.23	12.93
S1155	5/3/00	5/3/00	29.4	A - 3 #4 EPA	1.55	1.47	1.91	0.36	1.77	0.59	49.94	11.87
S1156	5/3/00	5/3/00	31.2	A - 3 #5 EPA	-0.95	1.35	2.24	0.35	2.76	0.58	12.35	11.29
S1157	5/3/00	5/3/00	30.5	A - 3 #6 EPA	0.28	1.56	2.43	0.39	1.33	0.64	45.44	13.1
S2367	9/12/00	9/12/00	37.1	A - 3 Caisson Pothole	-0.9	0.71	-0.08	0.2	1.93	0.34	9.48	6.48
S2001	8/3/00	8/7/00	32.7	A - 4 CAISSON #4	0.6	1.79	6.22	0.52	2.39	0.78	13.38	13.16
S2114	8/21/00	8/21/00	33.8	A - 4 Caisson Pothole	2.72	1.27	1.02	0.35	1.86	0.58	11.16	10.64
S2368	9/12/00	9/12/00	36.9	A - 4 Caisson Pothole	1.55	1.06	-0.32	0.29	1.69	0.5	3.21	9.62
S2108	8/18/00	8/18/00	35.7	A - 4 OB 1	3.86	1.27	0.61	0.34	2	0.57	11.1	10.67
S2109	8/18/00	8/18/00	31.1	A - 4 OB 2	7.93	1.7	1.62	0.45	0.79	0.73	21.76	13.75
S2110	8/18/00	8/18/00	31.2	A - 4 OB 3	5.09	1.6	1.11	0.43	1.64	0.71	31.38	13.21
S2111	8/18/00	8/18/00	33.1	A - 4 OB 4	4.02	1.68	1.76	0.47	2.49	0.75	-9.76	13.39
S2112	8/18/00	8/18/00	33.1	A - 4 OB 5	4.07	1.7	0.62	0.46	2.46	0.77	-0.9	14.03
S2113	8/18/00	8/18/00	32.8	A - 4 OB 6	2.16	1.42	0.86	0.39	2	0.65	23.8	12.32
S2126	8/21/00	8/21/00	32	A - 4.5 EPA #1	2.6	1.55	1.09	0.43	1.23	0.71	19.33	13.13
S2127	8/21/00	8/21/00	28.5	A - 4.5 EPA #2	1.9	1.07	1.16	0.3	1.58	0.49	18.14	9.1
S2128	8/21/00	8/21/00	32.7	A - 4.5 EPA #3	2.99	1.72	0.88	0.47	2.34	0.78	9.54	14.59
S2129	8/21/00	8/21/00	29.8	A - 4.5 EPA #4	-0.55	1.71	1.36	0.48	1.55	0.81	21.49	14.86
S2130	8/21/00	8/21/00	30.8	A - 4.5 EPA #5	1.36	1.34	0.5	0.37	2.61	0.64	8.96	11.72
S2131	8/21/00	8/21/00	30.4	A - 4.5 EPA #6	4.87	1.73	0.59	0.46	2	0.77	18.22	14.44
S2119	8/21/00	8/21/00	33.4	A - 4.5 SPOT	3.14	1.41	2.87	0.4	3.07	0.63	18.14	11.12

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2115	8/21/00	8/21/00	32	A - 5 Caisson Pothole	1 41	1.39	0 85	0.38	1 28	0.69	42 87	12.3
S2101	8/18/00	8/18/00	34 6	A - 5 OB QC	3 8	1.78	0 39	0.47	2 15	0.81	19 91	15.19
S2096	8/18/00	8/18/00	32 9	A - 5 OB1	2 06	1.67	2 19	0.44	2 48	0.71	39 62	12.98
S2097	8/18/00	8/18/00	33 3	A - 5 OB2	2 68	1.42	0 87	0.39	1 22	0.64	35 79	12.16
S2098	8/18/00	8/18/00	33	A - 5 OB3	2 38	1.49	0 94	0.41	2 25	0.68	22 01	12.44
S2099	8/18/00	8/18/00	33 8	A - 5 OB4	4 19	1.6	0 67	0.44	2 67	0.73	7 53	13.37
S2100	8/18/00	8/18/00	32 7	A - 5 OB5	-0 28	1.36	1 09	0.36	2 23	0.64	14 71	11.67
S2080	8/16/00	8/17/00	36 1	A - 5 5 EZ	6 3	2.67	4 09	0.76	5 38	1.16	17 57	19.39
S2132	8/21/00	8/21/00	34 5	A - 5 5 EPA #1	-0 07	1.48	0 2	0.41	3 97	0.71	-6 79	12.63
S2133	8/21/00	8/21/00	32 3	A - 5 5 EPA #2	0 99	1.41	1 27	0.41	1 39	0.66	13 96	12.59
S2134	8/21/00	8/21/00	32 9	A - 5 5 EPA #3	0 24	1.34	0 59	0.37	1 7	0.64	31 48	11.88
S2135	8/21/00	8/21/00	33 3	A - 5 5 EPA #4	2 34	1.06	0 04	0.29	1 34	0.49	35 65	9.67
S2136	8/21/00	8/21/00	33 6	A - 5 5 EPA #5	0 01	1.76	0 67	0.5	1 92	0.83	10 4	15.29
S2137	8/21/00	8/21/00	33 1	A - 5 5 EPA #6	2 28	1.45	0 94	0.4	1 05	0.66	5 56	12.37
S2116	8/21/00	8/21/00	32 3	A - 6 Caisson Pothole	5 12	2.46	2 46	0.66	3 33	1.06	4 32	18.45
S2081	8/16/00	8/17/00	38 1	A - 6 EZ	2 51	2.81	2 2	0.66	2 97	1.03	10 76	18.49
S2120	8/21/00	8/21/00	34	A - 7 EPA #1	0 85	1.75	1 46	0.5	2 44	0.81	14 51	14.8
S2121	8/21/00	8/21/00	33 5	A - 7 EPA #2	1 8	1.37	4 23	0.39	2 73	0.81	14 78	10.3
S2122	8/21/00	8/21/00	32 7	A - 7 EPA #3	3 79	1.84	1 84	0.46	2 22	0.74	6 27	13.1
S2123	8/21/00	8/21/00	32 4	A - 7 EPA #4	2 16	1.35	1 53	0.39	2 6	0.62	11 11	11.17
S2124	8/21/00	8/21/00	34 4	A - 7 EPA #5	3 23	1.72	1 5	0 47	1 68	0.76	35 7	14.53
S2125	8/21/00	8/21/00	33 6	A - 7 EPA #6	1 72	1.39	2 01	0 39	2 43	0.63	5 69	11.24
S2446	9/27/00	9/27/00	32 8	A - 11 Caisson Pothole	2 45	1.17	-0 57	0.31	2 84	0.56	23 2	10.38
S2009	8/7/00	8/8/00	38 2	A - 21 5 FLOOR	2 01	1.66	-0 21	0.41	2 26	0.73	9 06	13.91
S1738	6/22/00	6/22/00	38 3	A - 26 EPA #1	0 44	2.21	2 1	0.57	2 75	0.94	13 55	17.63
S1739	6/22/00	6/22/00	38 7	A - 26 EPA #2	5 54	1.4	1 37	0 33	2 31	0.56	16 11	10.91
S1740	6/22/00	6/22/00	37 3	A - 26 EPA #3	0 98	1.36	2 21	0.34	0 75	0.55	41 87	11.49
S1741	6/22/00	6/22/00	36 3	A - 26 EPA #4	1 08	1.87	2 1	0.46	0 85	0.76	39 08	15.16
S1742	6/22/00	6/22/00	38 3	A - 26 EPA #5	1 09	2.14	2 29	0.54	0 67	0.88	12 87	17.06
S1743	6/22/00	6/22/00	36 5	A - 26 EPA #6	1 23	1.56	1 9	0 39	1 54	0.65	23 47	12.78
S1903	7/19/00	7/19/00	41.7	A - 26 SIDEWALK	0 88	1.77	0 55	0.43	2 62	0.79	-1 59	14.55
S1713	6/16/00	6/16/00	36 6	A - 26 WALL	13 11	2.79	15 87	0.66	5 31	1.24	11 79	20.59
S1909	7/20/00	7/20/00	35.9	A - 27 EPA #1	3 2	1.49	0 58	0.35	1.83	0.61	10 58	11.65
S1910	7/20/00	7/20/00	36	A - 27 EPA #2	1 48	1.7	0 98	0.41	1.12	0.71	19 84	14.27
S1911	7/20/00	7/20/00	36.3	A - 27 EPA #3	-0 35	1.83	1.21	0.46	1 41	0.79	13 24	15.53
S1912	7/20/00	7/20/00	36.1	A - 27 EPA #4	3 06	1.87	0 37	0.44	1 97	0.77	16.85	15.29
S1913	7/20/00	7/20/00	38.2	A - 27 EPA #5	-0 52	1.38	0 67	0.34	2 4	0.6	27 82	11.84
S1914	7/20/00	7/20/00	38.2	A - 27 EPA #6	2 9	1.38	1.02	0.33	1.95	0.67	4.79	11
S1901	7/19/00	7/19/00	29.2	A - 27 SIDEWALK	2 2	2.44	6.2	0.63	3.26	0.94	33 86	16.81
S1013	4/5/00	4/5/00	26.9	A.2 - 27	83.15	51.66	203.36	20.38	60.52	28.97	374.6	830.96
S1902	7/19/00	7/19/00	31.1	A.2 - 27 FLOOR	1 85	1.34	1.37	0.33	-0.01	0.54	37.01	11.47
S1027	4/10/00	4/10/00	21.7	A.3 - 27	-14.7	9.91	69.83	2.65	14.91	3.62	56.81	45.45
S1871	7/14/00	7/14/00	17.8	A.5 - 1 Under Sidewalk	0.99	2.12	1.74	0.53	4.75	0.9	3.39	15.79

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2377	9/14/00	9/14/00	36.4	A.5 - 5	3.69	1.66	0.2	0.44	0.68	0.76	8.69	14.43
S2118	8/21/00	8/21/00	33.8	A.5 - 7	26.05	11.57	57.86	3.3	19.02	4.54	4.21	55.71
S2117	8/21/00	8/21/00	31.8	A.5 - 7.5	14.76	5.08	14.77	1.44	4.51	2.02	29.08	30.57
S2447	9/27/00	9/27/00	33.4	A.5 - 13	1.9	1.46	0.1	0.4	1.61	0.68	12.83	13.08
S2052	8/11/00	8/11/00	36.5	A.5 - 18.5 FLOOR	2.56	1.37	0.35	0.38	1.22	0.63	12.59	12.12
S2053	8/11/00	8/11/00	30.2	A.5 - 19.5 FLOOR	3.16	1.18	0.85	0.32	2.44	0.54	42.86	10.14
S2010	8/7/00	8/8/00	37.8	A.5 - 20.5 FLOOR	0.05	1.32	0.37	0.37	2.76	0.63	0.32	11.56
S2002	8/4/00	8/7/00	36.7	A.5 - 22.5 FLOOR	2.66	1.24	-0.55	0.34	2.39	0.59	7.24	11.29
S2003	8/4/00	8/7/00	35.2	A.5 - 23.5 FLOOR	4.36	1.33	0.01	0.36	1.58	0.62	-7.24	11.47
S2004	8/4/00	8/7/00	37.3	A.5 - 24.5 FLOOR	2.81	1.45	0.21	0.39	1.85	0.67	18.64	12.96
S2005	8/4/00	8/7/00	35.5	A.5 - 26 FLOOR	1.41	0.96	0.6	0.27	2.07	0.44	4.37	8.23
S1856	7/12/00	7/12/00	27.8	B.5 - 26 OB #1	1.25	1.6	0.71	0.39	1.73	0.68	22.77	14.13
S1857	7/12/00	7/12/00	32	B.5 - 26 OB #2	0.06	1.64	1.5	0.47	1.78	0.78	4.69	15.09
S1858	7/12/00	7/12/00	32	B.5 - 26 OB #3	1.97	1.35	0.26	0.32	2.08	0.57	22.22	11.76
S1859	7/12/00	7/12/00	29	B.5 - 26 OB #4	2.44	1.46	0.6	0.35	0.95	0.6	8.23	12.31
S1860	7/12/00	7/12/00	35.4	B.5 - 26 OB #5	0.78	1.7	0.15	0.42	1.64	0.75	-2.06	15.1
S1861	7/12/00	7/12/00	29.5	B.5 - 26 OB #6	3.29	1.75	1.49	0.42	1.85	0.71	19.4	13.8
S1862	7/12/00	7/12/00	28.1	B.5 - 26 OB QC	1.47	1.39	0.46	0.34	3.35	0.6	23.43	11.96
S1028	4/10/00	4/10/00	25.8	A.5 - 26.5	0.47	1.96	3.4	0.49	3.38	0.8	41.66	15.22
S1714	6/16/00	6/16/00	32.9	A.5 - 26.5 #1	1.85	1.44	3.17	0.96	0.77	0.57	36.49	11.38
S1715	6/16/00	6/16/00	36	A.5 - 26.5 #2	5.17	2.08	4.47	0.53	2.6	0.61	18.57	15.09
S1716	6/16/00	6/16/00	34.6	A.5 - 26.5 #3	3.03	1.53	1.84	0.37	2.65	0.62	4.4	11.59
S1717	6/16/00	6/16/00	31.7	A.5 - 26.5 #4	-0.73	1.19	0.57	0.3	1.7	0.53	10.54	10.47
S2369	9/12/00	9/12/00	34.2	B - 1	-1.74	1.45	0.7	0.41	0.96	0.66	3.14	12.98
S2370	9/12/00	9/12/00	36.3	B - 2	2.9	1.41	0.09	0.37	1.09	0.65	7.48	12.34
S2371	9/12/00	9/12/00	36.7	B - 3	3.97	1.47	-0.47	0.39	2.61	0.7	1.9	12.99
S2378	9/14/00	9/14/00	36.9	B - 4.5	2.26	1.35	0.47	0.38	1.9	0.62	-13.49	11.54
S2445	9/27/00	9/27/00	30.5	B - 9.5	-1.4	1.48	0.71	0.42	1.9	0.7	23.62	13.24
S2422	9/25/00	9/25/00	34.9	B - 11	3.74	1.9	0.79	0.52	2.07	0.86	10.83	16.17
S2449	9/27/00	9/27/00	32.8	B - 11.5	3.67	1.44	0.5	0.39	0.87	0.65	12.72	12.44
S2423	9/25/00	9/25/00	33.1	B - 12	3.25	1.91	-0.23	0.51	3.64	0.89	15.91	16.21
S2448	9/27/00	9/27/00	33.7	B - 12.5	3.91	1.31	-0.36	0.34	1.47	0.61	13.41	11.77
S2398	9/21/00	9/22/00	35	B - 15 AFTER DIG	-0.93	2.07	2.3	0.59	1.75	0.93	17.03	16.75
S2395	9/21/00	9/22/00	34.7	B - 15.5	17.53	5.2	15.92	1.45	8.84	2.1	32.71	30.04
S2603	10/24/00	10/24/00	32.1	B - 17.5 (11K) CPM (Shielded)	7.7	4.16	5.89	1.16	7.19	1.76	41.32	28.68
S2602	10/24/00	10/24/00	36	B - 17.5 (8K) CPM (Shielded)	13.62	2.57	4.5	0.69	3.91	1.06	15.74	17.67
S2604	10/26/00	10/26/00	41	B - 17.5 AFTER DIG	1.39	1.42	-0.33	0.38	1.97	0.67	30.87	12.86
S2607	10/27/00	10/27/00	38.3	B - 17.5 EPA # 1	0.77	1.72	-0.37	0.46	1.95	0.81	19.59	15.66
S2608	10/27/00	10/27/00	38.1	B - 17.5 EPA # 2	0.07	1.26	0.14	0.35	0.56	0.59	26.03	11.73
S2609	10/27/00	10/27/00	39.4	B - 17.5 EPA # 3	0.66	1.46	-0.04	0.4	1.7	0.68	9.25	13.26
S2610	10/27/00	10/27/00	38.2	B - 17.5 EPA # 4	1.24	1.79	-0.2	0.46	1.59	0.83	24.88	16.12
S2611	10/27/00	10/27/00	40.6	B - 17.5 EPA # 5	-0.06	1.38	0.29	0.36	1.6	0.64	-2.34	11.68
S2612	10/27/00	10/27/00	39.3	B - 17.5 EPA # 6	1.6	1.42	-0.3	0.38	2.46	0.67	13.84	12.71

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1052	4/14/00	4/14/00	31 4	B - 18 5	-1 85	2.35	2 37	0.6	2 93	0.99	28 55	18.51
S2007	8/7/00	8/7/00	31 7	B - 20 #1	2 8	2.08	2 13	0.59	1 95	0.84	16 59	17.13
S2008	8/7/00	8/7/00	35	B - 20 #2	1 93	1.76	2 36	0.46	2 99	0.76	23 77	14.04
S2006	8/7/00	8/7/00	31 6	B - 20	8 54	1.85	5 11	0.58	2 63	0.82	13 89	15.88
S1709	6/16/00	6/16/00	33 5	B - 26 OB #1	0 38	1.34	2 04	0.35	1 46	0.57	-3 93	10.03
S1710	6/16/00	6/16/00	33 7	B - 26 OB #2	1 7	1.79	0 9	0.44	3 2	0.75	21 83	14.65
S1711	6/16/00	6/16/00	28 5	B - 26 OB #3	3 5	1.51	1 38	0.37	1 53	0.61	6 96	12.19
S1712	6/16/00	6/16/00	29 3	B - 26 OB QC	2 82	1.55	1 81	0.39	1 84	0.65	3 47	12.47
S2397	9/21/00	9/22/00	29 5	B 2 - 15	27 81	12.45	41 07	9.49	20 63	4.91	-2 74	61.99
S1034	4/12/00	4/13/00	32	B 2 - 25 5 PILE	-1 16	2.37	1 14	0.58	2 64	1	72 66	20.23
S2416	9/22/00	9/23/00	33 4	B 5 - 7	41 6	17.8	45 92	4.9	17 76	6.75	3 35	64.13
S2396	9/21/00	9/22/00	28 8	B 5 - 15	24 11	9.36	18 72	2.58	11 54	3.7	2 54	51.52
S2406	9/22/00	9/22/00	24 6	B 5 - 15 EPA #1	0 17	1.43	0 5	0.4	2 09	0.67	7 38	12.54
S2407	9/22/00	9/22/00	24 4	B 5 - 15 EPA #2	1 17	1.91	0 78	0.58	2 17	0.87	2 45	18.08
S2408	9/22/00	9/22/00	23 5	B 5 - 15 EPA #3	2 94	1.42	0 66	0.39	2 26	0.65	7 83	11.97
S2409	9/22/00	9/22/00	24	B 5 - 15 EPA #4	0 7	1.48	0 69	0.41	2 21	0.69	3 75	12.74
S2410	9/22/00	9/22/00	24 9	B 5 - 15 EPA #5	3 93	1.21	1 31	0.33	1 11	0.54	4 94	9.87
S2411	9/22/00	9/22/00	22	B 5 - 15 EPA #6	1 72	1.66	0 38	0 45	1 59	0.78	25	14.51
S2582	10/18/00	10/19/00	34 8	B 5 - 19 LIFT 1	2 28	1.06	0 28	0.29	2 45	0.5	-1 86	9.01
S2583	10/18/00	10/19/00	35 9	B 5 - 19 LIFT 2	0 36	1.36	0 84	0.38	1 14	0.63	11 53	11 99
S2019	8/10/00	8/10/00	32 9	B 5 - 20	3 33	2.05	4 53	0.58	2 6	0.89	28 29	15.35
S2038	8/10/00	8/10/00	36 1	B 5 - 20 EPA #1	1 11	1.37	3 41	0 39	2 02	0.61	30 17	10.76
S2039	8/10/00	8/10/00	34 4	B 5 - 20 EPA #2	5 42	1.64	1 71	0.42	1 65	0.69	28 13	12.6
S2040	8/10/00	8/10/00	34 9	B 5 - 20 EPA #3	3 67	1.76	1 88	0.49	1 93	0.79	42 25	14 78
S2041	8/10/00	8/10/00	34 2	B 5 - 20 EPA #4	0 63	1.4	2 17	0.4	1 74	0.64	26 94	11.68
S2042	8/10/00	8/10/00	34 9	B 5 - 20 EPA #5	4 99	1.47	1 83	0.4	1 36	0.65	32 03	12
S2043	8/10/00	8/10/00	34 2	B 5 - 20 EPA #6	2 48	1.62	2 15	0.51	1 84	0.81	16 34	14.83
S2579	10/18/00	10/19/00	31 6	B 5 - 20 LIFT 1	0 39	1.24	0 32	0.34	2 22	0.58	19 95	10 96
S2580	10/18/00	10/19/00	33 7	B 5 - 20 LIFT 2	0 05	1.46	0 74	0.4	1 01	0.67	33 8	12.94
S2581	10/18/00	10/19/00	41 1	B 5 - 20 LIFT 3	0 47	1.33	0 12	0.37	1 25	0.62	24.78	12.39
S2576	10/18/00	10/19/00	37 3	B 5 - 21 LIFT 1	0 3	1.26	-0 55	0.34	3 01	0.61	12 58	11.35
S2577	10/18/00	10/19/00	37 3	B 5 - 21 LIFT 2	0 79	1.7	0 14	0.47	1 82	0.81	14.04	15.36
S2578	10/18/00	10/19/00	37 5	B 5 - 21 LIFT 3	0 93	1.28	0 16	0.35	0 43	0.6	29	11.76
S2557	10/17/00	10/18/00	36 9	B 5 - 22 LIFT 1	2 96	1.37	-0 15	0.37	1 87	0.64	18.48	12.15
S2558	10/17/00	10/18/00	34 1	B 5 - 22 LIFT 2	1 78	1.04	0 11	0.28	1 6	0.49	19 05	9.22
S2559	10/17/00	10/18/00	38 2	B 5 - 22 LIFT 3	0 49	0.89	-0 11	0.24	1 89	0.42	16 94	7 95
S2560	10/17/00	10/18/00	37 3	B 5 - 23 LIFT 1	0 86	1.36	0 84	0.36	0 97	0.63	22 1	11 9
S2561	10/17/00	10/18/00	38 6	B 5 - 23 LIFT 2	2 64	1.45	0 79	0.4	2 08	0.66	-18 72	11.55
S2562	10/17/00	10/18/00	38 5	B 5 - 23 LIFT 3	2 35	1.56	-0 65	0.41	2 36	0.75	5 19	14 03
S2546	10/16/00	10/17/00	37 8	B 5 - 24 LIFT 1	0 05	1.34	0 57	0.37	0 71	0.62	29 48	12 28
S2547	10/16/00	10/17/00	37 6	B 5 - 24 LIFT 2	2 28	1.38	-0 05	0.37	1 92	0.63	23 86	11 97
S2548	10/16/00	10/17/00	38 1	B 5 - 24 LIFT 3	0 08	1.32	0 43	0.37	0 02	0.62	28 35	12 47
S2540	10/14/00	10/16/00	33 8	B 5 - 25 LIFT 1	4 9	1.48	0 28	0.39	1 18	0.67	9 34	12 47

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2434	9/26/00	9/26/00	22.2	D - 7 EPA #3	3.04	1.46	0.42	0.4	1.72	0.66	10.5	12.44
S2435	9/26/00	9/26/00	24	D - 7 EPA #4	1.01	1.47	0.98	0.41	1.37	0.68	20.02	12.54
S2436	9/26/00	9/26/00	24.7	D - 7 EPA #5	-0.53	1.6	0.52	0.42	1.96	0.7	15.97	13.16
S2437	9/26/00	9/26/00	26.2	D - 7 EPA #6	2.7	1.35	0.34	0.36	2.03	0.62	24.99	11.68
S1032	4/10/00	4/10/00	39.2	D - 10	-2.84	2.68	2.89	0.68	4.03	1.13	80.36	21.79
S1012	4/4/00	4/4/00	30.8	D - 12	0.97	1.34	0.94	0.33	2.59	0.56	29.29	11.76
S2257	8/30/00	8/31/00	28.5	D - 13.5	-250.23	97.38	79.96	27.03	554.9	46.66	730.8	550.73
S2277	8/31/00	8/31/00	34.7	D - 13.5 EPA #1	2.38	1.44	1.63	0.4	0.59	0.66	23.25	12.31
S2278	8/31/00	8/31/00	37.5	D - 13.5 EPA #2	2.17	1.55	1.11	0.43	2.55	0.72	-5.52	12.56
S2279	8/31/00	8/31/00	37.5	D - 13.5 EPA #3	1.16	1.24	0.78	0.34	2.06	0.57	24.99	10.59
S2280	8/31/00	8/31/00	36.5	D - 13.5 EPA #4	-0.3	1.31	0.47	0.36	2.82	0.62	30.14	11.46
S2281	8/31/00	8/31/00	35.9	D - 13.5 EPA #5	0.32	1.7	0.57	0.47	3.35	0.82	7.59	14.35
S2282	8/31/00	8/31/00	35.9	D - 13.5 EPA #6	1.19	1.57	0.87	0.43	2.37	0.73	19.92	13.34
S2264	8/30/00	8/31/00	26.9	D - 14	3.66	1.34	0.13	0.36	1.63	0.62	13.23	11.57
S2150	8/21/00	8/22/00	38.1	D - 17.5 FLOOR	-0.21	1.39	0.24	0.39	0.96	0.66	26.2	12.96
S1060	4/18/00	4/18/00	33.8	D - 17.8	-3.17	2.54	10.35	0.68	4.35	0.99	39.61	17
S1066	4/19/00	4/19/00	34.9	D - 18.5	-0.15	1.98	3.1	0.5	2.95	0.81	48.68	15.78
S1062	4/18/00	4/18/00	19.8	D - 18.5 1 OF 4	0.68	1.95	1.07	0.47	1.97	0.81	64.09	16.96
S1063	4/18/00	4/18/00	28.5	D - 18.5 2 OF 4	-1.61	2.04	1	0.5	2.96	0.87	59.32	17.26
S1064	4/18/00	4/18/00	29.3	D - 18.5 3 OF 4	-2.25	1.51	1.21	0.39	2.9	0.66	53	13.61
S1065	4/18/00	4/18/00	34.2	D - 18.5 4 OF 4	1.74	1.74	2.18	0.42	1.96	0.7	45.09	13.99
S1048	4/14/00	4/14/00	31.9	D - 18.5 SPOT CHECK	1.66	3.03	7.28	0.78	3.72	1.16	49.38	20.92
S1049	4/14/00	4/14/00	35.1	D - 18.5 VERIFICATION	-3.92	1.71	3.9	0.45	3.65	0.73	55.9	14.02
S2567	10/18/00	10/19/00	28.3	D - 21 Exclusion Zone	10.87	2.43	1.26	0.64	15.2	1.12	19.76	16.69
S2584	10/20/00	10/20/00	32.8	D - 21.5 EPA #1	-1.12	1.46	-0.17	0.4	1.73	0.71	19.48	13.97
S2585	10/20/00	10/20/00	31.7	D - 21.5 EPA #2	1.23	1.21	-0.22	0.33	1.22	0.58	12.89	11.33
S2586	10/20/00	10/20/00	34	D - 21.5 EPA #3	-2.77	1.32	-0.15	0.37	2.14	0.65	6.79	12.04
S2587	10/20/00	10/20/00	31.1	D - 21.5 EPA #4	2.7	1.52	0.1	0.41	0.56	0.7	8.64	13.8
S2588	10/20/00	10/20/00	30.5	D - 21.5 EPA #5	-0.26	1.29	0.28	0.35	2.07	0.61	15.11	11.76
S2589	10/20/00	10/20/00	28.2	D - 21.5 EPA #6	0.37	1.01	-0.51	0.27	1.18	0.49	19.35	9.62
S1000	3/27/00	3/31/00	33.4	D - 23.5	1.16	1.47	1.71	0.37	1.27	0.61	22.91	12.61
S1849	7/11/00	7/11/00	29.7	D - 25	3.94	3.17	10.73	0.81	4.05	1.19	-9.4	18.37
S1847	7/11/00	7/11/00	27.5	D - 25.5	-92.36	131.98	630.67	34.63	174.02	46.34	332.22	506.62
S1035	4/12/00	4/13/00	32.1	D - 26 PILE	-1.72	2.07	0.97	0.51	1.18	0.88	92.82	19.15
S1905	7/20/00	7/20/00	37.8	D - 26.5 FLOOR	1.08	1.66	0.11	0.39	1	0.71	11.18	14.24
S2050	8/11/00	8/11/00	31.2	D.2 - 19 (-6 FEET)	0.64	1.73	8.03	0.51	3.7	0.74	15	12.04
S1037	4/12/00	4/13/00	33	D.2 - 25.5 PILE	-1.1	1.72	0.64	0.43	2.92	0.76	35.58	15.26
S1036	4/12/00	4/13/00	33.5	D.3 - 26.7 PILE	-0.75	2.2	0.58	0.53	3.31	0.96	51.39	19.3
S1854	7/12/00	7/12/00	29.1	D.4 - 24.5	2.79	1.43	1.09	0.35	0.99	0.58	21.43	12.22
S2381	9/14/00	9/14/00	36.4	D.5 - 4.5	2.82	1.46	-0.03	0.39	0.87	0.68	10.42	13.22
S1030	4/10/00	4/10/00	40.1	D.5 - 11	-2.45	1.95	2.84	0.5	5.48	0.84	57.12	15.75
S1010	4/4/00	4/4/00	30.4	D.5 - 12.5	2.02	1.67	1.79	0.41	1.23	0.67	35.66	13.69
S2054	8/14/00	8/14/00	32.5	D.5 - 19 PIPE	0.13	4.17	9.26	1.17	7.78	1.79	94.34	28.4

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1941	7/24/00	7/24/00	30 1	D 5 - 23 5 (-4 FEET)	3 68	2.04	1 97	0.49	3 74	0.62	25 71	15.33
S1940	7/24/00	7/24/00	33.4	D 5 - 23 5 FLOOR	1 88	1.49	0 9	0.36	3 04	0.63	11 54	11.61
S1939	7/24/00	7/24/00	39 6	D 5 - 24 FLOOR	2 05	1.56	0 38	0.37	2 27	0.66	24 69	16.26
S1848	7/11/00	7/11/00	23 4	D 5 - 25	2 65	2.41	6 78	0.87	2 54	0.66	5 13	15.11
S1863	7/13/00	7/13/00	34 9	D 5 - 25 #1	2 73	1.72	0 78	0.4	2 25	0.7	54 24	14.84
S1864	7/13/00	7/13/00	29 7	D 5 - 25 #2	1 89	1.81	1 4	0.8	2.18	0.8	6 67	8.89
S1936	7/24/00	7/24/00	33 3	D 5 - 25 FLOOR	1 09	1.58	1 26	0.4	2.15	0.67	10 13	13.4
S1840	7/5/00	7/5/00	45 7	D 5 - 25 5	9 07	3.02	10 26	0.76	4 53	1.06	11 03	17.61
S1879	7/18/00	7/18/00	34 2	D 5 - 25 5 EPA #1	-0 15	1.76	1 98	0.44	1 4	0.76	14 44	14.45
S1880	7/18/00	7/18/00	34 3	D 5 - 25 5 EPA #2	2 44	1.91	1 01	0.47	2 1	0.8	12 36	15.84
S1881	7/18/00	7/18/00	34 2	D 5 - 25 5 EPA #3	2 35	1.87	1 08	0.56	1 81	0.65	26 35	18.01
S1882	7/18/00	7/18/00	34 4	D 5 - 25 5 EPA #4	1 81	1.64	1 8	0.4	1 5	0.67	15 72	13.18
S1883	7/18/00	7/18/00	33 2	D 5 - 25 5 EPA #5	0 88	2.21	1 99	0.56	1 42	0.92	6 99	17.63
S1884	7/18/00	7/18/00	33 6	D 5 - 25 5 EPA #6	2 13	1.68	1 66	0.41	1 79	0.65	13 84	13.46
S1937	7/24/00	7/24/00	34 6	D 5 - 25 5 FLOOR	-1 07	1.47	1 02	0.57	1 23	0.64	33 84	13.19
S1867	7/13/00	7/13/00	34 9	D 5 - 25 5 SPOT #1	2 16	1.86	2 43	0.47	4 67	0.76	-3 29	13.78
S1868	7/13/00	7/13/00	35 9	D 5 - 25 5 SPOT #2	2 85	1.77	2	0.44	3 28	0.72	26 57	13.76
S1869	7/13/00	7/13/00	29 4	D 5 - 25 5 SPOT #3	2 25	1.4	0 13	0.33	1 15	0.6	18 06	12.66
S1870	7/13/00	7/13/00	32 9	D 5 - 25 5 SPOT #4	0 56	1.59	0 64	0.4	1 51	0.71	-5 68	13.96
S1938	7/24/00	7/24/00	34	D 5 - 26 FLOOR	0 3	1.39	0 16	0.34	2 57	0.6	27 75	12.39
S2382	9/14/00	9/14/00	37 1	E - 5	3 85	1.47	-0 44	0.39	1 13	0.66	26 2	13.42
S2417	9/22/00	9/23/00	33 1	E - 7 5	19 52	6.47	17 43	1.81	10 42	2.6	11 35	36.2
S2438	9/26/00	9/26/00	22 4	E - 7 5 EPA #1	0 26	1.27	0 83	0.35	0 74	0.59	34 28	11.35
S2439	9/26/00	9/26/00	24 4	E - 7 5 EPA #2	-0 2	1.19	0 36	0.34	2 31	0.56	-7 66	10.47
S2440	9/26/00	9/26/00	22 8	E - 7 5 EPA #3	1 41	1.08	0 45	0.29	0 53	0.49	17 76	9.53
S2441	9/26/00	9/26/00	21 9	E - 7 5 EPA #4	3 37	1.23	0 12	0 33	2 4	0.57	-10 12	10.29
S2442	9/26/00	9/26/00	26 1	E - 7 5 EPA #5	0 27	1.2	0 42	0.33	0 83	0.56	41 43	10.9
S2443	9/26/00	9/26/00	27 5	E - 7 5 EPA #6	0 9	1.16	0 3	0.32	1 4	0.54	12 08	10.43
S2299	9/1/00	9/1/00	31 4	E - 10	0 58	1.2	0 18	0.33	2 34	0.56	13	10.56
S1031	4/10/00	4/10/00	43 4	E - 11.5	-1 67	3.14	2 94	0.78	4 17	1.3	110 27	25.86
S1011	4/4/00	4/4/00	34 5	E - 12	1 06	1.19	1 54	0.3	1 52	0.49	20 94	10.24
S2273	8/30/00	8/31/00	35 5	E - 12.5	-0 14	1.15	0 71	0.32	0.85	0.54	3.24	10.23
S1042	4/13/00	4/13/00	31	E - 13 PILE	0.51	2.43	2 48	0.56	2 16	0.96	90.44	19.76
S1043	4/13/00	4/13/00	34.2	E - 13 PILE QC	-0.05	2.55	1 74	0.63	4.71	1.06	45.27	20.5
S2265	8/30/00	8/31/00	31 2	E - 14	1 18	1.8	0 91	0.45	1.83	0.74	30.12	14.01
S2148	8/21/00	8/22/00	41	E - 17.5 FLOOR	2 48	1.89	-0 67	0.37	1.56	0.67	27.66	13.1
S1855	7/12/00	7/12/00	25.4	E - 24	1 61	1.3	1.21	0.32	2.63	0.53	25.68	10.17
S1843	7/6/00	7/6/00	35.7	E - 25	4.44	3.23	13.14	0.83	4.65	1.19	12.51	18.84
S1846	7/11/00	7/11/00	29.3	E - 25	4.43	2.85	2.92	0.64	6.22	1.06	16.1	18.43
S1851	7/12/00	7/12/00	30.5	E - 26	3.23	2.09	1.94	0.5	1.57	0.83	14.06	15.73
S2332	9/6/00	9/6/00	30.2	E.5 - 9.5	1.27	0.96	-0.07	0.24	2.25	0.41	-7.41	7.67
S2139	8/21/00	8/22/00	28.6	E.5 - 15.5 Exclusion Zone	2.6	1.64	0.77	0.45	2.08	0.76	21.52	14.03
S2059	8/14/00	8/14/00	32.5	E.5 - 18.5 FLOOR	3.7	1.06	2.49	0.3	2.49	0.48	22.43	8.83

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2011	8/7/00	8/8/00	31.8	E.5 - 20 #1	2.31	1.94	0.74	0.53	3.35	0.9	20.01	16.01
S2012	8/7/00	8/8/00	31.6	E.5 - 20 #2	3.24	1.6	2.26	0.44	3.57	0.72	24.44	12.58
S2020	8/10/00	8/10/00	30.4	E.5 - 20 EPA #1	2.64	1.7	1.15	0.47	2.63	0.79	-1.81	13.93
S2021	8/10/00	8/10/00	30.9	E.5 - 20 EPA #2	2.08	1.42	0.79	0.39	2.64	0.66	29.75	12
S2022	8/10/00	8/10/00	31.1	E.5 - 20 EPA #3	2.43	1.28	1.72	0.36	2.8	0.58	5.94	10.22
S2023	8/10/00	8/10/00	30.7	E.5 - 20 EPA #4	5.92	1.61	0.81	0.43	2.39	0.73	10.97	13.4
S2024	8/10/00	8/10/00	31	E.5 - 20 EPA #5	2	1.7	1.35	0.48	1.72	0.77	27.28	14.52
S2025	8/10/00	8/10/00	30.1	E.5 - 20 EPA #6	2.75	1.29	1.11	0.35	0.81	0.58	32.77	11.1
S2013	8/7/00	8/8/00	32.3	E.5 - 20	14.52	5.23	30.6	1.5	14.71	2.13	-18.99	27.45
S1973	8/1/00	8/1/00	34.6	E.5 - 22.5	3.15	1.94	1.76	0.47	2.84	0.76	26.25	14.97
S2014	8/9/00	8/9/00	28.7	E.5 - 22.5 FLOOR	0.58	1.3	0.3	0.36	1.91	0.61	19.47	11.73
S1969	7/28/00	8/1/00	32.5	E.5 - 23.1	2.09	1.95	1.51	0.47	2.14	0.79	28.24	15.47
S1866	7/13/00	7/13/00	34.7	E.5 - 24.5	1.44	1.73	1.31	0.42	3.89	0.74	13.76	13.71
S1844	7/6/00	7/6/00	39.4	E.5 - 25.5	24.43	8.82	36.03	2.19	13.68	3.02	20.3	40.07
S1962	7/28/00	7/28/00	36.2	E.5 - 25.5 (-1 FOOT)	3.2	3.42	0.23	0.79	3.96	1.43	35.8	27.15
S1885	7/18/00	7/18/00	33.8	E.5 - 25.5 EPA #1	3.86	1.71	0.86	0.41	2.84	0.7	12.89	13.7
S1886	7/18/00	7/18/00	34.1	E.5 - 25.5 EPA #2	2.19	1.89	1.5	0.46	1.33	0.77	44.65	15.92
S1887	7/18/00	7/18/00	33.4	E.5 - 25.5 EPA #3	1.59	1.44	0.72	0.35	3.13	0.61	19.6	12
S1888	7/18/00	7/18/00	33.7	E.5 - 25.5 EPA #4	2.52	2.18	1	0.52	1.65	0.88	33.29	17.82
S1889	7/18/00	7/18/00	33.7	E.5 - 25.5 EPA #5	0.75	1.5	1.14	0.37	1.82	0.63	29.95	12.61
S1890	7/18/00	7/18/00	32.2	E.5 - 25.5 EPA #6	2.69	2.02	1.46	0.49	1.68	0.83	25.49	16.8
S1897	7/18/00	7/18/00	35.2	E.5 - 27.5	-2.01	2.77	0.33	0.7	1.32	1.26	6.37	24.88
S1022	4/6/00	4/6/00	35.7	E.9 - 26.8	-3	3.16	9.4	0.82	22.27	1.34	54.81	20.2
S1616	6/9/00	6/9/00	32.4	F - 7 #1	0.22	1.89	1.94	0.47	1.59	0.79	49.21	15.19
S1617	6/9/00	6/9/00	32.2	F - 7 #2	2.79	1.59	3.04	0.4	2.7	0.64	2.11	12.05
S1618	6/9/00	6/9/00	33.1	F - 7 #3	2.1	1.48	2.46	0.37	0.95	0.59	21.13	11.78
S2334	9/6/00	9/6/00	33.3	F - 8.5	3.16	1.26	0.1	0.34	1.58	0.59	-0.06	11
S2336	9/6/00	9/6/00	28	F - 8.5 EPA #1	2.84	1.2	0.66	0.33	2.6	0.56	0.84	10.11
S2337	9/6/00	9/6/00	27	F - 8.5 EPA #2	2.78	1.37	0.63	0.38	1.45	0.63	6.45	11.8
S2338	9/6/00	9/6/00	28.8	F - 8.5 EPA #3	3.59	1.61	0.74	0.44	0.9	0.72	24.8	13.67
S2339	9/6/00	9/6/00	25.7	F - 8.5 EPA #4	2.47	1.4	0.71	0.39	1.68	0.65	6.67	12
S2340	9/6/00	9/6/00	27.1	F - 8.5 EPA #5	2.43	1.17	0.53	0.32	1.35	0.54	24.65	10.32
S2341	9/6/00	9/6/00	27.4	F - 8.5 EPA #6	2.52	1.02	0.14	0.28	1.83	0.47	12.56	8.94
S2329	9/6/00	9/6/00	31.5	F - 9	5.66	1.5	0.22	0.4	1.51	0.68	3.94	12.61
S2300	9/1/00	9/1/00	33.2	F - 10	-0.63	1.35	0.66	0.38	1.28	0.64	8.44	12.01
S2274	8/30/00	8/31/00	35.6	F - 12.5	2.31	1.14	0.02	0.31	1.22	0.53	9.72	10.21
S2266	8/30/00	8/31/00	31.9	F - 14	0.71	1.27	0.89	0.36	2.54	0.6	3.49	10.53
S2230	8/29/00	8/30/00	30	F - 14.5	9.82	3.76	8.31	1.05	5.24	1.54	16.15	24.31
S2141	8/22/00	8/22/00	37.7	F - 15 EPA #1	4.2	1.1	0.37	0.3	2.23	0.5	11.22	9.26
S2142	8/22/00	8/22/00	37.6	F - 15 EPA #2	2.46	1.24	1.02	0.35	1.97	0.57	1.32	10.32
S2143	8/22/00	8/22/00	38.7	F - 15 EPA #3	2.51	1.43	0.53	0.39	2.46	0.66	12.52	12.31
S2144	8/22/00	8/22/00	37.5	F - 15 EPA #4	2.34	1.39	0.45	0.38	2.89	0.65	14.8	11.79
S2145	8/22/00	8/22/00	37.3	F - 15 EPA #5	4.19	1.15	0.91	0.31	1.6	0.51	18.03	9.6

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2146	8/22/00	8/22/00	38 8	F - 15 EPA #6	0 77	1.28	0 48	0.35	2 67	0.6	28 59	11.2
S2245	8/30/00	8/30/00	38 7	F - 15 EPA #1	-1 82	1.24	0 44	0.36	1 36	0.61	14 55	11.69
S2246	8/30/00	8/30/00	37 5	F - 15 EPA #2	-1 05	1.61	0 48	0.48	0 73	0.78	10 47	14.93
S2247	8/30/00	8/30/00	36 6	F - 15 EPA #3	2 67	1.46	-0 16	0.4	1 72	0.69	8 06	10.9
S2248	8/30/00	8/30/00	37 3	F - 15 EPA #4	0 66	1.3	0 23	0.36	0 21	0.61	21 96	11.96
S2249	8/30/00	8/30/00	37 2	F - 15 EPA #5	1 16	1.49	0	0.41	1 45	0.7	12 59	13.39
S2250	8/30/00	8/30/00	37 8	F - 15 EPA #6	0 75	1.36	-0 05	0.37	1 32	0.64	24 82	12.5
S2140	8/21/00	8/22/00	30 8	F - 15 EZ	3 27	1.44	0 67	0.4	1 59	0.66	-10 6	12.3
S2149	8/21/00	8/22/00	39 1	F - 17 FLOOR	2 83	1.12	0 68	0.3	0 55	0.51	12 28	9.66
S1732	6/21/00	6/21/00	21 9	F - 17 STOCK PILE #1	-0 06	1.58	0 73	0.4	0 62	0.68	20 55	14.09
S1733	6/21/00	6/21/00	21 6	F - 17 STOCK PILE #2	0 38	1.28	0 22	0.31	1 13	0.54	38 25	12.06
S1734	6/21/00	6/21/00	25 6	F - 17 STOCK PILE #3	0 35	1.63	0 9	0.41	0 51	0 7	20 09	14 42
S1735	6/21/00	6/21/00	27 5	F - 17 STOCK PILE QC	-0 98	1.23	0 04	0.3	1 08	0.54	15 39	11.32
S1750	6/22/00	6/22/00	41	F - 18 5 EPA #1	2 97	1.79	0 69	0.42	1 11	0.75	9 23	14.6
S1751	6/22/00	6/22/00	38 6	F - 18 5 EPA #2	1 33	1.46	0 71	0.36	1 54	0.61	12 76	12.3
S1752	6/22/00	6/22/00	40 6	F - 18 5 EPA #3	0 81	1.5	0 35	0.39	1 79	0.66	29 61	13 66
S1753	6/22/00	6/22/00	41 6	F - 18 5 EPA #4	1 53	1.3	0 63	0.31	1 06	0.54	44 27	11.32
S1754	6/22/00	6/22/00	40 9	F - 18 5 EPA #5	1 67	1.47	0 96	0 35	0 72	0.6	25 93	12.47
S1755	6/22/00	6/22/00	40 5	F - 18 5 EPA #6	1 56	1.67	0 39	0.4	1 36	0.7	33 44	14.68
S1744	6/22/00	6/22/00	32 1	F - 18 5 WALL EPA #1	3 79	1.56	0 61	0.36	3 71	0.66	33 98	12 75
S1745	6/22/00	6/22/00	32 4	F - 18 5 WALL EPA #2	3	1.5	1 23	0.44	3 72	0.75	2 09	14.09
S1746	6/22/00	6/22/00	34	F - 18 5 WALL EPA #3	2 36	1.33	0 6	0 32	5 88	0.58	5 67	10.66
S1747	6/22/00	6/22/00	35 8	F - 18 5 WALL EPA #4	3 53	1.42	1 04	0.34	5 38	0.6	15 76	11.21
S1748	6/22/00	6/22/00	32 2	F - 18 5 WALL EPA #5	2 57	1.89	0 89	0.45	3 39	0 8	28 69	15 41
S1749	6/22/00	6/22/00	31 9	F - 18 5 WALL EPA #6	1 75	1.56	0 93	0.38	4 49	0.67	10 3	12.34
S1722	6/19/00	6/19/00	22	F - 19 #1	2 63	1.44	1 19	0 35	1 92	0.69	22 07	11.92
S1723	6/19/00	6/19/00	25 5	F - 19 #2	1 09	1.72	1 2	0.42	2 05	0.73	3 45	14.23
S1724	6/19/00	6/19/00	23 7	F - 19 #3	1 32	1.39	0 49	0.34	2 25	0.61	-6 69	11.8
S1725	6/19/00	6/19/00	25.4	F - 19 #4	2 54	1.23	1 06	0.3	0 82	0.5	21 81	10.59
S1726	6/19/00	6/19/00	24 7	F - 19 #5	1 48	1.33	0 27	0 32	2 21	0.57	20 02	11.56
S1727	6/19/00	6/19/00	22	F - 19 #6	0 03	0.9	0 53	0.23	1 18	0.39	11 89	8.24
S1718	6/19/00	6/19/00	33.5	F - 19 OB #1	2 52	1.63	1 68	0.4	2 28	0.67	28 44	13 24
S1719	6/19/00	6/19/00	26	F - 19 OB #2	1 62	1.56	0 87	0.38	1 86	0.66	14 47	12.96
S1720	6/19/00	6/19/00	30 4	F - 19 OB #3	1 06	1.48	1 56	0.37	1 63	0.63	11 14	12.26
S1721	6/19/00	6/19/00	20.5	F - 19 OB QC	0.34	1.36	0 55	0.34	1.3	0.59	23 76	12.62
S1736	6/22/00	6/22/00	29.3	F - 19 SPOT #1	0.32	1.82	0 69	0.47	2 09	0.83	24 78	16.86
S1737	6/22/00	6/22/00	29.5	F - 19 SPOT #2	-0.61	1.4	0.75	0.35	2.61	0.61	46 12	12.3
S1974	8/1/00	8/1/00	28.8	F - 22.5	-1.15	2.01	1 62	0.51	2 43	0.86	20 07	16.51
S1987	8/3/00	8/7/00	31.5	F - 22.5 AD #1 (After Dig)	4 61	1.09	1.19	0.29	3.88	0.5	15.14	8.71
S1988	8/3/00	8/7/00	32.1	F - 22.5 AD #2 (After Dig)	-0 12	1.42	1.41	0.4	4.38	0.66	29.35	11.64
S1981	8/2/00	8/2/00	34.6	F - 22.5 EPA #1	2 13	2.11	2.64	0.52	5.03	0.86	27.41	15.43
S1982	8/2/00	8/2/00	33.6	F - 22.5 EPA #2	1 55	2.34	3.18	0.59	4.82	0.96	8.1	16.67
S1983	8/2/00	8/2/00	32.7	F - 22.5 EPA #3	4.52	1.89	2.65	0.45	4.81	0.75	30.35	13.71

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1984	8/2/00	8/2/00	35.1	F - 22.5 EPA #4	3.16	2.51	2.98	0.61	3.72	0.99	13.68	17.41
S1985	8/2/00	8/2/00	33.8	F - 22.5 EPA #5	2.24	1.69	2.22	0.47	6.39	0.8	-2.68	13.63
S1986	8/2/00	8/2/00	35.1	F - 22.5 EPA #6	8.61	2.76	3.56	0.65	9.27	1.09	15.52	17.9
S1989	8/3/00	8/7/00	34.2	F - 22.5 EPA #1 A	6.38	1.55	0.45	0.42	3.98	0.73	19.48	12.96
S1990	8/3/00	8/7/00	34.5	F - 22.5 EPA #2 A	5.23	0.99	0.9	0.27	3.07	0.45	22.79	8.23
S1991	8/3/00	8/7/00	33.9	F - 22.5 EPA #3 A	3.64	1.96	1.41	0.55	2.43	0.91	24.56	16.73
S1992	8/3/00	8/7/00	34.1	F - 22.5 EPA #4 A	-0.17	1.51	1.6	0.51	3.64	0.85	15.32	14.85
S1993	8/3/00	8/7/00	35	F - 22.5 EPA #5 A	9.43	2.01	1.03	0.54	4.72	0.9	25.62	16.01
S1994	8/3/00	8/7/00	34.2	F - 22.5 EPA #6 A	0.22	1.73	1.14	0.49	4.76	0.82	9.55	14.29
S1865	7/13/00	7/13/00	37.2	F - 24.5	1.58	1.27	0.63	0.31	2.76	0.55	5.8	10.55
S2524	10/11/00	10/12/00	33.9	F - 24.5 LIFT 2	4.36	1.32	0.2	0.35	1.89	0.6	8.91	11.09
S2525	10/11/00	10/12/00	33.5	F - 24.5 LIFT 3	-0.04	1.2	0.17	0.34	1.1	0.57	4.28	11.04
S2530	10/11/00	10/12/00	39.4	F - 25 LIFT 3	1.95	1.09	-0.2	0.29	2.12	0.51	11.28	9.64
S2522	10/11/00	10/12/00	36.4	F - 25.5 LIFT 1	0.11	1.54	-0.1	0.42	2.11	0.75	9.86	13.9
S2523	10/11/00	10/12/00	30.4	F - 25.5 LIFT 2	1.67	1.35	-0.43	0.38	2.26	0.65	12.29	12.15
S1906	7/20/00	7/20/00	35.9	F - 26.5 FLOOR	0.9	1.46	0.63	0.36	1.54	0.62	28.25	12.56
S1248	5/12/00	5/12/00	41.1	F - 27 EPA #1	4.54	1.48	1.47	0.34	2.01	0.58	59.49	11.9
S1249	5/12/00	5/12/00	39.6	F - 27 EPA #2	1.61	2.19	0.92	0.53	4.07	0.92	53.17	17.81
S1250	5/12/00	5/12/00	43.5	F - 27 EPA #3	2.45	1.6	0.93	0.38	4.7	0.67	68.48	13.13
S1251	5/12/00	5/12/00	36.7	F - 27 EPA #4	0.66	0.89	0.08	0.22	1.74	0.39	31.09	8.14
S1252	5/12/00	5/12/00	46.5	F - 27 EPA #5	3.14	2.46	3.06	0.62	6.8	1.01	46.76	18.43
S1253	5/12/00	5/12/00	48.2	F - 27 EPA #6	2.92	1.78	0.78	0.43	2.62	0.74	36.25	14.85
S1942	7/25/00	7/25/00	33.2	F TO J - 27.5 EPA #1	3.83	1.63	1.05	0.38	1.9	0.67	0.5	12.7
S1943	7/25/00	7/25/00	33.7	F TO J - 27.5 EPA #2	3.17	1.75	0.98	0.42	1.21	0.71	11.53	14.2
S1944	7/25/00	7/25/00	35	F TO J - 27.5 EPA #3	1.99	1.57	0.86	0.36	2.16	0.66	7.63	12.89
S1945	7/25/00	7/25/00	33.4	F TO J - 27.5 EPA #4	1.55	1.67	0.74	0.4	1.49	0.69	17.11	14.24
S1946	7/25/00	7/25/00	35.7	F TO J - 27.5 EPA #5	2.44	1.41	0.36	0.33	3.91	0.61	-8.93	11.19
S1947	7/25/00	7/25/00	32.3	F TO J - 27.5 EPA #6	-0.1	1.6	0.65	0.45	2.38	0.78	12.87	15.61
S1970	8/1/00	8/1/00	34.4	F.2 - 23	10.83	3.46	6.85	0.83	10.17	1.31	30.83	20.75
S2138	8/21/00	8/21/00	33.2	F.5 - 15.5	215.2	78.27	335.02	21.79	65.65	29.36	91.99	320.16
S2060	8/14/00	8/14/00	31.4	F.5 - 18.5 FLOOR	1.36	1.67	0.93	0.47	1.38	0.77	19.67	14.79
S2203	8/25/00	8/25/00	26.8	F.5 - 21.5 #1	3.14	1.33	0.05	0.36	4.32	0.62	-4.04	10.95
S2204	8/25/00	8/25/00	26.5	F.5 - 21.5 #2	0.59	1.54	0.15	0.42	3.68	0.74	15.88	13.91
S2205	8/25/00	8/25/00	28.2	F.5 - 21.5 #3	0.85	1.47	0.18	0.4	3.75	0.69	31.38	12.55
S2057	8/14/00	8/14/00	26.6	F.5 - 22.5 FLOOR	2.28	1.34	-0.1	0.36	2.45	0.64	18.96	11.81
S1966	7/28/00	7/28/00	32.2	F.5 - 24.5 (-1 FOOT)	-0.39	1.42	0.95	0.96	2.2	0.63	-9.62	11.9
S1026	4/10/00	4/10/00	33.4	F.5 - 26.5	0.24	1.94	1.14	0.47	2.32	0.82	30.45	16.3
S1018	4/6/00	4/6/00	24.2	F.5 - 26.8	0.67	1.74	0.58	0.42	4.02	0.75	42.53	14.41
S1053	4/17/00	4/17/00	27.1	F.8 - 20	-1.43	1.77	2.04	0.46	4.07	0.76	32.61	14.4
S1019	4/6/00	4/6/00	20.1	F.8 - 26.5	-1.68	1.56	0.32	0.39	1.98	0.71	25.78	14.45
S1067	4/19/00	4/19/00	37.9	F.9 - 1	-1.48	3.47	5.57	0.88	13.22	1.46	38.21	22.77
S1068	4/19/00	4/19/00	38.2	F.9 - 2	-1.51	2.1	0.42	0.51	2.54	0.92	66.21	18.92
S1629	6/9/00	6/9/00	33.1	G - 1 PILE #1	0.43	1.57	2.36	0.4	2.58	0.86	30.74	12.67

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1630	6/9/00	6/9/00	32 3	G - 1 PILE #2	1 27	1.95	2 11	0.34	0 1	0.64	23 5	10.96
S1631	6/9/00	6/9/00	32 3	G - 1 PILE #3	0 6	2	0 69	0.48	1 59	0.89	25 14	17.25
S1632	6/9/00	6/9/00	34 4	G - 1 PILE #4	0 74	1.88	1 89	0.84	0 57	0.56	26 95	11.46
S1633	6/9/00	6/9/00	33 2	G - 1 PILE #5	-0 84	1.86	0 63	0.38	1 85	0.81	20 25	12.58
S1634	6/9/00	6/9/00	32 2	G - 1 PILE #6	0 23	0.72	0 95	0.18	1 74	0.81	6 3	6.19
S1635	6/9/00	6/9/00	31 4	G - 1 PILE #7	1 28	1.86	0 98	0.84	2 6	0.56	16 04	11.86
S1636	6/9/00	6/9/00	32 4	G - 1 PILE #8	1 88	1.62	1 58	0.39	0 6	0.66	32 32	13.45
S1637	6/9/00	6/9/00	32 4	G - 1 PILE #9	2 36	1.07	0 9	0.26	1 13	0.44	33 2	9.24
S1638	6/9/00	6/9/00	33	G - 1 PILE QC	1 03	0.79	1 38	0.2	1 76	0.34	12 35	6.73
S1497	5/31/00	5/31/00	34 7	G - 2 EPA #1	0 8	1.06	1 36	0 27	1 01	0.44	11 2	9.09
S1498	5/31/00	5/31/00	34 2	G - 2 EPA #2	0 04	2.1	0 75	0.82	1 51	0.69	40 55	18.66
S1499	5/31/00	5/31/00	33 3	G - 2 EPA #3	1 48	1.06	0 5	0.26	1 64	0.44	45 8	9.52
S1500	5/31/00	5/31/00	35 8	G - 2 EPA #4	1 02	1.9	0 84	0.46	1 57	0.78	31 46	15.72
S1501	5/31/00	5/31/00	33 2	G - 2 EPA #5	1 32	1.11	1 07	0 27	1 47	0.46	10 59	9.33
S1502	5/31/00	5/31/00	34 3	G - 2 EPA #6	1 57	1.16	0 68	0.29	2 47	0.5	-0 65	9.34
S1696	6/14/00	6/14/00	38 7	G - 7 EPA #1	1 33	2.04	1 5	0.5	1 54	0.84	27 91	16.49
S1697	6/14/00	6/14/00	37 1	G - 7 EPA #2	0 36	1.58	1 76	0.4	1 45	0.67	27 17	13.83
S1698	6/14/00	6/14/00	37 7	G - 7 EPA #3	3 58	1.64	1 61	0.37	2 1	0.61	13 91	11.91
S1699	6/14/00	6/14/00	38 7	G - 7 EPA #4	0 39	1.91	2 08	0.48	1 47	0.78	13 9	16.14
S1700	6/14/00	6/14/00	37 7	G - 7 EPA #5	3 65	1.72	1	0.41	1 98	0.7	10 24	13.52
S1701	6/14/00	6/14/00	36 1	G - 7 EPA #6	0 87	1.95	1 66	0.49	2 2	0.82	-9 73	15.15
S2335	9/6/00	9/6/00	34	G - 8	0 59	1.31	1 16	0 38	0 82	0.6	-1 6	11.61
S2330	9/6/00	9/6/00	36 3	G - 8 5	3 33	1.2	0 09	0.32	0 68	0.56	-7 19	10.59
S2301	9/1/00	9/1/00	36	G - 10	1 59	1.16	0 88	0.31	2 69	0.57	11 48	10.64
S2275	8/30/00	8/31/00	35 9	G - 12 5	0 52	1.27	-0 19	0.35	1 22	0.61	22 37	11.95
S2267	8/30/00	8/31/00	31 9	G - 14	1 79	1.43	0 37	0.39	1 29	0.67	17 83	12.66
S2151	8/21/00	8/22/00	37 3	G - 17 FLOOR	1 96	1.19	0 22	0.33	1 55	0.56	-1 41	10.38
S1059	4/18/00	4/18/00	22	G - 18	-1 45	1.65	0 82	0.39	3 26	0.68	64 07	13 97
S1058	4/18/00	4/18/00	25 9	G - 19.2	0 62	1.85	1 24	0.4	2 57	0.69	51 27	13.76
S2206	8/26/00	8/26/00	31 9	G - 21.5 EPA #1	3 93	1.91	0 57	0.36	2 01	0.6	23 74	11.32
S2207	8/26/00	8/26/00	31	G - 21 5 EPA #2	3 19	1.84	0 24	0.41	2 96	0.71	25 1	12.97
S2208	8/26/00	8/26/00	31 4	G - 21.5 EPA #3	1 99	1.4	1.1	0.39	2 36	0.64	3 59	11.68
S2209	8/26/00	8/26/00	33.7	G - 21 5 EPA #4	2.82	1.83	1.11	0.51	3 14	0.88	-14 12	14.62
S2210	8/26/00	8/26/00	33 7	G - 21 5 EPA #5	3 22	1.72	0.56	0.36	2 56	0.6	29 58	11.18
S2211	8/26/00	8/26/00	34.1	G - 21 5 EPA #6	3.14	1.48	0.57	0.4	2.25	0.68	27 29	12.66
S1046	4/13/00	4/13/00	32.4	G - 21.8 1.5 Feet Wall	-1.49	2.13	0.59	0.52	1.64	0.91	52 52	18.89
S1045	4/13/00	4/13/00	32.9	G- 21.8 3 Feet Wall	-2.15	5.93	3.53	0.76	3.92	1.32	60 23	23.03
S1044	4/13/00	4/13/00	26.5	G - 21.8 Surface	-0 49	2.27	2.07	0.57	2	0.93	46.7	18.38
S1050	4/14/00	4/14/00	29.5	G - 22	-1.98	1.89	2.58	0.48	2.62	0.79	66 22	16.55
S1099	4/26/00	4/26/00	37.5	G - 23 Import Material	0.71	2.02	1.14	0.48	2.15	0.82	92.27	17.31
S1051	4/14/00	4/14/00	30.8	G - 24	0.16	1.91	1.16	0.47	2.14	0.81	36 26	15.96
S1967	7/28/00	7/28/00	33.9	G - 24 (-1 FOOT)	1.73	1.84	0.2	0.39	2.04	0.71	7.51	14.01
S1119	4/27/00	4/27/00	27.6	G - 25 EPA VERIFICATION	-0.51	2.03	0.82	0.6	3.53	0.89	49.19	17.6

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1021	4/6/00	4/6/00	26.8	G - 26	-18.05	7.52	54.5	1.97	75.16	3.08	52.45	37.23
S1002	3/27/00	3/31/00	36.8	G - 26.5 (E)	-0.88	1.51	1.35	0.38	2.77	0.65	40.02	13
S1003	3/27/00	3/31/00	36.6	G - 26.5 (W)	2.7	1.69	1.45	0.37	4.67	0.83	61.07	12.41
S1014	4/5/00	4/5/00	18.8	G - 27	-491.59	1155.91	1190.18	294.24	2893.82	477.31	4457.56	5370.26
S1077	4/24/00	4/24/00	34.3	G - 27 #1 5' OUT	-6.81	3.17	1.21	0.84	4.27	1.47	86.04	29.79
S1078	4/24/00	4/24/00	39.3	G - 27 #2 5' OUT	-3.26	3.48	1.08	0.85	2.4	1.49	98.45	31.29
S1079	4/24/00	4/24/00	40.3	G - 27 #3 5' OUT	-5.22	3.93	1.03	0.98	2.61	1.73	124.28	36.74
S1080	4/24/00	4/24/00	39.5	G - 27 #4 5' OUT	-4.02	3.97	1.04	0.97	2.55	1.71	93.86	34.91
S1081	4/24/00	4/24/00	39.2	G - 27#5 1' (floor)	-7.1	3.7	1.63	0.97	2.72	1.67	118.17	34.65
S1082	4/24/00	4/24/00	40.1	G - 27 #6 1' OUT	-7.09	6.48	10.19	1.69	20.36	2.77	83.61	42.12
S1083	4/24/00	4/24/00	34.8	G - 27 #7 1' OUT	-6.06	3	1.4	0.77	1.06	1.32	120.58	26.53
S1084	4/24/00	4/24/00	39.2	G - 27 #8 7' OUT	-2.56	3.05	1.26	0.75	2.05	1.3	90.37	27.24
S1085	4/24/00	4/24/00	40	G - 27 #9 7' OUT	-3.89	3.19	1.13	0.79	2.41	1.37	111.48	28.74
S1086	4/24/00	4/24/00	37.6	G - 27#10 7' OUT (floor)	-4.76	3.1	1.29	0.79	1.94	1.37	92.27	28.7
S1102	4/26/00	4/26/00	36.7	G - 27 #1 HOLE	-0.35	1.92	1.01	0.47	2.24	0.8	70.87	16.88
S1103	4/26/00	4/26/00	41.4	G - 27 #2 HOLE	-2.24	1.5	0.83	0.38	0.8	0.65	72.85	14.35
S1104	4/26/00	4/26/00	40.1	G - 27 #3 HOLE	-0.64	1.73	0.57	0.42	1.53	0.75	45.43	15.5
S1105	4/26/00	4/26/00	38.7	G - 27 #4 HOLE	-1.94	1.36	1.58	0.35	1.05	0.58	30.79	11.94
S1106	4/26/00	4/26/00	32.9	G - 27 #5 HOT AREA	0.81	2.14	9.16	0.56	3.66	0.82	41.15	14.33
S1107	4/26/00	4/26/00	36.9	G - 27 #6 HOT AREA	-1.85	1.61	3.83	0.42	1.96	0.66	46.83	12.86
S1108	4/26/00	4/26/00	36.1	G - 27 #7 HOT AREA	1.1	1.47	4.1	0.38	4.61	0.6	17.51	10.66
S1202	5/5/00	5/5/00	39	G - 27 CO #1 EPA Covered Wall	-0.08	1.58	0.22	0.38	1.26	0.68	46.84	14.34
S1203	5/5/00	5/5/00	36.2	G - 27 CO #2 EPA Covered Wall	1.96	1.58	1.1	0.39	1.53	0.65	44.1	13.64
S1204	5/5/00	5/5/00	38	G - 27 CO #3 EPA Covered Wall	0.06	1.65	0.57	0.41	1.04	0.7	15.65	14.46
S1205	5/5/00	5/5/00	38.9	G - 27 CO #4 EPA Covered Wall	-3.29	3.08	1.41	0.76	3.69	1.32	86.09	25.87
S1206	5/5/00	5/5/00	39.8	G - 27 CO #5 EPA Covered Wall	-1.53	2.26	0.74	0.56	3.12	0.99	49.6	19.88
S1207	5/5/00	5/5/00	35.4	G - 27 CO #6 EPA Covered Wall	-2.76	1.65	1.53	0.42	4.32	0.73	41.87	13.87
S1242	5/12/00	5/12/00	34.4	G - 27 EPA #1	0.74	1.57	0.65	0.39	0.91	0.66	22.02	13.8
S1243	5/12/00	5/12/00	34.2	G - 27 EPA #2	-0.55	1.07	0.31	0.27	1.62	0.47	24.01	9.86
S1244	5/12/00	5/12/00	38.3	G - 27 EPA #3	0.33	1.55	0.4	0.38	1.47	0.67	25.42	13.96
S1245	5/12/00	5/12/00	36.9	G - 27 EPA #4	-0.88	1.48	0.6	0.37	0.33	0.63	31.11	13.95
S1246	5/12/00	5/12/00	39.9	G - 27 EPA #5	1.52	1.66	0.69	0.41	0.53	0.69	36.73	14.88
S1247	5/12/00	5/12/00	35.9	G - 27 EPA #6	0.9	0.97	1.89	0.25	2.5	0.41	16.94	8.07
S1118	4/27/00	4/27/00	35.8	G - 27 LESS THAN 1' (floor)	-550.64	260.22	585.59	59.64	1343.18	114.65	926.47	1248.47
S1015	4/6/00	4/6/00	39.1	G - 27 SAND (floor)	-1.65	1.58	0.71	0.38	1.09	0.65	57.75	13.99
S1930	7/20/00	7/21/00	33.7	G - 27.5 FLOOR	2.75	1.72	0.98	0.41	2.15	0.71	8.1	13.89
S1954	7/26/00	7/26/00	28.4	G - 27.5 WALL (-3 FEET)	3.68	1.93	2.11	0.47	4.16	0.78	34.7	14.71
S1411	5/26/00	5/26/00	35.3	G - N/1-9 #1 Roadway Diagonal	0.16	1.69	2.1	0.43	1.95	0.71	26.27	13.99
S1412	5/26/00	5/26/00	34.2	G - N/1-9 #2 Roadway Diagonal	1.78	1.65	3.61	0.41	0.47	0.63	54.11	12.76
S1413	5/26/00	5/26/00	31.9	G - N/1-9 #3 Roadway Diagonal	2.63	1.7	3.22	0.42	1.79	0.67	30.51	13.08
S1414	5/26/00	5/26/00	25.3	G - N/1-9 #4 Roadway Diagonal	1.24	1.23	1.41	0.3	2.03	0.51	18.77	9.99
S1415	5/26/00	5/26/00	35.2	G - N/1-9 #5 Roadway Diagonal	1.84	1.56	3.12	0.4	2.58	0.64	14.73	12.08
S1416	5/26/00	5/26/00	35.7	G - N/1-9 #6 Roadway Diagonal	0.47	1.53	1.44	0.38	3.3	0.64	29.83	12.51

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1417	5/26/00	5/26/00	29	G - N/1-9 #7 Roadway Diagonal	3 7	1.69	5 39	0.49	1 87	0.65	22 24	11.97
S1418	5/26/00	5/26/00	27 6	G - N/1-9 #8 Roadway Diagonal	-0 8	1.76	2 33	0.46	2 18	0.74	49 85	15.16
S1419	5/26/00	5/26/00	29 7	G - N/1-9 #9 Roadway Diagonal	-1 35	1.57	2 72	0.48	2 6	0.79	18 21	14.68
S1420	5/26/00	5/26/00	32 4	G - N/1-9 #10 Roadway Diagonal	0 14	1.57	1 82	0.34	2 69	0.58	31 53	11.39
S1029	4/10/00	4/10/00	26 4	G 2 - 27	-1407	460.22	1306 34	124.67	3313 34	208.46	2268 8	2264.97
S2084	8/17/00	8/17/00	26 4	G 5 - 16	2 71	1.62	0 39	0.41	2 73	0.7	23 57	13.16
S1075	4/24/00	4/24/00	29 6	G 5 - 17 EPA VERIFICATION	-2 99	3.18	3	0.8	2 85	1.31	78 05	26.17
S1076	4/24/00	4/24/00	32 2	G 5 - 19 EPA VERIFICATION	-1 65	5.96	1 32	0.81	3 4	1.42	44 31	27.25
S2058	8/14/00	8/14/00	31 5	G 5 - 22 5 FLOOR	3 49	1.7	0 81	0.47	1 16	0.77	23 16	14.67
S2026	8/10/00	8/10/00	41 5	G 5 - 23 EPA #1	0 88	1.14	-0 3	0.31	2 18	0.64	8 84	10.42
S2027	8/10/00	8/10/00	41 4	G 5 - 23 EPA #2	1 24	1.42	0 66	0.4	1 81	0.65	7 76	12.58
S2028	8/10/00	8/10/00	39 9	G 5 - 23 EPA #3	2 06	1.41	0 44	0.38	1 96	0.66	11 59	12 12
S2029	8/10/00	8/10/00	41 1	G 5 - 23 EPA #4	-1 55	1.03	0 19	0.29	2 42	0.5	20 9	9.42
S2030	8/10/00	8/10/00	41 1	G 5 - 23 EPA #5	3 12	1.8	0 17	0.35	1 2	0.5	29 11	11.71
S2031	8/10/00	8/10/00	40 8	G 5 - 23 EPA #6	-1 57	1.58	0 9	0.45	1 2	0.76	22 58	14.19
S1017	4/6/00	4/6/00	28 7	G 5 - 26 4	-3 66	1.41	3 12	0.38	5 73	0.62	27 69	11.46
S1929	7/20/00	7/21/00	20 1	G 5 - 27 5 (- 4 FEET)	5 26	7.57	16 88	1.86	48 2	3.09	66 48	40.89
S1951	7/26/00	7/26/00	26 2	G 5 - 27 5 WALL (-2 FEET)	24 81	12.07	46 39	2.97	39 81	4.89	66.76	54.44
S1007	3/27/00	3/31/00	30 4	G 5 - 3	-6 96	6.6	62 2	1.79	6 4	2.29	38 7	30.8
S1878	7/17/00	7/17/00	25 9	G 6 - 27	-0 56	1.16	0 52	0.29	1 05	0.62	13 04	10 63
S1009	3/27/00	3/31/00	29 2	G 8 - 2 5	1 54	2.7	21 64	0.71	3 64	0.97	29 3	15.26
S1008	3/27/00	3/31/00	30 9	G 8 - 3	3 13	1.84	2 67	0 46	2 29	0.73	8 99	13.99
S1016	4/6/00	4/6/00	31 9	G 8 - 26 5	1 28	1.62	3 72	0.39	5 37	0.62	40 44	11.46
S1020	4/6/00	4/6/00	29 4	G 9 - 26 4	0 32	2.34	10 86	0.62	9 55	0.92	55 34	15 67
S1473	5/31/00	5/31/00	36 7	H - 2 EPA #1	0 5	1.32	1 59	0.33	2 13	0.55	24 75	10.97
S1474	5/31/00	5/31/00	36 7	H - 2 EPA #2	3 61	1.51	1 94	0 37	1 16	0.6	5 33	11.66
S1475	5/31/00	5/31/00	36 5	H - 2 EPA #3	0 76	1.19	1 99	0.31	1 7	0.51	25 2	10.25
S1476	5/31/00	5/31/00	36	H - 2 EPA #4	0 07	1.56	2 21	0.41	1 42	0.66	4 07	12.65
S1477	5/31/00	5/31/00	36 7	H - 2 EPA #5	2 37	1.85	1 89	0.45	1 52	0.74	21 32	14.61
S1478	5/31/00	5/31/00	36 9	H - 2 EPA #6	2 12	2.3	1 21	0 55	1 57	0.92	41 05	18.42
S1006	3/27/00	3/31/00	34 2	H - 6	0 13	1.24	0 6	0.31	0.62	0.63	24 92	11.3
S2333	9/6/00	9/6/00	34 2	H - 8 5	0 64	1.39	0 63	0.36	1 62	0.6	-14 34	10.98
S1509	5/31/00	5/31/00	30	H - 8 5 EPA #1	-0 59	1.43	1 81	0.36	2 65	0.6	28 8	11.69
S1510	5/31/00	5/31/00	29 6	H - 8 5 EPA #2	2 03	1.6	2 13	0.4	1 01	0.64	21 1	13.02
S1511	5/31/00	5/31/00	30 8	H - 8 5 EPA #3	1 35	1.86	2 15	0.46	1 17	0.75	16 02	14.68
S1512	5/31/00	5/31/00	30 5	H - 8 5 EPA #4	2 1	1.81	1 55	0.39	2 63	0.68	12 36	12.57
S1513	5/31/00	5/31/00	28 6	H - 8 5 EPA #5	-1 1	1.67	1 66	0.47	2 12	0.8	40 37	15.67
S1514	5/31/00	5/31/00	34 2	H - 8 5 EPA #6	1 85	1.8	1 03	0.39	3 04	0.67	12 36	12.72
S2328	9/6/00	9/6/00	33 9	H - 9	1 26	1.19	0 14	0.33	2 28	0.58	-6 1	10.47
S2289	8/31/00	8/31/00	34 9	H - 9 5	12 64	3.17	8 48	0.89	4 23	1.3	31 45	21 24
S2258	8/30/00	8/31/00	33 2	H - 11 OB #1	-4 32	2.66	1 48	0 73	4 03	1 23	88 21	22 5
S2259	8/30/00	8/31/00	34 9	H - 11 OB #2	-5 98	2.74	2 16	0 77	3 13	1 27	94 64	23 2
S2260	8/30/00	8/31/00	34 2	H - 11 OB #3	4 74	1 74	0 94	0 48	3 86	0 79	-5 04	13 81

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2261	8/30/00	8/31/00	34.6	H - 11 OB #4	2.48	1.42	2.18	0.4	1.78	0.64	15.45	11.5
S2262	8/30/00	8/31/00	35.2	H - 11 OB #5	2.78	1.54	1.65	0.43	3.74	0.7	5.96	12.19
S2263	8/30/00	8/31/00	33.3	H - 11 OB #QC	2.71	1.77	2.1	0.49	2.06	0.78	12.39	13.96
S2276	8/30/00	8/31/00	35.1	H - 12.5	2.6	1.68	0.29	0.46	1.28	0.78	-4.22	14.63
S2268	8/30/00	8/31/00	32.4	H - 14	-0.68	1.45	0.32	0.41	1.15	0.69	22.96	13.49
S2213	8/28/00	8/28/00	31.8	H - 14.5	3.3	2.55	10.93	0.74	4.93	1.07	7.27	15.99
S2218	8/29/00	8/29/00	36.1	H - 14.5 EPA #1	0.87	1.39	0.31	0.38	1.06	0.66	17.07	12.59
S2219	8/29/00	8/29/00	36.8	H - 14.5 EPA #2	-0.61	1	0.56	0.26	0.89	0.47	13.58	9.15
S2220	8/29/00	8/29/00	36.8	H - 14.5 EPA #3	3.44	1.25	-0.6	0.33	2.12	0.6	-2.78	11.26
S2221	8/29/00	8/29/00	37.2	H - 14.5 EPA #4	1.39	1.53	0.49	0.43	0.6	0.71	22.85	13.96
S2222	8/29/00	8/29/00	35.6	H - 14.5 EPA #5	-0.06	1.31	0.34	0.36	1.93	0.63	6.21	11.74
S2223	8/29/00	8/29/00	36	H - 14.5 EPA #6	1.33	1.21	0.04	0.33	0.99	0.57	27.34	11.29
S2085	8/17/00	8/17/00	27.5	H - 16	3.06	1.51	1.41	0.42	2.06	0.69	14.86	12.73
S2090	8/18/00	8/18/00	33.4	H - 16 EPA #1	3.02	1.55	0.39	0.42	1.84	0.71	33.29	13.56
S2091	8/18/00	8/18/00	32.2	H - 16 EPA #2	3.99	1.38	0.52	0.37	2.5	0.63	10.69	11.39
S2092	8/18/00	8/18/00	31.9	H - 16 EPA #3	2.72	1.25	0.67	0.33	1.72	0.57	28.86	10.66
S2093	8/18/00	8/18/00	30.1	H - 16 EPA #4	1.26	1.53	1.2	0.43	1.91	0.71	9.28	13.07
S2094	8/18/00	8/18/00	30.5	H - 16 EPA #5	3.49	1.67	0.83	0.45	2.16	0.76	14.97	13.84
S2095	8/18/00	8/18/00	32	H - 16 EPA #6	5.67	1.75	0.84	0.47	2.36	0.79	12.68	14.35
S2086	8/17/00	8/18/00	30	H - 16.5 Exclusion Zone #1	3.33	2.07	4.14	0.58	1.67	0.9	10.74	15.15
S2087	8/17/00	8/18/00	27	H - 16.5 Exclusion Zone #2	15.16	6.81	34.44	1.89	13.52	2.64	2.46	34.55
S2147	8/21/00	8/22/00	35.2	H - 17 FLOOR	-1.42	1.28	-0.24	0.35	1.09	0.61	33.62	12.3
S2017	8/9/00	8/9/00	36	H - 23 #1	8.12	1.61	1.6	0.43	1.74	0.69	17.04	12.71
S2018	8/9/00	8/9/00	37	H - 23 #2	4.07	1.7	1.56	0.47	2.4	0.77	12.63	13.84
S2016	8/9/00	8/9/00	39.2	H - 23	3.31	1.65	3.12	0.47	3.23	0.79	29.39	12.91
S1927	7/20/00	7/20/00	29.5	H - 27	101.94	347.14	790.06	86.42	1208.98	134.46	1390.77	1464.51
S1236	5/12/00	5/12/00	35.6	H - 27 EPA #1	-0.03	1.53	1.49	0.38	2.65	0.64	45.29	12.98
S1237	5/12/00	5/12/00	36.9	H - 27 EPA #2	-0.01	1.86	2.21	0.47	1.68	0.77	51.02	15.45
S1238	5/12/00	5/12/00	36	H - 27 EPA #3	3.2	1.17	1.46	0.29	3.48	0.49	6.4	9.19
S1239	5/12/00	5/12/00	36.5	H - 27 EPA #4	-0.66	1.67	2.05	0.43	2.53	0.7	38.29	13.79
S1240	5/12/00	5/12/00	35.5	H - 27 EPA #5	0.29	1.34	1.38	0.34	2.93	0.57	28.1	11.26
S1241	5/12/00	5/12/00	35.5	H - 27 EPA #6	1.01	2.18	1.64	0.56	3.17	0.93	12	16.24
S1931	7/20/00	7/21/00	35.1	H - 27.5 FLOOR	0.64	2	0.67	0.46	1.97	0.84	31.77	17.1
S1948	7/25/00	7/25/00	16	H - 27.5 WALL	10.26	5.72	7.51	1.35	17.94	2.23	12.07	32.53
S1950	7/26/00	7/26/00	26	H - 27.5 WALL (-2 FEET)	43.48	29.64	83.27	7.15	133.03	11.31	117.5	126.57
S1423	5/26/00	5/26/00	30.6	H-J, 3-5 (Roadway) #7 AFTER DIG EAST G	1.15	1.5	3.28	0.58	1.99	0.59	31.6	11.43
S1424	5/26/00	5/26/00	31.7	H-J, 3-4 (Roadway) #7 AFTER DIG WEST (	0.48	1.47	1.8	0.37	1.92	0.61	33.37	12.49
S1421	5/26/00	5/26/00	28.6	H-J, 3-5 (Roadway) #7 RESAMPLE EAST A	1.53	2.49	6.62	0.64	3.69	0.97	15.76	16.91
S1422	5/26/00	5/26/00	32.3	H-J, 3-5 (Roadway) #7 RESAMPLE WEST	0.96	2.06	5.85	0.53	2.38	0.81	33.55	14.83
S1101	4/26/00	4/26/00	28.9	H.5-3	-383.51	93.56	849.41	25.83	163.58	33.96	306.77	376.85
S2327	9/5/00	9/5/00	30.5	H.5 - 9 (-2)	59.73	18.35	56.99	5.06	20.69	7	16.69	85.99
S2315	9/5/00	9/5/00	32.5	H.5 - 9 EPA #1	2.85	0.83	2.03	0.23	1.44	0.37	23.53	6.83
S2316	9/5/00	9/5/00	31.3	H.5 - 9 EPA #2	4.71	1.44	1.53	0.4	2.06	0.65	3	11.47

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2317	9/5/00	9/5/00	32 9	H 5 - 9 EPA #3	5 25	1.73	2 23	0.48	1 7	0.76	3 42	13.67
S2318	9/5/00	9/5/00	33 3	H 5 - 9 EPA #4	4 21	1.67	0 92	0.46	3 9	0.76	8 86	13.41
S2319	9/5/00	9/5/00	32 6	H 5 - 9 EPA #5	-0 29	1.64	1 16	0.43	3 3	0.72	3 58	12.62
S2320	9/5/00	9/5/00	32 5	H 5 - 9 EPA #6	3 49	1.14	1 75	0.32	2 62	0.62	8 66	9.1
S2308	9/1/00	9/1/00	34 9	H 5 - 10 EPA #1	1 31	1.26	1 49	0.35	2 8	0.67	12 94	10.18
S2309	9/1/00	9/1/00	32 2	H 5 - 10 EPA #2	3 03	1.16	1 68	0.33	2 71	0.63	-14 5	8.12
S2310	9/1/00	9/1/00	34 6	H 5 - 10 EPA #3	3 02	1.48	1 23	0.41	3 39	0.67	-6 79	11.71
S2311	9/1/00	9/1/00	34 7	H 5 - 10 EPA #4	3 29	1.36	1 3	0.37	2 2	0.61	22 6	11.21
S2312	9/1/00	9/1/00	33 5	H 5 - 10 EPA #5	-0 14	1.32	1 92	0.39	2 04	0.6	28 31	11.18
S2313	9/1/00	9/1/00	34 2	H 5 - 10 EPA #6	-0 15	1.54	1 17	0 43	3 13	0.73	18 2	12.48
S1110	4/26/00	4/26/00	27 6	H 5-16 8	1 84	1.34	2 14	0.33	1 49	0.64	30 79	10.99
S2032	8/10/00	8/10/00	38 2	H 5 - 23 EPA #1	4 24	1.66	0 87	0.46	0 87	0.76	27 03	14 36
S2033	8/10/00	8/10/00	38 9	H 5 - 23 EPA #2	0 07	1.25	1 66	0.35	1 02	0.67	20 6	10.66
S2034	8/10/00	8/10/00	38 3	H 5 - 23 EPA #3	1 3	1.58	0 78	0 44	1 63	0.73	27 64	13.78
S2035	8/10/00	8/10/00	37 1	H 5 - 23 EPA #4	4 27	1.62	0 76	0.41	1 65	0.69	-3 08	12.57
S2036	8/10/00	8/10/00	38 6	H 5 - 23 EPA #5	2 88	1.75	0 4	0.47	3 19	0.8	5 02	14.92
S2037	8/10/00	8/10/00	39 4	H 5 - 23 EPA #6	-0 16	1.49	1 18	0.42	1 8	0.7	2 76	12.56
S1958	7/28/00	7/28/00	35 8	H 5 - 23 5 FLOOR	1 82	1.46	0 76	0 36	2 22	0.62	3 78	12
S1959	7/28/00	7/28/00	32 9	H 5 - 24 5 FLOOR	2 97	1.66	0 74	0.39	1 23	0.67	7 37	13.52
S1928	7/20/00	7/21/00	31 5	H 5 - 27 5 (- 4 FEET)	10 25	4.02	11 17	0.99	14 7	1.53	37 64	22 96
S1949	7/25/00	7/25/00	26 7	H 5 - 27 5 WALL	42 23	16.89	51 1	4.57	50 54	6.79	92 87	84.94
S1952	7/26/00	7/26/00	27 4	H 5 - 27 5 WALL (-2 FEET)	5 47	2.62	6 41	0.7	5 99	1.06	-4 27	17.24
S1968	7/28/00	8/1/00	33 3	H 8 - 26	13 4	4.66	14 47	1.19	7 38	1.73	10.2	25.43
S1971	8/1/00	8/1/00	32 7	H 8 - 26 #1	1 7	2.17	2 51	0.53	2 4	0.67	33 96	16 52
S1972	8/1/00	8/1/00	30 8	H 8 - 26 #2	3 12	1.91	2 12	0.47	3 14	0.77	27 46	14.6
S1975	8/2/00	8/2/00	33 6	H 8 - 26 EPA #1	2 14	2.62	5 13	0 66	2 65	1.01	32 19	18.26
S1976	8/2/00	8/2/00	34 1	H 8 - 26 EPA #2	2 86	2.06	1 78	0.5	2 17	0.84	18 32	15.89
S1977	8/2/00	8/2/00	33.5	H 8 - 26 EPA #3	2 15	2.02	1 53	0.49	2 05	0.82	22 43	16 06
S1978	8/2/00	8/2/00	33 1	H 8 - 26 EPA #4	2 64	1.31	1 64	0.31	1 09	0.52	30 26	10.43
S1979	8/2/00	8/2/00	33.7	H.8 - 26 EPA #5	0 24	1.8	1 1	0.4	1 78	0.68	33 74	13.87
S1980	8/2/00	8/2/00	32 3	H.8 - 26 EPA #6	2 69	1.92	1 37	0.47	1 55	0.78	20 58	15.33
S1449	5/31/00	5/31/00	37 8	I - 2 EPA #1	1 24	1.41	0 23	0.33	1.15	0.6	27 69	12.48
S1450	5/31/00	5/31/00	37 7	I - 2 EPA #2	1 86	1.43	0 45	0.34	0 47	0.59	26.73	12.49
S1451	5/31/00	5/31/00	37.9	I - 2 EPA #3	-0.76	1.47	0 35	0.37	1 85	0.65	8 38	13.21
S1452	5/31/00	5/31/00	38	I - 2 EPA #4	-0 55	1.26	0.15	0.42	1.52	0.67	29 49	12.02
S1453	5/31/00	5/31/00	37.7	I - 2 EPA #5	-1 54	1.42	1.15	0.36	2.07	0.62	53.52	12.63
S1454	5/31/00	5/31/00	37.7	I - 2 EPA #6	-1 54	1.26	0 26	0.32	0.86	0.56	37 76	12.31
S1503	5/31/00	5/31/00	38 5	I - 5 EPA #1	0.57	1.58	1.34	0.39	1.48	0.65	34.06	13.34
S1504	5/31/00	5/31/00	37.9	I - 5 EPA #2	0.61	1.67	1.94	0.42	0.65	0.67	35.91	13.58
S1505	5/31/00	5/31/00	36.5	I - 5 EPA #3	-0.46	1.65	1.84	0.41	1.58	0.69	31.11	13.78
S1506	5/31/00	5/31/00	36.3	I - 5 EPA #4	1.49	1.48	2.24	0.37	0.73	0.6	27.83	12.01
S1507	5/31/00	5/31/00	36.7	I - 5 EPA #5	-2.13	1.53	1.65	0.4	1.2	0.66	47.11	13.41
S1508	5/31/00	5/31/00	38	I - 5 EPA #6	3.24	1.96	1.3	0.44	1.42	0.75	19.08	14.96

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1443	5/31/00	5/31/00	34.1	I - 7 EPA #1	0.95	1.64	2.92	0.41	1.83	0.65	37.93	12.97
S1444	5/31/00	5/31/00	34.8	I - 7 EPA #2	0.19	1.8	2.16	0.45	3.76	0.75	33.67	14.22
S1445	5/31/00	5/31/00	27.6	I - 7 EPA #3	0.85	1.64	3.05	0.47	2.48	0.74	25.78	14.16
S1446	5/31/00	5/31/00	33.8	I - 7 EPA #4	-0.74	1.4	3.37	0.37	2.93	0.58	27.38	11.2
S1447	5/31/00	5/31/00	34	I - 7 EPA #5	2.59	2.22	2.65	0.55	2.31	0.86	25.15	16.61
S1448	5/31/00	5/31/00	33.7	I - 7 EPA #6	2.08	1.57	2.37	0.39	2.41	0.64	39.42	12.73
S2331	9/6/00	9/6/00	33	I - 9	4.18	1.55	-0.01	0.41	0.94	0.71	14.11	13.63
S2348	9/7/00	9/7/00	35.5	I - 9	1.62	1.15	0.26	0.31	1.2	0.54	17.97	10.3
S2290	8/31/00	8/31/00	25.4	I - 9.5	3.54	1.44	1.81	0.39	1.75	0.64	37.94	11.8
S1379	5/24/00	5/24/00	25.4	I - 10.5 EPA #1	2.31	1.55	2.05	0.38	1.44	0.62	25.93	12.46
S1380	5/24/00	5/24/00	24.7	I - 10.5 EPA #2	0.57	1.96	2.14	0.51	1.26	0.82	30.84	16.72
S1381	5/24/00	5/24/00	26.4	I - 10.5 EPA #3	1.37	1.59	1.84	0.4	2.99	0.66	-2.91	12.41
S1382	5/24/00	5/24/00	25.8	I - 10.5 EPA #4	2.47	1.41	1.2	0.34	2.69	0.69	30.72	11.7
S1383	5/24/00	5/24/00	25.9	I - 10.5 EPA #5	0.68	1.65	1.43	0.42	3.46	0.7	5.81	13.09
S1384	5/24/00	5/24/00	25.2	I - 10.5 EPA #6	-1.33	1.4	1.6	0.35	1.62	0.59	43.82	11.96
S2283	8/31/00	8/31/00	36.6	I - 11 EPA #1	1.17	1.35	2.09	0.38	2.45	0.62	8.94	10.81
S2284	8/31/00	8/31/00	37.5	I - 11 EPA #2	3.5	1.64	1.42	0.45	2.43	0.75	27.33	13.53
S2285	8/31/00	8/31/00	36.1	I - 11 EPA #3	1.71	1.48	1.58	0.41	2.27	0.67	10.88	11.93
S2286	8/31/00	8/31/00	37.1	I - 11 EPA #4	2	1.7	2.56	0.47	1	0.75	20.6	13.33
S2287	8/31/00	8/31/00	38.9	I - 11 EPA #5	2.22	1.34	1.17	0.37	3.22	0.62	12	10.82
S2288	8/31/00	8/31/00	36.1	I - 11 EPA #6	5.08	1.17	1.63	0.31	1.86	0.52	23.61	9.4
S2269	8/30/00	8/31/00	31.8	I - 14	2.05	1.01	-0.31	0.27	2.06	0.45	13.73	9.16
S1178	5/4/00	5/4/00	29.7	I - 14 Stockpile #1	0.57	1.37	0.34	0.33	1.59	0.53	48.96	12.44
S1179	5/4/00	5/4/00	28.2	I - 14 Stockpile #2	-0.41	1.14	0.83	0.29	1.92	0.5	25.62	10.16
S1158	5/3/00	5/3/00	34	I - 17 #1 EPA	-2.3	1.78	0.73	0.46	1.41	0.79	28.59	16.22
S1125	4/27/00	4/27/00	28.4	I - 17 #2 EPA	-1.15	1.62	1.2	0.46	2.81	0.78	65.95	15.98
S1159	5/3/00	5/3/00	34.2	I - 17 #2 EPA	-1.25	1.37	0.54	0.34	0.67	0.6	50.17	12.83
S1160	5/3/00	5/3/00	33.4	I - 17 #3 EPA	-1.37	1.26	1.86	0.33	-0.52	0.53	34.33	11.36
S1161	5/3/00	5/3/00	35.6	I - 17 #4 EPA	2.01	1.73	1.45	0.42	-0.28	0.66	33.96	15.19
S1162	5/3/00	5/3/00	34.1	I - 17 #5 EPA	1.05	1.54	0.57	0.38	1.83	0.66	34.53	13.65
S1163	5/3/00	5/3/00	35.5	I - 17 #6 EPA	0.05	1.44	1.02	0.36	0.84	0.61	29.93	13.04
S1120	4/27/00	4/27/00	32	I - 17 EPA	2.31	2.2	6.08	0.56	3.26	0.85	38.84	15.58
S1180	5/4/00	5/4/00	31.7	I - 17 SCRAPE #1	0.84	1.23	1.25	0.3	1.85	0.51	35.27	10.53
S1181	5/4/00	5/4/00	30.2	I - 17 SCRAPE #2	0.15	1.22	1.08	0.3	1.42	0.51	45.41	10.89
S1182	5/4/00	5/4/00	32.3	I - 17 SCRAPE #3	-1.83	1.55	1.28	0.41	1.23	0.68	27.57	14.29
S1183	5/4/00	5/4/00	28.8	I - 17 SCRAPE #4	1.49	0.94	0.71	0.23	1.48	0.39	40.18	8.35
S1184	5/4/00	5/4/00	31.2	I - 17 SCRAPE #5	-0.09	1.09	1.42	0.26	1.6	0.47	34.66	9.61
S1185	5/4/00	5/4/00	32	I - 17 SCRAPE #6	0.78	1.68	1.65	0.42	0.47	0.69	31.47	14.47
S1186	5/4/00	5/4/00	32.4	I - 17 SCRAPE #QC	-0.17	1.29	1.26	0.33	1.33	0.55	26.54	11.4
S1164	5/3/00	5/3/00	33.8	I - 18 #1 EPA	1.08	1.63	0.95	0.4	2.37	0.68	24.64	13.62
S1165	5/3/00	5/3/00	34	I - 18 #2 EPA	1.99	1.53	0.09	0.36	2.62	0.64	52.09	13.2
S1166	5/3/00	5/3/00	31.5	I - 18 #3 EPA	3.43	1.32	0.54	0.31	1.66	0.54	48.67	11.68
S1167	5/3/00	5/3/00	32.5	I - 18 #4 EPA	0.44	1.19	0.69	0.29	1.91	0.51	30.63	10.5

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1168	5/3/00	5/3/00	31 4	I - 18 #5 EPA	2 96	1.76	0 11	0.41	2 32	0.73	37 85	15.26
S1169	5/3/00	5/3/00	32 3	I - 18 #6 EPA	3 05	1.64	0 93	0.39	2 55	0.66	25 55	13.64
S1121	4/27/00	4/27/00	33 3	I - 18 EPA	-2 83	2.08	0 84	0.52	2 67	0.9	55 26	18.48
S2191	8/25/00	8/25/00	36 6	I - 20 EPA #1	3 47	1.84	-0 18	0.44	2 11	0.75	6 46	13.89
S2192	8/25/00	8/25/00	36 7	I - 20 EPA #2	0 06	1.31	0 05	0.37	2 47	0.65	9 84	11.64
S2193	8/25/00	8/25/00	36 5	I - 20 EPA #3	1 48	1.69	0 86	0.46	1 45	0.75	8 48	14.52
S2194	8/25/00	8/25/00	39 4	I - 20 EPA #4	2 93	1.4	0 24	0.37	1 82	0.65	21 11	12.23
S2195	8/25/00	8/25/00	37 4	I - 20 EPA #5	-0 76	1.44	-0 22	0.39	2 19	0.69	30 36	13.07
S2196	8/25/00	8/25/00	36 2	I - 20 EPA #6	0 51	1.37	0 23	0.38	2 35	0.65	13 68	12.26
S2175	8/24/00	8/24/00	22 5	I - 20 5	5 47	2.89	11 41	0.81	8 41	1.2	29 45	18.31
S2177	8/24/00	8/25/00	27 4	I - 21 #1	4 35	1.42	0 15	0.38	2 59	0.66	1 96	12.18
S2178	8/24/00	8/25/00	30 5	I - 21 #2	2 07	1.61	0 65	0.45	2 02	0.74	-10 89	13.41
S2179	8/24/00	8/25/00	32 2	I - 21 #3	3 07	1.66	-0 57	0.42	3 58	0.75	13 51	13.66
S2180	8/24/00	8/25/00	30	I - 21 #4	2 09	1.22	0 41	0 33	0 97	0.66	39 91	10.80
S2197	8/25/00	8/25/00	37 7	I - 21 EPA #1	2 78	1.21	0 62	0.34	2 2	0.67	5 63	10.45
S2198	8/25/00	8/25/00	38 8	I - 21 EPA #2	1 82	1	0 11	0.27	1 7	0.46	18 78	9
S2199	8/25/00	8/25/00	37 5	I - 21 EPA #3	3 16	0.97	0 25	0.26	3 2	0.46	2 16	8.17
S2200	8/25/00	8/25/00	38 4	I - 21 EPA #4	3 87	1.29	-0 25	0 34	3 12	0.61	-7 27	10.61
S2201	8/25/00	8/25/00	38 4	I - 21 EPA #5	3 66	1.58	-0 02	0.43	2 66	0.74	-3 78	13.56
S2202	8/25/00	8/25/00	38 4	I - 21 EPA #6	2 76	1.7	0 28	0.46	1 51	0.78	17 26	15 25
S2181	8/24/00	8/25/00	32 3	I - 21 OB #1	1 97	1.11	0 67	0.3	2 3	0.51	29 18	9.45
S2182	8/24/00	8/25/00	33 3	I - 21 OB #2	6 8	1.66	0 38	0 42	0 95	0.74	16 5	14.63
S2183	8/24/00	8/25/00	34 7	I - 21 OB #3	1	1.41	0 22	0.38	2 52	0.66	19 26	12.17
S2184	8/24/00	8/25/00	33 3	I - 21 OB #4	2 05	1.27	0 99	0.35	2 26	0.68	3 28	10.66
S2185	8/24/00	8/25/00	32 9	I - 21 OB #5	2 72	1.01	1 08	0.26	1 57	0.46	12 58	8.39
S2186	8/24/00	8/25/00	31 9	I - 21 OB #6	2 34	1.09	0 53	0.3	2 58	0.61	-2 3	9.26
S2187	8/24/00	8/25/00	33	I - 21 OB #7	1 27	1.39	0 42	0.36	3 12	0.65	-0 73	11.53
S2188	8/24/00	8/25/00	33 1	I - 21 OB #8	3 71	1.45	0 37	0.39	2 35	0.67	-2 06	12.26
S2189	8/24/00	8/25/00	33 7	I - 21 OB #9	3 23	1.5	-0 16	0.41	2 87	0.71	12 24	13.1
S2190	8/24/00	8/25/00	31 9	I - 21 OB QC	3 02	1.52	0 38	0.41	2 01	0.71	18 5	13.38
S2051	8/11/00	8/11/00	25.3	I - 21 5 (-1 FOOT)	1 28	1.33	3 82	0.36	2 58	0.6	29 44	10.34
S1001	3/27/00	3/31/00	33 9	I - 22 3	2 24	1.26	1 9	0.32	1 91	0.62	34 91	10.41
S2526	10/11/00	10/12/00	33.2	I - 24 LIFT 2	-0 47	1.35	0.37	0.37	1.98	0.66	12 34	11.96
S2527	10/11/00	10/12/00	39.2	I - 24 LIFT 3	-0.3	1.47	0 25	0.41	1.87	0.69	8 37	13.94
S2528	10/11/00	10/12/00	40.3	I - 25 LIFT 3	4 34	1.32	0 01	0.35	1 24	0.6	-5.68	11.19
S1263	5/12/00	5/12/00	35.9	I - N/13-19 #1 Roadway Diagonal	1 64	1.56	4.11	0.4	2.41	0.61	22 86	11.61
S1264	5/12/00	5/12/00	34.4	I - N/13-19 #2 Roadway Diagonal	2.72	1.65	3 16	0.42	2.04	0.66	23.2	12.86
S1265	5/12/00	5/12/00	33.3	I - N/13-19 #3 Roadway Diagonal	-0.77	1.48	3 14	0.38	2.47	0.61	35 02	11.9
S1266	5/12/00	5/12/00	27.6	I - N/13-19 #4 Roadway Diagonal	3.91	1.54	1.13	0.67	1.72	0.62	17.71	12.52
S1267	5/12/00	5/12/00	26.5	I - N/13-19 #5 Roadway Diagonal	0.2	1.1	2.19	0.29	1.97	0.47	-5.92	8.92
S1268	5/12/00	5/12/00	32.9	I - N/13-19 #6 Roadway Diagonal	-2.15	1.36	2.57	0.37	1.49	0.56	22.46	11.41
S1269	5/12/00	5/12/00	37.6	I - N/13-19 #7 Roadway Diagonal	2.29	1.85	3.31	0.46	1.11	0.72	48.82	14.57
S1270	5/12/00	5/12/00	31.7	I - N/13-19 #8 Roadway Diagonal	0.86	1.66	1.88	0.4	1.99	0.65	13.92	13.05

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2293	8/31/00	9/1/00	20.5	J.5 - 9.5 OB #3	-11.21	3.26	1.93	0.92	3.6	1.54	117.49	28.43
S2294	8/31/00	9/1/00	21	J.5 - 9.5 OB #4	-12.5	3.36	1.36	0.94	3.11	1.63	140.61	31.09
S2295	8/31/00	9/1/00	21	J.5 - 9.5 OB #5	-7.54	3.74	2.4	1.02	3.87	1.75	136.18	31.59
S2296	8/31/00	9/1/00	22	J.5 - 9.5 OB QC	-0.91	2.17	1.22	0.58	3.09	0.99	78.25	18.09
S2212	8/28/00	8/28/00	29.7	J.5 - 14.5	3.43	1.54	1.92	0.43	3.17	0.69	16.04	12.26
S1273	5/15/00	5/15/00	29.1	J.5 - 15.5 #1	2.38	0.92	2.01	0.22	0.73	0.36	43.1	7.55
S1274	5/15/00	5/15/00	35.7	J.5 - 15.5 #2	0.87	1.51	2.1	0.39	1.49	0.63	34.38	12.89
S1275	5/15/00	5/15/00	31.9	J.5 - 15.5 #3	-0.16	1.32	1.88	0.33	2.42	0.56	34.55	10.95
S1276	5/15/00	5/15/00	29.7	J.5 - 15.5 #4	-0.53	1.51	2.08	0.39	0.9	0.68	43.62	12.99
S1277	5/15/00	5/15/00	35.1	J.5 - 15.5 #5	1.82	1.55	2.08	0.39	1.79	0.62	18.92	12.2
S1278	5/15/00	5/15/00	31.7	J.5 - 15.5 #6	-0.05	1.52	2.02	0.39	1.73	0.64	26.25	12.51
S1279	5/15/00	5/15/00	32.6	J.5 - 17 #1	-0.17	1.76	2.48	0.45	1.68	0.73	13.07	14.32
S1280	5/15/00	5/15/00	30.3	J.5 - 17 #2	0.53	1.54	1.41	0.38	1.23	0.64	37.41	13.25
S1281	5/15/00	5/15/00	31.2	J.5 - 17 #3	-2.09	1.43	1.74	0.38	1.46	0.62	24.72	12.62
S1282	5/15/00	5/15/00	31.7	J.5 - 17 #4	1.26	1.32	1.68	0.33	0.72	0.54	22.66	11.36
S1283	5/15/00	5/15/00	30.8	J.5 - 17 #5	0.41	1.67	2.2	0.43	2	0.7	9.4	13.75
S1284	5/15/00	5/15/00	34.1	J.5 - 17 #6	-2.5	1.14	1.75	0.3	1.71	0.5	35.61	10.51
S1112	4/26/00	4/26/00	26	J.5 - 17.2 #1	-38.86	10.39	131.88	2.78	51.72	3.8	111.57	46.71
S1113	4/26/00	4/26/00	13.6	J.5 - 17.2 #2	-23.38	9.39	69.08	2.56	14.31	3.37	31.06	44.6
S2070	8/15/00	8/15/00	32.7	J.5 - 18.5 FLOOR	-0.38	1.34	0.19	0.37	2.16	0.65	7.36	12.01
S2176	8/24/00	8/24/00	35	J.5 - 21	4.53	2.05	5.83	0.59	4.06	0.88	11.76	14.57
S2163	8/24/00	8/24/00	39.6	J.5 - 21 EPA #1	4.13	1.26	1.47	0.34	2.29	0.57	26.54	10.38
S2164	8/24/00	8/24/00	39.5	J.5 - 21 EPA #2	1.61	1.96	0.86	0.54	2.78	0.92	19.65	16.47
S2165	8/24/00	8/24/00	39.6	J.5 - 21 EPA #3	3.6	1.32	0.09	0.35	4.21	0.62	20.35	11
S2166	8/24/00	8/24/00	38.1	J.5 - 21 EPA #4	3.61	1.06	0.34	0.28	2.42	0.49	40.81	9.28
S2167	8/24/00	8/24/00	40.4	J.5 - 21 EPA #5	4.37	1.33	1	0.36	2.59	0.6	17.71	11.03
S2168	8/24/00	8/24/00	37.9	J.5 - 21 EPA #6	4.78	1.16	1.05	0.31	2.73	0.53	11.67	9.53
S2056	8/14/00	8/14/00	34.3	J.5 - 22.5 FLOOR	-0.22	1.1	0.68	0.31	1.82	0.53	-4.18	9.66
S1061	4/18/00	4/18/00	29.3	J.5 - 23.4	-1.16	1.67	1.9	0.42	2.55	0.71	48.06	13.95
S1056	4/18/00	4/18/00	33.5	J.5 - 23.5	-3.08	1.82	6.36	0.48	1.76	0.72	76.5	14.11
S1074	4/24/00	4/24/00	31.5	J.5 - 24	-2.26	2.69	1.96	0.67	3.5	1.15	87.46	23.44
S2529	10/11/00	10/12/00	34.8	J.5 - 24.5 LIFT 3	-0.67	1.13	0.14	0.31	1.42	0.54	21.71	10.38
S2520	10/10/00	10/12/00	35.5	J.5 - 26 LIFT 1	4.26	1.21	0.11	0.32	2.71	0.55	6.56	10.29
S2521	10/10/00	10/12/00	32.3	J.5 - 26 LIFT 2	2.83	1.16	-0.11	0.31	3.15	0.54	9.58	9.77
S1935	7/21/00	7/21/00	34.2	J.5 - 27.5 FLOOR	1.75	1.91	2.17	0.48	2.24	0.78	-0.66	14.93
S1333	5/18/00	5/18/00	33.2	K - 1	22.11	34.07	295.61	8.77	62.02	11.48	113.33	131.56
S1131	4/28/00	4/28/00	38.8	K - 1 STOCKPILE #1	-2.44	3.37	6.53	0.88	3.55	1.34	67.02	24.74
S1132	4/29/00	4/29/00	35.6	K - 1 STOCKPILE #2	0.14	2.89	5.52	0.73	3.04	1.12	86.19	21.42
S1133	4/29/00	4/29/00	35.7	K - 1 STOCKPILE #3	-0.74	2.89	4.99	0.74	3.38	1.15	58.05	21.76
S1351	5/23/00	5/23/00	35.6	K - 1.5	-0.49	1.41	1.2	0.35	0.3	0.59	49.23	12.74
S1455	5/31/00	5/31/00	37.9	K - 2 EPA #1	-0.54	1.4	0.57	0.34	1	0.59	41.32	12.43
S1456	5/31/00	5/31/00	35	K - 2 EPA #2	-0.35	1.56	1.37	0.4	0.85	0.67	-1.04	13.23
S1457	5/31/00	5/31/00	37.6	K - 2 EPA #3	-0.73	1.48	0.78	0.37	0.88	0.65	29.08	13.2

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1458	5/31/00	5/31/00	37 4	K - 2 EPA #4	0 7	1.33	0 92	0.39	0 69	0.65	26 9	11.8
S1459	5/31/00	5/31/00	35 2	K - 2 EPA #5	2 67	1.31	-0 15	0.3	1 05	0.58	40 34	11.9
S1460	5/31/00	5/31/00	35 7	K - 2 EPA #6	0 41	1.41	0 64	0.35	1 44	0.61	23 09	12.16
S1353	5/23/00	5/23/00	29 8	K - 3 5	-0 57	1.34	1 82	0.34	1 35	0.67	23 56	11.87
S1128	4/28/00	4/28/00	35 2	K - 4	-51 28	68.65	499 1	16.84	106 35	22.15	149 53	248.04
S2360	9/8/00	9/11/00	40	K - 5	-0 22	1.62	0 19	0.49	1 63	0.75	10 33	18.77
S1485	5/31/00	5/31/00	34 7	K - 5 EPA #1	3 27	1.74	2 29	0.42	1 41	0.68	44 23	13.84
S1486	5/31/00	5/31/00	36 3	K - 5 EPA #2	1 23	2.01	3 16	0.51	2 33	0.8	25 23	15.2
S1487	5/31/00	5/31/00	35	K - 5 EPA #3	1 5	1.69	2 98	0.43	1 41	0.66	33 29	13.33
S1488	5/31/00	5/31/00	35 8	K - 5 EPA #4	3 33	1.73	2 86	0.43	1 7	0.65	15 65	13,05
S1489	5/31/00	5/31/00	35 7	K - 5 EPA #5	1 55	1.62	3 38	0.48	2 67	0.76	37 33	14.28
S1490	5/31/00	5/31/00	35 8	K - 5 EPA #6	0 83	2.23	2 86	0.67	3 12	0.91	16 36	16 84
S2361	9/8/00	9/11/00	36 3	K - 6	1 57	0.99	0 03	0.27	1 98	0.47	-5 45	8.82
S2362	9/8/00	9/11/00	33 6	K - 7	1 39	1.15	-0 47	0.31	1 74	0.55	8 5	10.75
S2363	9/8/00	9/11/00	34 7	K - 8	3 41	0.96	-0 28	0.25	2 23	0.44	-5 27	8.09
S1092	4/25/00	4/25/00	24 1	K - 8 0-12"	3 82	4.39	7 54	1.16	4 13	1.76	48 47	30.44
S1093	4/25/00	4/25/00	29 4	K - 8 12-24"	-1 41	5.62	36 8	1.59	12 9	2.11	74 71	30.71
S1437	5/31/00	5/31/00	27 2	K - 8 EPA #1	2 07	1.66	1 42	0.4	2 79	0.68	39 63	13.14
S1438	5/31/00	5/31/00	28	K - 8 EPA #2	1 06	1.81	1 78	0.45	3 44	0.75	30 48	14.24
S1439	5/31/00	5/31/00	27 2	K - 8 EPA #3	1 27	1.67	2 31	0.42	2 74	0.69	29 75	13 84
S1440	5/31/00	5/31/00	27 4	K - 8 EPA #4	-2 7	2	2 57	0.53	2 26	0.86	13 06	16.5
S1441	5/31/00	5/31/00	26 9	K - 8 EPA #5	-0 4	1.33	3 27	0 34	2 31	0.58	6 7	10.12
S1442	5/31/00	5/31/00	27 8	K - 8 EPA #6	1 25	1.62	2 37	0.4	2 25	0.66	23 09	12.52
S2364	9/8/00	9/11/00	35 2	K - 9	2 32	1.6	0 2	0.43	1 34	0.73	10 56	13.9
S2347	9/7/00	9/7/00	37 6	K - 10	0 88	1.22	-0 38	0.33	1 47	0.56	22 52	11.32
S1359	5/24/00	5/24/00	30 5	K - 10	1 39	1.25	0 8	0 31	1 58	0.53	49 36	11.2
S1360	5/24/00	5/24/00	29	K - 11	1 26	1.76	1 22	0.43	3 28	0.74	25 94	13.96
S1344	5/23/00	5/23/00	34 3	K - 11 #1	0 72	1.4	1 02	0.35	1 27	0 6	10 2	12 31
S1345	5/23/00	5/23/00	34 6	K - 11 #2	-1 45	1.63	2 64	0.43	1 21	0.67	42 19	13.97
S1346	5/22/00	5/23/00	32 1	K - 11 #3	1 63	1.7	1 86	0 42	2 07	0.69	19 98	13.51
S1347	5/23/00	5/23/00	31 3	K - 11 #4	4 6	1.47	1 97	0.36	1 91	0.58	23 25	11.66
S1348	5/23/00	5/23/00	30 8	K - 11 #5	1 06	1.69	2 33	0.42	0.75	0.68	38 71	13.75
S1349	5/23/00	5/23/00	32 6	K - 11 #6	-1 66	1.64	2.12	0.4	2.6	0.67	26 56	13
S1350	5/23/00	5/23/00	33.4	K - 11 #6	0.9	1.61	1 55	0.4	1 87	0.67	33 06	13.29
S2271	8/30/00	8/31/00	32.9	K - 14	-0 67	1.9	-0 26	0.52	1.63	0.91	27.06	17.58
S1177	5/3/00	5/3/00	33 9	K - 16.2	-0 74	3.75	29 53	1	7.06	1.24	41 33	20.28
S1297	5/15/00	5/15/00	30	K - 17 #1	0 89	1.67	1.53	0.4	1.49	0.66	2 3	12.64
S1298	5/15/00	5/15/00	27	K - 17 #2	0.17	1.14	1 53	0 29	-0.01	0.48	30 72	10.1
S1299	5/15/00	5/15/00	27	K - 17 #3	-0.47	1.3	1.36	0.33	1.52	0.56	16.34	11.17
S1300	5/15/00	5/15/00	25.9	K - 17 #4	2.3	0.85	1.1	0.21	1.43	0.25	2	6.93
S1301	5/15/00	5/15/00	27.2	K - 17 #5	0.78	1.19	1.58	0.3	0.61	0.49	16.93	9.99
S1302	5/15/00	5/15/00	31.6	K - 17 #6	0.29	1.25	1.28	0.32	1.28	0.62	12.14	10.55
S2069	8/15/00	8/15/00	33.6	K - 17 FLOOR	0.65	1.34	0.61	0.37	1	0.63	34.19	12.08

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2071	8/15/00	8/15/00	37	K - 18.5 FLOOR	-0.1	1.04	0.89	0.29	0.63	0.49	27.78	9.53
S1069	4/24/00	4/24/00	32.9	K - 19, 0-12"	-2.84	2.17	1.92	0.56	2.28	0.94	57.13	19.41
S1070	4/24/00	4/24/00	33.9	K - 19, 12-24"	-4.04	2.42	2.02	0.63	1.77	1.04	99.24	22.03
S1071	4/24/00	4/24/00	23.3	K - 19, 24-36"	-7.09	4.12	16.13	1.11	8.46	1.62	39.89	25.21
S2152	8/23/00	8/23/00	38	K - 20	6.52	1.38	1.2	0.37	9.38	0.64	-0.33	10.09
S2169	8/24/00	8/24/00	35.6	K - 20 EPA #1	-0.35	1.27	0.42	0.35	1.75	0.6	24.74	11.24
S2170	8/24/00	8/24/00	36.3	K - 20 EPA #2	2.14	1.55	0.42	0.43	2.43	0.72	-6.19	13.1
S2171	8/24/00	8/24/00	36.2	K - 20 EPA #3	5.25	1.21	0.03	0.32	2.04	0.55	12.31	10.52
S2172	8/24/00	8/24/00	35.8	K - 20 EPA #4	0	1.58	0.89	0.44	1.78	0.72	14.27	13.5
S2173	8/24/00	8/24/00	35.7	K - 20 EPA #5	1.07	1.58	0.13	0.44	3.19	0.75	-3.46	13.6
S2174	8/24/00	8/24/00	35.9	K - 20 EPA #6	4.03	1.13	0.67	0.31	3.26	0.52	-16.45	9.05
S2153	8/23/00	8/23/00	36.3	K - 20 EZ #1	1.9	1.6	0.48	0.44	2.86	0.74	26.26	13.74
S2154	8/23/00	8/23/00	36.1	K - 20 EZ #2	2.48	1.97	0.43	0.54	1.97	0.92	29.81	17.13
S1957	7/26/00	7/26/00	33.8	K - 23.5 FLOOR	4.58	1.85	0.34	0.42	4.81	0.76	33.37	14.39
S1005	3/27/00	3/31/00	32.9	K - 24	2.55	2.12	11.66	0.55	3.11	0.78	43.44	13.33
S2231	8/29/00	8/30/00	27.4	K.2 - 14 #1	-0.11	1.34	0.58	0.38	1.76	0.63	11.97	11.95
S2232	8/29/00	8/30/00	29.5	K.2 - 14 #2	2.47	1.94	0.27	0.54	2.36	0.9	13.23	17.34
S2233	8/29/00	8/30/00	28.7	K.2 - 14 #3	3.17	1.55	0.22	0.42	2.37	0.72	-2.52	13.23
S2234	8/29/00	8/30/00	27	K.2 - 14 #4	0.75	1.62	0.15	0.45	2.13	0.77	30.03	14.7
S1425	5/31/00	5/31/00	32.9	K.5 - 7 EPA #1	0.58	1.07	2.13	0.28	1.97	0.46	4.4	6.62
S1426	5/31/00	5/31/00	32.5	K.5 - 7 EPA #2	-1.97	1.25	2.23	0.33	1.46	0.54	22.53	10.96
S1427	5/31/00	5/31/00	35	K.5 - 7 EPA #3	1.23	1.51	2.1	0.38	1.17	0.61	18.65	11.97
S1428	5/31/00	5/31/00	30.3	K.5 - 7 EPA #4	1.37	1.3	1.85	0.32	1.33	0.53	9.44	10.49
S1429	5/31/00	5/31/00	33.8	K.5 - 7 EPA #5	1.33	1.7	2.16	0.42	2.51	0.7	16.85	13.5
S11430	5/31/00	5/31/00	34.2	K.5 - 7 EPA #6	1.79	1.44	2.08	0.35	1.47	0.57	18.34	11.4
S2353	9/7/00	9/7/00	35.1	K.5 - 12	0.46	1.71	-0.39	0.46	1.58	0.83	19.1	16.2
S2239	8/30/00	8/30/00	38.9	K.5 - 14 EPA #1	-0.47	1.31	-0.1	0.36	3.12	0.64	0.61	11.65
S2240	8/30/00	8/30/00	36.9	K.5 - 14 EPA #2	2.92	1.59	0.48	0.44	1.26	0.72	0.41	13.5
S2241	8/30/00	8/30/00	37.4	K.5 - 14 EPA #3	1.84	1.72	0.33	0.48	1.65	0.82	5.15	15.21
S2242	8/30/00	8/30/00	39.3	K.5 - 14 EPA #4	-0.37	1.42	0.32	0.39	1.48	0.67	25.8	12.75
S2243	8/30/00	8/30/00	37.2	K.5 - 14 EPA #5	3.19	1.72	-0.36	0.46	2.48	0.81	26.44	15.4
S2244	8/30/00	8/30/00	37.5	K.5 - 14 EPA #6	2.34	1.5	0.52	0.41	1.86	0.69	-7.64	12.78
S1892	7/18/00	7/18/00	35.7	K.5 - 22.5	2.62	2.58	-0.02	0.6	1.57	1.09	-25.15	20.28
S2061	8/14/00	8/14/00	37.2	K.5 - 22.5 FLOOR	-0.04	1.09	0.11	0.3	1.55	0.52	17.02	10.06
S1955	7/26/00	7/26/00	31.8	K.5 - 24.5 FLOOR	1.49	1.5	0.15	0.36	2.08	0.64	23.92	12.91
S1956	7/26/00	7/26/00	32.2	K.5 - 26 FLOOR	3.1	1.45	0.4	0.34	2.6	0.61	0.22	11.51
S1467	5/31/00	5/31/00	34.9	L - 2 EPA #1	-0.73	1.49	0.6	0.35	1.42	0.67	-5.95	13.06
S1468	5/31/00	5/31/00	35.6	L - 2 EPA #2	-1.12	1.37	0.93	0.35	0.22	0.6	31.3	13.12
S1469	5/31/00	5/31/00	36	L - 2 EPA #3	-0.11	1.27	0.49	0.32	0.87	0.56	19.2	11.63
S1470	5/31/00	5/31/00	35.9	L - 2 EPA #4	-0.01	1.41	0.62	0.35	0.34	0.59	40.59	12.86
S1471	5/31/00	5/31/00	35.9	L - 2 EPA #5	0.4	1.23	-0.17	0.3	1.3	0.53	39.63	11.55
S1472	5/31/00	5/31/00	34.6	L - 2 EPA #6	-0.53	1.32	0.42	0.33	1.74	0.58	19.44	11.72
S2350	9/7/00	9/7/00	34.9	L - 10	4.6	1.06	-0.23	0.28	1.63	0.49	-11.06	9.18

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2352	9/7/00	9/7/00	35 5	L - 11	2 56	1.13	0 29	0.31	0 67	0.58	-2 12	10.12
S2321	9/5/00	9/5/00	32	L - 11 EPA #1	3 07	1.33	-0 02	0 35	3 05	0.62	22 05	11.38
S2322	9/5/00	9/5/00	32 3	L - 11 EPA #2	1 04	0.55	1 09	0.29	3 13	0.44	20 85	8.01
S2323	9/5/00	9/5/00	30 9	L - 11 EPA #3	2 85	1.66	1 54	0.49	1 65	0.7	8 37	12.81
S2324	9/5/00	9/5/00	31 4	L - 11 EPA #4	2 79	1.65	0 28	0.45	3 58	0.76	14 98	14.1
S2325	9/5/00	9/5/00	30 4	L - 11 EPA #5	2 92	1.56	0 94	0.43	1 89	0.72	22 49	13.49
S2326	9/5/00	9/5/00	31 2	L - 11 EPA #6	-1 54	1.62	1 9	0.44	1 72	0.71	16 33	12.95
S2314	9/1/00	9/1/00	30.2	L - 11 SPOT	3 83	2.04	8 03	0.69	3 27	0.86	0 54	13.6
S2272	8/30/00	8/31/00	35.3	L - 14	-0 24	1.21	0 08	0.33	1 54	0.56	10 17	10.99
S1338	5/22/00	5/22/00	32 7	L - 16 #1	1 56	2.28	3 72	0 57	1 98	0.9	47 42	17.85
S1397	5/24/00	5/24/00	29	L - 16 EPA #1	4 24	1.3	2 38	0.31	1 46	0.5	34 89	9.99
S1398	5/24/00	5/24/00	30 2	L - 16 EPA #2	-0 1	1.56	2 12	0.39	2 37	0.64	44 33	12.92
S1399	5/24/00	5/24/00	28 8	L - 16 EPA #3	1 01	1.64	2 53	0.42	1 59	0.67	31 33	13.86
S1400	5/24/00	5/24/00	30 2	L - 16 EPA #4	2 27	1.36	1 76	0.34	3 19	0.56	32 37	11.16
S1401	5/24/00	5/24/00	29 5	L - 16 EPA #5	2 29	1.7	2 6	0.42	1 33	0.67	42 23	13.46
S1402	5/24/00	5/24/00	29 4	L - 16 EPA #6	-1 42	1.31	3 01	0.35	1 88	0.55	20 89	10.96
S1188	5/4/00	5/4/00	32	L - 17	-162 15	59.53	371 11	14.57	135 3	19.66	221 71	225.43
S1197	5/5/00	5/5/00	31 6	L - 19 3'	3 78	1.69	6 89	0.46	4 13	0.74	27 71	13.04
S2503	10/9/00	10/11/00	33 7	L - 19 LIFT 1	0 8	1.45	-0 06	0.4	3 23	0.71	-10 76	12.53
S2504	10/9/00	10/11/00	34 7	L - 19 LIFT 2	-0 95	1.49	0 07	0.41	2 63	0.74	12 31	13.25
S2505	10/9/00	10/11/00	40 6	L - 19 LIFT 3	-1 18	0.94	0 59	0.27	1 38	0.44	8 42	8.49
S2500	10/9/00	10/11/00	27 4	L - 20 LIFT 1	0 15	1.15	0 44	0 32	2 63	0.55	9 89	10
S2501	10/9/00	10/11/00	33 1	L - 20 LIFT 2	1 46	1.16	0 44	0.32	1 11	0.54	27 15	10.67
S2502	10/9/00	10/11/00	38 4	L - 20 LIFT 3	2 03	1.25	0 23	0.35	1 1	0.61	13 7	11.65
S2155	8/23/00	8/23/00	40 4	L - 20 5	9 79	5.5	2 92	1.48	27 21	2.58	18 65	34.91
S2475	10/9/00	10/10/00	29 9	L - 20 5	8 4	1.97	0 47	0 52	8 63	0.91	30 54	14.99
S2157	8/24/00	8/24/00	36 7	L - 20 5 EPA #1	5 79	1.4	-0 31	0.37	2 37	0.65	-0 84	12.02
S2158	8/24/00	8/24/00	36.3	L - 20 5 EPA #2	1 24	1.36	-0 14	0.37	1 78	0.64	18 43	12.3
S2159	8/24/00	8/24/00	37 3	L - 20 5 EPA #3	0 92	1.29	0 93	0.36	2 62	0.61	-14 17	10.57
S2160	8/24/00	8/24/00	36.7	L - 20 5 EPA #4	3 85	1.78	-0 66	0.47	2 25	0.83	12 1	16.66
S2161	8/24/00	8/24/00	36.8	L - 20.5 EPA #5	0.41	1.2	-0 26	0.33	2 41	0.58	28 78	11
S2162	8/24/00	8/24/00	36.1	L - 20.5 EPA #6	0.47	1.46	-0 03	0.4	2 14	0.71	19 84	13.37
S2156	8/23/00	8/23/00	36.2	L - 20.5 EZ	1 1	1.29	-0 02	0.35	0 97	0.61	30 25	11.99
S2497	10/9/00	10/11/00	35.8	L - 21 LIFT 1	2 86	1.99	0 04	0.53	2 31	0.92	29.78	17.42
S2498	10/9/00	10/11/00	31.6	L - 21 LIFT 2	3 82	1.97	0.23	0.57	2 24	0.83	-3.45	11.25
S2499	10/9/00	10/11/00	40.5	L - 21 LIFT 3	1.33	1.34	-0 34	0.36	2 01	0.63	22 91	12.01
S2478	10/9/00	10/10/00	25.4	L - 22	14 56	5.74	15 56	1.61	9 91	2.32	-0 33	32.58
S2506	10/9/00	10/12/00	41.5	L - 22 EPA # 1	3.14	1.05	0 33	0.28	1 07	0.48	18.24	9.19
S2507	10/9/00	10/12/00	39.6	L - 22 EPA # 2	-1.44	1.9	-0.52	0.61	2.43	0.91	42 24	17.56
S2508	10/9/00	10/12/00	41.4	L - 22 EPA # 3	1.73	1.13	0.66	0.31	1.15	0.52	8.74	9.89
S2509	10/9/00	10/12/00	42.5	L - 22 EPA # 4	-0.67	1.24	0.85	0.35	1	0.56	19.29	10.96
S2510	10/9/00	10/12/00	42.3	L - 22 EPA # 5	1.03	1.45	0.52	0.4	1.42	0.65	7.13	12.65
S2511	10/9/00	10/12/00	41.4	L - 22 EPA # 6	0.96	1.6	0.1	0.43	2.37	0.74	20.39	14.05

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2496	10/9/00	10/11/00	30.8	L - 22 LIFT 1	1.48	0.89	-0.02	0.25	2.67	0.43	-12.39	7.68
S2516	10/10/00	10/12/00	33.4	L - 22 LIFT 2	2.46	1.6	-0.14	0.44	2.57	0.76	-4.84	13.74
S2517	10/10/00	10/12/00	38.9	L - 22 LIFT 3	0.24	1.05	-0.13	0.29	1.81	0.5	12.73	9.59
S1170	5/3/00	5/3/00	30.1	L - 22.5 #1 EPA	0.64	1.67	1.61	0.42	3.67	0.71	23.15	13.7
S1171	5/3/00	5/3/00	31	L - 22.5 #2 EPA	0.29	1.58	2.58	0.4	2.1	0.64	36.5	12.48
S1172	5/3/00	5/3/00	29.1	L - 22.5 #3 EPA	-2.86	1.03	2.5	0.27	1.91	0.44	57.67	9.03
S1173	5/3/00	5/3/00	32.3	L - 22.5 #4 EPA	-1.91	1.74	2.55	0.46	2.43	0.74	50.11	15.07
S1174	5/3/00	5/3/00	30.5	L - 22.5 #5 EPA	0.66	1.36	2.51	0.35	2.09	0.56	33.56	11.14
S1175	5/3/00	5/3/00	29.7	L - 22.5 #6 EPA	0.46	1.29	2.18	0.33	1.87	0.53	42.67	10.88
S1134	4/29/00	4/29/00	32.9	L - 23	-1.36	4.14	21.07	1.1	6.05	1.52	78.73	24.35
S2495	10/9/00	10/11/00	32.6	L - 23 LIFT 1	0.59	1.31	-0.34	0.36	3.39	0.83	16.16	11.7
S2518	10/10/00	10/12/00	35.2	L - 23 LIFT 2	2.51	1.42	0.6	0.39	1.75	0.66	13.32	11.93
S2519	10/10/00	10/12/00	35.9	L - 23 LIFT 3	-0.86	1.13	-0.1	0.31	1.42	0.55	17.09	10.45
S2492	10/9/00	10/11/00	34.4	L - 24 LIFT 1	-1.77	1.41	0.72	0.4	1.25	0.66	30.19	12.64
S2493	10/9/00	10/11/00	31.8	L - 24 LIFT 2	4.79	1.79	-0.34	0.47	2.39	0.81	10.72	15.53
S2494	10/9/00	10/11/00	34.2	L - 24 LIFT 3	1.63	1.57	0.55	0.44	1.61	0.73	15.56	13.7
S2489	10/9/00	10/10/00	32.1	L - 25.5 LIFT 1	-1.75	1.44	0.57	0.39	1.28	0.67	49.71	12.95
S2490	10/9/00	10/10/00	36.1	L - 25.5 LIFT 2	1.61	1.68	-0.14	0.46	2.11	0.81	2.83	15.1
S2491	10/9/00	10/10/00	32.5	L - 25.5 LIFT 3	2.35	1.46	-0.07	0.4	2.44	0.7	1.63	13
S2486	10/9/00	10/10/00	31.8	L - 26 LIFT 1	1.14	1.35	-0.33	0.37	2.48	0.66	15.91	12.38
S2487	10/9/00	10/10/00	30.7	L - 26 LIFT 2	0.02	1.66	-0.32	0.46	3.46	0.81	3.11	14.66
S2488	10/9/00	10/10/00	32.8	L - 26 LIFT 3	0.67	1.55	0.41	0.43	1.21	0.72	29.29	13.95
S2404	9/21/00	9/22/00	31.2	L.5 - 6	3.69	1.33	0.52	0.36	1.45	0.6	0.76	11.32
S2405	9/21/00	9/22/00	34.9	L.5 - 7	2.89	1.56	-0.05	0.42	1.79	0.73	32.9	14.23
S2400	9/21/00	9/22/00	35	L.5 - 9	0.21	1.54	0.07	0.42	2.28	0.73	34.93	13.89
S1339	5/22/00	5/22/00	25.2	L.5 - 16 #2	0.55	1.2	1.13	0.3	2.12	0.5	25.33	10.02
S1195	5/5/00	5/5/00	29.7	L.5 - 18.5	-3.7	4.62	29.38	1.29	4.88	1.74	89.01	27.47
S1293	5/15/00	5/15/00	23.9	L.8 - 18.5 #3	0.69	1.54	2.27	0.39	2.25	0.64	4.26	11.89
S1190	5/4/00	5/4/00	33.7	L.9 - 17.5	1.95	2.04	26.82	0.54	6.35	0.74	32.37	11.21
S1291	5/15/00	5/15/00	25.2	L.9 - 18.5 #1	0.27	1.7	2.28	0.43	1.77	0.7	35.49	13.83
S1292	5/15/00	5/15/00	28.9	L.9 - 18.5 #2	0.52	1.6	2.42	0.41	2.61	0.67	28.09	13.02
S1294	5/15/00	5/15/00	25.5	L.9 - 18.5 #4	2.5	1.45	1.98	0.35	1.39	0.58	26.06	11.66
S1295	5/15/00	5/15/00	24.7	L.9 - 18.5 #5	1.55	1.23	1.89	0.3	1.57	0.49	19.29	9.96
S1296	5/15/00	5/15/00	24.8	L.9 - 18.6 #6	2.49	1.6	1.64	0.39	2.33	0.64	45.04	13.22
S1352	5/23/00	5/23/00	35	M - 1.5	-0.67	2.49	5.98	0.66	3.3	0.99	18.21	17.41
S1409	5/25/00	5/25/00	39.4	M - 1.5 #1	1.1	1.64	0.44	0.4	1.7	0.69	28.59	13.92
S1410	5/25/00	5/25/00	36.4	M - 1.5 #2	3.02	1.92	5.67	0.49	2.58	0.75	19.71	13.46
S1328	5/17/00	5/17/00	31	M - 1.5 OB #1	-1.66	0.94	0.58	0.24	1.39	0.42	24.74	8.61
S1329	5/17/00	5/17/00	32.3	M - 1.5 OB #2	0.14	1.42	-0.06	0.35	2.01	0.83	21.08	12.83
S1330	5/17/00	5/17/00	31.9	M - 1.5 OB #3	-1.87	0.87	0.55	0.23	1.17	0.39	26.91	8.23
S1331	5/17/00	5/17/00	32.3	M - 1.5 OB #4	1.78	1.73	0.3	0.41	0.82	0.71	43.93	15.37
S1332	5/17/00	5/17/00	32.8	M - 1.5 OB QC	-2.01	1.11	0.63	0.29	1.65	0.5	19.22	10.21
S1479	5/31/00	5/31/00	36	M - 2 EPA #1	-3.59	1.55	1.17	0.42	1.08	0.71	15.41	14.56

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1480	5/31/00	5/31/00	36	M - 2 EPA #2	-0 33	1.02	0 82	0.26	0 96	0.43	22 16	9.07
S1481	5/31/00	5/31/00	34 9	M - 2 EPA #3	1 22	1.18	0 83	0.29	1 05	0.5	19 43	10.26
S1482	5/31/00	5/31/00	35 6	M - 2 EPA #4	-0 24	1.08	0 31	0.26	0 53	0.45	49 71	9.64
S1483	5/31/00	5/31/00	37 6	M - 2 EPA #5	-0 15	1.29	0 75	0.32	1 01	0.56	19 32	11.66
S1484	5/31/00	5/31/00	37 2	M - 2 EPA #6	0 14	1.4	0 63	0.34	0 41	0.56	42 64	12.52
S2590	10/19/00	10/20/00	36 5	M - 2 LIFT 4	2 21	1.46	0 15	0.39	1 73	0.67	0 64	12.61
S1320	5/16/00	5/16/00	24 9	M - 2 OB #1	-3 04	1.64	2 39	0.44	1 3	0.71	36.7	14.11
S1321	5/16/00	5/16/00	32	M - 2 OB #2	0 01	1.29	0 27	0.32	1.1	0.56	24.77	11.88
S1322	5/16/00	5/16/00	31 5	M - 2 OB #3	-0 32	1.06	0 46	0.27	1 62	0.46	10 42	9.56
S1323	5/16/00	5/16/00	33 4	M - 2 OB #4	-0 12	1.38	0 49	0 34	0 58	0.59	36 29	12.61
S1324	5/16/00	5/16/00	32 8	M - 2 OB #5	-0 87	1.62	0 88	0.41	0 59	0.69	18 73	14.37
S1325	5/16/00	5/16/00	30 8	M - 2 OB #6	0 05	0.97	0 17	0.24	1 27	0.43	17 41	9 05
S1326	5/16/00	5/16/00	30 1	M - 2 OB QC	-0 32	1.27	0 56	0.32	1 16	0.56	17 96	11.41
S1318	5/15/00	5/15/00	31 4	M - 2 WEST WALL	12 77	10.67	77 49	2 82	21 07	3.75	43 33	48.26
S1316	5/15/00	5/15/00	36 2	M - 2 5 HOT STOCK PILE	24 43	41.16	293 69	10.62	61 8	13.69	112 34	160.51
S2591	10/19/00	10/20/00	36 8	M - 3 LIFT 4	0 67	1.81	-0 1	0.41	1 91	0.71	12 62	13.58
S1317	5/15/00	5/15/00	37	M - 3 NORTH WALL	30 65	27.32	165 32	7.02	37 1	9.22	29 63	107.16
S1254	5/12/00	5/12/00	30 7	M - 3 OB #1	0 71	1.48	1 13	0 37	1 19	0.62	25 23	12.75
S1255	5/12/00	5/12/00	32 6	M - 3 OB #2	1 32	1.35	1 36	0.34	0 57	0.55	39 78	11.91
S1256	5/12/00	5/12/00	34 4	M - 3 OB #3	-1 16	1.21	1 45	0.31	0 48	0 51	26 17	10 63
S1257	5/12/00	5/12/00	36 6	M - 3 OB #4	2 1	0.89	1 77	0.22	0 59	0.36	23 2	7.36
S1258	5/12/00	5/12/00	35 4	M - 3 OB #5	0 96	1.75	4 48	0 45	2 55	0.69	51 46	13.11
S1259	5/12/00	5/12/00	35 8	M - 3 OB #6	1 08	3.12	11 48	0.83	3 82	1.18	65 81	20.62
S1261	5/12/00	5/12/00	31 2	M - 3 OB #6 AFTER DIG	2	1.1	1 05	0.27	1 9	0.45	26 44	9 25
S1260	5/12/00	5/12/00	35 1	M - 3 OB QC	2 44	2.24	4 18	0.57	1 56	0.87	13 15	16.3
S1262	5/12/00	5/12/00	33 8	M - 3 OB QC AFTER DIG	1 77	1.88	1 95	0 48	1 82	0.79	40 61	15.66
S1138	4/29/00	4/29/00	27 8	M - 3 POTHOLE	1429 3	699.28	5023 83	187.41	574 94	240.45	1962 17	2614.85
S1354	5/23/00	5/23/00	33.4	M - 3 5	-0 01	1.72	3 61	0.44	2 45	0 7	18 69	13 09
S2592	10/19/00	10/20/00	37 1	M - 4 LIFT 4	1 36	1.6	1 07	0.45	0 25	0.72	11 54	13.97
S1229	5/11/00	5/11/00	34.1	M - 4 OB #1	-1 04	2.55	3 71	0 65	1.37	1.02	71 4	20.26
S1230	5/11/00	5/11/00	32 4	M - 4 OB #2	1 19	2.39	2 25	0.58	2 69	0.95	89.31	18.96
S1231	5/11/00	5/11/00	32.1	M - 4 OB #3	-4 09	2.14	4 35	0.57	1 91	0.89	53.73	17.01
S1232	5/11/00	5/11/00	31.4	M - 4 OB #4	-3 37	2.29	2 5	0.6	2 2	0.67	68 05	19.26
S1233	5/11/00	5/11/00	35	M - 4 OB #5	-0.12	2.25	1 88	0 55	1.67	0.91	58 6	18.75
S1234	5/11/00	5/11/00	33.3	M - 4 OB #6	0 68	2.15	0.79	0.52	0.89	0.85	64 88	19.46
S1235	5/11/00	5/11/00	32 5	M - 4 OB #7	-1.8	1.54	0.87	0.39	1.37	0.67	66.25	14.41
S1491	5/31/00	5/31/00	35.2	M - 4.5 EPA #1	0.52	1.62	3.32	0.4	3 58	0.68	25.59	11.73
S1492	5/31/00	5/31/00	30.8	M - 4.5 EPA #2	3.41	1.26	2.74	0.33	1.6	0.53	32.88	10.51
S1493	5/31/00	5/31/00	37.2	M - 4.5 EPA #3	2 81	1.47	2.98	0.37	2.64	0.59	11.54	11.16
S1494	5/31/00	5/31/00	36.9	M - 4.5 EPA #4	1.24	1.83	2.72	0.46	2.28	0.74	38.03	14.19
S1495	5/31/00	5/31/00	36.8	M - 4.5 EPA #5	-2.06	1.41	4.02	0.38	2.54	0.59	27.19	11.02
S1496	5/31/00	5/31/00	35.2	M - 4.5 EPA #6	1.09	1.57	3.47	0.49	1.23	0.78	32.45	14.9
S2593	10/19/00	10/20/00	37.1	M - 5 LIFT 4	4.35	1.79	-0.33	0.47	1.51	0.82	12.66	15.73

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1222	5/10/00	5/10/00	33.6	M - 5 OB PILE #1	-0.88	2.5	4.27	0.64	4.14	1.02	65.88	19.45
S1223	5/10/00	5/10/00	35	M - 5 OB PILE #2	-2.36	2.19	2.88	0.57	2.21	0.91	62.02	18
S1224	5/10/00	5/10/00	34.9	M - 5 OB PILE #3	-0.61	2.44	4.42	0.62	1.92	0.96	85.54	19.03
S1225	5/10/00	5/10/00	32	M - 5 OB PILE #4	-3.3	1.56	3.07	0.41	2.37	0.66	80.46	13.51
S1226	5/10/00	5/10/00	37	M - 5 OB PILE #5	-0.08	2.59	2.57	0.64	2.53	1.05	64.69	21.16
S1227	5/10/00	5/10/00	33.9	M - 5 OB PILE #6	-3	1.78	1.47	0.47	0.96	0.78	52.71	16.36
S1228	5/10/00	5/10/00	34.9	M - 5 OB PILE QC	-2.2	2.51	0.89	0.61	1.15	1.06	67.66	22.52
S2401	9/21/00	9/22/00	36.7	M - 5.5	1.78	1.25	0.59	0.35	1.92	0.58	-6.57	10.66
S2403	9/21/00	9/22/00	37	M - 6.5	3.93	1.25	0.07	0.34	1.54	0.57	17.03	10.9
S1431	5/31/00	5/31/00	35.9	M - 7 EPA #1	1.01	1.93	4.16	0.49	1.42	0.75	46.34	14.45
S1432	5/31/00	5/31/00	35.8	M - 7 EPA #2	1.04	1.85	3.8	0.47	0.58	0.73	58.2	14.71
S1433	5/31/00	5/31/00	36.2	M - 7 EPA #3	1.64	1.58	2.58	0.4	2.61	0.64	28.98	12.34
S1434	5/31/00	5/31/00	36.1	M - 7 EPA #4	1.26	1.88	3	0.48	1.97	0.76	43.17	14.79
S1435	5/31/00	5/31/00	36.7	M - 7 EPA #5	4.24	1.86	3.69	0.46	1	0.71	24.91	13.58
S1436	5/31/00	5/31/00	37.7	M - 7 EPA #6	0.04	1.81	3.22	0.47	2.12	0.75	22.4	14.25
S1215	5/10/00	5/10/00	34.3	M - 7 OB PILE #1	1.26	2.05	2.29	0.5	2.23	0.83	56.12	16.39
S1216	5/10/00	5/10/00	32.9	M - 7 OB PILE #2	-0.43	1.8	2.18	0.45	2.59	0.75	48.97	14.63
S1217	5/10/00	5/10/00	31.3	M - 7 OB PILE #3	-3.31	2.2	2.44	0.57	2.84	0.94	58.53	18.52
S1218	5/10/00	5/10/00	31	M - 7 OB PILE #4	-2.79	2.64	3	0.68	1.97	1.09	54.71	21.62
S1219	5/10/00	5/10/00	32.2	M - 7 OB PILE #5	-3.14	2.28	3.32	0.59	1.09	0.93	69	18.9
S1220	5/10/00	5/10/00	31.8	M - 7 OB PILE #6	-1.81	2.36	2.67	0.6	1.81	0.96	70.5	19.71
S1221	5/10/00	5/10/00	31.6	M - 7 OB PILE #QC	-1.79	1.62	2.85	0.41	2.18	0.67	57.84	13.36
S2402	9/21/00	9/22/00	33.3	M - 8	4.91	1.7	-0.25	0.45	2.51	0.78	-2.97	14.34
S1391	5/24/00	5/24/00	32.8	M - 8.5 EPA #1	1.77	1.95	0.36	0.47	2.28	0.83	15.2	16.41
S1392	5/24/00	5/24/00	30.9	M - 8.5 EPA #2	-1.37	1.66	0.67	0.42	1.6	0.73	15.84	14.6
S1393	5/24/00	5/24/00	32	M - 8.5 EPA #3	0.08	1.42	0.29	0.35	1.1	0.61	41.1	13.32
S1394	5/24/00	5/24/00	29.2	M - 8.5 EPA #4	0.94	1.57	0.57	0.38	1.89	0.67	2.93	13.31
S1395	5/24/00	5/24/00	30.5	M - 8.5 EPA #5	-1.48	1.17	0.17	0.29	2.4	0.52	36.1	10.48
S1396	5/24/00	5/24/00	30.7	M - 8.5 EPA #6	-0.07	1.3	0.68	0.33	1.28	0.56	24.2	11.86
S2399	9/21/00	9/22/00	36.3	M - 9	1.63	1.6	0.23	0.43	2.51	0.74	6.86	13.38
S1336	5/22/00	5/22/00	30.3	M - 10	140.2	177.43	1625.68	45.46	77.24	56.66	911.78	624.31
S1385	5/24/00	5/24/00	33.9	M - 10 EPA #1	3.22	1.43	1.03	0.34	1.97	0.59	15.61	11.61
S1386	5/24/00	5/24/00	36.2	M - 10 EPA #2	1.25	1.37	1.71	0.34	1.7	0.56	15.47	11.09
S1387	5/24/00	5/24/00	28.3	M - 10 EPA #3	0.14	1.43	1.52	0.36	0.75	0.6	23.39	12.92
S1388	5/24/00	5/24/00	33.1	M - 10 EPA #4	-0.96	1.63	1.41	0.41	2.21	0.69	33.21	13.69
S1389	5/24/00	5/24/00	33.5	M - 10 EPA #5	-1.26	1.69	2.09	0.43	1.56	0.71	32.4	14.19
S1390	5/24/00	5/24/00	25.9	M - 10 EPA #6	-0.47	1.32	1.1	0.33	1.91	0.57	18.3	11.34
S2351	9/7/00	9/7/00	35.4	M - 10.5	1.92	1.42	0.45	0.39	0.19	0.66	12.27	13.04
S1342	5/23/00	5/23/00	30.6	M - 13.8 #5	1.86	1.3	1.37	0.32	1.39	0.53	28.06	10.87
S1361	5/24/00	5/24/00	32.3	M - 14 EPA #1	0.08	1.39	1.35	0.35	1.7	0.58	37.55	12.07
S1362	5/24/00	5/24/00	32.1	M - 14 EPA #2	-0.23	1.67	1.18	0.42	1.86	0.7	39.22	14.72
S1363	5/24/00	5/24/00	33.8	M - 14 EPA #3	2.88	1.14	1.98	0.28	1.59	0.46	25.73	9.45
S1364	5/24/00	5/24/00	32.7	M - 14 EPA #4	1.05	0.99	1.46	0.25	2.06	0.42	13.98	8.29

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1365	5/24/00	5/24/00	33 2	M - 14 EPA #5	1 02	1.12	1 3	0.29	1 8	0.47	36 47	9.55
S1366	5/24/00	5/24/00	34 6	M - 14 EPA #6	-0 76	1.8	1 61	0.46	0 82	0.75	53 68	15.79
S1198	5/5/00	5/5/00	31 1	M - 14 GRAVEL #5	-1 32	1.98	2	0.5	2	0.82	-4 31	15.69
S1199	5/5/00	5/5/00	32 2	M - 14 GRAVEL #6	1 22	1.75	2 69	0.44	1 34	0.69	27 4	13.81
S1200	5/5/00	5/5/00	32 3	M - 14 GRAVEL #7	1 48	1.33	1 52	0.33	0 87	0.64	24 36	11.22
S1201	5/5/00	5/5/00	34 9	M - 14 GRAVEL QC	-0 32	1.73	1	0.43	1 84	0.75	16 16	14.72
S1142	5/1/00	5/1/00	33 3	M - 14 2	-2698 5	1186.45	4405 86	820.58	3001 39	468.14	5407 91	5071.14
S1140	5/1/00	5/1/00	35 8	M - 14 5	-4 98	10.84	33 73	2.7	18 49	3.83	119 18	65.03
S1143	5/1/00	5/1/00	43	M - 14 5	-11839	4061.08	5746 46	1160.41	12379 18	1868.81	24711 72	20764.07
S1213	5/8/00	5/8/00	34 6	M - 14 5 BOTTOM SAND #1	-753 09	582.95	1141 18	151	933 11	224.16	2231 35	2369.32
S1214	5/8/00	5/8/00	32 4	M - 14 5 BOTTOM SAND #2	-0 63	62.39	216 84	15.96	119 93	22.68	258 63	256.39
S1343	5/23/00	5/23/00	32 7	M - 14 7 #6	1 9	1.4	2 99	0.96	1 72	0.58	26 39	11.16
S1144	5/2/00	5/2/00	31 4	M - 14 7 STOCK PILE	-1837 7	636.86	2292 32	179.14	1232 17	252.8	2341 73	2769.09
S1340	5/22/00	5/22/00	32 5	M - 15 6 #3	-0 74	1.48	2 8	0.88	1 67	0.61	29 47	12.12
S1403	5/24/00	5/24/00	34 3	M - 16 EPA #1	-0 85	1.41	2 74	0.87	2 4	0.8	12 3	11.51
S1404	5/24/00	5/24/00	34 5	M - 16 EPA #2	-1 74	1.44	2 59	0.98	1 93	0.61	13 71	11.85
S1405	5/24/00	5/24/00	34 7	M - 16 EPA #3	1 54	1.68	1 35	0.38	1 7	0.64	34 73	12.92
S1406	5/24/00	5/24/00	34	M - 16 EPA #4	0 56	1.66	1 71	0.41	2 88	0.7	32 36	13.82
S1407	5/24/00	5/24/00	33 7	M - 16 EPA #5	-0 44	1.5	1 7	0.89	1 97	0.64	24 08	12.81
S1408	5/24/00	5/24/00	34 4	M - 16 EPA #6	-0 44	1.22	1 87	0.52	1 44	0.82	26 23	10.46
S1303	5/15/00	5/15/00	35 1	M - 17 5 #1	3 89	1.15	2 11	0.26	1 69	0.45	34 96	9
S1304	5/15/00	5/15/00	32 3	M - 17 5 #2	0 67	1.09	2 34	0 28	-0 07	0.44	31 33	9.14
S1305	5/15/00	5/15/00	34 5	M - 17 5 #3	-0 34	1.66	1 64	0.41	1 75	0.7	31 37	13.78
S1306	5/15/00	5/15/00	34 7	M - 17 5 #4	2 21	1.14	1 63	0.28	1	0.46	23 87	9.41
S1307	5/15/00	5/15/00	35 1	M - 17 5 #5	2 76	1.99	3 14	0.5	1 55	0.76	36 12	15.76
S1308	5/15/00	5/15/00	33	M - 17 5 #6	0 46	1.24	2 19	0 31	2 61	0.52	47 58	10.22
S1309	5/15/00	5/15/00	37 8	M - 18 #1	-0 11	1.58	1 31	0.41	0 39	0.67	23 83	14.23
S1310A	5/15/00	5/15/00	37 6	M - 18 #2	0 72	1.68	1 41	0.43	-0 32	0.69	22 61	14.65
S1311	5/15/00	5/15/00	33 5	M - 18 #3	0 15	1.28	0 68	0.32	0 94	0.56	12 87	11.87
S1312	5/15/00	5/15/00	36	M - 18 #4	-0 07	1.43	0 28	0 35	1 22	0.82	29 4	13.33
S1313	5/15/00	5/15/00	34 2	M - 18 #5	0 07	1.31	0 72	0.33	0 74	0.56	13 76	11.9
S1314	5/15/00	5/15/00	35.7	M - 18 #6	0.74	1.41	0.7	0.35	1 3	0.6	20.28	12.46
S1189	5/4/00	5/4/00	30.4	M - 18.6	0.55	1.83	5 68	0.47	3 2	0.71	49 75	13.23
S1196	5/5/00	5/5/00	33.9	M - 18.5 6'	2 83	2.75	8 45	0.7	3.65	1.03	43.9	15.1
S1191	5/5/00	5/5/00	34.8	M - 19 GRAVEL #1	-5 12	2.68	1 61	0.68	2.76	1.15	87.59	28.98
S1192	5/5/00	5/5/00	35.4	M - 19 GRAVEL #2	-4 14	3.01	1.79	0.76	1.61	1.28	94.05	26.86
S1193	5/5/00	5/5/00	36 5	M - 19 GRAVEL #3	-1 68	2.8	1 3	0.69	3 26	1.16	78.28	23.64
S1194	5/5/00	5/5/00	34.2	M - 19 GRAVEL #4	-3.93	2.91	1.39	0.79	2.77	1.37	89.1	26.35
S2472	10/9/00	10/10/00	28	M - 19 LIFT 1	-1.46	1.4	0.65	0.4	0.7	0.56	19.95	12.94
S2473	10/9/00	10/10/00	26.9	M - 19 LIFT 2	-0.5	1.06	0.07	0.29	1.9	0.81	6.69	9.15
S2474	10/9/00	10/10/00	29.8	M - 19 LIFT 3	2.35	1.72	0.23	0.47	0.23	0.76	20.26	15.74
S2476	10/9/00	10/10/00	28.6	M - 19.5	15.29	2.61	1.25	0.69	12.05	1.17	3.3	17.69
S2477	10/9/00	10/10/00	40.3	M - 20	3.19	1.54	0.56	0.41	6.94	0.73	14.02	11.99

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2459	10/10/00	10/10/00	26.7	M - 20 EPA # 1	0.86	0.94	0.49	0.26	1.82	0.44	16.79	8.21
S2460	10/10/00	10/10/00	29	M - 20 EPA # 2	3.96	1.41	0.51	0.38	1.37	0.64	8.19	11.98
S2461	10/10/00	10/10/00	28.6	M - 20 EPA # 3	1.29	1.27	-0.27	0.34	2.73	0.6	17.55	11.2
S2462	10/10/00	10/10/00	30.7	M - 20 EPA # 4	2.85	1.5	0.29	0.4	1.64	0.69	34.55	13.38
S2463	10/10/00	10/10/00	32.5	M - 20 EPA # 5	4.16	1.44	-0.3	0.38	3.04	0.67	4.7	12.52
S2464	10/10/00	10/10/00	29.5	M - 20 EPA # 6	1.98	1.49	-0.28	0.4	2.74	0.7	15.99	13.14
S2469	10/9/00	10/10/00	26.1	M - 20 LIFT 1	-1	1.26	-0.16	0.35	2.3	0.61	21.4	11.57
S2470	10/9/00	10/10/00	25.4	M - 20 LIFT 2	1.78	1.26	0.57	0.35	2.65	0.6	0.14	10.7
S2471	10/9/00	10/10/00	36.8	M - 20 LIFT 3	-1.42	1.39	0.55	0.38	0.49	0.64	35.97	12.73
S2466	10/9/00	10/10/00	31.5	M - 21 LIFT 1	3.37	1.75	0.7	0.48	0.82	0.8	20.25	15.1
S2467	10/9/00	10/10/00	34.4	M - 21 LIFT 2	3.88	1.26	0.08	0.34	2.64	0.58	28.93	10.96
S2468	10/9/00	10/10/00	37.8	M - 21 LIFT 3	0.36	1.34	-0.08	0.37	1.13	0.64	21.18	12.27
S2465	10/9/00	10/10/00	31.5	M - 22 LIFT 1	-1.07	1.34	-0.05	0.37	1.56	0.66	21.32	12.5
S2514	10/10/00	10/12/00	37.2	M - 22 LIFT 2	-0.85	1.34	0.55	0.38	1.67	0.64	8.4	11.84
S2515	10/10/00	10/12/00	35.8	M - 22 LIFT 3	0.14	1.36	0.71	0.38	-0.48	0.82	19.78	12.78
S2485	10/9/00	10/10/00	33.8	M - 23 LIFT 1	0.16	1.26	0.55	0.35	2.75	0.59	10.42	10.61
S2512	10/10/00	10/12/00	36.7	M - 23 LIFT 2	2.03	1.28	-0.04	0.35	2.48	0.6	-7.43	11.05
S2513	10/10/00	10/12/00	38.7	M - 23 LIFT 3	-0.79	1.32	0.19	0.37	1.86	0.63	5.35	11.79
S2482	10/9/00	10/10/00	37.6	M - 24 LIFT 1	0.36	1.25	0.01	0.34	1.8	0.59	12.01	11.19
S2483	10/9/00	10/10/00	38	M - 24 LIFT 2	2.88	1.41	-0.22	0.37	2.29	0.66	19.08	12.42
S2484	10/9/00	10/10/00	30.5	M - 24 LIFT 3	-1.75	1.6	0.23	0.44	0.52	0.76	34.26	14.7
S2479	10/9/00	10/10/00	35.6	M - 25 LIFT 1	1.65	1.67	0.67	0.46	0.77	0.76	20.31	14.96
S2480	10/9/00	10/10/00	36.5	M - 25 LIFT 2	-0.98	1.41	0.02	0.39	2.18	0.68	35.82	13.04
S2481	10/9/00	10/10/00	36.5	M - 25 LIFT 3	1.37	1.16	-0.23	0.31	1.24	0.54	14.91	10.69
S1315	5/15/00	5/15/00	28.7	M.5 - 3.5	8.33	14.07	111.73	3.65	12.13	4.67	70.07	59.35
S2349	9/7/00	9/7/00	36.9	M.5 - 12.5	0.6	1.33	0.27	0.37	0.37	0.61	14.39	12.44
S1136	4/29/00	4/29/00	41.2	M.5 - 17	-813.79	296.8	1164.17	84.14	246.56	110.82	976.82	1234.77
S1995	8/3/00	8/7/00	40.8	M.5 - 21 FLOOR	2.93	1.26	-0.16	0.34	1.11	0.59	9.03	11.47
S1996	8/3/00	8/7/00	39.6	M.5 - 22.5 FLOOR	-0.51	1.38	-0.41	0.38	2.56	0.68	6.75	12.64
S1997	8/3/00	8/7/00	39.2	M.5 - 23.5 FLOOR	1.19	1.3	-0.64	0.35	2.67	0.61	18.21	11.82
S1998	8/3/00	8/7/00	39.3	M.5 - 24.5 FLOOR	-2.33	1.54	-0.13	0.43	1.79	0.75	29.89	14.43
S1999	8/3/00	8/7/00	39.3	M.5 - 25.5 FLOOR	0.01	1.21	0.39	0.34	0.64	0.58	3.6	11.06
S2000	8/3/00	8/7/00	38	M.5 - 26 FLOOR	2.19	1.17	-0.45	0.31	2.08	0.55	4.93	10.57
S1932	7/21/00	7/21/00	37.5	M.5 - 27 FLOOR	2.42	1.63	1.46	0.4	1.31	0.67	1.97	13.06
S1341	5/23/00	5/23/00	31.5	M.8 - 15.5 #4	0.31	1.71	2.25	0.44	2.96	0.72	31.08	14.06
S2594	10/19/00	10/20/00	36.4	N - 2 LIFT 4	2.39	1.57	0.22	0.43	2.46	0.74	-18.74	13.4
S1319	5/15/00	5/15/00	23.7	N - 2 SOUTHWALL UNDER SIDEWALK	-0.82	4.99	26.73	1.32	3.97	1.76	19.24	26.58
S1327	5/16/00	5/16/00	45.5	N - 2.5	-4233	1723.95	4180.67	504.89	1048.54	674.92	5749.24	7372.01
S2595	10/19/00	10/20/00	37.1	N - 3 LIFT 4	-0.98	1.53	0.6	0.43	1.34	0.73	7.05	13.5
S2596	10/19/00	10/20/00	37.5	N - 4 LIFT 4	2.06	1.7	-0.31	0.46	3.24	0.81	2.91	14.81
S2597	10/19/00	10/20/00	38.9	N - 5 LIFT 4	3.57	1.81	0.09	0.48	1.29	0.83	32.39	16.17
S2082	8/16/00	8/17/00	30.3	N - 7 (-1 FOOT)	-0.68	1.37	0.21	0.38	1.92	0.66	24.5	12.66
S2063	8/15/00	8/15/00	36.4	N - 7 EPA #1	-0.25	1.33	0.91	0.38	0.69	0.63	20.45	12.1

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S2064	8/15/00	8/15/00	34 8	N - 7 EPA #2	0 48	1.17	-0 02	0.32	2 52	0.68	4 5	10.36
S2065	8/15/00	8/15/00	35 5	N - 7 EPA #3	1 4	1.19	0 41	0.29	1 61	0.68	9 51	12.35
S2066	8/15/00	8/15/00	35 2	N - 7 EPA #4	2 63	1.43	0 61	0.39	1 43	0.65	-4 84	12.17
S2067	8/15/00	8/15/00	34 6	N - 7 EPA #5	2 25	1.16	-0 12	0.31	1 92	0.64	7 47	10.06
S2068	8/15/00	8/15/00	34.7	N - 7 EPA #6	1 79	1.4	0 32	0.36	1 8	0.64	20 31	12.19
S2083	8/16/00	8/17/00	26 2	N - 7.5 (-1 FOOT)	0 86	1.52	0 44	0.34	2 13	0.68	24 07	10.77
S2015	8/9/00	8/9/00	32 6	N - 7 5	-0 04	3.06	15 71	0.9	4 13	1.26	9 69	18.9
S1357	5/24/00	5/24/00	27 7	N - 9	2 63	1.49	1 67	0.36	2 42	0.61	26 79	12.18
S2072	8/16/00	8/16/00	26 8	N - 9 #1	3 41	1.67	0 36	0.42	2 76	0.78	5 36	13.18
S2073	8/16/00	8/16/00	42 3	N - 9 #2	3 1	1.27	0 23	0.34	2 3	0.59	33 81	11.02
S2074	8/16/00	8/16/00	35 2	N - 9 EPA #1	0 47	1.35	1 19	0.38	0 64	0.61	27 45	11.9
S2075	8/16/00	8/16/00	34 1	N - 9 EPA #2	0 12	1.14	0 64	0.31	1 51	0.63	34 54	10.07
S2076	8/16/00	8/16/00	34 2	N - 9 EPA #3	3 66	1.67	0 36	0.51	1 92	0.84	12 35	16.34
S2077	8/16/00	8/16/00	34 1	N - 9 EPA #4	-0 64	0.96	0 02	0.28	2	0.46	45 58	8.79
S2078	8/16/00	8/16/00	36 2	N - 9 EPA #5	3 35	1.61	0 58	0.44	2 33	0.74	9 82	13.54
S2079	8/16/00	8/16/00	33 7	N - 9 EPA #6	2 78	1.29	0 58	0.35	2 01	0.59	9 36	10.88
S1337	5/22/00	5/22/00	36 1	N - 9 5 UNDER SIDEWALK	4 46	4.21	18 3	1.11	3 88	1.5	27 05	23.99
S2354	9/8/00	9/8/00	24 1	N - 11 EPA #1	3 1	1.27	0 52	0.35	1 18	0.68	12 82	10,98
S2355	9/8/00	9/8/00	26 3	N - 11 EPA #2	0 78	1.12	0 17	0.31	1 37	0.63	20 86	10.14
S2356	9/8/00	9/8/00	28 4	N - 11 EPA #3	3 06	1.34	0	0.36	1 75	0.62	8 68	11.65
S2357	9/8/00	9/8/00	27 3	N - 11 EPA #4	2 61	1.66	0 46	0.46	1 26	0.77	3 31	14.72
S2358	9/8/00	9/8/00	27 7	N - 11 EPA #5	1 36	1.68	0 28	0 47	2 37	0.78	-6 1	14.5
S2359	9/8/00	9/8/00	25 9	N - 11 EPA #6	4 36	1.47	0 02	0.39	0 82	0.67	28 81	13.38
S2342	9/6/00	9/6/00	38 4	N - 11 SPOT #1	23 25	5.7	23 38	1.61	7 32	2.23	-0 45	30 75
S2343	9/6/00	9/6/00	38 7	N - 11 SPOT #2	19 68	6.68	28 53	1.9	7 91	2.61	21 99	35.7
S1141	5/1/00	5/1/00	32 5	N - 14 5	8 71	8.98	28 92	2 39	10 59	3.31	108 62	50.91
S1208	5/8/00	5/8/00	28 6	N - 14 5 UNDER SIDEWALK	1 04	14.76	86 23	3.63	51 57	5.45	70 73	66.09
S1137	4/29/00	4/29/00	30 4	N - 16 5	-5 3	8.13	22 51	1.36	17 95	1.99	77 54	29 37
S1209	5/8/00	5/8/00	28 8	N - 16 5 UNDER SIDEWALK	-2 67	2.63	4 96	0.68	3 8	1.06	71 14	20.11
S1139	4/29/00	5/1/00	40 1	N - 16 5 UNDER SOUTH WALL	-7614 6	2116.36	3904 91	620 06	5773 84	967.34	12975 92	10679.93
S1135	4/29/00	4/29/00	23 8	N - 17 5	-15 56	10.9	71 42	2.9	20.49	3.89	74 34	50.84
S1210	5/8/00	5/8/00	23.1	N - 17.5 UNDER SIDEWALK	-6 28	4.24	18 38	1.12	15.53	1.68	45 57	24.6
S1211	5/8/00	5/8/00	32.3	N - 18 5 UNDER SIDEWALK	3 06	6.31	30 06	1.36	9.2	1.91	65 21	28.6
S1896	7/18/00	7/18/00	36.3	N - 19.2	10.43	7.86	3.21	1.77	16.95	3.19	25.46	46.49
S1904	7/20/00	7/20/00	40.4	N - 22 (- 6 FEET)	2.55	1.82	0 2	0.41	1.15	0.74	32 02	15.26
S1358	5/24/00	5/24/00	31 9	N.5 - 9.5	3.07	1.17	1.09	0.28	1 56	0.47	28 92	9.61
S2344	9/6/00	9/6/00	26.7	N.5 - 11 #1	1.69	1.33	0 04	0.38	2 95	0.84	-7 22	11.4
S2345	9/6/00	9/6/00	26.7	N.5 - 11 #2	1 55	1.56	0 72	0.66	1 83	0.91	3.55	17.15
S2346	9/6/00	9/6/00	30.8	N.5 - 11 #3	1.14	1.67	1.37	0.44	1.1	0.73	14.6	13.49
S1876	7/17/00	7/17/00	35	N.5 - 16	2.22	1.8	-0.15	0.37	2.04	0.66	-1.27	13.42
S1899	7/19/00	7/19/00	30.2	N.5 - 16 (- 6 FEET)	1.41	1.33	0.94	0.33	1.54	0.67	11.68	11.46
S1893	7/18/00	7/18/00	24.2	N.5 - 16 1ST LIFT	2.94	3.31	0.51	0.76	2.94	1.36	-0.66	25.29
S1963	7/28/00	7/28/00	34.2	N.5 - 17 (-4 FEET) #1	0.8	8.76	5.87	2.16	8.34	3.5	11.89	53.25

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1964	7/28/00	7/28/00	31.8	N.5 - 17 (-4 FEET) #2	1.97	3.7	5.26	0.94	4.17	1.45	14.36	25.33
S1965	7/28/00	7/28/00	33.1	N.5 - 17 (-5 FEET)	7.23	2.7	4.36	0.65	2.23	1	-1.6	17.69
S1894	7/18/00	7/18/00	34.9	N.5 - 17 1ST LIFT	14.1	4.82	3.31	1.07	5.96	1.8	6.52	30.17
S1895	7/18/00	7/18/00	38.3	N.5 - 17 3RD LIFT	2.65	3.1	0.44	0.73	0.89	1.28	2.18	25.91
S1960	7/28/00	7/28/00	26.1	N.5 - 17 SLOPE	2.68	2.04	1.48	0.49	0.8	0.81	40.05	16.94
S1961	7/28/00	7/28/00	26.3	N.5 - 17.5 SLOPE	3.03	2.28	3.99	0.57	2.39	0.89	1.34	15.97
S1891	7/18/00	7/18/00	33.4	N.5 - 18 2ND LIFT	3.22	2.93	0.28	0.69	1.14	1.22	-14.72	24.42
S1915	7/20/00	7/20/00	41	N.5 - 19 EPA #1	-0.51	1.67	0.89	0.42	0.98	0.72	22.98	14.79
S1916	7/20/00	7/20/00	39.7	N.5 - 19 EPA #2	-1.59	1.69	0.61	0.44	1.36	0.75	24.98	15.56
S1917	7/20/00	7/20/00	40.2	N.5 - 19 EPA #3	0.7	1.77	0.44	0.43	1.13	0.76	18.17	15.62
S1918	7/20/00	7/20/00	38.2	N.5 - 19 EPA #4	1.85	1.61	0.72	0.39	0.77	0.66	17.75	13.6
S1919	7/20/00	7/20/00	40.4	N.5 - 19 EPA #5	0.58	1.74	0.7	0.43	1.76	0.73	26.12	14.94
S1920	7/20/00	7/20/00	39.7	N.5 - 19 EPA #6	0.17	1.42	0.43	0.34	1.45	0.61	21.03	12.45
S1875	7/17/00	7/17/00	34.8	N.5 - 20	0.43	1.44	0.51	0.36	1.69	0.63	21.81	13.16
S1907	7/20/00	7/20/00	36.6	N.5 - 20.5 (- 6 FEET)	0.67	1.7	0.86	0.42	0.94	0.71	18.33	14.47
S1898	7/19/00	7/19/00	40.2	N.5 - 21.5 (- 4 FEET)	0.81	1.33	1.19	0.33	1.46	0.56	13.33	11.11
S1921	7/20/00	7/20/00	40.1	N.5 - 21.5 EPA #1	0.12	1.6	0.62	0.37	2.22	0.65	10.39	12.8
S1922	7/20/00	7/20/00	40.3	N.5 - 21.5 EPA #2	1.78	1.42	0.06	0.33	1.74	0.6	38.58	12.44
S1923	7/20/00	7/20/00	40.6	N.5 - 21.5 EPA #3	1.58	1.73	0.55	0.42	1.83	0.73	17.49	14.66
S1924	7/20/00	7/20/00	39.4	N.5 - 21.5 EPA #4	-1.27	1.43	0.77	0.37	2.39	0.63	10.56	12.39
S1925	7/20/00	7/20/00	38.5	N.5 - 21.5 EPA #5	0.93	0.97	0.68	0.24	1.49	0.41	6.54	8.38
S1926	7/20/00	7/20/00	39.6	N.5 - 21.5 EPA #6	2.36	1.51	0.77	0.36	0.62	0.61	34.67	13.01
S1900	7/19/00	7/19/00	39.6	N.5 - 22.5 (- 6 FEET)	1.52	1.34	0.66	0.33	0.76	0.56	2.75	11.61
S1877	7/17/00	7/17/00	34.9	N.5 - 24.5	2.22	1.95	0.79	0.46	1.39	0.8	24.86	16.09
S1933	7/21/00	7/21/00	38.3	N.5 - 26 FLOOR	2.37	1.78	0.8	0.43	1.72	0.74	-1.13	14.42

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1645	6/12/00	6/12/00	34.6	AREA A #1 After Dig	1.22	1.56	4.45	0.4	2.08	0.62	33.48	11.61
S1646	6/12/00	6/12/00	36.4	AREA A #2 After Dig	5.14	2.46	3.1	0.6	2.3	0.95	2.89	17.49
S1647	6/12/00	6/12/00	31.4	AREA A #3 After Dig	2.15	1.63	2.3	0.41	1.22	0.65	17.32	12.96
S1648	6/12/00	6/12/00	34.5	AREA A #4 After Dig	5.66	1.68	2.82	0.4	1.86	0.64	5.7	12.22
S1649	6/12/00	6/12/00	34.4	AREA A #5 After Dig	2.49	1.83	2.45	0.45	0.89	0.73	21.58	14.21
S1650	6/12/00	6/12/00	34.9	AREA A #6 After Dig	5.86	1.55	2.11	0.37	1.95	0.6	6.02	11.77
S1651	6/12/00	6/12/00	32.7	AREA A #7 After Dig	-1.97	2.03	5.5	0.54	1.5	0.82	41.63	15.47
S1652	6/12/00	6/12/00	34.4	AREA A #8 After Dig	3.94	2.09	3.73	0.52	3.26	0.84	-9.88	14.5
S1758	6/26/00	6/26/00	33.8	Area A Crushed Stonebase Course OB #1	2.01	1.73	1.28	0.43	1.25	0.72	-5.61	14.5
S1759	6/26/00	6/26/00	33.9	Area A Crushed Stonebase Course OB #2	3.09	1.72	0.42	0.4	0.67	0.7	8.67	14.41
S1760	6/26/00	6/26/00	33	Area A Crushed Stonebase Course OB #3	0.16	1.43	0.54	0.36	1.8	0.63	-2.15	12.88
S1761	6/26/00	6/26/00	35.8	Area A Crushed Stonebase Course OB #4	2.21	1.52	0.66	0.37	1.85	0.64	-5.2	12.38
S1619	6/9/00	6/9/00	32.3	AREA A HIGH COUNT #1 Pre-Verification	2.97	1.8	9.26	0.47	3.22	0.68	16.06	11.62
S1620	6/9/00	6/9/00	36	AREA A HIGH COUNT #2 Pre-Verification	2.28	1.9	10.96	0.5	2.73	0.71	22.98	12.19
S1621	6/9/00	6/9/00	34.1	AREA A HIGH COUNT #3 Pre-Verification	5.83	2.03	9.92	0.52	3.54	0.75	28.34	12.79
S1774	6/27/00	6/27/00	29.1	H.5 - (-0.5) 3RD LIFT	1.86	1	0.82	0.24	0.04	0.42	5.98	8.95
S1781	6/27/00	6/28/00	33.9	H.5 - (-0.5) FLOOR	1.23	1.3	0.28	0.32	0.79	0.55	10.64	11.74
S1775	6/27/00	6/28/00	28.3	H.5 - (-1.5) 3RD LIFT	0.95	1.31	0.48	0.31	0.87	0.55	37.31	11.75
S1776	6/27/00	6/28/00	34.6	H.5 - (-1.5) FLOOR	-0.85	1.83	-0.16	0.46	1.3	0.82	22.48	17.33
S1766	6/27/00	1/0/00	23	H.5 - (-3) FLOOR	2.21	1.66	0.6	0.4	1.12	0.69	11.76	13.76
S1767	6/27/00	6/27/00	19.3	H.5 - (-5) FLOOR	1.51	1.61	0.52	0.38	0.95	0.68	8.75	13.82
S1550	6/5/00	6/5/00	36	I - (-1)	1.64	2.72	5.52	0.7	2.92	1.05	42.6	19.48
S1587	6/6/00	6/6/00	36.7	I - (-1) EPA #1	1.32	1.6	1.43	0.39	1.36	0.66	40.39	13.55
S1588	6/6/00	6/6/00	37.5	I - (-1) EPA #2	-1.1	1.64	2.4	0.43	1.39	0.7	5.15	13.36
S1589	6/6/00	6/6/00	35.5	I - (-1) EPA #3	-0.15	1.52	2.02	0.39	0.29	0.62	42.77	13.2
S1590	6/6/00	6/6/00	35.9	I - (1) EPA #4	3.51	1.68	1.07	0.39	1.58	0.67	25.56	13.67
S1591	6/6/00	6/6/00	36	I - (-1) EPA #5	1.73	1.5	2	0.37	0.62	0.6	23.9	12.26
S1592	6/6/00	6/6/00	35.6	I - (-1) EPA #6	-0.53	1.27	1.49	0.33	1.27	0.54	29.5	11.13
S1530	6/2/00	6/2/00	38.7	I - (-1)OB #1	2.29	1.28	0.55	0.31	1.11	0.53	18.39	11.08
S1531	6/2/00	6/2/00	40.1	I - (-1)OB #2	-1.49	1.32	0.92	0.35	1.49	0.59	16.34	12.44
S1532	6/2/00	6/2/00	41.4	I - (-1)OB #3	-1.35	1.14	1.07	0.29	0.59	0.49	41.06	10.55
S1533	6/2/00	6/2/00	38.8	I - (-1)OB #4	1.06	1.29	0.99	0.32	0.43	0.54	4.69	11.18
S1534	6/2/00	6/2/00	39.9	I - (-1)OB #5	1.55	1.37	1	0.34	0.63	0.57	13.8	11.97
S1535	6/2/00	6/2/00	37.3	I - (-1)OB QC	2.04	1.18	0.34	0.28	1.16	0.49	22	10.47
S1764	6/27/00	6/27/00	20.4	I - (-2) 3RD LIFT	-1.38	1.67	0.62	0.43	1.21	0.77	4.48	15.63
S1593	6/6/00	6/6/00	34	I - (-2) EPA #1	-0.13	1.29	1.43	0.33	1.9	0.56	3.32	10.7
S1594	6/6/00	6/6/00	33.9	I - (-2) EPA #2	-1.06	1.19	1.17	0.31	2.99	0.52	10.01	10.06
S1595	6/6/00	6/6/00	33.5	I - (-2) EPA #3	2.18	1.54	0.94	0.37	1.72	0.64	17.67	12.84
S1596	6/6/00	6/6/00	34.5	I - (-2) EPA #4	-0.85	1.89	1.51	0.48	1.63	0.81	23.78	16.08
S1597	6/6/00	6/6/00	34.6	I - (-2) EPA #5	2.72	1.5	1.83	0.37	0.43	0.6	29.85	12.36
S1598	6/6/00	6/6/00	33.8	I - (-2) EPA #6	2.8	1.24	0.71	0.3	2.35	0.52	10.3	10.35
S1549	6/5/00	6/5/00	35.1	I - (-3)	2.55	1.77	3.82	0.45	2.96	0.71	12.65	13.24
S1765	6/27/00	1/0/00	25.2	I - (-3) 3RD LIFT	-0.49	1.71	0.77	0.43	1.11	0.75	12.42	15.33
S1762	6/26/00	6/26/00	33.7	I - (-3.5)	1.91	1.09	0.42	0.26	1.05	0.46	14.19	9.47
S1599	6/6/00	6/6/00	34	I - (-4) EPA #1	0.63	1.27	1.84	0.32	1.44	0.52	30.38	10.45
S1600	6/6/00	6/6/00	32.7	I - (-4) EPA #2	2.29	1.71	2.15	0.42	1.82	0.7	14.07	13.44

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1601	6/6/00	6/6/00	35	I - (-4) EPA #3	1.37	2.3	2.57	0.57	1.51	0.92	-10.86	16.6
S1602	6/6/00	6/6/00	33.5	I - (-4) EPA #4	1.77	1.87	1.83	0.46	2.22	0.77	18.63	14.8
S1603	6/6/00	6/6/00	33.2	I - (-4) EPA #5	2.78	1.84	1.56	0.45	2	0.75	22.53	14.67
S1604	6/6/00	6/6/00	31.6	I - (-4) EPA #6	3.03	1.55	1.74	0.38	1.13	0.62	20.05	12.51
S1548	6/5/00	6/5/00	35.1	I - (-4.5)	2.93	1.23	2.27	0.3	2.43	0.49	25.81	9.5
S1763	6/26/00	6/26/00	35.9	I - (-5)	0.15	1.71	0.8	0.43	0.85	0.75	1.44	15.49
S1537	6/5/00	6/5/00	37.1	I - (-6) #2	2.86	1.69	1.4	0.42	1.66	0.69	12.02	13.99
S1551	6/6/00	6/6/00	33.3	I - (-6) EPA #1	0.65	1.68	1.78	0.43	2.33	0.7	17.33	13.57
S1552	6/6/00	6/6/00	32.4	I - (-6) EPA #2	0.29	1.6	1.51	0.4	1.3	0.67	32.6	13.75
S1553	6/6/00	6/6/00	33	I - (-6) EPA #3	0.84	1.16	0.56	0.28	2.19	0.49	53.21	10.39
S1554	6/6/00	6/6/00	33.3	I - (-6) EPA #4	0.5	1.91	3.43	0.49	1.06	0.77	23.23	14.69
S1555	6/6/00	6/6/00	33.4	I - (-6) EPA #5	-0.76	1.55	1.65	0.4	1	0.66	26.3	13.14
S1556	6/6/00	6/6/00	34.2	I - (-6) EPA #6	0.54	1.59	1.54	0.39	1.31	0.66	26.98	13.14
S1757	6/26/00	6/26/00	35.5	I - (-6.5) 2ND LIFT	-0.38	1.28	-0.14	0.31	1.79	0.57	28.01	12.03
S1536	6/5/00	6/5/00	34.6	I - (-7) #1	2.15	1.33	1.31	0.33	1.98	0.55	32.34	11.3
S1756	6/26/00	6/26/00	37.6	I - (-7.5) 2ND LIFT	2.06	1.94	0.28	0.47	0.47	0.81	14.14	17.1
S1557	6/6/00	6/6/00	32.1	I - (-7.5) EPA #1	0.75	1.27	0.82	0.31	2.08	0.55	26.86	11.24
S1558	6/6/00	6/6/00	32.3	I - (-7.5) EPA #2	0.21	1.21	1.24	0.3	1.81	0.51	27.92	10.3
S1559	6/6/00	6/6/00	32.3	I - (-7.5) EPA #3	2.4	1.35	1.15	0.33	0.55	0.55	24.63	11.8
S1560	6/6/00	6/6/00	31.9	I - (-7.5) EPA #4	0.01	1.33	1.3	0.34	0.76	0.57	23.1	11.78
S1561	6/6/00	6/6/00	32.5	I - (-7.5) EPA #5	1.3	0.99	1.29	0.24	1.44	0.42	17.09	8.35
S1562	6/6/00	6/6/00	31.7	I - (-7.5) EPA #6	2.04	1.28	1.13	0.31	0.96	0.53	10.47	10.58
S1690	6/14/00	6/14/00	35.2	I - 0 EPA #1	1.9	1.57	3.41	0.4	1.89	0.63	16.99	12.2
S1691	6/14/00	6/14/00	32.8	I - 0 EPA #2	1.26	1.34	3.56	0.34	2.75	0.54	2.65	9.88
S1692	6/14/00	6/14/00	33.3	I - 0 EPA #3	2.44	1.62	2.84	0.4	2.29	0.65	29.96	12.48
S1693	6/14/00	6/14/00	33.5	I - 0 EPA #4	2.89	1.63	3.59	0.4	1.39	0.63	43.46	12.38
S1694	6/14/00	6/14/00	36.4	I - 0 EPA #5	-0.69	1.52	3.66	0.4	2.07	0.62	20.66	11.9
S1695	6/14/00	6/14/00	33.4	I - 0 EPA #6	3.09	1.49	2.93	0.37	1.83	0.59	38.59	11.52
S1772	6/27/00	6/27/00	28.6	I.5 - (-0.5) 3RD LIFT	1.99	1.76	-0.14	0.41	2.43	0.76	5.91	14.96
S1807	6/29/00	6/29/00	30.6	I.5 - (-0.5) 3RD LIFT	0.32	1.42	0.73	0.35	1.95	0.61	9.07	12.17
S1771	6/27/00	6/27/00	35.2	I.5 - (-0.5) FLOOR	0.77	1.51	0.81	0.38	0.7	0.64	2.27	12.94
S1773	6/27/00	6/27/00	27.2	I.5 - (-1.5) 3RD LIFT	-0.41	1.46	0.52	0.36	1.25	0.63	20.33	12.98
S1782	6/27/00	6/28/00	35	I.5 - (-1.5) FLOOR	1.12	1.56	0.36	0.38	0.6	0.65	22.58	13.9
S1769	6/27/00	6/27/00	31	I.5 - (-2.5) FLOOR #1	-1.23	1.31	0.63	0.33	1.16	0.57	28.11	11.92
S1770	6/27/00	6/27/00	29.2	I.5 - (-2.5) FLOOR #2	-0.32	1.41	0.47	0.36	1.16	0.63	7.91	12.99
S1515	5/31/00	5/31/00	30.1	I.5 - (-7)	19.8	11.18	56.65	2.84	14.64	3.8	22.48	49.05
S1653	6/12/00	6/12/00	33	J - (-3) OB	2.2	1.84	2.24	0.45	2.4	0.75	7.14	13.95
S1639	6/12/00	6/12/00	38.2	J - (-4) OB #1	-1.01	1.44	4.13	0.38	2.39	0.59	15.91	11.05
S1640	6/12/00	6/12/00	33.4	J - (-4) OB #2	1.78	1.44	3.82	0.37	2.1	0.58	7.21	10.76
S1641	6/12/00	6/12/00	32.4	J - (-4) OB #3	-0.54	1.53	3.61	0.4	1.24	0.62	29.58	12.29
S1642	6/12/00	6/12/00	35.3	J - (-4) OB #4	0.06	1.8	3.56	0.47	2.08	0.74	25.64	14.29
S1643	6/12/00	6/12/00	34.7	J - (-4) OB #5	0.95	1.54	3.84	0.4	1.37	0.62	16.86	11.84
S1644	6/12/00	6/12/00	36.8	J - (-4) OB QC	0.57	2.17	5.2	0.56	2.69	0.87	18.86	15.41
S1801	6/28/00	6/28/00	30	J.5 - (-0.5) 2ND LIFT	-0.26	1.63	1.01	0.41	1.59	0.7	12.89	13.81
S1808	6/29/00	6/29/00	30.5	J.5 - (-0.5) 3RD LIFT	2.34	1.66	0.82	0.39	0.05	0.66	27.38	14.11
S1810	6/29/00	6/29/00	33.5	J.5 - (-0.5) FLOOR	1.2	1.69	0.75	0.41	0.81	0.71	25.13	14.65

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1802	6/28/00	6/28/00	30.6	J.5 - (-1.5) 2ND LIFT	1.41	2.25	0.88	0.55	1.41	0.95	16.24	18.96
S1809	6/29/00	6/29/00	28.3	J.5 - (-1.5) 3RD LIFT	1.99	1.46	0.11	0.35	1.58	0.62	4.06	12.71
S1768	6/27/00	6/27/00	27.4	J.5 - (-2.5) FLOOR	1.94	1.44	0.79	0.35	1.22	0.6	15.46	12.62
S1803	6/28/00	6/28/00	23.3	J.5 - (-2.5) FLOOR	3.67	1.32	0.76	0.31	2.09	0.54	12.43	10.62
S1790	6/28/00	6/28/00	30.1	J.5 - (-3.5) 2ND LIFT	3.6	1.68	1.34	0.4	2.18	0.68	0.88	13.2
S1793	6/28/00	6/28/00	30.5	J.5 - (-3.5) 2ND LIFT	0.86	1.07	1.5	0.27	1.08	0.45	10.68	9.01
S1789	6/28/00	6/28/00	28.6	J.5 - (-3.5) 3RD LIFT	2.58	1.61	0.7	0.38	0.91	0.66	12.79	13.41
S1796	6/28/00	6/28/00	29.5	J.5 - (-3.5) 3RD LIFT	1.27	1.43	1.72	0.36	0.9	0.59	-7.14	11.36
S1798	6/28/00	6/28/00	29.8	J.5 - (-3.5) FLOOR	1.8	1.98	0.81	0.49	1.61	0.82	12.67	15.96
S1791	6/28/00	6/28/00	28.3	J.5 - (-4) 2ND LIFT	-0.28	1.65	0.74	0.41	1.63	0.72	2.37	14.25
S1794	6/28/00	6/28/00	30.8	J.5 - (-4) 2ND LIFT	0.3	1.67	0.98	0.41	2.02	0.7	21.81	14.1
S1788	6/28/00	6/28/00	29.6	J.5 - (-4) 3RD LIFT	-0.85	1.4	0.38	0.35	1.45	0.62	24.48	12.88
S1797	6/28/00	6/28/00	30.6	J.5 - (-4) 3RD LIFT	0.85	1.39	0.6	0.34	1.48	0.6	17.58	11.99
S1799	6/28/00	6/28/00	24.3	J.5 - (-4) FLOOR	1.29	1.13	0.11	0.27	3.75	0.49	12.26	9.48
S1792	6/28/00	6/28/00	28.6	J.5 - (-4.5) 2ND LIFT	2.01	1.62	0.05	0.38	1.51	0.69	2.82	13.7
S1795	6/28/00	6/28/00	27.1	J.5 - (-4.5) 2ND LIFT	1.34	1.92	1.6	0.48	1.31	0.79	-0.49	15.2
S1787	6/28/00	6/28/00	29.8	J.5 - (-4.5) 3RD LIFT	0.54	1.32	-0.11	0.32	1.52	0.59	23.34	12.41
S1800	6/28/00	6/28/00	21.6	J.5 - (-4.5) FLOOR	1.21	1.41	0.81	0.34	1.67	0.59	16.12	11.94
S1785	6/28/00	6/28/00	22.5	J.5 - (-5.5) FLOOR	0.31	1.24	0.67	0.31	3.21	0.54	13.52	10.64
S1786	6/28/00	6/28/00	22.1	J.5 - (-6) FLOOR	1.72	1.13	1.2	0.28	1.29	0.46	7.24	9.25
S1778	6/27/00	6/28/00	29.8	J.5 - (-6.5) 2ND LIFT	0.66	1.73	0.29	0.43	1.62	0.75	10.23	15.36
S1777	6/27/00	6/28/00	20.1	J.5 - (-6.5) FLOOR	-0.11	1.53	1.19	0.38	1.15	0.64	21.81	12.91
S1779	6/27/00	6/28/00	30.9	J.5 - (-7) 2ND LIFT	0.5	1.69	0.27	0.42	1.52	0.76	-6.71	14.69
S1784	6/27/00	6/28/00	21	J.5 - (-7) FLOOR	3.09	1.24	0.73	0.3	2.5	0.52	-4.96	9.95
S1780	6/27/00	6/28/00	31.7	J.5 - (-7.5) 2ND LIFT	1.11	1.78	0.99	0.44	0.67	0.74	-5.71	14.8
S1783	6/27/00	6/28/00	17.7	J.5 - (-7.5) FLOOR	0.7	1.76	0.41	0.42	1.56	0.75	28.2	15.37
S1812	6/29/00	6/29/00	29.8	K - (- 4) 2ND LIFT	0.94	1.57	0.42	0.38	1.43	0.68	16.91	13.79
S1684	6/14/00	6/14/00	33.6	K - 0 EPA #1	0.38	1.08	1.61	0.27	1.31	0.45	32.45	9.31
S1685	6/14/00	6/14/00	33.4	K - 0 EPA #2	1.02	1.61	1.48	0.41	1.83	0.69	-2.02	13
S1686	6/14/00	6/14/00	33.7	K - 0 EPA #3	2.66	1.9	2.69	0.48	2.1	0.77	-9.16	14.16
S1687	6/14/00	6/14/00	34.4	K - 0 EPA #4	0.79	1.63	1.69	0.41	1.32	0.68	17.46	13.47
S1688	6/14/00	6/14/00	35	K - 0 EPA #5	2.31	1.3	1.37	0.32	1.63	0.54	20.54	10.74
S1689	6/14/00	6/14/00	35.4	K - 0 EPA #6	1.37	1.5	1.67	0.38	1.17	0.62	15.74	12.38
S1614	6/8/00	6/8/00	35.4	K- (-2) OB #1	3.19	1.6	1.92	0.39	0.34	0.63	12.31	12.98
S1524	6/1/00	6/1/00	37.5	K-(-1)OB #1	1.12	1.34	-0.16	0.32	1.31	0.58	4.58	12.08
S1525	6/1/00	6/1/00	38.4	K-(-1)OB #2	-0.51	0.81	0.34	0.21	1	0.36	15.2	7.72
S1526	6/1/00	6/1/00	38.1	K-(-1)OB #3	0.19	0.92	0.52	0.23	0.33	0.39	32.9	8.49
S1527	6/1/00	6/1/00	39.5	K-(-1)OB #4	-0.95	1.43	0.76	0.36	1.15	0.63	3.88	12.37
S1528	6/1/00	6/1/00	37	K-(-1)OB #5	0.74	1.44	0.41	0.35	1.93	0.62	20.8	12.53
S1529	6/1/00	6/1/00	37.3	K-(-1)OB QC	3.45	0.97	-0.35	0.22	2.67	0.41	26.97	8.4
S1666	6/14/00	6/14/00	33.1	K-(-2) EPA #1	2.57	1.71	1.81	0.42	1.58	0.69	8.09	13.01
S1667	6/14/00	6/14/00	32.3	K-(-2) EPA #2	2.76	1.93	2.15	0.47	1.36	0.77	26.1	15.11
S1668	6/14/00	6/14/00	31.9	K-(-2) EPA #3	0.66	1.71	2.04	0.43	1.65	0.71	16.83	13.67
S1669	6/14/00	6/14/00	33.4	K-(-2) EPA #4	3.05	1.45	1.55	0.35	2.77	0.59	2.08	11.06
S1670	6/14/00	6/14/00	32.9	K-(-2) EPA #5	0.95	1.48	2.48	0.38	0.84	0.6	42.37	12.5
S1671	6/14/00	6/14/00	33.1	K-(-2) EPA #6	0.89	2.2	2.41	0.55	1.68	0.9	22.75	17

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1542	6/5/00	6/5/00	38.8	K-(-2)OB #1	3.96	2.29	5.97	0.58	2.74	0.87	33.21	16.09
S1543	6/5/00	6/5/00	40.3	K-(-2)OB #2	1.97	1.46	2.47	0.36	2.05	0.59	17.62	11.15
S1544	6/5/00	6/5/00	40	K-(-2)OB #3	0.39	1.57	1.82	0.41	-0.48	0.65	15.14	13.66
S1545	6/5/00	6/5/00	40.1	K-(-2)OB #4	1.1	2.24	0.63	0.55	2.46	0.96	-6.86	17.53
S1546	6/5/00	6/5/00	38.5	K-(-2)OB #5	0.32	1.85	1.8	0.47	0.63	0.75	41.67	15.69
S1547	6/5/00	6/5/00	39	K-(-2)OB QC	2.16	1.47	1.87	0.36	1.46	0.6	21.85	12.01
S1654	6/14/00	6/14/00	32.8	K-(-4) EPA #1	0.83	1.55	2.79	0.4	0.89	0.63	23.56	12.6
S1655	6/14/00	6/14/00	33.8	K-(-4) EPA #2	-1.13	1.66	3.14	0.44	2.71	0.7	11.12	12.95
S1656	6/14/00	6/14/00	34.9	K-(-4) EPA #3	2.42	1.29	2.12	0.32	3.67	0.53	-4.45	9.92
S1657	6/14/00	6/14/00	32.5	K-(-4) EPA #4	1.6	1.77	2.62	0.45	0.73	0.71	28.68	14.15
S1658	6/14/00	6/14/00	33.2	K-(-4) EPA #5	0.3	1.99	2.6	0.51	1.98	0.82	25.55	15.49
S1659	6/14/00	6/14/00	32.8	K-(-4) EPA #6	0.35	1.51	2.93	0.39	0.99	0.61	7.64	11.64
S1539	6/5/00	6/5/00	36	K-(-6) #4	1.86	2.09	3.11	0.52	1.16	0.82	40.9	16.08
S1563	6/6/00	6/6/00	35.8	K-(-6) EPA #1	1.07	1.58	2.23	0.4	1.53	0.65	43.62	13.21
S1564	6/6/00	6/6/00	36.6	K-(-6) EPA #2	3.19	1.7	2.88	0.42	1.78	0.67	2.64	12.41
S1565	6/6/00	6/6/00	35.8	K-(-6) EPA #3	0.42	1.74	2.5	0.44	1.36	0.71	13.15	14
S1566	6/6/00	6/6/00	36.6	K-(-6) EPA #4	1.5	1.66	2.48	0.41	1.75	0.67	40.32	13.06
S1567	6/6/00	6/6/00	35.7	K-(-6) EPA #5	1.34	1.58	2.07	0.4	0.97	0.64	35.05	13.03
S1568	6/6/00	6/6/00	36.7	K-(-6) EPA #6	1.27	1.68	2.99	0.43	2.91	0.7	4.79	12.84
S1538	6/5/00	6/5/00	36	K-(-7) #3	0.77	1.2	1.16	0.3	2.75	0.51	29.49	10.06
S1569	6/6/00	6/6/00	35.5	K-(-7.5) EPA #1	0.79	1.75	2.11	0.44	1.87	0.72	26.33	14.35
S1570	6/6/00	6/6/00	35	K-(-7.5) EPA #2	-0.21	1.52	1.95	0.38	1.64	0.63	24.47	12.58
S1571	6/6/00	6/6/00	36.7	K-(-7.5) EPA #3	3.98	2.25	2.45	0.55	1.15	0.87	13.09	16.54
S1572	6/6/00	6/6/00	36.7	K-(-7.5) EPA #4	2.36	1.52	1.88	0.37	2.04	0.62	14.95	11.86
S1573	6/6/00	6/6/00	34.7	K-(-7.5) EPA #5	2.92	1.51	1.7	0.37	2.06	0.62	19.12	12.1
S1574	6/6/00	6/6/00	34.6	K-(-7.5) EPA #6	-1.19	1.47	2.41	0.38	1.32	0.61	54.24	12.71
S2618	10/31/00	10/31/00	20.6	K-(-8)-8'	-0.08	1.31	0.34	0.36	1.73	0.61	22.83	11.61
S1818	6/30/00	6/30/00	27.7	K.5 - (- 0.5) 2ND LIFT	1.45	1.34	0.87	0.33	1.62	0.57	12.27	11.55
S1819	6/30/00	6/30/00	30.6	K.5 - (- 0.5) 3RD LIFT	0.6	1.73	0.01	0.41	2.68	0.76	13.9	14.98
S1828	6/30/00	6/30/00	34	K.5 - (- 0.5) FLOOR	2.22	1.71	0.48	0.41	0.87	0.7	24.67	14.81
S1817	6/29/00	6/29/00	19.9	K.5 - (- 4) FLOOR	1.85	1.6	1.08	0.39	1.42	0.66	29.02	13.71
S1814	6/29/00	6/29/00	21.8	K.5 - (- 5) FLOOR	2.73	1.41	0.28	0.33	2.33	0.58	30.64	11.85
S1813	6/29/00	6/29/00	32.6	K.5 - (- 5.5) 3RD LIFT	0.07	1.42	0.52	0.35	1.77	0.62	0.1	12.29
S1816	6/29/00	6/29/00	31	K.5 - (-3.5) 3RD LIFT	0.37	1.36	0.71	0.34	0.95	0.58	4.1	12.09
S1805	6/29/00	6/29/00	34.9	K.5 - (-5.5) 2ND LIFT	-0.58	1.6	0.61	0.4	1.45	0.7	13.2	14.12
S1804	6/29/00	6/29/00	30.4	K.5 - (-7) 2ND LIFT	1.13	1.85	1.03	0.46	0.13	0.78	0.77	16.06
S1806	6/29/00	6/29/00	29.6	K.5 - (-7) 3RD LIFT	-0.46	1.22	0.14	0.3	1.31	0.54	23.34	11.33
S1820	6/30/00	6/30/00	23.4	L - (- 2.5) FLOOR	0.88	1.35	0.82	0.33	2.29	0.58	3.25	11.33
S1811	6/29/00	6/29/00	21.5	L - (-7) FLOOR	0.63	1.62	0.91	0.39	2.36	0.68	26.58	13.23
S2617	10/31/00	10/31/00	18.6	L-(-7)-8'	2.55	1.69	0.69	0.46	2.56	0.77	13.23	13.87
S1815	6/29/00	6/29/00	30.5	L.5 - (- 2.5) 2ND LIFT	-1.71	1.28	0.38	0.33	1.46	0.58	22.18	12.01
S1821	6/30/00	6/30/00	31	L.5 - (- 2.5) FLOOR	-1.22	1.62	0.55	0.4	1.14	0.71	33.04	14.07
S1829	6/30/00	6/30/00	20.2	M - (- 5) FLOOR	2.36	1.35	0.43	0.31	2.51	0.56	32.39	11.27
S1822	6/30/00	6/30/00	29.1	M - (- 6) 2ND LIFT	0.83	1.77	0.85	0.43	-0.21	0.73	12.21	15.45
S1826	6/30/00	6/30/00	31.3	M - (- 7.5) 3RD LIFT	0.56	1.46	0.28	0.36	1.68	0.63	13.88	12.92
S1832	7/3/00	7/3/00	32.3	M - (0.5) 4.5 FEET	8.58	3.44	15.98	0.88	4.63	1.23	27.51	19.41

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1833	7/3/00	7/3/00	33.8	M - (0.5) 5 FEET	12.76	2.49	16.32	0.62	7.62	0.89	18.01	13.51
S1834	7/3/00	7/3/00	30.8	M - (-1) 2ND LIFT	0.86	1.64	1.82	0.41	0.45	0.66	28.84	13.58
S1835	7/3/00	7/3/00	32.4	M - (-3) 3RD LIFT	0.3	1.16	0.69	0.29	3.26	0.51	13.04	9.98
S1678	6/14/00	6/14/00	35.8	M - 0 EPA #1	3.4	1.83	2.34	0.45	2.4	0.73	6.72	13.46
S1679	6/14/00	6/14/00	36	M - 0 EPA #2	1.48	1.53	2.55	0.39	1.96	0.62	29.93	12.04
S1680	6/14/00	6/14/00	36.1	M - 0 EPA #3	1.36	1.57	2.24	0.39	2.3	0.65	22.49	12.35
S1681	6/14/00	6/14/00	33.2	M - 0 EPA #4	1.45	1.43	2.39	0.36	2.26	0.59	10.84	11.08
S1682	6/14/00	6/14/00	36.5	M - 0 EPA #5	2.16	1.78	2.39	0.44	1.63	0.71	22.33	13.84
S1683	6/14/00	6/14/00	34.6	M - 0 EPA #6	1.56	1.72	3.12	0.44	2.54	0.7	11.98	12.95
S1605	6/7/00	6/7/00	31.3	M-(-1) OB #1	1.59	2.04	1.14	0.5	1.19	0.85	10.19	16.59
S1606	6/7/00	6/7/00	29.5	M-(-1) OB #2	1.34	1.21	0.86	0.3	0.71	0.51	15.41	10.52
S1607	6/7/00	6/7/00	32.9	M-(-1) OB #3	-0.51	1.24	0.23	0.31	1.07	0.55	22.31	11.74
S1608	6/7/00	6/7/00	32.4	M-(-1) OB #4	0.56	1.54	0.21	0.38	1.97	0.67	26.33	13.95
S1609	6/7/00	6/7/00	33.6	M-(-1) OB QC	-1.06	1.52	1.2	0.39	0.35	0.66	16.59	13.65
S1516	6/1/00	6/1/00	38.3	M-(-2) #1	2.71	1.79	5.52	0.46	1.15	0.69	29.83	12.88
S1517	6/1/00	6/1/00	35.1	M-(-2) #2	2.1	1.37	1.74	0.34	0.55	0.56	10.62	11.36
S1518	6/1/00	6/1/00	44.7	M-(-2) #3	1.95	1.09	1.52	0.27	0.31	0.44	14.18	9.23
S1519	6/1/00	6/1/00	40.2	M-(-2) #4	0.34	1.35	0.82	0.34	1.41	0.58	13.05	11.58
S1520	6/1/00	6/1/00	42	M-(-2) #5	-0.03	1.47	0.77	0.36	1	0.62	52.63	13.11
S1672	6/14/00	6/14/00	31.3	M-(-2) EPA #1	0.96	1.71	1.79	0.43	1.07	0.71	22.1	14.6
S1673	6/14/00	6/14/00	30.8	M-(-2) EPA #2	3.69	2.36	4.99	0.59	3.36	0.91	37.51	16.75
S1674	6/14/00	6/14/00	32.4	M-(-2) EPA #3	-1.01	1.12	1.3	0.28	1.78	0.48	37.64	9.78
S1675	6/14/00	6/14/00	33.2	M-(-2) EPA #4	2.15	1.58	1.56	0.38	2.13	0.64	21.53	12.65
S1676	6/14/00	6/14/00	34.3	M-(-2) EPA #5	-1.2	1.96	1.81	0.5	1.36	0.82	58.67	16.84
S1677	6/14/00	6/14/00	34.1	M-(-2) EPA #6	-1.32	1.44	1.43	0.38	1.75	0.63	26.62	12.81
S1521	6/1/00	6/1/00	41.2	M-(-2) QC	3.65	1.99	1.68	0.48	2.2	0.79	18.8	15.29
S1660	6/14/00	6/14/00	35.4	M-(-4) EPA #1	0.77	1.72	1.86	0.44	1.47	0.72	19.15	14.38
S1661	6/14/00	6/14/00	36.3	M-(-4) EPA #2	3.06	1.97	1.86	0.49	2.52	0.81	-0.28	15.45
S1662	6/14/00	6/14/00	36.1	M-(-4) EPA #3	1.31	1.06	0.97	0.26	2.84	0.45	32.68	8.9
S1663	6/14/00	6/14/00	35.7	M-(-4) EPA #4	-0.15	2.08	2.16	0.53	1.91	0.87	30.84	16.84
S1664	6/14/00	6/14/00	35.9	M-(-4) EPA #5	2.85	1.9	2.52	0.47	1.11	0.75	19.84	14.52
S1665	6/14/00	6/14/00	36.5	M-(-4) EPA #6	2.22	1.66	1.41	0.4	1.94	0.68	19.4	13.64
S1541	6/5/00	6/5/00	36.7	M-(6) #6	1.86	1.44	1.24	0.36	2.77	0.61	10.28	11.82
S1581	6/6/00	6/6/00	36.2	M-(-6) EPA #1	2.08	1.71	1.42	0.42	1.73	0.7	17.24	13.87
S1582	6/6/00	6/6/00	32.1	M-(-6) EPA #2	1.61	1.07	1.88	0.27	0.49	0.43	34.21	9.18
S1583	6/6/00	6/6/00	36.3	M-(-6) EPA #3	1.83	1.9	1.36	0.46	2.46	0.78	26.04	15.21
S1584	6/6/00	6/6/00	36.5	M-(-6) EPA #4	1.12	1.89	2.61	0.47	0.8	0.75	36.36	15.41
S1585	6/6/00	6/6/00	35.5	M-(-6) EPA #5	0.21	1.25	2	0.32	1.41	0.52	21.15	10.52
S1586	6/6/00	6/6/00	34.7	M-(-6) EPA #6	-0.11	1.36	1.9	0.35	1.01	0.57	27.18	11.66
S1540	6/5/00	6/5/00	36.7	M-(-7) #5	3.08	1.45	0.67	0.34	1.38	0.59	5.8	11.63
S1610	6/7/00	6/7/00	37.9	M-(-7) OB #1	0.55	1.32	2.67	0.34	1.33	0.54	20.98	10.9
S1611	6/7/00	6/7/00	37.9	M-(-7) OB #2	1.54	1.36	1.01	0.33	0.81	0.56	31.34	11.69
S1612	6/7/00	6/7/00	39.3	M-(-7) OB #3	-1.5	1.31	3.3	0.36	1.45	0.56	12.86	10.79
S1613	6/7/00	6/7/00	37.6	M-(-7) OB QC	2.02	1.7	2.8	0.42	0.27	0.67	33.67	13.95
S1575	6/6/00	6/6/00	35.4	M-(-7.5) EPA #1	1.04	1.44	0.35	0.34	1.98	0.61	26.3	12.34
S1576	6/6/00	6/6/00	37.8	M-(-7.5) EPA #2	1.55	1.31	0.5	0.31	1.61	0.55	13.15	11.06

Area A

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1577	6/6/00	6/6/00	38.1	M-(-7.5) EPA #3	1.22	1.52	0.79	0.37	0.71	0.63	43.08	13.51
S1578	6/6/00	6/6/00	35	M-(-7.5) EPA #4	2.18	1.31	0.64	0.31	1.42	0.54	9.56	11.13
S1579	6/6/00	6/6/00	35.2	M-(-7.5) EPA #5	1.18	1.53	0.55	0.37	2.83	0.65	24.23	12.79
S1580	6/6/00	6/6/00	35.5	M-(-7.5) EPA #6	2.13	1.96	0.62	0.47	1.48	0.84	18.37	17.38
S1823	6/30/00	6/30/00	30.5	M.5 - (- 4.5) 2ND LIFT	1.77	0.83	0.46	0.2	0.98	0.35	17.94	7.33
S1825	6/30/00	6/30/00	32.2	M.5 - (- 4.5) 3RD LIFT	2.23	1.42	0.32	0.34	0.74	0.58	24.77	12.4
S1830	6/30/00	6/30/00	22.9	M.5 - (- 5.5) FLOOR	2.99	1.45	0.83	0.35	2.18	0.6	11.13	11.72
S1827	6/30/00	6/30/00	30.4	M.5 - (- 6) 3RD LIFT	-0.35	1.35	0.44	0.34	1.26	0.59	16.29	12.19
S1824	6/30/00	6/30/00	30.2	M.5 - (- 7.5) 2ND LIFT	0.05	1.42	0.12	0.35	1.73	0.64	2.61	12.52
S1831	6/30/00	6/30/00	20.7	M.5 - (- 7.5) FLOOR	0.69	0.99	0.77	0.25	1.94	0.42	11	8.58
S1838	7/3/00	7/3/00	31.6	M.5 - (-0.5) FLOOR	0.63	1.73	0.57	0.42	1.4	0.75	9.54	14.86
S1837	7/3/00	7/3/00	33.5	M.5 - (-1) FLOOR	1.94	1.21	0.33	0.29	0.83	0.51	15.27	10.73
S1836	7/3/00	7/3/00	30.2	M.5 - (-1.5) 3RD LIFT	0.21	1.12	2.52	0.29	1.66	0.46	21.13	9.08
S1845	7/11/00	7/11/00	31.6	M.5 - (-3.5) 2ND LIFT	0.08	1.37	0.62	0.34	1.59	0.59	8.86	11.88
S1839	7/3/00	7/3/00	25.8	M.5 - (-3.5) FLOOR	-0.11	1.5	0.55	0.37	2.12	0.65	23.39	13.18
S1615	6/8/00	6/8/00	37.3	M.7 - (-4) EZ	64.36	27.91	250.11	7.1	64.37	9.48	-9.13	104.72

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location/Notes	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	Ra-226Result	+/-	K-40Result	+/-
S1025	NOT USED	NOT USED	0	(NOT USED)	NOT USED		NOT USED		NOT USED		NOT USED	
S2531	10/12/00	10/12/00	32.2	COM ED #1 Grand Pier	1.62	1.34	-0.1	0.36	0.92	0.63	36.88	12.55
S2532	10/12/00	10/12/00	37	COM ED #2 Grand Pier Verification	-1.03	1	0.64	0.28	0.27	0.46	26.36	9.08
S2533	10/12/00	10/12/00	27	COM ED #3 Grand Pier Verification	1.44	1.38	1.08	0.39	2.69	0.65	-10.96	11.28
S1212	5/8/00	5/8/00	35.9	DEBRIS FROM STREET SWEEPER	-2.48	2.06	0.5	0.51	2.36	0.9	66.43	18.71
S2613	10/27/00	10/27/00	49.2	EFFLUENT SEDIMENT 1 Grand Pier	-1.08	1.34	0.63	0.38	0.38	0.63	24.76	12.28
S2614	10/27/00	10/27/00	47.2	EFFLUENT SEDIMENT 2 Grand Pier	6.09	1.45	-0.17	0.38	0.94	0.64	10.54	12.68
S2615	10/27/00	10/27/00	24.1	EFFLUENT WATER 1 Grand Pier	1.42	1.11	-0.47	0.3	1.4	0.53	-13.57	10.14
S2616	10/27/00	10/27/00	23.7	EFFLUENT WATER 2 Grand Pier	-0.1	1.79	-0.67	0.49	1.22	0.88	13.29	17.68
S1335	5/22/00	5/22/00	34.2	EXCAVATOR TRACKS	2.07	1.32	0.98	0.32	2.75	0.56	15.58	10.67
S1872	7/14/00	7/14/00	33.2	IMPORT MATERIAL #1 Grand Pier	1.62	1.71	0.7	0.42	2.52	0.72	12.12	13.76
S1873	7/14/00	7/14/00	32.1	IMPORt MATERIAL #2 Grand Pier	1.69	1.39	1.11	0.33	-0.44	0.56	38	12.14
S1874	7/14/00	7/14/00	35.2	IMPORT MATERIAL #3 Grand Pier	-1.16	1.45	0.02	0.36	1.98	0.65	30.64	13.37
S1522	6/1/00	6/1/00	36.5	M - 10 Import Material	1.59	1.26	0.19	0.29	-0.04	0.53	35.56	11.72
S1523	6/1/00	6/1/00	37.3	M - 10 Import Material	0.66	0.93	0.64	0.23	0.71	0.41	12.1	8.58
S2620	11/2/00	11/2/00	35.1	NIGAS (-3') Right-of-WaySouth of N-8	0.23	1.64	-0.26	0.45	2.93	0.78	6.45	14.34
S2619	11/2/00	11/2/00	37.5	NIGAS (-3.5) Right-of-Way South of N-8	1.68	1.34	-0.1	0.36	1.88	0.63	8.88	11.95
S1702	6/15/00	6/15/00	3.2	OIL FROM TANK Grand Pier	0	0.86	0.02	0.21	0.12	0.38	0.69	8.11
S1728	6/19/00	6/19/00	33.9	OILY STOCK #1 Grand Pier	1.49	1.42	2.41	0.36	1.75	0.58	-1.47	11.04
S1729	6/19/00	6/19/00	28.2	OILY STOCK #2 Grand Pier	1.91	1.09	1.28	0.27	0.59	0.45	30.89	9.44
S1730	6/19/00	6/19/00	31.5	OILY STOCK #3 Grand Pier	1.24	1.49	1.04	0.36	1.99	0.63	3.74	12.11
S1731	6/19/00	6/19/00	29.1	OILY STOCK #4 Grand Pier	2.52	1.88	2.95	0.47	1.86	0.75	12.9	14.28
S1708	6/15/00	6/15/00	44.2	SLUDGE FROM TANK Grand Pier	2.57	1.36	1.55	0.33	1.38	0.55	8.65	10.74
S1334	5/18/00	5/18/00	40.1	SPILL MATERIAL Grand Pier	1.56	2.78	12.42	0.73	5.5	1.06	41.64	17.69
S1087	4/24/00	4/25/00	30.4	STOCKPILE #1 Grand Pier - Fuel	-2.52	2.98	1.9	0.75	2.71	1.25	58.46	24.6
S1088	4/24/00	4/25/00	34.3	STOCKPILE #2 Grand Pier - Fuel	-3.52	2.13	1.66	0.55	2.36	0.93	54.63	18.99
S1089	4/24/00	4/25/00	34.2	STOCKPILE #3 Grand Pier - Fuel	-3.87	3.01	3.13	0.78	2.37	1.26	79.61	25.21
S1090	4/24/00	4/25/00	31.8	STOCKPILE #4 Grand Pier - Fuel	-5.84	3.31	9.11	0.89	4.1	1.32	85.87	23.92
S1094	4/25/00	4/25/00	33.3	STOCKPILE 2ND SET #1 Grand Pier - Fuel	-1.95	2.03	6.66	0.54	1.7	0.8	43.31	14.86
S1095	4/25/00	4/25/00	30.5	STOCKPILE 2ND SET #2 Grand Pier - Fuel	1.91	2.49	4.72	0.63	1.99	0.96	34.54	17.91
S1096	4/25/00	4/25/00	32.6	STOCKPILE 3RD SET #1 Grand Pier - Fuel	-1.01	2.04	1.57	0.51	1.63	0.86	43.21	17.69
S1097	4/25/00	4/25/00	32	STOCKPILE 3RD SET #2 Grand Pier - Fuel	-2.6	2.44	3.24	0.62	2.8	1	67.92	19.69
S1098	4/25/00	4/25/00	32.7	STOCKPILE 3RD SET #3 Grand Pier - Fuel	-1.99	1.51	1.97	0.39	1.99	0.64	44.96	12.97
S1072	4/24/00	4/24/00	34.1	STOCKPILE Grand Pier - Fuel	1.2	2.6	0.95	0.62	4.44	1.07	56.47	21.22
S1091	4/24/00	4/25/00	33	STOCKPILE QC OF #2 Grand Pier - Fuel	-4.33	2.82	2.19	0.73	2.49	1.22	80.85	24.77
S1703	6/15/00	6/15/00	24.6	TANK WATER #1 Grand Pier	0.63	0.93	-0.14	0.23	0.49	0.42	6.2	8.95
S1704	6/15/00	6/15/00	21.1	TANK WATER #2 Grand Pier	-0.29	0.96	-0.12	0.24	0.35	0.44	-2.14	9.4
S1705	6/15/00	6/15/00	22.9	TANK WATER #3 Grand Pier	-0.48	0.82	-0.05	0.21	0.38	0.37	4.26	7.94
S1706	6/15/00	6/15/00	23.6	TANK WATER #4 Grand Pier	0.47	0.88	-0.1	0.22	0.45	0.39	-3.86	8.37
S1707	6/15/00	6/15/00	24.3	TANK WATER #5 Grand Pier	0.86	0.87	0.04	0.21	0.36	0.38	-2.51	7.88

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1000	03/27/2000	03/31/2000	33.4	D-23.5	1.16	1.47	1.71	0.37	1.27	0.61	22.91	12.61
S1001	03/27/2000	03/31/2000	33.9	I-22.3	2.24	1.28	1.9	0.32	1.91	0.52	34.91	10.41
S1002	03/27/2000	03/31/2000	36.8	G-26.5 (E)	-0.88	1.51	1.35	0.39	2.77	0.65	40.02	13
S1003	03/27/2000	03/31/2000	36.6	G-26.5 (W)	2.7	1.53	1.45	0.37	4.67	0.63	61.07	12.41
S1004	03/27/2000	03/31/2000	36.5	J-25	22.56	28.04	26.05	6.76	277.08	12.45	70.11	138.99
S1005	03/27/2000	03/31/2000	32.9	K-24	2.55	2.12	11.66	0.55	3.11	0.78	43.44	13.33
S1006	03/27/2000	03/31/2000	34.2	H-6	0.13	1.24	0.6	0.31	0.62	0.53	24.92	11.9
S1007	03/27/2000	03/31/2000	30.4	G.5-3	-6.96	6.6	62.2	1.78	6.4	2.29	38.7	30.8
S1008	03/27/2000	03/31/2000	30.9	G.8-3	3.13	1.84	2.67	0.46	2.29	0.73	8.99	13.98
S1009	03/27/2000	03/31/2000	29.2	G.8-2.5	1.54	2.7	21.64	0.71	3.64	0.97	29.3	15.26
S1010	04/04/2000	04/04/2000	30.4	D.5-12.5	2.02	1.67	1.79	0.41	1.23	0.67	35.66	13.69
S1011	04/04/2000	04/04/2000	34.5	E-12	1.06	1.19	1.54	0.3	1.52	0.49	20.94	10.24
S1012	04/04/2000	04/04/2000	30.8	D-12	0.97	1.34	0.94	0.39	2.59	0.58	29.29	11.78
S1013	04/05/2000	04/05/2000	26.9	A.2-27	83.15	81.98	203.36	20.38	60.52	26.97	374.6	530.56
S1014	04/05/2000	04/05/2000	18.8	G-27	-491.59	1155.91	1190.18	294.24	2893.82	477.31	4457.56	5370.26
S1015	04/06/2000	04/06/2000	39.1	SAND G-27	-1.65	1.53	0.71	0.38	1.09	0.66	57.75	13.09
S1016	04/06/2000	04/06/2000	31.9	G.8-26.5	1.28	1.52	3.72	0.39	5.37	0.62	40.44	11.46
S1017	04/06/2000	04/06/2000	28.7	G.5-26.4	-3.66	1.41	3.12	0.38	5.73	0.62	27.69	11.46
S1018	04/06/2000	04/06/2000	24.2	F.5-26.8	0.67	1.74	0.58	0.42	4.02	0.75	42.53	14.41
S1019	04/06/2000	04/06/2000	20.1	F.8-26.5	-1.68	1.56	0.32	0.39	1.98	0.71	25.78	14.45
S1020	04/06/2000	04/06/2000	29.4	G.9-26.4	0.32	2.34	10.86	0.62	9.55	0.92	55.34	15.67
S1021	04/06/2000	04/06/2000	26.8	G-26	-18.05	7.52	54.5	1.97	75.16	3.03	52.45	37.23
S1022	04/06/2000	04/06/2000	35.7	E.9-26.8	-3	3.16	9.4	0.82	22.27	1.34	54.81	20.2
S1023 KM SAMPLE	04/07/2000	04/07/2000	20	KM-CHECK FROM BEN DH-1	504.56	32.53	115.01	7.03	644.48	12.53	-82.55	133.42
S1024 KM SAMPLE	04/07/2000	04/07/2000	20	KM-CHECK FROM BEN NBL-75	158.96	9.76	4.39	1.96	168.97	3.6	-71.81	41.57
S1025	NOT USED	NOT USED	0	(NOT USED)	NOT USED		NOT USED		NOT USED		NOT USED	
S1026	04/10/2000	04/10/2000	33.4	F.5-26.5	0.24	1.94	1.14	0.47	2.32	0.82	30.45	16.9
S1027	04/10/2000	04/10/2000	21.7	A.3-27	-14.7	9.91	69.83	3.65	14.91	3.52	56.81	45.48
S1028	04/10/2000	04/10/2000	25.8	A.5-26.5	0.47	1.96	3.4	0.49	3.38	0.8	41.66	15.22
S1029	04/10/2000	04/10/2000	26.4	G.2-27	-1407	466.22	1306.34	124.67	3313.34	206.46	2268.8	2254.97
S1030	04/10/2000	04/10/2000	40.1	D.5-11	-2.45	1.96	2.84	0.5	5.48	0.84	57.12	15.75
S1031	04/10/2000	04/10/2000	43.4	E-11.5	-1.67	3.14	2.94	0.78	4.17	1.3	110.27	25.86
S1032	04/10/2000	04/10/2000	39.2	D-10	-2.84	2.68	2.89	0.68	4.03	1.13	80.36	21.79
S1033	04/12/2000	04/13/2000	35.3	C-26 PILE	-1.13	2.4	0.86	0.6	3	1.05	36.85	20.53
S1034	04/12/2000	04/13/2000	32	B.2-25.5 PILE	-1.16	2.37	1.14	0.58	2.64	1	72.66	20.23
S1035	04/12/2000	04/13/2000	32.1	D-26 PILE	-1.72	2.07	0.97	0.51	1.18	0.88	92.82	19.18
S1036	04/12/2000	04/13/2000	33.5	D.3-26.7 PILE	-0.75	2.2	0.58	0.53	3.31	0.96	51.39	19.3
S1037	04/12/2000	04/13/2000	33	D.2-25.5 PILE	-1.1	1.72	0.64	0.43	2.92	0.76	35.58	15.26
S1038	04/12/2000	04/13/2000	32.2	C.5-25.5 PILE	-3.61	2.34	1.56	0.6	2.19	1.02	66.3	21.06
S1039	04/12/2000	04/13/2000	32.7	C.5-25.5 PILE QC	-3.34	2.46	1.06	0.62	3.16	1.08	67.34	21.97
S1040	04/13/2000	04/13/2000	34.1	C-12.5 PILE	-0.97	2.52	2.27	0.64	3.17	1.06	37.29	19.68
S1041	04/13/2000	04/13/2000	31	C-13 PILE	-2.69	2.59	2.67	0.66	2.14	1.09	77.13	21.59
S1042	04/13/2000	04/13/2000	31	E-13 PILE	0.51	2.43	2.48	0.59	2.16	0.96	90.44	19.76

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	U-238 +/-	TH-232 Result	TH-232 +/-	RA-226 Result	RA-226 +/-	K-40 Result	K-40 +/-
S1043	04/13/2000	04/13/2000	34 2	E-13 PILE QC	-0 05	2.55	1 74	0.65	4 71	1.08	45 27	20.8
S1044	04/13/2000	04/13/2000	26 5	G 21 8 CRUST	-0.49	2.37	2 07	0.63	2	0.85	46 7	19.69
S1045	04/13/2000	04/13/2000	32 9	G 21 8 3 FEET DOWN	-2 15	2.85	3 53	0.75	3 02	1.02	60 23	24.08
S1046	04/13/2000	04/13/2000	32 4	G 21 8 1 5 FEET DOWN	-1 49	2.19	0 59	0.58	1 64	0.81	52 52	19.89
S1047	04/14/2000	04/14/2000	29 2	C-22 5	-0 66	15.15	2 53	0.65	2 97	1.09	53 32	17.94
S1048	04/14/2000	04/14/2000	31 9	D-18 5 SPOT CHECK	1 66	3.09	7 28	0.78	3 72	1.16	49 38	20.38
S1049	04/14/2000	04/14/2000	35 1	D-18 5 VERIFICATION	-3 92	1.71	3 9	0.45	3 65	0.78	55.9	14.02
S1050	04/14/2000	04/14/2000	29 5	G-22	-1 98	1.89	2 58	0.49	2.62	0.79	66 22	15.69
S1051	04/14/2000	04/14/2000	30 8	G-24	0 16	1.91	1.16	0.47	2 14	0.81	36 26	15.99
S1052	04/14/2000	04/14/2000	31 4	B-18 5	-1 85	2.15	2 37	0.6	2 93	0.99	28 55	18.81
S1053	04/17/2000	04/17/2000	27 1	F 8-20	-1 43	1.77	2 04	0.46	4 07	0.76	32 61	14.4
S1054	04/18/2000	04/18/2000	35 7	J-23	4 41	2.87	2 06	0.61	9 07	1.06	46 42	18.19
S1055	04/18/2000	04/18/2000	37 3	J-23 1	0 57	2.38	2 17	0.59	0 28	1.01	39 87	18.06
S1056	04/18/2000	04/18/2000	33 5	J 5-23 5	-3 08	1.82	6 36	0.46	1 78	0.72	78 5	14.11
S1057	04/18/2000	04/18/2000	28 4	J 3-23	-1 55	2.09	0 7	0.52	3 75	0.92	59 37	18.21
S1058	04/18/2000	04/18/2000	25 9	G-19 2	0 62	1.86	1 24	0.6	2 57	0.96	51 27	18.79
S1059	04/18/2000	04/18/2000	22	G-18	-1 45	1.55	0 82	0.39	3 26	0.68	64 07	13.97
S1060	04/18/2000	04/18/2000	33 8	D-17 8	-3 17	2.34	10 35	0.66	4 35	0.99	39 61	17
S1061	04/18/2000	04/18/2000	29 3	J 5-23 4	-1 16	1.67	1 9	0.42	2 55	0.71	48 06	13.98
S1062	04/18/2000	04/18/2000	19.8	D-18.5 1 OF 4	0 68	1.96	1 07	0.47	1 97	0.81	64 09	16.99
S1063	04/18/2000	04/18/2000	28 5	D-18 5 2 OF 4	-1.61	2.04	1	0.5	2 96	0.87	59 32	17.28
S1064	04/18/2000	04/18/2000	29 3	D-18 5 3 OF 4	-2 25	1.81	1 21	0.39	2 9	0.68	53	13.61
S1065	04/18/2000	04/18/2000	34 2	D-18 5 4 OF 4	1 74	1.74	2 18	0.42	1 96	0.7	45 09	15.59
S1066	04/19/2000	04/19/2000	34 9	D 18 5	0 15	1.99	3 1	0.5	2 95	0.81	48 68	15.78
S1067	04/19/2000	04/19/2000	37 9	F 9 1	-1 48	3.47	5 57	0.86	13 22	1.46	38 21	22.77
S1068	04/19/2000	04/19/2000	38 2	F 9 2	-1 51	2.1	0 42	0.51	2 54	0.82	66 21	18.82
S1069	04/24/2000	04/24/2000	32 9	K-19, 0 12"	2 84	2.17	1 92	0.56	2 28	0.94	57 13	19.41
S1070	04/24/2000	04/24/2000	33 9	K 19, 12 24"	4 04	2.42	2 02	0.63	1 77	1.04	99 24	22.03
S1071	04/24/2000	04/24/2000	23 3	K-19, 24-36"	-7.09	4.12	16.13	1.11	8 46	1.62	39 89	25.21
S1072	04/24/2000	04/24/2000	34.1	STOCKPILE	1 2	2.6	0 95	0.62	4.44	1.07	56 47	21.22
S1073	04/24/2000	04/24/2000	27 2	J-22 5	-2.58	2.69	0 69	0.67	3 92	1.19	70.37	24.18
S1074	04/24/2000	04/24/2000	31 5	J.5-24	-2.26	2.69	1 96	0.67	3.5	1.15	87.46	23.44
S1075	04/24/2000	04/24/2000	29 6	G.5-17 EPA VERIFICATION	-2.99	3.12	3	0.8	2.85	1.31	78.05	26.17
S1076	04/24/2000	04/24/2000	32.2	G.5-19 EPA-VERIFICATION	-1 65	3.28	1 32	0.81	3.4	1.42	44 31	27.28
S1077	04/24/2000	04/24/2000	34.3	G-27 #1 5' OUT	-6.81	3.17	1.21	0.84	4.27	1.47	86.04	28.78
S1078	04/24/2000	04/24/2000	39.3	G-27 #2 5' OUT	-3.26	3.38	1.08	0.86	2.4	1.48	98.45	31.09
S1079	04/24/2000	04/24/2000	40.3	G-27 #3 5' OUT	-5.22	3.03	1.03	0.86	2.61	1.78	124.28	33.74
S1080	04/24/2000	04/24/2000	39.5	G-27 #4 5' OUT	-4.02	3.07	1.04	0.87	2.55	1.71	93.86	34.91
S1081	04/24/2000	04/24/2000	39.2	G-27#5 1' OUT	-7.1	3.7	1.63	0.97	2.72	1.87	118.17	44.58
S1082	04/24/2000	04/24/2000	40.1	G-27 #6 1' OUT	-7.09	6.48	10.19	1.89	20.36	1.77	83.61	42.12
S1083	04/24/2000	04/24/2000	34.8	G-27 #7 1' OUT	-6.06	3	1.4	0.77	1.06	1.32	120.58	28.53
S1084	04/24/2000	04/24/2000	39.2	G-27 #8 7' OUT	-2.56	3.06	1.26	0.75	2.05	1.3	90.37	27.24
S1085	04/24/2000	04/24/2000	40	G-27 #9 7' OUT	-3.89	3.16	1.13	0.79	2.41	1.37	111.48	28.74

RSSI NUTRAL RESULTS
GRAND PIER PROJECT

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1086	04/24/2000	04/24/2000	37.6	G-27#10 7' OUT	-4.76	3.1	1.29	0.79	1.94	1.37	92.27	28.7
S1087	04/24/2000	04/25/2000	30.4	STOCKPILE #1	-2.52	2.98	1.9	0.75	2.71	1.28	58.46	24.6
S1088	04/24/2000	04/25/2000	34.3	STOCKPILE #2	-3.52	2.13	1.66	0.55	2.36	0.93	54.63	18.99
S1089	04/24/2000	04/25/2000	34.2	STOCKPILE #3	-3.87	3.01	3.13	0.78	2.37	1.26	79.61	25.21
S1090	04/24/2000	04/25/2000	31.8	STOCKPILE #4	-5.84	5.31	9.11	0.89	4.1	1.32	85.87	23.92
S1091	04/24/2000	04/25/2000	33	STOCKPILE QC OF #2	-4.33	2.83	2.19	0.73	2.49	1.22	80.85	24.77
S1092	04/25/2000	04/25/2000	24.1	K-8 0-12"	-3.82	4.39	7.54	1.15	4.13	1.75	48.47	30.44
S1093	04/25/2000	04/25/2000	29.4	K-8 12-24"	-1.41	5.82	36.8	1.53	12.9	2.11	74.71	30.71
S1094	04/25/2000	04/25/2000	33.3	STOCKPILE 2ND SET #1	-1.95	2.03	6.66	0.64	1.7	0.8	43.31	14.86
S1095	04/25/2000	04/25/2000	30.5	STOCKPILE 2ND SET #2	1.91	2.49	4.72	0.63	1.99	0.96	34.54	17.91
S1096	04/25/2000	04/25/2000	32.6	STOCKPILE 3RD SET #1	-1.01	2.04	1.57	0.51	1.63	0.86	43.21	17.69
S1097	04/25/2000	04/25/2000	32	STOCKPILE 3RD SET #2	-2.6	2.44	3.24	0.62	2.8	1	67.92	19.69
S1098	04/25/2000	04/25/2000	32.7	STOCKPILE 3RD SET #3	-1.99	1.51	1.97	0.39	1.99	0.64	44.96	12.97
S1099	04/26/2000	04/26/2000	37.5	G-23 BACKFILL	0.71	2.03	1.14	0.48	2.15	0.82	92.27	17.31
S1100	04/26/2000	04/26/2000	32.3	A-2.8	-1.04	1.47	4.06	0.39	2.19	0.61	30.13	11.79
S1101	04/26/2000	04/26/2000	28.9	H.5-3	-383.51*	93.56	849.41	25.63	163.58	33.95	306.77	376.85
S1102	04/26/2000	04/26/2000	36.7	#1 HOLE G-27	-0.35	1.92	1.01	0.47	2.24	0.8	70.87	16.68
S1103	04/26/2000	04/26/2000	41.4	#2 HOLE G-27	-2.24	1.5	0.83	0.35	0.8	0.65	72.85	14.35
S1104	04/26/2000	04/26/2000	40.1	#3 HOLE G-27	-0.64	1.73	0.57	0.42	1.53	0.75	45.43	15.5
S1105	04/26/2000	04/26/2000	38.7	#4 HOLE G-27	-1.94	1.36	1.58	0.35	1.05	0.58	30.79	11.94
S1106	04/26/2000	04/26/2000	32.9	#5 HOT AREA G-27	0.81	2.14	9.16	0.56	3.66	0.82	41.15	14.33
S1107	04/26/2000	04/26/2000	36.9	#6 HOT AREA G-27	-1.85	1.61	3.83	0.42	1.96	0.66	46.83	12.56
S1108	04/26/2000	04/26/2000	36.1	#7 HOT AREA G-27	1.1	1.47	4.1	0.38	4.61	0.6	17.51	10.86
S1109	04/26/2000	04/26/2000	26	J-18	0.71	2.12	2.08	0.51	1.41	0.85	77.82	17.88
S1110	04/26/2000	04/26/2000	27.6	H.5-16.8	1.84	1.34	2.14	0.33	1.49	0.54	30.79	10.98
S1111	04/26/2000	04/26/2000	27.4	I.2-16	0.83	1.86	2.04	0.45	2	0.76	37.87	14.07
S1112	04/26/2000	04/26/2000	26	J.5-17.2 #1	-38.86	10.39	131.88	2.78	51.72	3.8	111.57	46.71
S1113	04/26/2000	04/26/2000	13.6	J.5-17.2 #2	-23.38	9.59	69.08	2.55	14.31	3.37	31.06	44.8
S1114	04/26/2000	04/27/2000	28.5	A-1 #1	1.83	2.31	5.03	0.58	2.64	0.9	42.06	17.06
S1115	04/26/2000	04/27/2000	33.1	A-3 #1	0.32	2.14	4.19	0.54	2.79	0.85	62.96	16.71
S1116	04/27/2000	04/27/2000	37.1	A-3 #1 SET 2	-0.41	1.6	5.84	0.42	1.67	0.63	54.1	12
S1117	04/27/2000	04/27/2000	31.5	A-1 #1 SET 2	0.1	2.1	3.74	0.53	2.57	0.85	47.13	16.61
S1118	04/27/2000	04/27/2000	35.8	G-27 LESS THAN 1'	-550.64	260.22	585.59	69.64	1343.18	114.65	926.47	1248.47
S1119	04/27/2000	04/27/2000	27.6	G-25 EPA VERIFICATION	-0.51	2.03	0.82	0.5	3.53	0.89	49.19	17.6
S1120	04/27/2000	04/27/2000	32	I-17 EPA VERIFICATION	2.31	2.2	6.08	0.56	3.26	0.85	38.84	15.56
S1121	04/27/2000	04/27/2000	33.3	I-18 EPA VERIFICATION	-2.83	2.03	0.84	0.52	2.67	0.9	55.26	18.45
S1122	04/27/2000	04/27/2000	30.1	A-3 EPA VERIFICATION	-1.93	2.04	3.26	0.52	2.43	0.84	64.57	17.03
S1123	04/27/2000	04/27/2000	32.1	A-3 SPOT EPA VERIFICATION	-1.82	2.67	8.44	0.71	3.33	1.04	46.2	18.59
S1124	04/27/2000	04/27/2000	26.9	A-1	-4.38	1.8	2.61	0.47	2.34	0.77	51.36	15.28
S1125	04/27/2000	04/27/2000	28.4	I-17 #2 EPA VERIFICATION	-1.15	1.82	1.2	0.46	2.81	0.76	65.95	15.99
S1126	04/27/2000	04/27/2000	35.7	A-3 #2	-0.38	2.11	4.22	0.53	3.64	0.85	70.67	15.99
S1127	04/28/2000	04/28/2000	36.4	J-3	-6.44	21.42	220.43	5.6	50.38	7.41	82.1	86.29
S1128	04/28/2000	04/28/2000	35.2	K-4	-51.28	63.83	499.1	16.84	106.35	22.15	149.53	248.04

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	U-238 +/-	TH-232 Result	TH-232 +/-	RA-226 Result	RA-226 +/-	K-40 Result	K-40 +/-
S1129	04/28/2000	04/28/2000	29 2	A-3	-1 3	2.33	2 46	0.58	3 6	0.87	54 87	16.33
S1130	04/28/2000	04/28/2000	34.7	A-3 STREET WALL	-1 2	2.27	4 59	0.56	4.18	0.83	30.83	16.09
S1131	04/28/2000	04/28/2000	38.8	K-1 STOCKPILE	-2 44	3.37	6 53	0.83	3 55	1.04	67.02	24.74
S1132	04/29/2000	04/29/2000	35.6	K-1 STOCKPILE #2	0 14	2.69	5 52	0.79	3 04	0.92	86 19	21.49
S1133	04/29/2000	04/29/2000	35.7	K-1 STOCKPILE #3	-0 74	2.55	4 99	0.74	3 38	0.86	58 05	20.79
S1134	04/29/2000	04/29/2000	32 9	L-23	-1 36	4.14	21 07	1.11	6 05	1.64	78 73	24.36
S1135	04/29/2000	04/29/2000	23 8	N-17.5	-16 56	10.9	71 42	2.5	20.49	5.82	74 34	60.54
S1136	04/29/2000	04/29/2000	41 2	M.5-17	-813.79	296.6	1164 17	84.14	246 56	110.62	976 82	1284.77
S1137	04/29/2000	04/29/2000	30.4	N-16 5	-5 3	14.5513	22.51	1.35	17 95	11.299	77 54	29.97
S1138	04/29/2000	04/29/2000	27 8	M-3 POTHOLE	-1429 3	699 25	5023 83	187.41	574 94	240.49	1962 17	3614.85
S1139	04/29/2000	05/01/2000	40 1	N-16.5 UNDER SOUTH WALL	-7614 6	2116.66	3904 91	820.05	5773 84	967.34	12975 92	10679.98
S1140	05/01/2000	05/01/2000	35 8	M-14 5	-4 98	10.94	33 73	5.7	18 49	4.89	119 18	69.03
S1141	05/01/2000	05/01/2000	32 5	N-14 5	-8 71	6.98	28 92	2.39	10 59	3.81	108 62	50.91
S1142	05/01/2000	05/01/2000	33 3	M-14 2	2698 5	1185 46	4405 86	820.68	3001 39	492.14	5407 91	6071.14
S1143	05/01/2000	05/01/2000	43	M-14 5	-11839	4061.09	5746 46	1160.41	12379 18	1886.91	24711 72	20754.07
S1144	05/02/2000	05/02/2000	31 4	M-14.7 STOCK SAMPLE	-1837 7	696.96	2292 32	179.14	1232 17	362.8	2341 73	2748.09
S1145	05/02/2000	05/02/2000	28 6	J-14 STOCKPILE #1	1 3	1.22	0 24	0.26	2 16	0.82	37 23	10.66
S1146	05/02/2000	05/02/2000	30 9	J-14 STOCKPILE #2	0 79	1.66	0 57	0.44	2 37	0.79	49 43	16.96
S1147	05/02/2000	05/02/2000	31 4	J-14 STOCKPILE #3	0 3	1.66	0 29	0.42	2 51	0.74	39 33	16.36
S1148	05/02/2000	05/02/2000	32 6	J-14 STOCKPILE #4	0 66	1.60	0 55	0.41	2 17	0.73	33 07	14.61
S1149	05/02/2000	05/02/2000	31 4	J-14 STOCKPILE #5	0 69	1.71	1	0.42	2 22	0.72	24 89	14.16
S1150	05/02/2000	05/02/2000	30 3	J-14 STOCKPILE #6	1	1.56	0 59	0.37	2 19	0.60	16 5	12.85
S1151	05/02/2000	05/02/2000	31 9	J-14 STOCKPILE #7	0 57	1.42	0 98	0.36	1 61	0.61	25 93	12.32
S1152	05/03/2000	05/03/2000	28 3	A-3 #1 EPA VERIFICATION	0 32	1.74	2 67	0.45	1 02	0.71	20 23	14.21
S1153	05/03/2000	05/03/2000	30 9	A-3 #2 EPA VERIFICATION	0 4	1.45	1 92	0.36	1 9	0.6	44 18	12.11
S1154	05/03/2000	05/03/2000	29 7	A-3 #3 EPA VERIFICATION	1 11	1.56	2 35	0.39	1 25	0.63	35 23	12.93
S1155	05/03/2000	05/03/2000	29 4	A-3 #4 EPA VERIFICATION	1 55	1.47	1 91	0.36	1 77	0.59	49 94	11.87
S1156	05/03/2000	05/03/2000	31 2	A-3 #5 EPA VERIFICATION	0 95	1.35	2 24	0.35	2 76	0.58	12 35	11.29
S1157	05/03/2000	05/03/2000	30 5	A-3 #6 EPA VERIFICATION	0 28	1.56	2 43	0.39	1 33	0.64	45 44	13.1
S1158	05/03/2000	05/03/2000	34	I-17 #1 EPA VERIFICATION	-2 3	1.78	0 73	0.46	1 41	0.79	28 59	16.22
S1159	05/03/2000	05/03/2000	34 2	I-17 #2 EPA VERIFICATION	-1 25	1.37	0 54	0.34	0 87	0.6	50.17	12.85
S1160	05/03/2000	05/03/2000	33.4	I-17 #3 EPA VERIFICATION	-1 37	1.29	1 86	0.33	-0 52	0.53	34.33	11.36
S1161	05/03/2000	05/03/2000	35 6	I-17 #4 EPA VERIFICATION	2.01	1.73	1.45	0.42	-0 28	0.68	33 96	13.19
S1162	05/03/2000	05/03/2000	34.1	I-17 #5 EPA VERIFICATION	1.05	1.64	0 57	0.39	1.83	0.65	34 53	13.09
S1163	05/03/2000	05/03/2000	35.5	I-17 #6 EPA VERIFICATION	0.05	1.34	1.02	0.36	0.84	0.61	29.93	13.04
S1164	05/03/2000	05/03/2000	33.8	I-18 #1 EPA VERIFICATION	1.08	1.69	0.95	0.4	2.37	0.68	24.64	13.62
S1165	05/03/2000	05/03/2000	34	I-18 #2 EPA VERIFICATION	1.99	1.53	0.09	0.36	2.62	0.64	52.09	13.2
S1166	05/03/2000	05/03/2000	31.5	I-18 #3 EPA VERIFICATION	3.43	1.68	0.54	0.31	1.66	0.64	48.67	11.89
S1167	05/03/2000	05/03/2000	32.5	I-18 #4 EPA VERIFICATION	0.44	1.19	0.69	0.29	1.91	0.61	30.63	10.5
S1168	05/03/2000	05/03/2000	31.4	I-18 #5 EPA VERIFICATION	2.96	1.75	0.11	0.41	2.32	0.76	37.85	15.09
S1169	05/03/2000	05/03/2000	32.3	I-18 #6 EPA VERIFICATION	3.05	1.64	0.93	0.38	2.55	0.69	25.55	13.64
S1170	05/03/2000	05/03/2000	30.1	L-22.5 #1 EPA VERIFICATION	0.64	1.57	1.61	0.42	3.67	0.71	23.15	13.7
S1171	05/03/2000	05/03/2000	31	L-22.5 #2 EPA VERIFICATION	0.29	1.58	2.58	0.4	2.1	0.64	36.5	12.49

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1172	05/03/2000	05/03/2000	29.1	L-22.5 #3 EPA VERIFICATION	-2.86	1.03	2.5	0.27	1.91	0.44	57.67	9.03
S1173	05/03/2000	05/03/2000	32.3	L-22.5 #4 EPA VERIFICATION	-1.91	1.74	2.55	0.46	2.43	0.74	50.11	15.07
S1174	05/03/2000	05/03/2000	30.5	L-22.5 #5 EPA VERIFICATION	0.66	1.38	2.51	0.36	2.09	0.56	33.56	11.14
S1175	05/03/2000	05/03/2000	29.7	L-22.5 #6 EPA VERIFICATION	0.46	1.29	2.18	0.33	1.87	0.53	42.67	10.85
S1176	05/03/2000	05/03/2000	31.9	J-15.5	1.96	4.74	34.53	1.25	8.92	1.68	24.82	24.1
S1177	05/03/2000	05/03/2000	33.9	K-16.2	-0.74	3.75	29.53	1	7.06	1.34	41.33	20.28
S1178	05/04/2000	05/04/2000	29.7	I-14 stockpile #1	0.57	1.37	0.34	0.33	1.59	0.58	48.96	12.44
S1179	05/04/2000	05/04/2000	28.2	I-14 Stockpile #2	-0.41	1.14	0.83	0.29	1.92	0.5	25.62	10.16
S1180	05/04/2000	05/04/2000	31.7	I-17 SCRAPE #1	0.84	1.23	1.25	0.3	1.85	0.51	35.27	10.53
S1181	05/04/2000	05/04/2000	30.2	I-17 SCRAPE #2	0.15	1.22	1.08	0.3	1.42	0.51	45.41	10.89
S1182	05/04/2000	05/04/2000	32.3	I-17 SCRAPE #3	-1.83	1.55	1.28	0.41	1.23	0.68	27.57	14.29
S1183	05/04/2000	05/04/2000	28.8	I-17 SCRAPE #4	1.49	0.94	0.71	0.23	1.48	0.39	40.18	9.35
S1184	05/04/2000	05/04/2000	31.2	I-17 SCRAPE #5	-0.09	1.09	1.42	0.28	1.6	0.47	34.66	9.61
S1185	05/04/2000	05/04/2000	32	I-17 SCRAPE #6	0.78	1.68	1.65	0.42	0.47	0.69	31.47	14.47
S1186	05/04/2000	05/04/2000	32.4	I-17 SCRAPE #QC	-0.17	1.29	1.26	0.33	1.33	0.55	26.54	11.4
S1187	05/04/2000	05/04/2000	32	J-17	-34.41	28.14	304	7.39	113.86	19.05	71.78	113.21
S1188	05/04/2000	05/04/2000	32	L-17	-162.15	53.53	371.11	14.57	135.3	19.85	221.71	225.43
S1189	05/04/2000	05/04/2000	30.4	M-18.5	0.55	1.83	5.68	0.47	3.2	0.71	49.75	13.23
S1190	05/04/2000	05/04/2000	33.7	L.9-17.5	1.95	2.04	26.82	0.54	6.35	0.74	32.37	11.21
S1191	05/05/2000	05/05/2000	34.8	M-19 GRAVEL #1	-5.12	2.53	1.61	0.58	2.75	1.15	87.59	23.85
S1192	05/05/2000	05/05/2000	35.4	M-19 GRAVEL #2	-4.14	3.01	1.79	0.76	1.61	1.28	94.05	26.66
S1193	05/05/2000	05/05/2000	36.5	M-19 GRAVEL #3	-1.68	2.8	1.3	0.69	3.26	1.18	78.28	23.64
S1194	05/05/2000	05/05/2000	34.2	M-19 GRAVEL #4	-3.93	2.91	1.39	0.73	2.77	1.27	89.1	26.38
S1195	05/05/2000	05/05/2000	29.7	L.5-18.5	-3.7	4.82	29.38	1.29	4.88	1.74	89.01	27.47
S1196	05/05/2000	05/05/2000	33.9	M-18.5 6'	2.83	2.75	8.45	0.7	3.65	1.03	43.9	18.1
S1197	05/05/2000	05/05/2000	31.6	L-19 3'	3.78	1.93	6.89	0.49	4.13	0.74	27.71	13.04
S1198	05/05/2000	05/05/2000	31.1	M-14 GRAVEL #5	-1.32	1.88	2	0.5	2	0.82	-4.31	15.59
S1199	05/05/2000	05/05/2000	32.2	M-14 GRAVEL #6	1.22	1.73	2.69	0.44	1.34	0.69	27.4	13.81
S1200	05/05/2000	05/05/2000	32.3	M-14 GRAVEL #7	1.48	1.33	1.52	0.39	0.87	0.54	24.36	11.22
S1201	05/05/2000	05/05/2000	34.9	M-14 GRAVEL QC	-0.32	1.73	1	0.43	1.84	0.75	16.16	14.72
S1202	05/05/2000	05/05/2000	39	G-27 CO #1 EPA VERIFICATION	-0.08	1.58	0.22	0.38	1.26	0.65	46.84	14.34
S1203	05/05/2000	05/05/2000	36.2	G-27 CO #2 EPA VERIFICATION	1.96	1.58	1.1	0.39	1.53	0.65	44.1	13.64
S1204	05/05/2000	05/05/2000	38	G-27 CO #3 EPA VERIFICATION	0.06	1.65	0.57	0.41	1.04	0.7	15.65	14.46
S1205	05/05/2000	05/05/2000	38.9	G-27 CO #4 EPA VERIFICATION	-3.29	3.08	1.41	0.76	3.69	1.32	86.09	25.87
S1206	05/05/2000	05/05/2000	39.8	G-27 CO #5 EPA VERIFICATION	-1.53	2.26	0.74	0.56	3.12	0.99	49.6	19.86
S1207	05/05/2000	05/05/2000	35.4	G-27 CO #6 EPA VERIFICATION	-2.76	1.65	1.53	0.42	4.32	0.73	41.87	13.67
S1208	05/08/2000	05/08/2000	28.6	UNDER SIDEWALK 14.5	1.04	14.78	86.23	3.83	51.57	5.45	70.73	86.09
S1209	05/08/2000	05/08/2000	28.8	UNDER SIDEWALK 16.5	-2.67	2.63	4.96	0.66	3.8	1.08	71.14	20.11
S1210	05/08/2000	05/08/2000	23.1	UNDER SIDEWALK 17.5	-6.28	4.24	18.38	1.12	15.53	1.86	45.57	24.5
S1211	05/08/2000	05/08/2000	32.3	UNDER SIDEWALK 18.5	3.06	5.31	30.06	1.38	9.2	1.91	65.21	28.5
S1212	05/08/2000	05/08/2000	35.9	DEBRIS FROM STREET SWEEPER	-2.48	2.06	0.5	0.51	2.36	0.9	66.43	15.71
S1213	05/08/2000	05/08/2000	34.6	M-14.5 BOTTOM SAND #1	-753.09	562.35	1141.18	151	933.11	224.16	2231.35	2399.32
S1214	05/08/2000	05/08/2000	32.4	M-14.5 BOTTOM SAND #2	-0.63	62.39	216.84	15.96	119.93	22.65	258.63	256.39

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1215	05/10/2000	05/10/2000	34 3	M-7 OB PILE #1	1 26	2.05	2 29	0.8	2 23	0.89	56 12	16.39
S1216	05/10/2000	05/10/2000	32 9	M-7 OB PILE #2	-0 43	1.8	2 18	0.48	2 59	0.75	48.97	14.89
S1217	05/10/2000	05/10/2000	31 3	M-7 OB PILE #3	-3 31	2.6	2 44	0.87	2 84	0.94	58.53	16.98
S1218	05/10/2000	05/10/2000	31	M-7 OB PILE #4	-2 79	2.64	3	0.88	1 97	1.06	54 71	21.06
S1219	05/10/2000	05/10/2000	32 2	M-7 OB PILE #5	-3 14	2.28	3 32	0.86	1 09	0.93	69	16.9
S1220	05/10/2000	05/10/2000	31 8	M-7 OB PILE #6	-1 81	2.56	2 67	0.8	1 81	0.96	70 5	16.71
S1221	05/10/2000	05/10/2000	31 6	M-7 OB PILE #QC	-1 79	1.62	2 86	0.41	2 18	0.67	57 84	13.09
S1222	05/10/2000	05/10/2000	33 6	M-5 OB PILE #1	-0 88	2.5	4 27	0.84	4 14	1.03	65 88	19.46
S1223	05/10/2000	05/10/2000	35	M-5 OB PILE #2	-2 36	2.19	2 88	0.77	2 21	0.91	62.02	18
S1224	05/10/2000	05/10/2000	34 9	M-5 OB PILE #3	-0 61	2.44	4 42	0.98	1 92	0.96	85 54	19.03
S1225	05/10/2000	05/10/2000	32	M-5 OB PILE #4	-3 3	1.96	3 07	0.41	2 37	0.66	80 46	16.51
S1226	05/10/2000	05/10/2000	37	M-5 OB PILE #5	0 08	2.69	2 57	0.84	2 53	1.06	64 69	21.16
S1227	05/10/2000	05/10/2000	33 9	M-5 OB PILE #6	3	1.78	1 47	0.47	0 96	0.78	52 71	16.96
S1228	05/10/2000	05/10/2000	34 9	M 5 OB PILE QC	2 2	2.51	0 89	0.81	1 15	1.09	67 66	22.62
S1229	05/11/2000	05/11/2000	34 1	M-4 OB #1	-1 04	2.55	3 71	0.85	1 37	1.02	71 4	20.26
S1230	05/11/2000	05/11/2000	32 4	M-4 OB #2	1 19	2.89	2 25	0.58	2 69	0.96	69 31	18.96
S1231	05/11/2000	05/11/2000	32 1	M-4 OB #3	-4 09	2.14	4 35	0.87	1 91	0.89	53 73	17.01
S1232	05/11/2000	05/11/2000	31 4	M-4 OB #4	3 37	2.29	2 5	0.8	2 2	0.97	68 05	18.29
S1233	05/11/2000	05/11/2000	35	M-4 OB #5	0 12	2.25	1 88	0.85	1 67	0.91	58 0	18.75
S1234	05/11/2000	05/11/2000	33 3	M-4 OB #6	0 68	2.15	0 79	0.82	0 89	0.98	64 88	19.46
S1235	05/11/2000	05/11/2000	32 5	M-4 OB #7	-1 8	1.54	0 87	0.39	1 37	0.67	66 25	14.41
S1236	05/12/2000	05/12/2000	35 6	H-27 EPA #1	0 03	1.83	1 49	0.86	2 65	0.84	45 29	12.98
S1237	05/12/2000	05/12/2000	36 9	H-27 EPA #2	-0 01	1.96	2 21	0.47	1 68	0.77	51 02	15.45
S1238	05/12/2000	05/12/2000	36	H-27 EPA #3	3 2	1.17	1 46	0.29	3 48	0.49	6 4	9.19
S1239	05/12/2000	05/12/2000	36 5	H-27 EPA #4	-0 66	1.67	2 05	0.43	2 53	0.7	38 29	13.79
S1240	05/12/2000	05/12/2000	35 5	H-27 EPA #5	0 29	1.34	1 38	0.34	2 93	0.87	28 1	11.28
S1241	05/12/2000	05/12/2000	35 5	H-27 EPA #6	1 01	2.16	1 64	0.56	3.17	0.93	12	16.24
S1242	05/12/2000	05/12/2000	34 4	G-27 EPA #1	0 74	1.67	0 65	0.39	0 91	0.66	22 02	13.8
S1243	05/12/2000	05/12/2000	34 2	G-27 EPA #2	-0 55	1.07	0 31	0.27	1 62	0.47	24 01	9.88
S1244	05/12/2000	05/12/2000	38 3	G-27 EPA #3	0 33	1.55	0 4	0.86	1 47	0.67	25.42	13.09
S1245	05/12/2000	05/12/2000	36 9	G-27 EPA #4	-0 88	1.48	0 6	0.87	0 33	0.69	31.11	13.96
S1246	05/12/2000	05/12/2000	39.9	G-27 EPA #5	1 52	1.89	0 69	0.41	0.53	0.69	36.73	14.84
S1247	05/12/2000	05/12/2000	35.9	G-27 EPA #6	0 9	0.97	1.89	0.25	2.5	0.41	16.94	8.07
S1248	05/12/2000	05/12/2000	41.1	F-27 EPA #1	4 54	1.48	1.47	0.84	2.01	0.88	59.49	11.9
S1249	05/12/2000	05/12/2000	39.6	F-27 EPA #2	1.61	2.19	0.92	0.53	4.07	0.92	53.17	17.61
S1250	05/12/2000	05/12/2000	43.5	F-27 EPA #3	2.45	1.8	0.93	0.58	4.7	0.97	68.48	19.15
S1251	05/12/2000	05/12/2000	36.7	F-27 EPA #4	0.66	0.89	0.08	0.29	1.74	0.39	31.09	8.14
S1252	05/12/2000	05/12/2000	46.5	F-27 EPA #5	3.14	2.16	3.06	0.92	6.8	1.01	46.76	15.43
S1253	05/12/2000	05/12/2000	48 2	F-27 EPA #6	2.92	1.79	0.78	0.43	2.62	0.74	36.25	14.89
S1254	05/12/2000	05/12/2000	30.7	M-3 OB #1	0.71	1.48	1.13	0.57	1.19	0.68	25.23	12.75
S1255	05/12/2000	05/12/2000	32.6	M-3 OB #2	1.32	1.38	1.36	0.34	0.57	0.85	39.78	11.91
S1256	05/12/2000	05/12/2000	34.4	M-3 OB #3	-1.16	1.21	1.45	0.81	0.48	0.81	28.17	10.62
S1257	05/12/2000	05/12/2000	36.6	M-3 OB #4	2.1	0.89	1.77	0.22	0.59	0.34	23.2	7.34

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1258	05/12/2000	05/12/2000	35.4	M-3 OB #5	0.96	1.75	4.48	0.45	2.55	0.69	51.46	13.11
S1259	05/12/2000	05/12/2000	35.8	M-3 OB #6	-1.08	3.12	11.48	0.83	3.82	1.18	65.81	20.62
S1260	05/12/2000	05/12/2000	35.1	M-3 OB QC	2.44	2.24	4.18	0.57	1.56	0.87	13.15	16.9
S1261	05/12/2000	05/12/2000	31.2	M-3 OB #6 AFTER DIG	2	1.1	1.05	0.22	1.9	0.45	26.44	9.25
S1262	05/12/2000	05/12/2000	33.8	M-3 OB QC AFTER DIG	-1.77	1.88	1.95	0.48	1.82	0.79	40.61	15.86
S1263	05/12/2000	05/12/2000	35.9	I-N/13-19 #1	1.64	1.56	4.11	0.4	2.41	0.61	22.86	11.81
S1264	05/12/2000	05/12/2000	34.4	I-N/13-19 #2	2.72	1.65	3.16	0.42	2.04	0.86	23.2	12.56
S1265	05/12/2000	05/12/2000	33.3	I-N/13-19 #3	-0.77	1.48	3.14	0.38	2.47	0.61	35.02	11.9
S1266	05/12/2000	05/12/2000	27.6	I-N/13-19 #4	3.91	1.54	1.13	0.37	1.72	0.62	17.71	12.52
S1267	05/12/2000	05/12/2000	26.5	I-N/13-19 #5	0.2	1.1	2.19	0.29	1.97	0.47	-5.92	8.92
S1268	05/12/2000	05/12/2000	32.9	I-N/13-19 #6	-2.15	1.36	2.57	0.37	1.49	0.58	22.46	11.41
S1269	05/12/2000	05/12/2000	37.6	I-N/13-19 #7	2.29	1.85	3.31	0.46	1.11	0.72	48.82	14.57
S1270	05/12/2000	05/12/2000	31.7	I-N/13-19 #8	0.86	1.56	1.88	0.4	1.99	0.66	13.92	13.05
S1271	05/12/2000	05/12/2000	31.7	I-N/13-19 #9	1.34	1.42	4.06	0.36	1.45	0.55	47.01	10.81
S1272	05/12/2000	05/12/2000	33.5	I-N/13-19 #10	-0.18	1.15	0.74	0.3	2.99	0.61	2.25	9.8
S1273	05/15/2000	05/15/2000	29.1	J.5-15.5 #1	2.38	0.92	2.01	0.22	0.73	0.86	43.1	7.65
S1274	05/15/2000	05/15/2000	35.7	J.5-15.5 #2	0.87	1.51	2.1	0.39	1.49	0.63	34.38	12.89
S1275	05/15/2000	05/15/2000	31.9	J.5-15.5 #3	-0.16	1.32	1.88	0.33	2.42	0.56	34.55	10.95
S1276	05/15/2000	05/15/2000	29.7	J.5-15.5 #4	-0.53	1.51	2.08	0.39	0.9	0.63	43.62	12.99
S1277	05/15/2000	05/15/2000	35.1	J.5-15.5 #5	1.82	1.55	2.08	0.39	1.79	0.62	18.92	12.2
S1278	05/15/2000	05/15/2000	31.7	J.5-15.5 #6	-0.05	1.52	2.02	0.39	1.73	0.64	26.25	12.61
S1279	05/15/2000	05/15/2000	32.6	J.5-17 #1	-0.17	1.76	2.48	0.45	1.68	0.73	13.07	14.32
S1280	05/15/2000	05/15/2000	30.3	J.5-17 #2	0.53	1.54	1.41	0.38	1.23	0.64	37.41	13.25
S1281	05/15/2000	05/15/2000	31.2	J.5-17 #3	-2.09	1.43	1.74	0.38	1.46	0.62	24.72	12.62
S1282	05/15/2000	05/15/2000	31.7	J.5-17 #4	1.26	1.32	1.68	0.33	0.72	0.54	22.66	11.36
S1283	05/15/2000	05/15/2000	30.8	J.5-17 #5	0.41	1.67	2.2	0.43	2	0.7	9.4	13.75
S1284	05/15/2000	05/15/2000	34.1	J.5-17 #6	-2.5	1.14	1.75	0.3	1.71	0.5	35.61	10.31
S1285	05/15/2000	05/15/2000	22.9	J-18 #1	4.73	1.61	1.59	0.38	1.49	0.63	12.04	12.29
S1286	05/15/2000	05/15/2000	25.2	J-18 #2	2.62	1.59	1.7	0.39	2	0.64	14.73	12.8
S1287	05/15/2000	05/15/2000	23.3	J-18 #3	0.36	1.17	1.67	0.29	1.59	0.49	30.61	9.96
S1288	05/15/2000	05/15/2000	22.8	J-18 #4	0.33	1.31	1.22	0.32	1.45	0.54	31.84	11.39
S1289	05/15/2000	05/15/2000	22.6	J-18 #5	2.51	0.99	0.94	0.24	2.39	0.41	20.17	8.36
S1290	05/15/2000	05/15/2000	24.1	J-18 #6	1.11	1.17	1.71	0.29	1.26	0.47	36.17	9.63
S1291	05/15/2000	05/15/2000	25.2	L.9-18.5 #1	0.27	1.7	2.28	0.43	1.77	0.7	35.49	13.83
S1292	05/15/2000	05/15/2000	28.9	L.9-18.5 #2	0.52	1.6	2.42	0.41	2.61	0.67	28.09	13.02
S1293	05/15/2000	05/15/2000	23.9	L.8-18.5 #3	0.69	1.54	2.27	0.39	2.25	0.64	4.26	11.89
S1294	05/15/2000	05/15/2000	25.5	L.9-18.5 #4	2.5	1.45	1.98	0.35	1.39	0.58	26.06	11.66
S1295	05/15/2000	05/15/2000	24.7	L.9-18.5 #5	1.55	1.23	1.89	0.3	1.57	0.49	19.29	9.96
S1296	05/15/2000	05/15/2000	24.8	L.9-18.6 #6	2.49	1.6	1.64	0.38	2.33	0.64	45.04	13.22
S1297	05/15/2000	05/15/2000	30	K-17 #1	0.89	1.57	1.53	0.4	1.49	0.66	2.3	12.84
S1298	05/15/2000	05/15/2000	27	K-17 #2	0.17	1.14	1.53	0.29	-0.01	0.48	30.72	10.1
S1299	05/15/2000	05/15/2000	27	K-17 #3	-0.47	1.3	1.36	0.33	1.52	0.56	16.34	11.17
S1300	05/15/2000	05/15/2000	25.9	K-17 #4	2.3	0.83	1.1	0.21	1.43	0.35	2	6.83

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1301	05/15/2000	05/15/2000	27.2	K-17 #5	0.78	1.19	1.58	0.3	0.61	0.49	16.93	6.99
S1302	05/15/2000	05/15/2000	31.6	K-17 #6	0.29	1.26	1.28	0.39	1.28	0.63	12.14	10.99
S1303	05/15/2000	05/15/2000	35.1	M17.5 #1	3.89	1.15	2.11	0.29	1.69	0.35	34.96	9
S1304	05/15/2000	05/15/2000	32.3	M17.5 #2	0.67	1.09	2.34	0.28	-0.07	0.44	31.33	9.14
S1305	05/15/2000	05/15/2000	34.5	M17.5 #3	-0.34	1.66	1.64	0.41	1.75	0.7	31.37	13.79
S1306	05/15/2000	05/15/2000	34.7	M17.5 #4	2.21	1.14	1.63	0.36	1	0.46	23.87	9.41
S1307	05/15/2000	05/15/2000	35.1	M17.5 #5	2.76	1.09	3.14	0.46	1.55	0.79	36.12	15.78
S1308	05/15/2000	05/15/2000	33	M17.5 #6	-0.46	1.24	2.19	0.31	2.61	0.59	47.58	10.22
S1309	05/15/2000	05/15/2000	37.8	M18 #1	-0.11	1.58	1.31	0.41	0.39	0.67	23.83	14.23
S1310A	05/15/2000	05/15/2000	37.6	M18 #2	0.72	1.66	1.41	0.43	-0.32	0.59	22.61	14.06
S1311	05/15/2000	05/15/2000	33.5	M18 #3	0.15	1.26	0.68	0.32	0.94	0.65	12.87	11.37
S1312	05/15/2000	05/15/2000	30	M18 #4	-0.07	1.49	0.28	0.35	1.22	0.69	29.4	13.83
S1313	05/15/2000	05/15/2000	14.2	M18 #5	0.07	1.31	0.72	0.33	0.74	0.56	13.76	11.9
S1314	05/15/2000	05/15/2000	35.7	M18 #6	0.74	1.41	0.7	0.35	1.3	0.6	20.28	12.48
S1315	05/15/2000	05/15/2000	28.7	M5-3.5	8.33	14.07	111.73	3.85	12.13	4.67	70.07	59.38
S1316	05/15/2000	05/15/2000	36.2	M2.5 HOT STOCK PILE	24.43	41.16	293.69	10.02	61.8	13.99	112.34	180.51
S1317	05/15/2000	05/15/2000	37	M3 NORTH WALL	30.65	27.32	165.32	7.02	37.1	9.22	29.63	107.16
S1318	05/15/2000	05/15/2000	31.4	M2 WEST WALL	12.77	10.87	77.49	2.82	21.07	3.76	43.33	46.26
S1319	05/15/2000	05/15/2000	23.7	N2 SOUTHWALL UNDER SIDEWALK	0.82	4.99	26.73	1.82	3.97	1.76	19.24	26.58
S1320	05/16/2000	05/16/2000	24.9	M-2 OB #1	-3.04	1.64	2.39	0.44	1.3	0.71	30.7	14.11
S1321	05/16/2000	05/16/2000	32	M-2 OB #2	0.01	1.29	0.27	0.32	1.1	0.56	24.77	11.68
S1322	05/16/2000	05/16/2000	31.5	M-2 OB #3	0.32	1.05	0.46	0.27	1.62	0.46	10.42	9.58
S1323	05/16/2000	05/16/2000	33.4	M-2 OB#4	0.12	1.38	0.49	0.34	0.58	0.59	36.29	12.81
S1324	05/16/2000	05/16/2000	32.8	M-2 OB #5	0.87	1.62	0.88	0.41	0.59	0.66	18.73	14.37
S1325	05/16/2000	05/16/2000	30.8	M-2 OB #6	0.05	0.97	0.17	0.24	1.27	0.43	17.41	9.05
S1326	05/16/2000	05/16/2000	30.1	M-2 OB QC	-0.32	1.27	0.56	0.32	1.16	0.55	17.96	11.41
S1327	05/16/2000	05/16/2000	45.5	N 2.5	4233	1723.96	4180.67	504.89	1048.54	674.92	5749.24	7372.01
S1328	05/17/2000	05/17/2000	31	M-1.5 OB #1	-1.66	0.94	0.58	0.24	1.39	0.42	24.74	8.81
S1329	05/17/2000	05/17/2000	32.3	M-1.5 OB #2	0.14	1.42	0.06	0.35	2.01	0.63	21.08	12.83
S1330	05/17/2000	05/17/2000	31.9	M-1.5 OB #3	-1.87	0.87	0.55	0.23	1.17	0.39	26.91	8.23
S1331	05/17/2000	05/17/2000	32.3	M-1.5 OB #4	1.78	1.73	0.3	0.41	0.82	0.71	43.93	15.37
S1332	05/17/2000	05/17/2000	32.8	M-1.5 OB QC	-2.01	1.11	0.63	0.29	1.65	0.5	19.22	10.81
S1333	05/18/2000	05/18/2000	33.2	K-1	22.11	34.07	295.61	8.77	62.02	11.48	113.33	131.56
S1334	05/18/2000	05/18/2000	40.1	SPILL MATERIAL	1.58	2.78	12.42	0.73	5.5	1.09	41.64	17.69
S1335	05/22/2000	05/22/2000	34.2	H-6 EXCAVATOR TRACKS	2.07	1.32	0.98	0.32	2.75	0.56	15.58	10.87
S1336	05/22/2000	05/22/2000	30.3	M-10	140.2	177.43	1625.68	45.46	77.24	66.96	911.78	682.81
S1337	05/22/2000	05/22/2000	36.1	N-9.5 UNDER SIDEWALK	4.46	4.21	18.3	1.11	3.88	2.15	27.05	28.99
S1338	05/22/2000	05/22/2000	32.7	L-16 #1	1.56	2.28	3.72	0.57	1.98	1.09	47.42	17.99
S1339	05/22/2000	05/22/2000	25.2	L.5-16 #2	0.55	1.12	1.13	0.3	2.12	0.5	25.33	10.09
S1340	05/22/2000	05/22/2000	32.5	M-15.5#3	-0.74	1.48	2.8	0.38	1.67	10.61	29.47	12.19
S1341	05/23/2000	05/23/2000	31.5	M.8-15.5 #4	0.31	1.71	2.25	0.44	2.96	0.72	31.08	14.06
S1342	05/23/2000	05/23/2000	30.6	M-13.8 #5	1.86	1.3	1.37	0.32	1.39	0.63	28.06	10.97
S1343	05/23/2000	05/23/2000	32.7	M-14.7 #6	1.9	1.4	2.99	0.38	1.72	0.66	26.39	11.16

Nutranl Sample ID					NUTRANL RESULTS U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1344	05/23/2000	05/23/2000	34.3	K11 #1	0.72	1.4	1.02	0.35	1.27	0.6	10.2	12.31
S1345	05/23/2000	05/23/2000	34.6	K11 #2	-1.45	1.63	2.64	0.49	1.21	0.67	42.19	13.97
S1346	05/22/2000	05/23/2000	32.1	K11 #3	1.63	1.7	1.86	0.42	2.07	0.69	19.98	13.51
S1347	05/23/2000	05/23/2000	31.3	K11 #4	4.6	1.47	1.97	0.36	1.91	0.58	23.25	11.86
S1348	05/23/2000	05/23/2000	30.8	K11 #5	1.06	1.69	2.33	0.42	0.75	0.66	38.71	13.75
S1349	05/23/2000	05/23/2000	32.6	K11 #6	-1.66	1.54	2.12	0.4	2.6	0.67	26.56	13
S1350	05/23/2000	05/23/2000	33.4	K11 #6	0.9	1.61	1.55	0.4	1.87	0.67	33.06	13.29
S1351	05/23/2000	05/23/2000	35.6	K-1.5	-0.49	1.41	1.2	0.35	0.3	0.59	49.23	12.74
S1352	05/23/2000	05/23/2000	35	M-1.5	-0.67	2.49	5.98	0.66	3.3	0.98	18.21	17.41
S1353	05/23/2000	05/23/2000	29.8	K-3.5	-0.57	1.34	1.82	0.34	1.35	0.57	23.56	11.37
S1354	05/23/2000	05/23/2000	33.4	M-3.5	-0.01	1.72	3.61	0.44	2.45	0.7	18.69	13.09
S1355	05/23/2000	05/23/2000	28.2	J-10.5 #1	0.88	2	1.7	0.5	2.22	0.83	36.27	16.15
S1356	05/23/2000	05/23/2000	26.3	J-10.5 #2	1.74	1.39	0.69	0.33	3.62	0.69	46.3	11.72
S1357	05/24/2000	05/24/2000	27.7	N-9	2.63	1.49	1.67	0.36	2.42	0.61	26.79	12.12
S1358	05/24/2000	05/24/2000	31.9	N.5-9.5	3.07	1.17	1.09	0.28	1.56	0.47	28.92	9.61
S1359	05/24/2000	05/24/2000	30.5	K-10	1.39	1.25	0.8	0.31	1.58	0.53	49.36	11.2
S1360	05/24/2000	05/24/2000	29	K-11	1.26	1.76	1.22	0.49	3.28	0.74	25.94	13.98
S1361	05/24/2000	05/24/2000	32.3	M-14 EPA #1	0.08	1.39	1.35	0.35	1.7	0.58	37.55	12.07
S1362	05/24/2000	05/24/2000	32.1	M-14 EPA #2	-0.23	1.67	1.18	0.42	1.86	0.7	39.22	14.72
S1363	05/24/2000	05/24/2000	33.8	M-14 EPA #3	2.88	1.14	1.98	0.28	1.59	0.46	25.73	9.45
S1364	05/24/2000	05/24/2000	32.7	M-14 EPA #4	1.05	0.99	1.46	0.25	2.06	0.42	13.98	8.29
S1365	05/24/2000	05/24/2000	33.2	M-14 EPA #5	1.02	1.13	1.3	0.28	1.8	0.47	36.47	9.55
S1366	05/24/2000	05/24/2000	34.6	M-14 EPA #6	-0.76	1.8	1.61	0.45	0.82	0.75	53.68	16.73
S1367	05/24/2000	05/24/2000	30.2	J-12 EPA #1	2.51	1.06	1.01	0.26	1.92	0.44	26.42	9.06
S1368	05/24/2000	05/24/2000	31.4	J-12 EPA #2	1.06	1.01	1.37	0.25	0.75	0.42	37.34	8.91
S1369	05/24/2000	05/24/2000	29.8	J-12 EPA #3	1.71	1.03	0.98	0.25	0.72	0.42	50.78	9.2
S1370	05/24/2000	05/24/2000	29.6	J-12 EPA #4	0.06	1.62	1.25	0.4	1.83	0.67	20.32	13.21
S1371	05/24/2000	05/24/2000	29.9	J-12 EPA #5	2.35	1.57	0.85	0.38	2.25	0.66	22.03	13.06
S1372	05/24/2000	05/24/2000	32.9	J-12 EPA #6	1.12	1.25	0.39	0.3	2.15	0.54	31.68	11
S1373	05/24/2000	05/24/2000	23.1	J-10.5 EPA #1	1.03	1.37	1.06	0.34	2.53	0.59	3.73	11.19
S1374	05/24/2000	05/24/2000	23.7	J-10.5 EPA #2	1.36	1.5	1.33	0.37	2.6	0.63	19.47	12.18
S1375	05/24/2000	05/24/2000	22.5	J-10.5 EPA #3	-0.32	1.39	2.03	0.36	0.75	0.58	25.78	11.6
S1376	05/24/2000	05/24/2000	24.2	J-10.5 EPA #4	-0.11	1.47	1.48	0.37	1.86	0.63	20.13	12.4
S1377	05/24/2000	05/24/2000	24.9	J-10.5 EPA #5	1.91	1.31	1.19	0.32	2.67	0.55	24.69	11.12
S1378	05/24/2000	05/24/2000	24.4	J-10.5 EPA #6	1.86	1.68	0.72	0.4	2.83	0.7	28.03	14.06
S1379	05/24/2000	05/24/2000	25.4	I-10.5 EPA #1	2.31	1.55	2.05	0.38	1.44	0.62	25.93	12.46
S1380	05/24/2000	05/24/2000	24.7	I-10.5 EPA #2	0.57	1.98	2.14	0.51	1.26	0.82	30.84	16.72
S1381	05/24/2000	05/24/2000	26.4	I-10.5 EPA #3	1.37	1.59	1.84	0.4	2.99	0.66	-2.91	12.41
S1382	05/24/2000	05/24/2000	25.8	I-10.5 EPA #4	2.47	1.41	1.2	0.34	2.69	0.59	30.72	11.7
S1383	05/24/2000	05/24/2000	25.9	I-10.5 EPA #5	0.68	1.65	1.43	0.42	3.46	0.7	5.81	13.09
S1384	05/24/2000	05/24/2000	25.2	I-10.5 EPA #6	-1.33	1.4	1.6	0.35	1.62	0.59	43.82	11.98
S1385	05/24/2000	05/24/2000	33.9	M-10 EPA #1	3.22	1.43	1.03	0.34	1.97	0.59	15.61	11.61
S1386	05/24/2000	05/24/2000	36.2	M-10 EPA #2	1.25	1.37	1.71	0.34	1.7	0.56	15.47	11.09

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1387	05/24/2000	05/24/2000	28 3	M-10 EPA #3	0 14	1.45	1 52	0.36	0 75	0.68	23 39	12.32
S1388	05/24/2000	05/24/2000	33.1	M-10 EPA #4	-0 96	2.05	1 41	0.43	2 21	0.88	33 21	16.89
S1389	05/24/2000	05/24/2000	33 5	M-10 EPA #5	-1 26	1.66	2 09	0.42	1.56	0.71	32 4	16.19
S1390	05/24/2000	05/24/2000	25 9	M-10 EPA #6	-0 47	2.03	1 1	0.38	1 91	0.87	18 3	11.84
S1391	05/24/2000	05/24/2000	32 8	M-8 5 EPA #1	1 77	1.95	0 36	0.37	2 28	0.85	15 2	10.41
S1392	05/24/2000	05/24/2000	30 9	M-8 5 EPA #2	-1 37	1.56	0 67	0.38	1 6	0.73	15 84	10.9
S1393	05/24/2000	05/24/2000	32	M-8 5 EPA #3	0 08	1.42	0 29	0.35	1 1	0.61	41 1	13.32
S1394	05/24/2000	05/24/2000	29 2	M-8 5 EPA #4	0 94	1.67	0 57	0.38	1 80	0.67	2 03	19.81
S1395	05/24/2000	05/24/2000	30 5	M-8 5 EPA #5	-1 48	1.17	0 17	0.29	2 4	0.52	36 1	10.48
S1396	05/24/2000	05/24/2000	30 7	M-8 5 EPA #6	-0 07	1.3	0 68	0.33	1.28	0.56	24 2	11.99
S1397	05/24/2000	05/24/2000	29	L-16 EPA #1	4 24	1.5	2 38	0.51	1 46	0.5	34 89	9.96
S1398	05/24/2000	05/24/2000	30 2	L-16 EPA #2	-0 1	1.65	2 12	0.39	2 37	0.64	44 33	12.92
S1399	05/24/2000	05/24/2000	28 8	L-16 EPA #3	1 01	1.64	2 53	0.42	1 59	0.67	31 33	13.56
S1400	05/24/2000	05/24/2000	30 2	L-16 EPA #4	2 27	1.56	1 76	0.34	3 19	0.56	32 37	11.16
S1401	05/24/2000	05/24/2000	29 5	L-16 EPA #5	2 29	1.7	2 6	0.42	1 33	0.67	42 23	13.46
S1402	05/24/2000	05/24/2000	29 4	L-16 EPA #6	-1 42	1.81	3 01	0.55	1 88	0.85	20 89	10.86
S1403	05/24/2000	05/24/2000	34 3	M-16 EPA #1	-0 85	1.41	2 74	0.37	2 4	0.6	12 3	11.51
S1404	05/24/2000	05/24/2000	34 5	M-16 EPA #2	-1 74	1.44	2 59	0.38	1 93	0.61	13.71	11.99
S1405	05/24/2000	05/24/2000	34 7	M-16 EPA #3	1 54	1.58	1 35	0.38	1 7	0.64	34 73	12.92
S1406	05/24/2000	05/24/2000	34	M-16 EPA #4	0 56	1.66	1 71	0.41	2 88	0.7	32 36	13.52
S1407	05/24/2000	05/24/2000	33 7	M-16 EPA #5	-0 44	1.5	1 7	0.39	1 97	0.64	24 08	12.81
S1408	05/24/2000	05/24/2000	34 4	M-16 EPA #6	-0 44	1.22	1 87	0.32	1 44	0.52	26 23	10.46
S1409	05/25/2000	05/25/2000	39 4	M-1 5 #1	1 1	1.64	0 44	0.4	1 7	0.69	28 59	13.92
S1410	05/25/2000	05/25/2000	36 4	M-1 5 #2	3 02	1.02	5 67	0.49	2 58	0.76	19 71	12.46
S1411	05/26/2000	05/26/2000	35 3	G-N/1-9 #1	0.16	1.69	2 1	0.43	1 95	0.71	26 27	13.99
S1412	05/26/2000	05/26/2000	34 2	G-N/1-9 #2	1 78	1.65	3 61	0.41	0 47	0.63	54 11	12.76
S1413	05/26/2000	05/26/2000	31 9	G-N/1-9 #3	2 63	1.7	3 22	0.42	1 79	0.67	30 51	13.06
S1414	05/26/2000	05/26/2000	25 3	G-N/1-9 #4	1 24	1.23	1 41	0.3	2 03	0.51	18 77	9.99
S1415	05/26/2000	05/26/2000	35 2	G-N/1-9 #5	1 84	1.56	3 12	0.4	2 58	0.64	14 73	12.08
S1416	05/26/2000	05/26/2000	35 7	G-N/1-9 #6	0.47	1.53	1 44	0.38	3 3	0.64	29 83	12.51
S1417	05/26/2000	05/26/2000	29	G-N/1-9 #7	3.7	1.69	5 39	0.43	1 87	0.65	22.24	11.97
S1418	05/26/2000	05/26/2000	27.6	G-N/1-9 #8	-0.8	1.76	2 33	0.45	2.18	0.74	49.85	15.16
S1419	05/26/2000	05/26/2000	29.7	G-N/1-9 #9	-1 35	1.67	2 72	0.46	2 6	0.79	18.21	14.65
S1420	05/26/2000	05/26/2000	32.4	G-N/1-9 #10	0.14	1.67	1 82	0.34	2 69	0.59	31.53	11.99
S1421	05/26/2000	05/26/2000	28 6	#7 RESAMPLE EAST	1.53	2.49	6.62	0.64	3.69	0.97	15.76	16.91
S1422	05/26/2000	05/26/2000	32 3	#7 RESAMPLE WEST	0.96	2.09	5.85	0.63	2.38	0.81	33.55	16.83
S1423	05/26/2000	05/26/2000	30.6	#7 AFTER DIG E	1.15	1.5	3.28	0.36	1.99	0.69	31.6	11.43
S1424	05/26/2000	05/26/2000	31.7	#7 AFTER DIG W	0.48	1.47	1.8	0.37	1.92	0.61	33.37	12.49
S1425	05/31/2000	05/31/2000	32.9	K.5-7 EPA #1	0.58	1.07	2.13	0.25	1.97	0.45	4.4	8.93
S1426	05/31/2000	05/31/2000	32.5	K.5-7 EPA #2	-1.97	1.35	2.23	0.33	1.46	0.51	22.53	10.96
S1427	05/31/2000	05/31/2000	35	K.5-7 EPA #3	1.23	1.51	2.1	0.34	1.17	0.61	18.65	11.97
S1428	05/31/2000	05/31/2000	30.3	K.5-7 EPA #4	1.37	1.3	1.85	0.32	1.33	0.52	9.44	10.49
S1429	05/31/2000	05/31/2000	33.8	K.5-7 EPA #5	1.33	1.7	2.16	0.42	2.51	0.7	16.85	13.9

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S11430	05/31/2000	05/31/2000	34.2	K.5-7 EPA #6	1.79	1.44	2.08	0.35	1.47	0.67	18.34	11.4
S1431	05/31/2000	05/31/2000	35.9	M-7 EPA #1	1.01	1.93	4.16	0.48	1.42	0.75	46.34	14.45
S1432	05/31/2000	05/31/2000	35.8	M-7 EPA #2	1.04	1.65	3.8	0.47	0.58	0.73	58.2	14.71
S1433	05/31/2000	05/31/2000	36.2	M-7 EPA #3	1.64	1.56	2.58	0.4	2.61	0.64	28.98	12.34
S1434	05/31/2000	05/31/2000	36.1	M-7 EPA #4	1.26	1.88	3	0.46	1.97	0.76	43.17	14.79
S1435	05/31/2000	05/31/2000	36.7	M-7 EPA #5	4.24	1.86	3.69	0.46	1	0.71	24.91	13.58
S1436	05/31/2000	05/31/2000	37.7	M-7 EPA #6	0.04	1.61	3.22	0.47	2.12	0.75	22.4	14.25
S1437	05/31/2000	05/31/2000	27.2	K-8 EPA #1	2.07	1.65	1.42	0.4	2.79	0.68	39.63	13.14
S1438	05/31/2000	05/31/2000	28	K-8 EPA #2	1.06	1.81	1.78	0.45	3.44	0.75	30.48	14.24
S1439	05/31/2000	05/31/2000	27.2	K-8 EPA #3	1.27	1.67	2.31	0.42	2.74	0.69	29.75	13.54
S1440	05/31/2000	05/31/2000	27.4	K-8 EPA #4	-2.7	2	2.57	0.53	2.26	0.86	13.06	18.5
S1441	05/31/2000	05/31/2000	26.9	K-8 EPA #5	-0.4	1.33	3.27	0.34	2.31	0.55	6.7	10.12
S1442	05/31/2000	05/31/2000	27.8	K-8 EPA #6	1.25	1.62	2.37	0.4	2.25	0.66	23.09	12.52
S1443	05/31/2000	05/31/2000	34.1	I-7 EPA #1	0.95	1.64	2.92	0.41	1.83	0.65	37.93	12.97
S1444	05/31/2000	05/31/2000	34.8	I-7 EPA #2	0.19	1.8	2.16	0.45	3.76	0.75	33.67	14.22
S1445	05/31/2000	05/31/2000	27.6	I-7 EPA #3	0.85	1.84	3.05	0.47	2.48	0.74	25.78	14.15
S1446	05/31/2000	05/31/2000	33.8	I-7 EPA #4	-0.74	1.4	3.37	0.37	2.93	0.58	27.38	11.2
S1447	05/31/2000	05/31/2000	34	I-7 EPA #5	2.59	2.22	2.65	0.55	2.31	0.88	25.15	16.61
S1448	05/31/2000	05/31/2000	33.7	I-7 EPA #6	2.08	1.67	2.37	0.39	2.41	0.64	39.42	12.79
S1449	05/31/2000	05/31/2000	37.8	I-2 EPA #1	1.24	1.41	0.23	0.33	1.15	0.6	27.69	12.46
S1450	05/31/2000	05/31/2000	37.7	I-2 EPA #2	1.86	1.43	0.45	0.34	0.47	0.59	26.73	12.49
S1451	05/31/2000	05/31/2000	37.9	I-2 EPA #3	-0.76	1.47	0.35	0.37	1.85	0.65	8.38	13.21
S1452	05/31/2000	05/31/2000	38	I-2 EPA #4	-0.55	1.28	0.15	0.32	1.52	0.57	29.49	12.02
S1453	05/31/2000	05/31/2000	37.7	I-2 EPA #5	-1.54	1.42	1.15	0.36	2.07	0.62	53.52	12.63
S1454	05/31/2000	05/31/2000	37.7	I-2 EPA #6	-1.54	1.26	0.26	0.32	0.86	0.56	37.76	12.31
S1455	05/31/2000	05/31/2000	37.9	K-2 EPA #1	-0.54	1.4	0.57	0.34	1	0.59	41.32	12.43
S1456	05/31/2000	05/31/2000	35	K-2 EPA #2	-0.35	1.56	1.37	0.4	0.85	0.67	-1.04	13.23
S1457	05/31/2000	05/31/2000	37.6	K-2 EPA #3	-0.73	1.48	0.78	0.37	0.88	0.65	29.08	13.2
S1458	05/31/2000	05/31/2000	37.4	K-2 EPA #4	0.7	1.33	0.92	0.33	0.69	0.55	26.9	11.8
S1459	05/31/2000	05/31/2000	35.2	K-2 EPA #5	2.67	1.31	-0.15	0.3	1.05	0.55	40.34	11.9
S1460	05/31/2000	05/31/2000	35.7	K-2 EPA #6	0.41	1.41	0.64	0.35	1.44	0.61	23.09	12.15
S1461	05/31/2000	05/31/2000	36.5	J-2 EPA #1	-0.57	1.37	1.15	0.35	1.21	0.59	30.45	12.17
S1642	05/31/2000	05/31/2000	36.5	J-2 EPA #2	-2.14	1.7	1.61	0.45	0.65	0.73	32	15.15
S1463	05/31/2000	05/31/2000	37.4	J-2 EPA #3	0	1.66	1.44	0.42	1.11	0.69	16.64	14.03
S1464	05/31/2000	05/31/2000	36.4	J-2 EPA #4	0.48	1.46	1.49	0.38	0.79	0.6	13.11	12.35
S1465	05/31/2000	05/31/2000	36.6	J-2 EPA #5	0.65	1.61	1.4	0.4	0.13	0.66	42.25	14.19
S1466	05/31/2000	05/31/2000	35.1	J-2 EPA #6	-0.91	0.95	1.28	0.25	1.01	0.41	25.24	8.63
S1467	05/31/2000	05/31/2000	34.9	L-2 EPA #1	-0.73	1.49	0.6	0.36	1.42	0.67	-5.95	13.06
S1468	05/31/2000	05/31/2000	35.6	L-2 EPA #2	-1.12	1.37	0.93	0.35	0.22	0.6	31.3	13.12
S1469	05/31/2000	05/31/2000	36	L-2 EPA #3	-0.11	1.27	0.49	0.32	0.87	0.55	19.2	11.63
S1470	05/31/2000	05/31/2000	35.9	L-2 EPA #4	-0.01	1.41	0.62	0.35	0.34	0.59	40.59	12.86
S1471	05/31/2000	05/31/2000	35.9	L-2 EPA #5	0.4	1.23	-0.17	0.3	1.3	0.53	39.63	11.55
S1472	05/31/2000	05/31/2000	34.6	L-2 EPA #6	-0.53	1.32	0.42	0.33	1.74	0.58	19.44	11.72

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1473	05/31/2000	05/31/2000	36 7	H-2 EPA #1	0 5	1.32	1 59	0.36	2.13	0.85	24.75	10.97
S1474	05/31/2000	05/31/2000	36.7	H-2 EPA #2	3 61	1.61	1 94	0.37	1 16	0.6	6 33	11.66
S1475	05/31/2000	05/31/2000	36 5	H-2 EPA #3	-0 76	1.15	1 99	0.41	1.7	0.81	25 2	10.26
S1476	05/31/2000	05/31/2000	36	H-2 EPA #4	0.07	1.09	2 21	0.41	1 42	0.66	4 07	12.44
S1477	05/31/2000	05/31/2000	36.7	H-2 EPA #5	2 37	1.85	1 89	0.38	1 52	0.74	21 32	14.61
S1478	05/31/2000	05/31/2000	36 9	H-2 EPA #6	2 12	2.3	1 21	0.56	1 57	0.92	41 05	18.42
S1479	05/31/2000	05/31/2000	36	M-2 EPA #1	-3 69	1.55	1 17	0.42	1 08	0.71	15 41	14.58
S1480	05/31/2000	05/31/2000	36	M-2 EPA #2	-0 33	1.02	0 82	0.29	0 96	0.48	22 16	9.07
S1481	05/31/2000	05/31/2000	34.9	M-2 EPA #3	1 22	1.15	0 83	0.29	1 05	0.5	19 43	10.26
S1482	05/31/2000	05/31/2000	35 6	M-2 EPA #4	-0 24	1.06	0 31	0.26	0.53	0.45	49.71	8.84
S1483	05/31/2000	05/31/2000	37 6	M-2 EPA #5	-0.15	1.29	0 75	0.32	1.01	0.56	19 32	11.56
S1484	05/31/2000	05/31/2000	37 2	M-2 EPA #6	0 14	1.4	0 63	0.34	0 41	0.58	42 64	12.52
S1485	05/31/2000	05/31/2000	34 7	K-5 EPA #1	3 27	1.74	2 29	0.42	1 41	0.68	44 23	13.84
S1486	05/31/2000	05/31/2000	36 3	K-5 EPA #2	1 23	2.01	3 16	0.51	2 33	0.9	25 23	16.2
S1487	05/31/2000	05/31/2000	35	K-5 EPA #3	1 5	1.69	2 98	0.43	1 41	0.88	33 29	13.35
S1488	05/31/2000	05/31/2000	35 8	K-5 EPA #4	3 33	1.79	2 86	0.42	1 7	0.88	15 65	13.06
S1489	05/31/2000	05/31/2000	35 7	K-5 EPA #5	1 55	1.92	3 36	0.46	2 67	0.76	37 33	14.26
S1490	05/31/2000	05/31/2000	35 8	K-5 EPA #6	0 83	2.28	2 86	0.57	3 12	0.91	16 36	16.54
S1491	05/31/2000	05/31/2000	35 2	M-4 5 EPA #1	0 52	1.52	3 32	0.4	3 58	0.83	25 59	11.78
S1492	05/31/2000	05/31/2000	30 8	M-4 5 EPA #2	3 41	1.86	2 74	0.33	1 6	0.88	32 88	10.61
S1493	05/31/2000	05/31/2000	37 2	M-4 5 EPA #3	2 81	1.47	2 98	0.37	2 64	0.69	11 54	11.16
S1494	05/31/2000	05/31/2000	36 9	M 4 5 EPA #4	1 24	1.83	2 72	0.46	2 28	0.74	38 03	14.19
S1495	05/31/2000	05/31/2000	36 8	M-4 5 EPA #5	2 06	1.41	4 02	0.85	2 54	0.89	27.19	11.02
S1496	05/31/2000	05/31/2000	35 2	M 4 5 EPA #6	1 09	1.87	3 47	0.49	1 23	0.75	32 45	14.9
S1497	05/31/2000	05/31/2000	34 7	G-2 EPA #1	0 8	1.05	1 36	0.27	1 01	0.44	11 2	9.09
S1498	05/31/2000	05/31/2000	34 2	G-2 EPA #2	0 04	2.1	0 75	0.52	1 51	0.89	40 55	18.66
S1499	05/31/2000	05/31/2000	33 3	G-2 EPA #3	1 48	1.06	0 5	0.25	1 64	0.44	45 8	9.52
S1500	05/31/2000	05/31/2000	35 8	G 2 EPA #4	1 92	1.9	0 84	0.46	1 57	0.78	31 46	15.72
S1501	05/31/2000	05/31/2000	33 2	G-2 EPA #5	1 32	1.11	1 07	0.27	1 47	0.46	10 59	9.53
S1502	05/31/2000	05/31/2000	34 3	G-2 EPA #6	1 57	1.18	0 68	0.29	2 47	0.6	-0 65	9.84
S1503	05/31/2000	05/31/2000	38.5	I-5 EPA #1	0.57	1.58	1.34	0.39	1.48	0.66	34.06	13.34
S1504	05/31/2000	05/31/2000	37.9	I-5 EPA #2	0.61	1.87	1 94	0.42	0.65	0.87	35.91	12.88
S1505	05/31/2000	05/31/2000	36 5	I-5 EPA #3	-0.46	1.65	1 84	0.41	1.58	0.69	31 11	13.75
S1506	05/31/2000	05/31/2000	36 3	I-5 EPA #4	1.49	1.48	2 24	0.37	0.73	0.6	27.83	10.01
S1507	05/31/2000	05/31/2000	36.7	I-5 EPA #5	-2.13	1.53	1.65	0.4	1.2	0.66	47.11	10.51
S1508	05/31/2000	05/31/2000	38	I-5 EPA #6	3.24	1.98	1.3	0.44	1.42	0.75	19.08	14.96
S1509	05/31/2000	05/31/2000	30	H-8.5 EPA #1	-0.59	1.43	1.81	0.36	2.65	0.6	28.8	11.69
S1510	05/31/2000	05/31/2000	29.6	H-8.5 EPA #2	2.03	1.8	2.13	0.4	1.01	0.64	21.1	13.03
S1511	05/31/2000	05/31/2000	30.8	H-8.5 EPA #3	1.35	1.66	2.15	0.46	1.17	0.75	16.02	14.66
S1512	05/31/2000	05/31/2000	30.5	H-8.5 EPA #4	2.1	1.61	1.55	0.39	2.63	0.06	12.36	12.67
S1513	05/31/2000	05/31/2000	28.6	H-8.5 EPA #5	-1.1	1.87	1.66	0.47	2.12	0.8	40.37	15.07
S1514	05/31/2000	05/31/2000	34.2	H-8.5 EPA #6	1.85	1.6	1.03	0.39	3.04	0.67	12.36	13.72
S1515	05/31/2000	05/31/2000	30.1	I.5 - (-7)	19.8	11.19	56.65	2.64	14.64	3.9	22.48	49.09

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1516	06/01/2000	06/01/2000	38.3	M-(-2) #1	2.71	1.79	5.52	0.48	1.15	0.69	29.83	12.68
S1517	06/01/2000	06/01/2000	35.1	M-(-2) #2	2.1	1.37	1.74	0.34	0.55	0.56	10.62	11.36
S1518	06/01/2000	06/01/2000	44.7	M-(-2) #3	1.95	1.09	1.52	0.27	0.31	0.44	14.18	9.29
S1519	06/01/2000	06/01/2000	40.2	M-(-2) #4	0.34	1.35	0.82	0.34	1.41	0.58	13.05	11.56
S1520	06/01/2000	06/01/2000	42	M-(-2) #5	-0.03	1.47	0.77	0.36	1	0.62	52.63	13.11
S1521	06/01/2000	06/01/2000	41.2	M-(-2) QC	3.65	1.99	1.68	0.48	2.2	0.79	18.8	15.29
S1522	06/01/2000	06/01/2000	36.5	M-10 OFFSITE GROUND	1.59	1.26	0.19	0.29	-0.04	0.53	35.56	11.72
S1523	06/01/2000	06/01/2000	37.3	M-10 OFFSITE GROUND	0.66	0.93	0.64	0.23	0.71	0.41	12.1	8.55
S1524	06/01/2000	06/01/2000	37.5	K-(-1)OB #1	1.12	1.34	-0.16	0.32	1.31	0.58	4.58	12.08
S1525	06/01/2000	06/01/2000	38.4	K-(-1)OB #2	-0.51	0.81	0.34	0.21	1	0.36	15.2	7.72
S1526	06/01/2000	06/01/2000	38.1	K-(-1)OB #3	0.19	0.92	0.52	0.23	0.33	0.39	32.9	8.49
S1527	06/01/2000	06/01/2000	39.5	K-(-1)OB #4	-0.95	1.43	0.76	0.36	1.15	0.63	3.88	12.37
S1528	06/01/2000	06/01/2000	37	K-(-1)OB #5	0.74	1.44	0.41	0.35	1.93	0.62	20.8	12.53
S1529	06/01/2000	06/01/2000	37.3	K-(-1)OB QC	3.45	0.97	-0.35	0.22	2.67	0.41	26.97	8.4
S1530	06/02/2000	06/02/2000	38.7	I-(-1)OB #1	2.29	1.28	0.55	0.31	1.11	0.53	18.39	11.08
S1531	06/02/2000	06/02/2000	40.1	I-(-1)OB #2	-1.49	1.32	0.92	0.35	1.49	0.59	16.34	12.44
S1532	06/02/2000	06/02/2000	41.4	I-(-1)OB #3	-1.35	1.14	1.07	0.29	0.59	0.49	41.06	10.56
S1533	06/02/2000	06/02/2000	38.8	I-(-1)OB #4	1.06	1.29	0.99	0.32	0.43	0.54	4.69	11.18
S1534	06/02/2000	06/02/2000	39.9	I-(-1)OB #5	1.55	1.37	1	0.34	0.63	0.57	13.8	11.97
S1535	06/02/2000	06/02/2000	37.3	I-(-1)OB QC	2.04	1.16	0.34	0.28	1.16	0.48	22	10.47
S1536	06/05/2000	06/05/2000	34.6	I-(-7) #1	2.15	1.33	1.31	0.33	1.98	0.66	32.34	11.3
S1537	06/05/2000	06/05/2000	37.1	I-(-6) #2	2.86	1.69	1.4	0.42	1.66	0.69	12.02	13.99
S1538	06/05/2000	06/05/2000	36	K-(-7) #3	0.77	1.2	1.16	0.3	2.75	0.61	29.49	10.06
S1539	06/05/2000	06/05/2000	36	K-(-6) #4	1.86	2.09	3.11	0.52	1.16	0.82	40.9	16.09
S1540	06/05/2000	06/05/2000	36.7	M-(-7) #5	3.08	1.45	0.67	0.34	1.38	0.59	5.8	11.63
S1541	06/05/2000	06/05/2000	36.7	M-(6) #6	1.86	1.44	1.24	0.36	2.77	0.61	10.28	11.82
S1542	06/05/2000	06/05/2000	38.8	K-(-2)OB #1	3.96	2.29	5.97	0.58	2.74	0.87	33.21	16.09
S1543	06/05/2000	06/05/2000	40.3	K-(-2)OB #2	1.97	1.46	2.47	0.36	2.05	0.58	17.62	11.15
S1544	06/05/2000	06/05/2000	40	K-(-2)OB #3	0.39	1.57	1.82	0.41	-0.48	0.65	15.14	13.66
S1545	06/05/2000	06/05/2000	40.1	K-(-2)OB #4	1.1	2.24	0.63	0.55	2.46	0.96	-6.86	17.53
S1546	06/05/2000	06/05/2000	38.5	K-(-2)OB #5	0.32	1.85	1.8	0.47	0.63	0.75	41.67	15.69
S1547	06/05/2000	06/05/2000	39	K-(-2)OB QC	2.16	1.47	1.87	0.36	1.46	0.6	21.85	12.01
S1548	06/05/2000	06/05/2000	35.1	I-(-4.5)	2.93	1.23	2.27	0.3	2.43	0.49	25.81	9.5
S1549	06/05/2000	06/05/2000	35.1	I-(-3)	2.55	1.77	3.82	0.45	2.96	0.71	12.65	13.24
S1550	06/05/2000	06/05/2000	36	I-(-1)	1.64	2.72	5.52	0.7	2.92	1.05	42.6	19.48
S1551	06/06/2000	06/06/2000	33.3	I-(-6) EPA #1	0.65	1.68	1.78	0.43	2.33	0.7	17.33	13.57
S1552	06/06/2000	06/06/2000	32.4	I-(-6) EPA #2	0.29	1.6	1.51	0.4	1.3	0.67	32.6	13.75
S1553	06/06/2000	06/06/2000	33	I-(-6) EPA #3	0.84	1.16	0.56	0.25	2.19	0.49	53.21	10.39
S1554	06/06/2000	06/06/2000	33.3	I-(-6) EPA #4	0.5	1.91	3.43	0.48	1.06	0.77	23.23	14.69
S1555	06/06/2000	06/06/2000	33.4	I-(-6) EPA #5	-0.76	1.55	1.65	0.4	1	0.66	26.3	13.14
S1556	06/06/2000	06/06/2000	34.2	I-(-6) EPA #6	0.54	1.59	1.54	0.39	1.31	0.66	26.98	13.14
S1557	06/06/2000	06/06/2000	32.1	I-(-7.5) EPA #1	0.75	1.27	0.82	0.31	2.08	0.55	26.86	11.24
S1558	06/06/2000	06/06/2000	32.3	I-(-7.5) EPA #2	0.21	1.21	1.24	0.3	1.81	0.51	27.92	10.3

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1559	06/06/2000	06/06/2000	32 3	I-(-7 5) EPA #3	2 4	1.35	1 15	0.36	0 65	0.66	24 63	11.8
S1560	06/06/2000	06/06/2000	31 9	I-(-7 5) EPA #4	0 01	1.88	1 3	0.34	0 70	0.67	23 1	11.78
S1561	06/06/2000	06/06/2000	32 5	I-(-7 5) EPA #5	1 3	0.99	1 29	0.24	1 44	0.42	17 09	8.58
S1562	06/06/2000	06/06/2000	31 7	I-(-7 5) EPA #6	2 04	1.26	1 13	0.31	0 96	0.58	10 47	10.09
S1563	06/06/2000	06/06/2000	35 8	K-(-6) EPA #1	1 07	1.75	2 23	0.34	1 53	0.65	43 62	13.21
S1564	06/06/2000	06/06/2000	36 6	K-(-6) EPA #2	3 19	1.7	2 88	0.49	1 78	0.67	2 64	12.41
S1565	06/06/2000	06/06/2000	35 8	K-(-6) EPA #3	0 42	1.74	2 5	0.44	1 36	0.71	13 15	1.14
S1566	06/06/2000	06/06/2000	36 6	K-(-6) EPA #4	1 5	1.80	2 48	0.41	1 75	0.67	40 32	13.09
S1567	06/06/2000	06/06/2000	35 7	K-(-6) EPA #5	1 34	1.58	2 07	0.4	0 97	0.64	35 05	13.03
S1568	06/06/2000	06/06/2000	36 7	K-(-6) EPA #6	1 27	1.58	2 99	0.53	2 91	0.7	4 79	13.84
S1569	06/06/2000	06/06/2000	35 5	K-(-7 5) EPA #1	0 79	1.75	2 11	0.34	1 87	0.72	26 33	14.35
S1570	06/06/2000	06/06/2000	35	K-(-7 5) EPA #2	-0 21	1.82	1 95	0.36	1 64	0.69	24 47	12.69
S1571	06/06/2000	06/06/2000	36 7	K-(-7 5) EPA #3	3 98	2.25	2 45	0.55	1 15	0.67	13 09	15.54
S1572	06/06/2000	06/06/2000	36 7	K-(-7 5) EPA #4	2 36	1.69	1 88	0.37	2 04	0.62	14 95	11.99
S1573	06/06/2000	06/06/2000	34 7	K-(-7 5) EPA #5	2 92	1.61	1 7	0.37	2 06	0.68	19 12	12.1
S1574	06/06/2000	06/06/2000	34 6	K-(-7 5) EPA #6	-1 19	1.47	2 41	0.39	1 32	0.61	54 24	13.71
S1575	06/06/2000	06/06/2000	35 4	M-(-7 5) EPA #1	1 04	1.44	0 35	0.24	1 98	0.61	26 3	12.44
S1576	06/06/2000	06/06/2000	37 8	M-(-7 5) EPA #2	1 55	1.81	0.5	0.31	1 61	0.65	13 15	11.06
S1577	06/06/2000	06/06/2000	38 1	M-(-7 5) EPA #3	1 22	1.52	0 79	0.37	0.71	0.53	43 08	13.51
S1578	06/06/2000	06/06/2000	35	M-(-7 5) EPA #4	2 18	1.51	0 64	0.31	1 42	0.64	9.56	11.13
S1579	06/06/2000	06/06/2000	35 2	M-(-7 5) EPA #5	1 18	1.53	0 55	0.37	2 83	0.66	24 23	12.79
S1580	06/06/2000	06/06/2000	35 5	M-(-7 5) EPA #6	2 13	1.96	0 62	0.47	1 48	0.64	18 37	17.66
S1581	06/06/2000	06/06/2000	36 2	M-(-6) EPA #1	2 08	1.71	1 42	0.42	1 73	0.7	17 24	13.87
S1582	06/06/2000	06/06/2000	32 1	M-(-6) EPA #2	1 61	1.07	1 88	0.27	0 49	0.43	34 21	9.16
S1583	06/06/2000	06/06/2000	36 3	M-(-6) EPA #3	1 83	1.9	1 36	0.46	2.46	0.78	26 04	15.27
S1584	06/06/2000	06/06/2000	36 5	M-(-6) EPA #4	1 12	1.89	2 61	0.47	0.8	0.75	36 36	16.41
S1585	06/06/2000	06/06/2000	35 5	M-(-6) EPA #5	0 21	1.25	2	0.32	1.41	0.62	21 15	10.52
S1586	06/06/2000	06/06/2000	34 7	M-(-6) EPA #6	0 11	1.38	1 9	0.35	1 01	0.67	27 18	11.66
S1587	06/06/2000	06/06/2000	36 7	I-(-1) EPA #1	1 32	1.8	1.43	0.39	1 36	0.66	40 39	13.55
S1588	06/06/2000	06/06/2000	37.5	I-(-1) EPA #2	-1.1	1.64	2.4	0.43	1 39	0.7	5 15	13.96
S1589	06/06/2000	06/06/2000	35.5	I-(-1) EPA #3	-0.15	1.52	2 02	0.39	0 29	0.62	42 77	13.2
S1590	06/06/2000	06/06/2000	35 9	I-(1) EPA #4	3 51	1.88	1.07	0.19	1 58	0.67	25 56	13.67
S1591	06/06/2000	06/06/2000	36	I-(-1) EPA #5	1 73	1.5	2	0.37	0 62	0.6	23 9	12.26
S1592	06/06/2000	06/06/2000	35.6	I-(-1) EPA #6	-0.53	1.27	1.49	0.33	1 27	0.64	29.5	11.13
S1593	06/06/2000	06/06/2000	34	I-(-2) EPA #1	-0.13	1.39	1.43	0.33	1.9	0.58	3.32	10.7
S1594	06/06/2000	06/06/2000	33.9	I-(-2) EPA #2	-1 06	1.19	1.17	0.31	2.99	0.58	10.01	10.09
S1595	06/06/2000	06/06/2000	33.5	I-(-2) EPA #3	2.18	1.64	0.94	0.37	1.72	0.64	17.67	12.84
S1596	06/06/2000	06/06/2000	34.5	I-(-2) EPA #4	-0.85	1.88	1.51	0.46	1.63	0.81	23.78	14.08
S1597	06/06/2000	06/06/2000	34.0	I-(-2) EPA #5	2.72	1.8	1.83	0.37	0.43	0.6	29.85	12.96
S1598	06/06/2000	06/06/2000	33.8	I-(-2) EPA #6	2.8	1.94	0 71	0.3	2.35	0.69	10.3	10.85
S1599	06/06/2000	06/06/2000	34	I-(-4) EPA #1	0.63	1.27	1.84	0.32	1.44	0.62	30.38	10.45
S1600	06/06/2000	06/06/2000	32.7	I-(-4) EPA #2	2.29	1.71	2.15	0.42	1.82	0.7	14.07	13.44
S1601	06/06/2000	06/06/2000	35	I-(-4) EPA #3	1.37	2.6	2.57	0.67	1.51	0.62	-10.86	15.6

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1602	06/06/2000	06/06/2000	33.5	I-(-4) EPA #4	1.77	1.87	1.83	0.46	2.22	0.77	18.63	14.8
S1603	06/06/2000	06/06/2000	33.2	I-(-4) EPA #5	2.78	1.84	1.56	0.42	2	0.75	22.53	14.87
S1604	06/06/2000	06/06/2000	31.6	I-(-4) EPA #6	3.03	1.55	1.74	0.38	1.13	0.62	20.05	12.51
S1605	06/07/2000	06/07/2000	31.3	M-(-1) OB #1	1.59	2.04	1.14	0.5	1.19	0.85	10.19	16.59
S1606	06/07/2000	06/07/2000	29.5	M-(-1) OB #2	1.34	1.21	0.86	0.3	0.71	0.51	15.41	10.52
S1607	06/07/2000	06/07/2000	32.9	M-(-1) OB #3	-0.51	1.24	0.23	0.31	1.07	0.55	22.31	11.74
S1608	06/07/2000	06/07/2000	32.4	M-(-1) OB #4	0.56	1.54	0.21	0.38	1.97	0.87	26.33	13.95
S1609	06/07/2000	06/07/2000	33.6	M-(-1) OB QC	-1.06	1.52	1.2	0.39	0.35	0.66	16.59	13.65
S1610	06/07/2000	06/07/2000	37.9	M-(-7) OB #1	0.55	1.32	2.67	0.34	1.33	0.54	20.98	10.9
S1611	06/07/2000	06/07/2000	37.9	M-(-7) OB #2	1.54	1.36	1.01	0.33	0.81	0.56	31.34	11.09
S1612	06/07/2000	06/07/2000	39.3	M-(-7) OB #3	-1.5	1.31	3.3	0.36	1.45	0.56	12.86	10.79
S1613	06/07/2000	06/07/2000	37.6	M-(-7) OB QC	2.02	1.7	2.8	0.42	0.27	0.67	33.67	13.05
S1614	06/08/2000	06/08/2000	35.4	K- (-2) OB #1 AD	3.19	1.6	1.92	0.39	0.34	0.63	12.31	12.98
S1615	06/08/2000	06/08/2000	37.3	M.7 - (-4) EZ	*64.36*	*27.91*	*250.11*	*7.1*	64.37	9.48	-9.13	104.72
S1616	06/09/2000	06/09/2000	32.4	F-7 #1	0.22	1.69	1.94	0.47	1.59	0.79	49.21	16.19
S1617	06/09/2000	06/09/2000	32.2	F-7 #2	2.79	1.59	3.04	0.4	2.7	0.64	2.11	12.05
S1618	06/09/2000	06/09/2000	33.1	F-7 #3	2.1	1.48	2.46	0.37	0.95	0.59	21.13	11.78
S1619	06/09/2000	06/09/2000	32.3	AREA HIGH COUNT #1	2.97	1.8	9.26	0.47	3.22	0.68	16.06	11.62
S1620	06/09/2000	06/09/2000	36	AREA HIGH COUNT #2	2.28	1.9	10.96	0.5	2.73	0.71	22.98	12.19
S1621	06/09/2000	06/09/2000	34.1	AREA HIGH COUNT #3	5.83	2.03	9.92	0.52	3.54	0.75	28.34	12.79
S1622	06/09/2000	06/09/2000	32	A COMP #1	0.43	1.18	4.99	0.31	2.86	0.48	-4.27	8.51
S1623	06/09/2000	06/09/2000	33.4	A COMP #2	1.26	1.14	0.76	0.27	1.53	0.48	37.4	9.59
S1624	06/09/2000	06/09/2000	30.8	A COMP #3	1.42	1.64	2.75	0.46	1.93	0.74	25.35	14.59
S1625	06/09/2000	06/09/2000	33.8	A COMP #4	2.13	2.17	4.49	0.55	2.53	0.85	11.2	15.42
S1626	06/09/2000	06/09/2000	32.7	A COMP #5	0.95	1.86	1.89	0.46	1.99	0.76	43.81	15.3
S1627	06/09/2000	06/09/2000	33.5	A COMP #6	3.32	1.95	5.65	0.49	3.39	0.75	38.25	14.07
S1628	06/09/2000	06/09/2000	33.6	A COMP #7	3.09	2.13	4.9	0.54	3.71	0.84	5.27	14.44
S1629	06/09/2000	06/09/2000	33.1	G-1 PILE #1	0.43	1.57	2.36	0.4	2.58	0.66	30.74	12.67
S1630	06/09/2000	06/09/2000	32.3	G-1 PILE #2	1.27	1.35	2.11	0.34	0.1	0.54	23.5	10.98
S1631	06/09/2000	06/09/2000	32.3	G-1 PILE #3	0.6	2	0.69	0.48	1.59	0.85	25.14	17.25
S1632	06/09/2000	06/09/2000	34.4	G-1 PILE #4	0.74	1.38	1.89	0.44	0.57	0.56	26.95	11.46
S1633	06/09/2000	06/09/2000	33.2	G-1 PILE #5	-0.84	1.36	0.63	0.35	1.85	0.61	20.25	12.58
S1634	06/09/2000	06/09/2000	32.2	G-1 PILE #6	0.23	0.72	0.95	0.16	1.74	0.31	6.3	6.19
S1635	06/09/2000	06/09/2000	31.4	G-1 PILE #7	1.28	1.38	0.98	0.34	2.6	0.58	16.04	11.56
S1636	06/09/2000	06/09/2000	32.4	G-1 PILE #8	1.88	1.62	1.58	0.39	0.6	0.65	32.32	13.45
S1637	06/09/2000	06/09/2000	32.4	G-1 PILE #9	2.36	1.07	0.9	0.26	1.13	0.44	33.2	9.24
S1638	06/09/2000	06/09/2000	33	G-1 PILE QC	1.03	0.79	1.36	0.2	1.76	0.34	12.35	6.73
S1639	06/12/2000	06/12/2000	38.2	J-(-4) OB #1	-1.01	1.44	4.13	0.35	2.39	0.59	15.91	11.05
S1640	06/12/2000	06/12/2000	33.4	J-(-4) OB #2	1.78	1.44	3.82	0.37	2.1	0.58	7.21	10.76
S1641	06/12/2000	06/12/2000	32.4	J-(-4) OB #3	-0.54	1.53	3.61	0.4	1.24	0.62	29.58	12.29
S1642	06/12/2000	06/12/2000	35.3	J-(-4) OB #4	0.06	1.5	3.56	0.47	2.08	0.74	25.64	14.29
S1643	06/12/2000	06/12/2000	34.7	J-(-4) OB #5	0.95	1.54	3.84	0.4	1.37	0.62	16.86	11.84
S1644	06/12/2000	06/12/2000	36.8	J-(-4) OB QC	0.57	2.17	5.2	0.56	2.69	0.87	18.86	15.41

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location
S1645	06/12/2000	06/12/2000	34 6	AREA A AD #1
S1646	06/12/2000	06/12/2000	36 4	AREA A AD #2
S1647	06/12/2000	06/12/2000	31 4	AREA A AD #3
S1648	06/12/2000	06/12/2000	34 5	AREA A AD #4
S1649	06/12/2000	06/12/2000	34 4	AREA A AD #5
S1650	06/12/2000	06/12/2000	34 9	AREA A AD #6
S1651	06/12/2000	06/12/2000	32 7	AREA A AD #7
S1652	06/12/2000	06/12/2000	34 4	AREA A AD #8
S1653	06/12/2000	06/12/2000	33	J-(-3) OB
S1654	06/14/2000	06/14/2000	32.8	K-(-4) EPA #1
S1655	06/14/2000	06/14/2000	33 8	K-(-4) EPA #2
S1656	06/14/2000	06/14/2000	34 9	K-(-4) EPA #3
S1657	06/14/2000	06/14/2000	32 5	K-(-4) EPA #4
S1658	06/14/2000	06/14/2000	33 2	K-(-4) EPA #5
S1659	06/14/2000	06/14/2000	32 8	K-(-4) EPA #6
S1660	06/14/2000	06/14/2000	35 4	M-(-4) EPA #1
S1661	06/14/2000	06/14/2000	36 3	M-(-4) EPA #2
S1662	06/14/2000	06/14/2000	36 1	M-(-4) EPA #3
S1663	06/14/2000	06/14/2000	35 7	M-(-4) EPA #4
S1664	06/14/2000	06/14/2000	35 9	M-(-4) EPA #5
S1665	06/14/2000	06/14/2000	36 5	M-(-4) EPA #6
S1666	06/14/2000	06/14/2000	33 1	K-(-2) EPA #1
S1667	06/14/2000	06/14/2000	32 3	K-(-2) EPA #2
S1668	06/14/2000	06/14/2000	31 9	K-(-2) EPA #3
S1669	06/14/2000	06/14/2000	33 4	K-(-2) EPA #4
S1670	06/14/2000	06/14/2000	32 9	K-(-2) EPA #5
S1671	06/14/2000	06/14/2000	33 1	K-(-2) EPA #6
S1672	06/14/2000	06/14/2000	31 3	M-(-2) EPA #1
S1673	06/14/2000	06/14/2000	30 8	M-(-2) EPA #2
S1674	06/14/2000	06/14/2000	32 4	M-(-2) EPA #3
S1675	06/14/2000	06/14/2000	33 2	M-(-2) EPA #4
S1676	06/14/2000	06/14/2000	34.3	M-(-2) EPA #5
S1677	06/14/2000	06/14/2000	34.1	M-(-2) EPA #6
S1678	06/14/2000	06/14/2000	35 8	M-0 EPA #1
S1679	06/14/2000	06/14/2000	36	M-0 EPA #2
S1680	06/14/2000	06/14/2000	36.1	M-0 EPA #3
S1681	06/14/2000	06/14/2000	33.2	M-0 EPA #4
S1682	06/14/2000	06/14/2000	36.5	M-0 EPA #5
S1683	06/14/2000	06/14/2000	34.6	M-0 EPA #6
S1684	06/14/2000	06/14/2000	33.6	K-0 EPA #1
S1685	06/14/2000	06/14/2000	33.4	K-0 EPA #2
S1686	06/14/2000	06/14/2000	33.7	K-0 EPA #3
S1687	06/14/2000	06/14/2000	34.4	K-0 EPA #4

NUTRANL RESULTS							
U-238		TH-232		RA-226		K-40	
Result	+/-	Result	+/-	Result	+/-	Result	+/-
1 22	[illegible]	4 45	[illegible]	2 08	[illegible]	33 46	[illegible]
5 14	[illegible]	3 1	[illegible]	2 3	[illegible]	2 89	[illegible]
2 15	[illegible]	2 3	[illegible]	1 22	[illegible]	17 32	[illegible]
5 06	[illegible]	2 82	[illegible]	1 86	[illegible]	5 7	[illegible]
2 49	[illegible]	2 45	[illegible]	0 89	[illegible]	21 58	[illegible]
6 86	[illegible]	2 11	[illegible]	1 95	[illegible]	6 02	[illegible]
-1 97	[illegible]	5 5	[illegible]	1 5	[illegible]	41 63	[illegible]
3 94	[illegible]	3 73	[illegible]	3 26	[illegible]	-9 88	[illegible]
2 2	[illegible]	2 24	[illegible]	2 4	0.75	7 14	[illegible]
0 83	[illegible]	2 79	[illegible]	0 89	[illegible]	23 56	[illegible]
-1 13	[illegible]	3 14	[illegible]	2.71	[illegible]	11 12	[illegible]
2 42	[illegible]	2 12	[illegible]	3 67	[illegible]	-4 45	[illegible]
1 6	1.77	2 62	[illegible]	0 73	0.71	28 68	14.16
0 3	1.90	2 6	[illegible]	1 98	[illegible]	25 55	[illegible]
0 35	[illegible]	2 93	[illegible]	0 99	[illegible]	7 64	[illegible]
0 77	[illegible]	1 86	[illegible]	1 47	[illegible]	19 15	[illegible]
3 06	[illegible]	1 86	[illegible]	2 52	[illegible]	-0 28	[illegible]
1 31	[illegible]	0 97	[illegible]	2 84	[illegible]	32 68	[illegible]
-0 15	[illegible]	2 16	[illegible]	1.91	[illegible]	30 84	[illegible]
2 85	[illegible]	2 52	[illegible]	1 11	[illegible]	19 84	[illegible]
2 22	[illegible]	1 41	[illegible]	1 94	[illegible]	19 4	[illegible]
2 57	[illegible]	1 81	[illegible]	1 58	[illegible]	8 09	[illegible]
2 76	[illegible]	2 15	[illegible]	1 36	[illegible]	26 1	[illegible]
0 66	[illegible]	2 04	[illegible]	1 65	[illegible]	16 83	[illegible]
3 05	[illegible]	1 55	[illegible]	2 77	[illegible]	2 08	[illegible]
0 95	[illegible]	2 48	[illegible]	0 84	[illegible]	42 37	[illegible]
0 89	[illegible]	2 41	[illegible]	1 68	[illegible]	22 75	[illegible]
0 96	[illegible]	1 79	[illegible]	1 07	[illegible]	22 1	[illegible]
3 69	[illegible]	4 99	[illegible]	3.36	[illegible]	37 51	[illegible]
-1 01	[illegible]	1.3	[illegible]	1.78	[illegible]	37 64	[illegible]
2.15	[illegible]	1 56	[illegible]	2.13	[illegible]	21 53	[illegible]
-1 2	[illegible]	1.81	[illegible]	1.36	[illegible]	58.67	[illegible]
-1 32	[illegible]	1.43	[illegible]	1.75	[illegible]	26.62	[illegible]
3.4	[illegible]	2.34	[illegible]	2.4	[illegible]	6.72	[illegible]
1.48	[illegible]	2.55	[illegible]	1.96	[illegible]	29.93	[illegible]
1.36	[illegible]	2.24	[illegible]	2.3	[illegible]	22.49	[illegible]
1.45	[illegible]	2.39	[illegible]	2.26	[illegible]	10.84	[illegible]
2.16	[illegible]	2.39	[illegible]	1.63	[illegible]	22.33	[illegible]
1.56	[illegible]	3.12	[illegible]	2.54	[illegible]	11.98	[illegible]
0.38	[illegible]	1.61	[illegible]	1.31	[illegible]	32.45	[illegible]
1.02	[illegible]	1.48	[illegible]	1.83	[illegible]	-2.02	[illegible]
2.66	[illegible]	2.69	[illegible]	2.1	[illegible]	-9.16	[illegible]
0.79	[illegible]	1.69	[illegible]	1.32	[illegible]	17.46	[illegible]

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1688	06/14/2000	06/14/2000	35	K-0 EPA #5	2.31	1.3	1.37	0.32	1.63	0.54	20.54	10.74
S1689	06/14/2000	06/14/2000	35.4	K-0 EPA #6	1.37	1.5	1.67	0.38	1.17	0.62	15.74	12.38
S1690	06/14/2000	06/14/2000	35.2	I-0 EPA #1	1.9	1.57	3.41	0.4	1.89	0.63	16.99	12.2
S1691	06/14/2000	06/14/2000	32.8	I-0 EPA #2	1.26	1.34	3.56	0.34	2.75	0.54	2.65	9.88
S1692	06/14/2000	06/14/2000	33.3	I-0 EPA #3	2.44	1.62	2.84	0.4	2.29	0.66	29.96	12.48
S1693	06/14/2000	06/14/2000	33.5	I-0 EPA #4	2.89	1.63	3.59	0.4	1.39	0.63	43.46	12.39
S1694	06/14/2000	06/14/2000	36.4	I-0 EPA #5	-0.69	1.62	3.66	0.4	2.07	0.62	20.66	11.9
S1695	06/14/2000	06/14/2000	33.4	I-0 EPA #6	3.09	1.49	2.93	0.37	1.83	0.59	38.59	11.62
S1696	06/14/2000	06/14/2000	38.7	G-7 EPA #1	1.33	2.04	1.5	0.6	1.54	0.84	27.91	16.42
S1697	06/14/2000	06/14/2000	37.1	G-7 EPA #2	-0.36	1.58	1.76	0.4	1.45	0.67	27.17	13.33
S1698	06/14/2000	06/14/2000	37.7	G-7 EPA #3	3.58	1.54	1.61	0.37	2.1	0.61	13.91	11.91
S1699	06/14/2000	06/14/2000	36.7	G-7 EPA #4	0.39	1.81	2.06	0.48	1.47	0.78	13.9	15.14
S1700	06/14/2000	06/14/2000	37.7	G-7 EPA #5	3.65	1.72	1	0.41	1.98	0.7	10.24	13.52
S1701	06/14/2000	06/14/2000	36.1	G-7 EPA #6	0.87	1.95	1.66	0.49	2.2	0.82	-9.73	15.15
S1702	06/15/2000	06/15/2000	3.2	OIL FROM TANK	0	0.86	0.02	0.21	0.12	0.36	0.69	6.11
S1703	06/15/2000	06/15/2000	24.6	TANK WATER #1	0.63	0.93	-0.14	0.23	0.49	0.42	6.2	8.95
S1704	06/15/2000	06/15/2000	21.1	TANK WATER #2	-0.29	0.96	-0.12	0.24	0.35	0.44	-2.14	9.4
S1705	06/15/2000	06/15/2000	22.9	TANK WATER #3	-0.48	0.82	-0.05	0.21	0.38	0.37	4.26	7.94
S1706	06/15/2000	06/15/2000	23.6	TANK WATER #4	0.47	0.88	-0.1	0.22	0.45	0.39	-3.86	8.37
S1707	06/15/2000	06/15/2000	24.3	TANK WATER #5	0.86	0.87	0.04	0.21	0.36	0.38	-2.51	7.85
S1708	06/15/2000	06/15/2000	44.2	SLUDGE FROM TANK	2.57	1.36	1.55	0.33	1.38	0.55	8.65	10.74
S1709	06/16/2000	06/16/2000	33.5	B-26 OB #1	0.38	1.34	2.04	0.35	1.46	0.57	-3.93	10.93
S1710	06/16/2000	06/16/2000	33.7	B-26 OB #2	1.7	1.79	0.9	0.44	3.2	0.76	21.83	14.59
S1711	06/16/2000	06/16/2000	28.5	B-26 OB #3	3.5	1.51	1.38	0.37	1.53	0.61	6.96	12.19
S1712	06/16/2000	06/16/2000	29.3	B-26 OB QC	2.82	1.69	1.81	0.39	1.84	0.65	3.47	12.47
S1713	06/16/2000	06/16/2000	36.6	A-26 WALL	13.11	3.79	15.87	0.95	5.31	1.34	11.79	20.58
S1714	06/16/2000	06/16/2000	32.9	A.5 - 26.5 #1	1.85	1.44	3.17	0.36	0.77	0.57	36.49	11.36
S1715	06/16/2000	06/16/2000	36	A.5 - 26.5 #2	5.17	2.08	4.47	0.53	2.6	0.81	18.57	15.09
S1716	06/16/2000	06/16/2000	34.6	A.5 - 26.5 #3	3.03	1.53	1.84	0.37	2.65	0.62	4.4	11.59
S1717	06/16/2000	06/16/2000	31.7	A.5 - 26.5 #4	-0.73	1.19	0.57	0.3	1.7	0.53	10.54	10.47
S1718	06/19/2000	06/19/2000	33.5	F 19 OB #1	2.52	1.63	1.68	0.4	2.28	0.67	28.44	13.24
S1719	06/19/2000	06/19/2000	26	F 19 OB #2	1.62	1.56	0.87	0.38	1.86	0.65	14.47	12.96
S1720	06/19/2000	06/19/2000	30.4	F 19 OB #3	1.06	1.48	1.56	0.37	1.63	0.63	11.14	12.26
S1721	06/19/2000	06/19/2000	20.5	F 19 OB QC	0.34	1.36	0.55	0.34	1.3	0.59	23.76	12.52
S1722	06/19/2000	06/19/2000	22	F 19 #1	2.63	1.44	1.19	0.35	1.92	0.59	22.07	11.92
S1723	06/19/2000	06/19/2000	25.5	F 19 #2	1.09	1.72	1.2	0.42	2.05	0.73	3.45	14.23
S1724	06/19/2000	06/19/2000	23.7	F 19 #3	1.32	1.39	0.49	0.34	2.25	0.61	-6.69	11.8
S1725	06/19/2000	06/19/2000	25.4	F 19 #4	2.54	1.23	1.06	0.3	0.82	0.5	21.81	10.59
S1726	06/19/2000	06/19/2000	24.7	F 19 #5	1.48	1.33	0.27	0.32	2.21	0.57	20.02	11.56
S1727	06/19/2000	06/19/2000	22	F 19 #6	0.03	0.9	0.53	0.23	1.18	0.39	11.89	9.24
S1728	06/19/2000	06/19/2000	33.9	OILY STOCK #1	1.49	1.42	2.41	0.36	1.75	0.58	-1.47	11.04
S1729	06/19/2000	06/19/2000	28.2	OILY STOCK #2	1.91	1.09	1.28	0.27	0.59	0.46	30.89	9.44
S1730	06/19/2000	06/19/2000	31.5	OILY STOCK #3	1.24	1.48	1.04	0.36	1.99	0.63	3.74	12.11

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1731	06/19/2000	06/19/2000	29.1	OILY STOCK #4	2.52	1.85	2.95	0.47	1.86	0.75	12.9	14.89
S1732	06/21/2000	06/21/2000	21.9	STOCK PILE F-17 #1	-0.06	1.56	0.73	0.4	0.62	0.64	20.55	14.09
S1733	06/21/2000	06/21/2000	21.6	STOCK PILE F-17 #2	-0.38	1.25	0.22	0.31	1.13	0.54	38.25	12.06
S1734	06/21/2000	06/21/2000	25.6	STOCK PILE F-17 #3	-0.35	1.43	0.9	0.41	0.51	0.7	20.09	14.42
S1735	06/21/2000	06/21/2000	27.5	STOCK PILE F-17 QC	-0.98	1.25	0.04	0.28	1.08	0.64	15.39	11.82
S1736	06/22/2000	06/22/2000	29.3	F-19 SPOT #1	0.32	1.69	0.69	0.47	2.09	0.84	24.78	16.39
S1737	06/22/2000	06/22/2000	29.5	F-19 SPOT #2	-0.61	1.4	0.75	0.38	2.61	0.91	46.12	12.6
S1738	06/22/2000	06/22/2000	38.3	A-26 EPA #1	-0.44	2.21	2.1	0.57	2.75	0.94	13.55	17.89
S1739	06/22/2000	06/22/2000	38.7	A-26 EPA #2	5.54	1.4	1.37	0.35	2.31	0.85	16.11	10.91
S1740	06/22/2000	06/22/2000	37.3	A-26 EPA #3	0.98	1.99	2.21	0.64	0.75	0.69	41.87	11.49
S1741	06/22/2000	06/22/2000	36.3	A-26 EPA #4	1.08	1.87	2.1	0.49	0.85	0.74	39.08	15.16
S1742	06/22/2000	06/22/2000	38.3	A-26 EPA #5	1.09	2.14	2.29	0.64	0.67	0.69	12.67	17.06
S1743	06/22/2000	06/22/2000	36.5	A-26 EPA #6	1.23	1.56	1.9	0.39	1.54	0.65	23.47	12.75
S1744	06/22/2000	06/22/2000	32.1	F-18.5 WALL EPA #1	3.79	1.56	0.61	0.26	3.71	0.89	33.98	12.75
S1745	06/22/2000	06/22/2000	32.4	F-18.5 WALL EPA #2	3	1.5	1.23	0.44	3.72	0.75	2.09	14.09
S1746	06/22/2000	06/22/2000	34	F-18.5 WALL EPA #3	2.36	1.33	0.6	0.32	5.88	0.59	5.67	10.29
S1747	06/22/2000	06/22/2000	35.8	F-18.5 WALL EPA #4	3.53	1.42	1.04	0.34	5.38	0.8	15.76	11.21
S1748	06/22/2000	06/22/2000	32.2	F-18.5 WALL EPA #5	2.57	1.09	0.89	0.76	3.39	0.8	28.69	15.41
S1749	06/22/2000	06/22/2000	31.9	F-18.5 WALL EPA #6	1.75	1.56	0.93	0.38	4.49	0.87	10.3	12.24
S1750	06/22/2000	06/22/2000	41	F-18.5 EPA #1	2.97	1.79	0.69	0.42	1.11	0.73	9.23	14.6
S1751	06/22/2000	06/22/2000	38.6	F-18.5 EPA #2	1.33	1.46	0.71	0.36	1.54	0.61	12.76	12.3
S1752	06/22/2000	06/22/2000	40.6	F-18.5 EPA #3	0.81	1.5	0.35	0.36	1.79	0.65	29.61	13.66
S1753	06/22/2000	06/22/2000	41.6	F-18.5 EPA #4	1.53	1.3	0.63	0.61	1.06	0.54	44.27	11.32
S1754	06/22/2000	06/22/2000	40.9	F-18.5 EPA #5	1.67	1.47	0.96	0.35	0.72	0.6	25.93	12.47
S1755	06/22/2000	06/22/2000	40.5	F-18.5 EPA #6	1.56	1.67	0.39	0.4	1.36	0.7	33.44	14.68
S1756	06/26/2000	06/26/2000	37.6	I / -7.5 2ND LIFT	2.06	1.94	0.28	0.47	0.47	0.81	14.14	17.1
S1757	06/26/2000	06/26/2000	35.5	I / -6.5 2ND LIFT	0.38	1.28	-0.14	0.31	1.79	0.57	28.01	12.03
S1758	06/26/2000	06/26/2000	33.8	OVER BURDEN #1	2.01	1.73	1.28	0.43	1.25	0.72	5.61	14.5
S1759	06/26/2000	06/26/2000	33.9	OVER BURDEN #2	3.09	1.72	0.42	0.4	0.67	0.7	8.67	14.41
S1760	06/26/2000	06/26/2000	33	OVER BURDEN #3	0.16	1.43	0.54	0.36	1.8	0.62	-2.15	12.69
S1761	06/26/2000	06/26/2000	35.8	OVER BURDEN #4	2.21	1.52	0.66	0.37	1.85	0.84	-5.2	12.36
S1762	06/26/2000	06/26/2000	33.7	I-(-3.5)	1.91	1.09	0.42	0.28	1.05	0.46	14.19	9.47
S1763	06/26/2000	06/26/2000	35.9	I-(-5)	0.15	1.71	0.8	0.48	0.85	0.75	1.44	15.19
S1764	06/27/2000	06/27/2000	20.4	I - (-2) 3RD LIFT	-1.38	1.67	0.62	0.43	1.21	0.77	4.48	14.63
S1765	06/27/2000	01/00/1900	25.2	I - (-3) 3RD LIFT	-0.49	1.71	0.77	0.43	1.11	0.75	12.42	15.38
S1766	06/27/2000	01/00/1900	23	H.5 - (-3) FLOOR	2.21	1.66	0.6	0.4	1.12	0.69	11.76	13.76
S1767	06/27/2000	06/27/2000	19.3	H.5 - (-5) FLOOR	1.51	1.61	0.52	0.36	0.95	0.65	8.75	13.82
S1768	06/27/2000	06/27/2000	27.4	J.5 - (-2.5) FLOOR	1.94	1.44	0.79	0.38	1.22	0.6	15.46	12.02
S1769	06/27/2000	06/27/2000	31	I.5 - (-2.5) FLOOR #1	-1.23	1.81	0.63	0.43	1.16	0.67	28.11	11.69
S1770	06/27/2000	06/27/2000	29.2	I.5 - (-2.5) FLOOR #2	-0.32	1.41	0.47	0.36	1.18	0.63	7.91	12.09
S1771	06/27/2000	06/27/2000	35.2	I.5 - (-0.5) FLOOR	0.77	1.51	0.81	0.36	0.7	0.64	2.27	12.04
S1772	06/27/2000	06/27/2000	28.6	I.5 - (-0.5) 3RD LIFT	1.99	1.78	-0.14	0.41	2.43	0.75	5.91	14.25
S1773	06/27/2000	06/27/2000	27.2	I.5 - (-1.5) 3RD LIFT	-0.41	1.46	0.52	0.36	1.25	0.63	20.33	12.06

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1774	06/27/2000	06/27/2000	29.1	H.5 - (-0.5) 3RD LIFT	1.86	1	0.82	0.24	0.04	0.42	5.98	8.95
S1775	06/27/2000	06/28/2000	28.3	H.5 - (-1.5) 3RD LIFT	0.95	1.31	0.48	0.31	0.87	0.55	37.31	11.75
S1776	06/27/2000	06/28/2000	34.6	H.5 - (-1.5) FLOOR	-0.85	1.63	-0.16	0.46	1.3	0.82	22.48	17.33
S1777	06/27/2000	06/28/2000	20.1	J.5 - (-6.5) FLOOR	-0.11	1.53	1.19	0.38	1.15	0.64	21.81	12.91
S1778	06/27/2000	06/28/2000	29.8	J.5 - (-6.5) 2ND LIFT	0.66	1.73	0.29	0.48	1.62	0.75	10.23	15.36
S1779	06/27/2000	06/28/2000	30.9	J.5 - (-7) 2ND LIFT	0.5	1.68	0.27	0.42	1.52	0.75	-6.71	14.69
S1780	06/27/2000	06/28/2000	31.7	J.5 - (-7.5) 2ND LIFT	1.11	1.76	0.99	0.44	0.67	0.74	-5.71	14.6
S1781	06/27/2000	06/28/2000	33.9	H.5 - (-0.5) FLOOR	1.23	1.4	0.28	0.32	0.79	0.55	10.64	11.74
S1782	06/27/2000	06/28/2000	35	I.5 - (-1.5) FLOOR	1.12	1.56	0.36	0.36	0.6	0.65	22.58	13.9
S1783	06/27/2000	06/28/2000	17.7	J.5 - (-7.5) FLOOR	0.7	1.76	0.41	0.42	1.56	0.75	28.2	15.37
S1784	06/27/2000	06/28/2000	21	J.5 - (-7) FLOOR	3.09	1.24	0.73	0.3	2.5	0.52	-4.96	9.95
S1785	06/28/2000	06/28/2000	22.5	J.5 - (-5.5) FLOOR	0.31	1.24	0.67	0.31	3.21	0.54	13.52	10.64
S1786	06/28/2000	06/28/2000	22.1	J.5 - (-6) FLOOR	1.72	1.13	1.2	0.28	1.29	0.48	7.24	9.25
S1787	06/28/2000	06/28/2000	29.8	J.5 - (-4.5) 3RD LIFT	0.54	1.32	-0.11	0.32	1.52	0.59	23.34	12.41
S1788	06/28/2000	06/28/2000	29.6	J.5 - (-4) 3RD LIFT	-0.85	1.4	0.38	0.35	1.45	0.62	24.48	12.56
S1789	06/28/2000	06/28/2000	28.6	J.5 - (-3.5) 3RD LIFT	2.58	1.61	0.7	0.38	0.91	0.66	12.79	13.41
S1790	06/28/2000	06/28/2000	30.1	J.5 - (-3.5) 2ND LIFT	3.6	1.66	1.34	0.4	2.18	0.68	0.88	13.2
S1791	06/28/2000	06/28/2000	28.3	J.5 - (-4) 2ND LIFT	-0.28	1.65	0.74	0.41	1.63	0.72	2.37	14.25
S1792	06/28/2000	06/28/2000	28.6	J.5 - (-4.5) 2ND LIFT	2.01	1.62	0.05	0.38	1.51	0.69	2.82	13.7
S1793	06/28/2000	06/28/2000	30.5	J.5 - (-3.5) 2ND LIFT	0.86	1.07	1.5	0.27	1.08	0.46	10.68	9.01
S1794	06/28/2000	06/28/2000	30.8	J.5 - (-4) 2ND LIFT	0.3	1.67	0.98	0.41	2.02	0.7	21.81	14.1
S1795	06/28/2000	06/28/2000	27.1	J.5 - (-4.5) 2ND LIFT	1.34	1.92	1.6	0.48	1.31	0.79	-0.49	15.2
S1796	06/28/2000	06/28/2000	29.5	J.5 - (-3.5) 3RD LIFT	1.27	1.43	1.72	0.36	0.9	0.59	-7.14	11.36
S1797	06/28/2000	06/28/2000	30.6	J.5 - (-4) 3RD LIFT	0.85	1.39	0.6	0.34	1.48	0.6	17.58	11.99
S1798	06/28/2000	06/28/2000	29.8	J.5 - (-3.5) FLOOR	1.8	1.98	0.81	0.49	1.61	0.82	12.67	15.96
S1799	06/28/2000	06/28/2000	24.3	J.5 - (-4) FLOOR	1.29	1.13	0.11	0.27	3.75	0.49	12.26	9.48
S1800	06/28/2000	06/28/2000	21.6	J.5 - (-4.5) FLOOR	1.21	1.41	0.81	0.34	1.67	0.59	16.12	11.94
S1801	06/28/2000	06/28/2000	30	J.5 - (-0.5) 2ND LIFT	-0.26	1.63	1.01	0.41	1.59	0.7	12.89	13.81
S1802	06/28/2000	06/28/2000	30.6	J.5 - (-1.5) 2ND LIFT	1.41	2.25	0.88	0.55	1.41	0.95	16.24	18.98
S1803	06/28/2000	06/28/2000	23.3	J.5 - (-2.5) FLOOR	3.67	1.32	0.76	0.31	2.09	0.54	12.43	10.62
S1804	06/29/2000	06/29/2000	30.4	K.5 - (-7) 2ND LIFT	1.13	1.65	1.03	0.46	0.13	0.78	0.77	16.06
S1805	06/29/2000	06/29/2000	34.9	K.5 - (-5.5) 2ND LIFT	-0.58	1.5	0.61	0.4	1.45	0.7	13.2	14.12
S1806	06/29/2000	06/29/2000	29.6	K.5 - (-7) 3RD LIFT	-0.46	1.22	0.14	0.3	1.31	0.54	23.34	11.33
S1807	06/29/2000	06/29/2000	30.6	I.5 - (-0.5) 3RD LIFT	0.32	1.42	0.73	0.35	1.95	0.61	9.07	12.17
S1808	06/29/2000	06/29/2000	30.5	J.5 - (-0.5) 3RD LIFT	2.34	1.66	0.82	0.39	0.05	0.66	27.38	14.11
S1809	06/29/2000	06/29/2000	28.3	J.5 - (-1.5) 3RD LIFT	1.99	1.46	0.11	0.35	1.58	0.62	4.06	12.71
S1810	06/29/2000	06/29/2000	33.5	J.5 - (-0.5) FLOOR	1.2	1.69	0.75	0.41	0.81	0.71	25.13	14.65
S1811	06/29/2000	06/29/2000	21.5	L - (-7) FLOOR	0.63	1.62	0.91	0.39	2.36	0.68	26.58	13.23
S1812	06/29/2000	06/29/2000	29.8	K - (- 4) 2ND LIFT	0.94	1.57	0.42	0.38	1.43	0.65	16.91	13.79
S1813	06/29/2000	06/29/2000	32.6	K.5 - (- 5.5) 3RD LIFT	0.07	1.42	0.52	0.35	1.77	0.62	0.1	12.29
S1814	06/29/2000	06/29/2000	21.8	K.5 - (- 5) FLOOR	2.73	1.41	0.28	0.33	2.33	0.56	30.64	11.65
S1815	06/29/2000	06/29/2000	30.5	L.5 - (- 2.5) 2ND LIFT	-1.71	1.28	0.38	0.33	1.46	0.55	22.18	12.01
S1816	06/29/2000	06/29/2000	31	K.5 - (-3.5) 3RD LIFT	0.37	1.36	0.71	0.34	0.95	0.55	4.1	12.09

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1817	06/29/2000	06/29/2000	19 9	K 5 - (- 4) FLOOR	1 85	1.6	1 08	0.59	1.42	0.96	29.02	13.71
S1818	06/30/2000	06/30/2000	27.7	K 5 - (- 0 5) 2ND LIFT	1.45	1.84	0 87	0.83	1.62	0.91	12.27	11.66
S1819	06/30/2000	06/30/2000	30 6	K.5 - (- 0 5) 3RD LIFT	0 6	1.76	0.01	0.41	2.68	0.78	13.9	14.39
S1820	06/30/2000	06/30/2000	23 4	L - (- 2 5) FLOOR	0 88	1.85	0 82	0.57	2.29	0.96	3 25	11.85
S1821	06/30/2000	06/30/2000	31	L 5 - (- 2 5) FLOOR	-1.22	1.62	0 55	0.4	1 14	0.73	33 04	14.07
S1822	06/30/2000	06/30/2000	29.1	M - (- 6) 2ND LIFT	0 83	2.17	0 85	0.85	-0 21	0.76	12 21	14.49
S1823	06/30/2000	06/30/2000	30 5	M 5 - (- 4 5) 2ND LIFT	1 77	0.89	0 46	0.52	0 98	0.58	17 94	12.46
S1824	06/30/2000	06/30/2000	30 2	M 5 - (- 7 5) 2ND LIFT	0 05	1.42	0 12	0.35	1 73	0.64	2 61	12.59
S1825	06/30/2000	06/30/2000	32 2	M 5 - (- 4 5) 3RD LIFT	2 23	1.12	0 32	0.34	0 74	0.58	24 77	13.24
S1826	06/30/2000	06/30/2000	31 3	M - (- 7 5) 3RD LIFT	0 56	1.08	0 28	0.38	1 68	0.81	13 88	13.56
S1827	06/30/2000	06/30/2000	30 4	M 5 - (- 6) 3RD LIFT	-0 35	1.85	0 44	0.52	1 26	0.88	16 29	12.19
S1828	06/30/2000	06/30/2000	34	K 5 - (- 0 5) FLOOR	2 22	1.71	0 48	0.41	0 87	0.7	24 67	11.81
S1829	06/30/2000	06/30/2000	20 2	M - (- 5) FLOOR	2 36	1.35	0 43	0.31	2 51	0.86	32 39	11.27
S1830	06/30/2000	06/30/2000	22 9	M 5 - (- 5 5) FLOOR	2 99	1.45	0 83	0.58	2 18	0.8	11 13	11.72
S1831	06/30/2000	06/30/2000	20 7	M 5 - (- 7 5) FLOOR	0 69	0.99	0 77	0.39	1 94	0.48	11	9.96
S1832	07/03/2000	07/03/2000	32 3	M - (0 5) 4 5 FEET	8 58	2.44	15 98	0.98	4 63	1.38	27 51	16.01
S1833	07/03/2000	07/03/2000	33 8	M - (0 5) 5 FEET	12 76	2.49	16 32	0.92	7 62	0.89	18 01	12.51
S1834	07/03/2000	07/03/2000	30 8	M - (-1) 2ND LIFT	0 86	1.64	1 82	0.41	0 45	0.66	28 84	15.58
S1835	07/03/2000	07/03/2000	32 4	M - (-3) 3RD LIFT	0 3	1.16	0 69	0.29	3 26	0.51	13 04	9.96
S1836	07/03/2000	07/03/2000	30 2	M 5 - (-1 5) 3RD LIFT	0 21	1.12	2 52	0.29	1 66	0.49	21 13	9.06
S1837	07/03/2000	07/03/2000	33 5	M 5 - (-1) FLOOR	1 94	1.21	0 33	0.29	0 83	0.51	15 27	10.73
S1838	07/03/2000	07/03/2000	31 6	M 5 - (-0 5) FLOOR	0 63	1.73	0 57	0.42	1 4	0.79	9 54	14.96
S1839	07/03/2000	07/03/2000	25 8	M 5 - (-3 5) FLOOR	0 11	1.5	0 55	0.67	2 12	0.85	23 39	13.16
S1840	07/05/2000	07/05/2000	45 7	D 5 - (25 5)	9 07	3.02	10 26	0.75	4 53	1.08	11 03	17.51
S1841	07/06/2000	07/06/2000	31 1	C - (23 5) OB	1 86	1.37	0 73	0.38	1 79	0.68	14 19	11.74
S1842	07/06/2000	07/06/2000	31 6	C - (24 5) OB	1 35	1.89	0 8	0.45	1 26	0.78	36 15	16.16
S1843	07/06/2000	07/06/2000	35 7	E - (25)	4 44	3.23	13 14	0.83	4 65	1.15	12 51	16.84
S1844	07/06/2000	07/06/2000	39.4	E 5 - (25.5)	24 43	8.82	36 03	2.19	13 68	3.02	20 3	40.07
S1845	07/11/2000	07/11/2000	31 6	M 5 - (-3 5) 2ND LIFT	0 08	1.37	0.62	0.34	1 59	0.69	8 86	11.88
S1846	07/11/2000	07/11/2000	29 3	E - (25)	4 43	2.63	2 92	0.84	6.22	1.09	16.1	15.42
S1847	07/11/2000	07/11/2000	27.5	D - (25.5)	-92 36	181.98	630.67	34.63	174.02	46.34	332.22	509.62
S1848	07/11/2000	07/11/2000	23.4	D.5 - (25)	2 65	2.21	6.78	0.87	2.54	0.86	5.13	13.11
S1849	07/11/2000	07/11/2000	29.7	D - (25)	3 94	3.17	10.73	0.91	4.05	1.19	-9.4	15.97
S1850	07/11/2000	07/11/2000	31.7	REFRACTORY BRICK	1.79	1.92	3.65	0.45	5.25	0.79	42.38	14.91
S1851	07/12/2000	07/12/2000	30.5	E - (26)	3.23	2.09	1.94	0.8	1.57	0.83	14 06	15.73
S1852	07/12/2000	07/12/2000	30	C.5 - (25.5)	-0.99	1.1	1.07	0.29	1.37	0.46	7.76	9.89
S1853	07/12/2000	07/12/2000	32.2	C.5 - (26)	1.75	1.48	0.54	0.36	1.24	0.61	22.51	12.45
S1854	07/12/2000	07/12/2000	29.1	D 4 - (24 5)	2.79	1.43	1.09	0.35	0.99	0.69	21.43	13.22
S1855	07/12/2000	07/12/2000	25.4	E - (24)	1.61	1.8	1 21	0.62	2.63	0.64	25.68	10.77
S1856	07/12/2000	07/12/2000	27.8	OB #1	1.25	1.5	0.71	0.39	1.73	0.65	22.77	14.16
S1857	07/12/2000	07/12/2000	32	OB #2	0.06	1.84	1.5	0.47	1.78	0.78	4.69	11.06
S1858	07/12/2000	07/12/2000	32	OB #3	1.97	1.35	0.26	0.82	2.08	0.47	22.22	11.78
S1859	07/12/2000	07/12/2000	29	OB #4	2.44	1.49	0.6	0.85	0.95	0.8	8.23	12.31

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1860	07/12/2000	07/12/2000	35.4	OB #5	0.78	1.7	0.15	0.42	1.64	0.75	-2.06	15.1
S1861	07/12/2000	07/12/2000	29.5	OB #6	3.29	1.76	1.49	0.42	1.85	0.71	19.4	13.8
S1862	07/12/2000	07/12/2000	28.1	OB QC	1.47	1.38	0.46	0.54	3.35	0.6	23.43	11.96
S1863	07/13/2000	07/13/2000	34.9	D.5 - (25) #1	2.73	1.72	0.78	0.4	2.25	0.7	54.24	14.34
S1864	07/13/2000	07/13/2000	29.7	D.5 - (25) #2	1.89	1.21	1.4	0.3	2.18	0.6	6.67	9.59
S1865	07/13/2000	07/13/2000	37.2	F - (24.5)	1.58	1.27	0.63	0.31	2.76	0.59	5.8	10.95
S1866	07/13/2000	07/13/2000	34.7	E.5 - (24.5)	1.44	1.73	1.31	0.42	3.89	0.74	13.76	13.71
S1867	07/13/2000	07/13/2000	34.9	D.5 - (25.5) SPOT #1	2.16	1.66	2.43	0.47	4.67	0.78	-3.29	13.78
S1868	07/13/2000	07/13/2000	35.9	D.5 - (25.5) SPOT #2	2.85	1.77	2	0.44	3.28	0.72	26.57	13.76
S1869	07/13/2000	07/13/2000	29.4	D.5 - (25.5) SPOT #3	2.25	1.4	0.13	0.33	1.15	0.6	18.06	12.55
S1870	07/13/2000	07/13/2000	32.9	D.5 - (25.5) SPOT #4	0.56	1.59	0.64	0.4	1.51	0.71	-5.68	13.96
S1871	07/14/2000	07/14/2000	17.8	A.5 - (1) UW	0.99	2.12	1.74	0.53	4.75	0.9	3.39	15.79
S1872	07/14/2000	07/14/2000	33.2	OFF SITE MATERIAL #1	1.62	1.71	0.7	0.42	2.52	0.72	12.12	13.76
S1873	07/14/2000	07/14/2000	32.1	OFF SITE MATERIAL #2	1.69	1.39	1.11	0.33	-0.44	0.56	38	12.14
S1874	07/14/2000	07/14/2000	35.2	OFF SITE MATERIAL #3	-1.16	1.45	0.02	0.38	1.98	0.66	30.64	13.37
S1875	07/17/2000	07/17/2000	34.8	N.5 - (20)	0.43	1.44	0.51	0.36	1.69	0.63	21.81	13.16
S1876	07/17/2000	07/17/2000	35	N.5 - (16)	2.22	1.6	-0.15	0.37	2.04	0.68	-1.27	13.42
S1877	07/17/2000	07/17/2000	34.9	N.5 - (24.5)	2.22	1.95	0.79	0.46	1.39	0.6	24.86	16.09
S1878	07/17/2000	07/17/2000	25.9	G.6 - (27)	-0.56	1.18	0.52	0.29	1.05	0.52	13.04	10.63
S1879	07/18/2000	07/18/2000	34.2	D.5 - (25.5) EPA #1	-0.15	1.75	1.98	0.44	1.4	0.73	14.44	14.43
S1880	07/18/2000	07/18/2000	34.3	D.5 - (25.5) EPA #2	2.44	1.91	1.01	0.47	2.1	0.8	12.36	15.84
S1881	07/18/2000	07/18/2000	34.2	D.5 - (25.5) EPA #3	2.35	1.57	1.06	0.36	1.81	0.65	26.35	13.01
S1882	07/18/2000	07/18/2000	34.4	D.5 - (25.5) EPA #4	1.81	1.64	1.6	0.4	1.5	0.67	15.72	13.18
S1883	07/18/2000	07/18/2000	33.2	D.5 - (25.5) EPA #5	0.88	2.21	1.99	0.56	1.42	0.92	6.99	17.63
S1884	07/18/2000	07/18/2000	33.6	D.5 - (25.5) EPA #6	2.13	1.58	1.66	0.41	1.79	0.68	13.84	13.48
S1885	07/18/2000	07/18/2000	33.8	E.5 - (25.5) EPA #1	3.86	1.71	0.86	0.41	2.84	0.7	12.89	13.7
S1886	07/18/2000	07/18/2000	34.1	E.5 - (25.5) EPA #2	2.19	1.69	1.5	0.46	1.33	0.77	44.65	15.92
S1887	07/18/2000	07/18/2000	33.4	E.5 - (25.5) EPA #3	1.59	1.44	0.72	0.35	3.13	0.61	19.6	12
S1888	07/18/2000	07/18/2000	33.7	E.5 - (25.5) EPA #4	2.52	2.18	1	0.52	1.65	0.86	33.29	17.82
S1889	07/18/2000	07/18/2000	33.7	E.5 - (25.5) EPA #5	0.75	1.5	1.14	0.37	1.82	0.63	29.95	12.61
S1890	07/18/2000	07/18/2000	32.2	E.5 - (25.5) EPA #6	2.69	2.02	1.46	0.49	1.68	0.83	25.49	16.8
S1891	07/18/2000	07/18/2000	33.4	N.5 - (18) 2ND LIFT	3.22	2.23	0.28	0.59	1.14	1.22	-14.72	24.42
S1892	07/18/2000	07/18/2000	35.7	K.5 - (22.5)	2.62	2.58	-0.02	0.6	1.57	1.09	-25.15	20.28
S1893	07/18/2000	07/18/2000	24.2	N.5 - (16) 1ST LIFT	2.94	3.31	0.51	0.76	2.94	1.36	-0.66	25.29
S1894	07/18/2000	07/18/2000	34.9	N.5 - (17) 1ST LIFT	14.1	4.82	3.31	1.07	5.96	1.5	6.52	30.17
S1895	07/18/2000	07/18/2000	38.3	N.5 - (17) 3RD LIFT	2.65	3.1	0.44	0.73	0.89	1.28	2.18	25.91
S1896	07/18/2000	07/18/2000	36.3	N - (19.2)	10.43	7.85	3.21	1.77	16.95	3.19	25.46	46.49
S1897	07/18/2000	07/18/2000	35.2	E.5 - (27.5)	-2.01	2.77	0.33	0.7	1.32	1.26	6.37	24.88
S1898	07/19/2000	07/19/2000	40.2	N.5 - 21.5 (- 4 FEET)	0.81	1.33	1.19	0.33	1.46	0.56	13.33	11.11
S1899	07/19/2000	07/19/2000	30.2	N.5 - 16 (- 6 FEET)	1.41	1.33	0.94	0.33	1.54	0.57	11.68	11.46
S1900	07/19/2000	07/19/2000	39.6	N.5 - 22.5 (- 6 FEET)	1.52	1.34	0.66	0.33	0.76	0.56	2.75	11.61
S1901	07/19/2000	07/19/2000	29.2	A - (27) SIDEWALK	2.2	2.44	6.2	0.63	3.26	0.94	33.86	16.81
S1902	07/19/2000	07/19/2000	31.1	A.2 - (27) FLOOR	1.85	1.34	1.37	0.33	-0.01	0.54	37.01	11.47

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1903	07/19/2000	07/19/2000	41 7	A - (26) SIDEWALK	0 88	1.77	0 55	0.45	2.62	0.78	-1.59	14.55
S1904	07/20/2000	07/20/2000	40 4	N - 22 (- 6 FEET)	2 55	1.82	0 2	0.41	1.15	0.74	32.02	16.98
S1905	07/20/2000	07/20/2000	37 8	D - (26 5) FLOOR	1 08	1.96	0.11	0.69	1	0.74	11.18	14.34
S1906	07/20/2000	07/20/2000	35 9	F - (26 5) FLOOR	0 9	1.48	0 63	0.36	1.54	0.68	28 25	12.66
S1907	07/20/2000	07/20/2000	36 6	N 5 - 20.5 (- 6 FEET)	0 67	1.7	0 86	0.52	0 94	0.61	18 33	13.67
S1908	07/20/2000	07/20/2000	27.9	C - (27) FLOOR	-0 46	1.09	-0 04	0.67	1.34	0.74	17 03	15.01
S1909	07/20/2000	07/20/2000	35.9	A - (27) EPA #1	3 2	2.19	0 58	0.52	1.83	0.81	10.58	11.98
S1910	07/20/2000	07/20/2000	36	A - (27) EPA #2	1.48	1.7	0 98	0.41	1.12	0.71	19.84	14.27
S1911	07/20/2000	07/20/2000	36.3	A - (27) EPA #3	-0 35	1.83	1 21	0.46	1 41	0.78	13 24	15.63
S1912	07/20/2000	07/20/2000	36 1	A - (27) EPA #4	3 06	1.87	0 37	0.44	1.97	0.77	16.85	16.29
S1913	07/20/2000	07/20/2000	38 2	A - (27) EPA #5	-0 52	1.38	0 67	0.84	2 4	0.8	27 82	11.94
S1914	07/20/2000	07/20/2000	38 2	A - (27) EPA #6	2 9	1.88	1 02	0.39	1 95	0.87	4 79	11
S1915	07/20/2000	07/20/2000	41	N 5 - (19) EPA #1	-0 51	1.87	0 89	0.48	0 98	0.72	22 98	14.79
S1916	07/20/2000	07/20/2000	39 7	N 5 - (19) EPA #2	-1 59	1.69	0 61	0.44	1 36	0.75	24 98	15.58
S1917	07/20/2000	07/20/2000	40 2	N 5 - (19) EPA #3	0 7	1.77	0 44	0.43	1.13	0.76	18 17	15.62
S1918	07/20/2000	07/20/2000	38 2	N 5 - (19) EPA #4	1 85	1.61	0 72	0.39	0.77	0.66	17 75	13.6
S1919	07/20/2000	07/20/2000	40 4	N 5 - (19) EPA #5	0 58	1.74	0 7	0.48	1 76	0.79	26 12	14.94
S1920	07/20/2000	07/20/2000	39 7	N 5 - (19) EPA #6	0 17	1.48	0 43	0.34	1 45	0.61	21 03	12.46
S1921	07/20/2000	07/20/2000	40.1	N 5 - (21 5) EPA #1	0 12	1.5	0 62	0.37	2 22	0.85	10 39	12.5
S1922	07/20/2000	07/20/2000	40 3	N 5 - (21 5) EPA #2	1 78	1.42	0 06	0.38	1.74	0.8	38 58	12.44
S1923	07/20/2000	07/20/2000	40 6	N 5 - (21 5) EPA #3	1 58	1.73	0 55	0.42	1 83	0.73	17.49	14.65
S1924	07/20/2000	07/20/2000	39 4	N 5 - (21 5) EPA #4	-1 27	1.43	0 77	0.37	2 39	0.69	10 56	12.99
S1925	07/20/2000	07/20/2000	38 5	N 5 - (21 5) EPA #5	0 93	0.97	0 68	0.24	1 49	0.41	6 54	8.36
S1926	07/20/2000	07/20/2000	39 6	N 5 - (21 5) EPA #6	2 36	1.51	0 77	0.36	0 62	0.61	34 67	13.01
S1927	07/20/2000	07/20/2000	29 5	H - (27)	101 94	347.14	790 06	86.42	1208 98	134.46	1390.77	1464.61
S1928	07/20/2000	07/21/2000	31 5	H 5 - 27 5 (- 4 FEET)	10 25	4.02	11 17	0.99	14 7	1.53	37 64	22.96
S1929	07/20/2000	07/21/2000	20 1	G 5 - 27 5 (- 4 FEET)	5 26	7.57	16 88	1.86	48 2	8.09	66.48	40.39
S1930	07/20/2000	07/21/2000	33 7	G - (27 5) FLOOR	2 75	1.72	0 98	0.41	2 15	0.71	8 1	13.89
S1931	07/20/2000	07/21/2000	35.1	H - (27 5) FLOOR	0 64	2	0 67	0.48	1 97	0.84	31.77	17.1
S1932	07/21/2000	07/21/2000	37 5	M 5 - (27) FLOOR	2.42	1.63	1 46	0.4	1.31	0.67	1 97	13.06
S1933	07/21/2000	07/21/2000	38.3	N.5 - (26) FLOOR	2.37	1.79	0 8	0.43	1 72	0.74	-1 13	14.42
S1934	07/21/2000	07/21/2000	36.1	I 5 - (26.5) FLOOR	0.15	1.79	1.03	0.44	1.02	0.75	18.17	15.14
S1935	07/21/2000	07/21/2000	34.2	J.5 - (27.5) FLOOR	1.75	1.91	2.17	0.48	2 24	0.78	-0 66	14.93
S1936	07/24/2000	07/24/2000	33 3	D.5 - (25) FLOOR	1.09	1.88	1 26	0.4	2.15	0.67	10.13	13.4
S1937	07/24/2000	07/24/2000	34.6	D.5 - (25 5) FLOOR	-1.07	1.47	1.02	0.37	1.23	0.64	33 84	13.18
S1938	07/24/2000	07/24/2000	34	D.5 - (26) FLOOR	0.3	1.89	0.16	0.64	2.57	0.8	27.75	12.69
S1939	07/24/2000	07/24/2000	39.6	D.5 - (24) FLOOR	2.05	1.58	0.38	0.37	2.27	0.66	24.69	13.25
S1940	07/24/2000	07/24/2000	33.4	D.5 - (23.5) FLOOR	1 88	1.40	0 9	0.86	3 04	0.62	11 54	11.91
S1941	07/24/2000	07/24/2000	30.1	D.5 - 23.5 (-4 FEET)	3.68	2.04	1.07	0.49	3.74	0.82	25.71	15.35
S1942	07/25/2000	07/25/2000	33.2	F-J - (27.5) EPA #1	3.83	1.69	1.05	0.38	1.9	0.67	0.5	12.7
S1943	07/25/2000	07/25/2000	33.7	F-J - (27.5) EPA #2	3.17	1.75	0.98	0.43	1.21	0.71	11.53	14.2
S1944	07/25/2000	07/25/2000	35	F-J - (27.5) EPA #3	1.99	1.67	0.86	0.38	2.16	0.69	7.63	12.19
S1945	07/25/2000	07/25/2000	33.4	F-J - (27.5) EPA #4	1.55	1.43	0.74	0.4	1.49	0.67	17.11	14.24

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S1946	07/25/2000	07/25/2000	35.7	F-J - (27.5) EPA #5	2.44	1.41	0.36	0.38	3.91	0.61	-8.93	11.19
S1947	07/25/2000	07/25/2000	32.3	F-J - (27.5) EPA #6	-0.1	1.8	0.65	0.45	2.38	0.78	12.87	15.61
S1948	07/25/2000	07/25/2000	16	H - (27.5) WALL	10.26	5.72	7.51	1.86	17.94	2.23	12.07	92.59
S1949	07/25/2000	07/25/2000	26.7	H.5 - (27.5) WALL	42.23	18.89	51.1	4.57	50.54	6.79	92.87	84.94
S1950	07/26/2000	07/26/2000	26	H - (27.5) WALL (-2 FEET)	43.48	29.84	83.27	7.15	133.03	11.81	117.5	126.57
S1951	07/26/2000	07/26/2000	26.2	G.5 - (27.5) WALL (-2 FEET)	24.81	12.07	46.39	2.97	39.81	4.39	66.76	54.44
S1952	07/26/2000	07/26/2000	27.4	H.5 - (27.5) WALL (-2 FEET)	5.47	2.62	6.41	0.7	5.99	1.08	-4.27	17.24
S1953	07/26/2000	07/26/2000	23.8	I.5 - (27.5) WALL (-3 FEET)	3.02	2.25	1.63	0.54	3.39	0.91	2.84	15.65
S1954	07/26/2000	07/26/2000	28.4	G - (27.5) WALL (-3 FEET)	3.68	1.93	2.11	0.47	4.16	0.78	34.7	14.71
S1955	07/26/2000	07/26/2000	31.8	K.5 - (24.5) FLOOR	1.49	1.5	0.15	0.36	2.08	0.64	23.92	12.91
S1956	07/26/2000	07/26/2000	32.2	K.5 - (26) FLOOR	3.1	1.45	0.4	0.54	2.6	0.61	0.22	11.51
S1957	07/26/2000	07/26/2000	33.8	K - (23.5) FLOOR	4.58	1.65	0.34	0.42	4.81	0.76	33.37	14.39
S1958	07/28/2000	07/28/2000	35.8	H.5 - (23.5) FLOOR	1.82	1.46	0.76	0.35	2.22	0.62	3.78	12
S1959	07/28/2000	07/28/2000	32.9	H.5 - (24.5) FLOOR	2.97	1.66	0.74	0.39	1.23	0.67	7.37	13.52
S1960	07/28/2000	07/28/2000	26.1	N.5 - (17) SLOPE	2.68	2.04	1.48	0.49	0.8	0.81	40.05	16.94
S1961	07/28/2000	07/28/2000	26.3	N.5 - (17.5) SLOPE	3.03	2.26	3.99	0.57	2.39	0.88	1.34	15.97
S1962	07/28/2000	07/28/2000	36.2	E.5 - (25.5) (-1 FOOT)	3.2	3.42	0.23	0.79	3.96	1.43	35.8	27.15
S1963	07/28/2000	07/28/2000	34.2	N.5 (17) (-4 EET) #1	0.8	5.78	5.87	2.18	8.34	3.5	11.89	53.28
S1964	07/28/2000	07/28/2000	31.8	N.5 (17) (-4 EET) #2	1.97	3.7	5.26	0.94	4.17	1.45	14.36	25.39
S1965	07/28/2000	07/28/2000	33.1	N.5 (17) (-5 EET)	7.23	2.7	4.36	0.65	2.23	1	-1.6	17.69
S1966	07/28/2000	07/28/2000	32.2	F.5 - (24.5) (-1 FOOT)	-0.39	1.42	0.95	0.36	2.2	0.63	-9.62	11.9
S1967	07/28/2000	07/28/2000	33.9	G - (24) (-1 FOOT)	1.73	1.64	0.2	0.39	2.04	0.71	7.51	14.01
S1968	07/28/2000	08/01/2000	33.3	H.8 - (26)	13.4	4.68	14.47	1.19	7.38	1.73	10.2	25.43
S1969	07/28/2000	08/01/2000	32.5	E.5 - (23.1)	2.09	1.95	1.51	0.47	2.14	0.78	28.24	15.47
S1970	08/01/2000	08/01/2000	34.4	F.2 - (23)	10.83	3.46	6.85	0.88	10.17	1.31	30.83	20.75
S1971	08/01/2000	08/01/2000	32.7	H.8 - (26) #1	1.7	2.17	2.51	0.53	2.4	0.87	33.96	16.52
S1972	08/01/2000	08/01/2000	30.8	H.8 - (26) #2	3.12	1.91	2.12	0.47	3.14	0.77	27.46	14.6
S1973	08/01/2000	08/01/2000	34.6	E.5 - (22.5)	3.15	1.94	1.76	0.47	2.84	0.78	26.25	14.97
S1974	08/01/2000	08/01/2000	28.8	F - (22.5)	-1.15	2.01	1.62	0.51	2.43	0.96	20.07	16.61
S1975	08/02/2000	08/02/2000	33.6	H.8 - (26) EPA #1	2.14	2.62	5.13	0.66	2.65	1.01	32.19	15.26
S1976	08/02/2000	08/02/2000	34.1	H.8 - (26) EPA #2	2.86	2.08	1.78	0.5	2.17	0.84	18.32	15.89
S1977	08/02/2000	08/02/2000	33.5	H.8 - (26) EPA #3	2.15	2.02	1.53	0.49	2.05	0.82	22.43	15.06
S1978	08/02/2000	08/02/2000	33.1	H.8 - (26) EPA #4	2.64	1.31	1.64	0.31	1.09	0.52	30.26	10.43
S1979	08/02/2000	08/02/2000	33.7	H.8 - (26) EPA #5	0.24	1.5	1.1	0.4	1.78	0.68	33.74	13.67
S1980	08/02/2000	08/02/2000	32.3	H.8 - (26) EPA #6	2.69	1.92	1.37	0.47	1.55	0.78	20.58	15.39
S1981	08/02/2000	08/02/2000	34.6	F - (22.5) EPA #1	2.13	2.11	2.64	0.52	5.03	0.86	27.41	15.43
S1982	08/02/2000	08/02/2000	33.6	F - (22.5) EPA #2	1.55	2.34	3.18	0.59	4.82	0.96	8.1	16.67
S1983	08/02/2000	08/02/2000	32.7	F - (22.5) EPA #3	4.52	1.89	2.65	0.45	4.81	0.75	30.35	13.71
S1984	08/02/2000	08/02/2000	35.1	F - (22.5) EPA #4	3.16	2.51	2.98	0.61	3.72	0.99	13.68	17.41
S1985	08/02/2000	08/02/2000	33.8	F - (22.5) EPA #5	2.24	1.89	2.22	0.47	6.39	0.8	-2.68	13.63
S1986	08/02/2000	08/02/2000	35.1	F - (22.5) EPA #6	8.61	2.76	3.56	0.65	9.27	1.09	15.52	17.9
S1987	08/03/2000	08/07/2000	31.5	F - (22.5) AD #1	4.61	1.09	1.19	0.29	3.88	0.5	15.14	8.71
S1988	08/03/2000	08/07/2000	32.1	F - (22.5) AD #2	-0.12	1.42	1.41	0.4	4.38	0.86	29.35	11.64

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S1989	08/03/2000	08/07/2000	34.2	F - (22.5) EPA #1 A	6.38	1.58	0.45	0.42	3.98	0.75	19.48	15.06
S1990	08/03/2000	08/07/2000	34.5	F - (22.5) EPA #2 A	5.23	2.09	0.9	0.87	3.07	0.91	22.79	8.26
S1991	08/03/2000	08/07/2000	33.9	F - (22.5) EPA #3 A	3.64	2.07	1.41	0.85	2.43	0.81	24.56	10.75
S1992	08/03/2000	08/07/2000	34.1	F - (22.5) EPA #4 A	-0.17	0.81	1.6	0.81	3.64	0.86	15.32	9.36
S1993	08/03/2000	08/07/2000	35	F - (22.5) EPA #5 A	9.43	2.01	1.03	0.84	4.72	0.9	25.62	10.01
S1994	08/03/2000	08/07/2000	34.2	F - (22.5) EPA #6 A	0.22	1.78	1.14	0.86	4.76	0.94	9.55	9.29
S1995	08/03/2000	08/07/2000	40.8	M.5 - (21) FLOOR	2.93	1.26	-0.16	0.84	1.11	0.76	9.03	11.47
S1996	08/03/2000	08/07/2000	39.6	M.5 - (22.5) FLOOR	-0.51	1.08	-0.41	0.88	2.56	0.88	6.75	12.84
S1997	08/03/2000	08/07/2000	39.2	M.5 - (23.5) FLOOR	1.19	1.13	-0.64	0.89	2.67	0.91	18.21	11.82
S1998	08/03/2000	08/07/2000	39.3	M.5 - (24.5) FLOOR	-2.33	1.04	-0.13	0.83	1.79	0.78	29.89	14.49
S1999	08/03/2000	08/07/2000	39.3	M.5 - (25.5) FLOOR	0.01	1.21	0.39	0.84	0.64	0.68	3.6	11.06
S2000	08/03/2000	08/07/2000	38	M.5 - (26) FLOOR	2.19	1.17	-0.45	0.81	2.08	0.85	4.93	10.67
S2001	08/03/2000	08/07/2000	32.7	CASSON #4 A-4	0.6	1.79	6.22	0.82	2.39	0.78	13.38	13.16
S2002	08/04/2000	08/07/2000	36.7	A.5 (22.5) FLOOR	2.66	1.24	-0.55	0.84	2.39	0.89	7.24	11.29
S2003	08/04/2000	08/07/2000	35.2	A.5 (23.5) FLOOR	4.36	1.38	0.01	0.86	1.58	0.82	-7.24	11.47
S2004	08/04/2000	08/07/2000	37.3	A.5 (24.5) FLOOR	2.81	1.48	0.21	0.79	1.85	0.87	18.64	12.06
S2005	08/04/2000	08/07/2000	35.5	A.5 (26) FLOOR	1.41	0.96	0.6	0.27	2.07	0.44	4.37	3.23
S2006	08/07/2000	08/07/2000	31.6	B - (20) HOT	8.54	1.98	5.11	0.88	2.63	0.92	13.89	15.83
S2007	08/07/2000	08/07/2000	31.7	B - (20) #1	2.81	2.06	2.13	0.89	1.95	0.84	16.59	17.18
S2008	08/07/2000	08/07/2000	35	B - (20) #2	1.93	1.78	2.36	0.49	2.99	0.79	23.77	14.04
S2009	08/07/2000	08/08/2000	38.2	A - (21.5) FLOOR	2.01	1.56	-0.21	0.41	2.26	0.73	9.06	13.91
S2010	08/07/2000	08/08/2000	37.8	A.5 - (20.5) FLOOR	0.05	1.32	0.37	0.37	2.76	0.82	0.32	11.86
S2011	08/07/2000	08/08/2000	31.8	E.5 - (20) #1	2.31	1.94	0.74	0.53	3.35	0.9	20.01	16.01
S2012	08/07/2000	08/08/2000	31.6	E.5 - (20) #2	3.24	1.6	2.26	0.44	3.57	0.72	24.44	12.58
S2013	08/07/2000	08/08/2000	32.3	E.5 - (20) HOT	14.52	5.23	30.6	1.6	14.71	2.13	-18.99	27.45
S2014	08/09/2000	08/09/2000	28.7	E.5 - (22.5) FLOOR	0.58	1.3	0.3	0.36	1.91	0.61	19.47	11.73
S2015	08/09/2000	08/09/2000	32.6	N - (7.5) HOT	0.04	3.06	15.71	0.9	4.13	1.26	9.69	18.9
S2016	08/09/2000	08/09/2000	39.2	H - (23) HOT	3.31	1.65	3.12	0.47	3.23	0.73	29.39	12.91
S2017	08/09/2000	08/09/2000	36	H - (23) #1	8.12	1.81	1.6	0.43	1.74	0.69	17.04	12.71
S2018	08/09/2000	08/09/2000	37	H - (23) #2	4.07	1.7	1.56	0.47	2.4	0.77	12.63	13.94
S2019	08/10/2000	08/10/2000	32.9	B.5 - (20)	3.33	2.05	4.53	0.55	2.6	0.89	28.29	15.35
S2020	08/10/2000	08/10/2000	30.4	E.5 - (20) EPA #1	2.64	1.7	1.15	0.47	2.63	0.79	-1.81	12.89
S2021	08/10/2000	08/10/2000	30.9	E.5 - (20) EPA #2	2.08	1.42	0.79	0.39	2.64	0.66	29.75	8.12
S2022	08/10/2000	08/10/2000	31.1	E.5 - (20) EPA #3	2.43	1.28	1.72	0.86	2.8	0.86	5.94	10.22
S2023	08/10/2000	08/10/2000	30.7	E.5 - (20) EPA #4	5.92	1.61	0.81	0.45	2.39	0.73	10.97	13.4
S2024	08/10/2000	08/10/2000	31	E.5 - (20) EPA #5	2	1.77	1.35	0.44	1.72	0.77	27.28	13.69
S2025	08/10/2000	08/10/2000	30.1	E.5 - (20) EPA #6	2.75	1.29	1.11	0.38	0.81	0.86	32.77	11.1
S2026	08/10/2000	08/10/2000	41.5	G.5 - (23) EPA #1	0.88	1.14	-0.3	0.81	2.18	0.64	8.84	10.42
S2027	08/10/2000	08/10/2000	41.4	G.5 - (23) EPA #2	1.24	1.42	0.66	0.4	1.81	0.85	7.76	12.56
S2028	08/10/2000	08/10/2000	39.9	G.5 - (23) EPA #3	2.06	1.41	0.44	0.38	1.96	0.86	11.59	12.12
S2029	08/10/2000	08/10/2000	41.1	G.5 - (23) EPA #4	-1.55	1.03	0.19	0.26	2.42	0.5	20.9	9.42
S2030	08/10/2000	08/10/2000	41.1	G.5 - (23) EPA #5	3.12	1.3	0.17	0.36	1.2	0.6	29.11	11.71
S2031	08/10/2000	08/10/2000	40.8	G.5 - (23) EPA #6	-1.57	1.56	0.9	0.45	1.2	0.74	22.58	14.16

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2032	08/10/2000	08/10/2000	38.2	H.5 - (23) EPA #1	4.24	1.66	0.87	0.45	0.87	0.76	27.03	14.35
S2033	08/10/2000	08/10/2000	38.9	H.5 - (23) EPA #2	-0.07	1.25	1.66	0.35	1.02	0.57	20.6	10.66
S2034	08/10/2000	08/10/2000	38.3	H.5 - (23) EPA #3	1.3	1.58	0.78	0.44	1.63	0.73	27.64	13.78
S2035	08/10/2000	08/10/2000	37.1	H.5 - (23) EPA #4	4.27	1.52	0.76	0.41	1.65	0.69	-3.08	12.57
S2036	08/10/2000	08/10/2000	38.6	H.5 - (23) EPA #5	2.88	1.73	0.4	0.47	3.19	0.8	5.02	14.92
S2037	08/10/2000	08/10/2000	39.4	H.5 - (23) EPA #6	-0.16	1.49	1.18	0.42	1.8	0.7	2.76	12.59
S2038	08/10/2000	08/10/2000	36.1	B.5 - (20) EPA #1	1.11	1.37	3.41	0.38	2.02	0.61	30.17	10.76
S2039	08/10/2000	08/10/2000	34.4	B.5 - (20) EPA #2	5.42	1.54	1.71	0.42	1.65	0.69	28.13	12.6
S2040	08/10/2000	08/10/2000	34.9	B.5 - (20) EPA #3	3.67	1.76	1.88	0.49	1.93	0.79	42.25	14.78
S2041	08/10/2000	08/10/2000	34.2	B.5 - (20) EPA #4	-0.63	1.4	2.17	0.4	1.74	0.64	26.94	11.68
S2042	08/10/2000	08/10/2000	34.9	B.5 - (20) EPA #5	4.99	1.47	1.83	0.4	1.36	0.66	32.03	12
S2043	08/10/2000	08/10/2000	34.2	B.5 - (20) EPA #6	2.48	1.82	2.15	0.51	1.84	0.81	16.34	14.83
S2044	08/10/2000	08/10/2000	30.8	I.5 - (22) EPA #1	2.16	1.25	1.63	0.35	2.72	0.57	13.28	10.24
S2045	08/10/2000	08/10/2000	30.2	I.5 - (22) EPA #2	-0.66	1.59	1.66	0.45	3.4	0.75	16.86	12.92
S2046	08/10/2000	08/10/2000	31.3	I.5 - (22) EPA #3	3.91	1.61	2.25	0.46	2.41	0.71	1.87	12.52
S2047	08/10/2000	08/10/2000	30.6	I.5 - (22) EPA #4	1.11	1.37	2.13	0.39	3.06	0.62	18.16	11.14
S2048	08/10/2000	08/10/2000	30.2	I.5 - (22) EPA #5	2.54	1.61	1.38	0.45	3.62	0.74	5.35	12.99
S2049	08/10/2000	08/10/2000	32	I.5 - (22) EPA #6	-0.52	1.85	2.23	0.54	2.48	0.84	15.64	15.37
S2050	08/11/2000	08/11/2000	31.2	D.2 - 19 (-6 FEET)	0.64	1.73	8.03	0.61	3.7	0.74	15	12.04
S2051	08/11/2000	08/11/2000	25.3	I - 21.5 (-1 FOOT)	1.28	1.33	3.82	0.38	2.58	0.6	29.44	10.34
S2052	08/11/2000	08/11/2000	36.5	A.5 - (18.5) FLOOR	2.56	1.37	0.35	0.36	1.22	0.63	12.59	12.12
S2053	08/11/2000	08/11/2000	30.2	A.5 - (19.5) FLOOR	3.16	1.18	0.85	0.32	2.44	0.54	42.86	10.14
S2054	08/14/2000	08/14/2000	32.5	D.5 - (19) PIPE	0.13	4.17	9.26	1.17	7.78	1.79	94.34	28.4
S2055	08/14/2000	08/14/2000	33.8	I.5 - (22.5) FLOOR	2.86	1.51	-1.01	0.4	2.45	0.73	4.59	13.96
S2056	08/14/2000	08/14/2000	34.3	J.5 - (22.5) FLOOR	-0.22	1.1	0.68	0.31	1.82	0.53	-4.18	9.86
S2057	08/14/2000	08/14/2000	26.6	F.5 - (22.5) FLOOR	2.28	1.34	-0.1	0.35	2.45	0.64	18.96	11.81
S2058	08/14/2000	08/14/2000	31.5	G.5 - (22.5) FLOOR	3.49	1.7	0.81	0.47	1.16	0.77	23.16	14.87
S2059	08/14/2000	08/14/2000	32.5	E.5 - (18.5) FLOOR	3.7	1.08	2.49	0.3	2.49	0.48	22.43	9.63
S2060	08/14/2000	08/14/2000	31.4	F.5 - (18.5) FLOOR	1.36	1.67	0.93	0.47	1.38	0.77	19.67	14.79
S2061	08/14/2000	08/14/2000	37.2	K.5 - (22.5) FLOOR	-0.04	1.09	0.11	0.3	1.55	0.52	17.02	10.06
S2062	08/14/2000	08/14/2000	31.9	C.5 - (18)	9.42	2.49	7.71	0.7	3.4	1.03	14.89	16.49
S2063	08/15/2000	08/15/2000	36.4	N - (7) EPA #1	-0.25	1.33	0.91	0.38	0.69	0.63	20.45	12.1
S2064	08/15/2000	08/15/2000	34.8	N - (7) EPA #2	0.48	1.17	-0.02	0.32	2.52	0.56	4.5	10.36
S2065	08/15/2000	08/15/2000	35.5	N - (7) EPA #3	1.4	1.39	0.41	0.39	1.61	0.65	9.51	12.35
S2066	08/15/2000	08/15/2000	35.2	N - (7) EPA #4	2.63	1.43	0.61	0.39	1.43	0.65	-4.84	12.17
S2067	08/15/2000	08/15/2000	34.6	N - (7) EPA #5	2.25	1.15	-0.12	0.31	1.92	0.54	7.47	10.05
S2068	08/15/2000	08/15/2000	34.7	N - (7) EPA #6	1.79	1.4	0.32	0.36	1.8	0.64	20.31	12.19
S2069	08/15/2000	08/15/2000	33.6	K - (17) FLOOR	0.65	1.34	0.61	0.37	1	0.63	34.19	12.06
S2070	08/15/2000	08/15/2000	32.7	J.5 - (18.5) FLOOR	-0.38	1.34	0.19	0.37	2.16	0.66	7.36	12.01
S2071	08/15/2000	08/15/2000	37	K - (18.5) FLOOR	-0.1	1.04	0.89	0.29	0.63	0.49	27.78	9.53
S2072	08/16/2000	08/16/2000	26.8	N - (9) #1	3.41	1.57	0.36	0.42	2.76	0.73	5.36	13.16
S2073	08/16/2000	08/16/2000	42.3	N - (9) #2	3.1	1.27	0.23	0.34	2.3	0.59	33.81	11.02
S2074	08/16/2000	08/16/2000	35.2	N - (9) EPA #1	0.47	1.35	1.19	0.38	0.64	0.81	27.45	11.9

RSSI NUTRANL RESULTS
GRAND PIER PROJECT

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S2075	08/16/2000	08/16/2000	34 1	N - (9) EPA #2	0 12	1.14	0 64	0.71	1.51	0.66	34 54	10.07
S2076	08/16/2000	08/16/2000	34 2	N - (9) EPA #3	3 66	1.87	0 36	0.51	1.92	0.64	12.35	10.34
S2077	08/16/2000	08/16/2000	34 1	N - (9) EPA #4	-0 64	0.96	0 02	0.4	2	0.64	45.58	9.78
S2078	08/16/2000	08/16/2000	36 2	N - (9) EPA #5	3 35	1.61	0 58	0.51	2.33	0.74	9 82	9.45
S2079	08/16/2000	08/16/2000	33.7	N - (9) EPA #6	2 78	1.26	0 58	0.51	2.01	0.74	9.36	10.04
S2080	08/16/2000	08/17/2000	36 1	A - (5.5) E2	6 3	2.07	4 09	0.96	5 38	1.1	17 57	11.08
S2081	08/16/2000	08/17/2000	38.1	A - (6) E2	2.51	2.21	2.2	0.76	2.97	1.09	10 76	15.16
S2082	08/16/2000	08/17/2000	30 3	N - 7 (-1 FOOT)	-0 68	1.13	0 21	0.38	1 92	1.04	24 5	14.39
S2083	08/16/2000	08/17/2000	26.2	N - 7.5 (-1 FOOT)	0.86	1.28	0 44	0.54	2.13	0.89	24.07	10.77
S2084	08/17/2000	08/17/2000	26.4	G.5 - (16)	2.71	1.89	0.39	0.61	2.73	0.97	23 57	11.16
S2085	08/17/2000	08/17/2000	27 5	H - (16)	3 06	1.61	1.41	0.72	2.06	0.84	14 86	12.78
S2086	08/17/2000	08/18/2000	30	H - (16 5) EZ #1	3 33	2.07	4 14	0.96	1 67	0.9	10 74	15.16
S2087	08/17/2000	08/18/2000	27	H - (16 5) EZ #2	15 16	6.61	34 44	1.89	13 52	2.64	2 46	34.55
S2088	08/18/2000	08/18/2000	31 3	C 5 - (18) #1	1 64	1.8	0 65	0.6	2 06	0.80	12 88	15.79
S2089	08/18/2000	08/18/2000	33 1	C.5 - (18) #2	4 67	1.82	1 73	0.5	1 97	0.8	9.49	14.6
S2090	08/18/2000	08/18/2000	33 4	H - (16) EPA #1	3 02	1.55	0 39	0.42	1 84	0.71	33 29	13.56
S2091	08/18/2000	08/18/2000	32 2	H - (16) EPA #2	3 99	1.39	0 52	0.37	2 5	0.69	10 69	11.09
S2092	08/18/2000	08/18/2000	31 9	H - (16) EPA #3	2 72	1.25	0 67	0.33	1 72	0.67	28 86	10.66
S2093	08/18/2000	08/18/2000	30.1	H - (16) EPA #4	1 26	1.53	1 2	0.43	1 91	0.71	9 28	13.07
S2094	08/18/2000	08/18/2000	30.5	H - (16) EPA #5	3 49	1.87	0 83	0.48	2.16	0.78	14 97	13.84
S2095	08/18/2000	08/18/2000	32	H - (16) EPA #6	5 67	1.78	0 84	0.47	2 36	0.79	12 68	14.35
S2096	08/18/2000	08/18/2000	32 9	A-5 OB1	2 06	1.67	2 19	0.44	2 48	0.71	39 62	13.09
S2097	08/18/2000	08/18/2000	33 3	A 5 OB2	2 68	1.42	0 87	0.38	1 22	0.64	35 79	12.16
S2098	08/18/2000	08/18/2000	33	A 5 OB3	2 38	1.48	0 94	0.41	2 25	0.68	22 01	12.44
S2099	08/18/2000	08/18/2000	33 8	A-5 OB4	4 19	1.6	0 57	0.44	2 57	0.73	7.53	13.37
S2100	08/18/2000	08/18/2000	32 7	A-5 OB5	0 28	1.99	1 09	0.39	2 23	0.84	14 71	11.67
S2101	08/18/2000	08/18/2000	34 6	A-5 OB QC	3 8	1.76	0 39	0.47	2 15	0.81	19 91	15.19
S2102	08/18/2000	08/18/2000	31 7	C 5 - (18) LPA #1	3 72	1.9	0 94	0.53	2 94	0.86	7 64	10.14
S2103	08/18/2000	08/18/2000	32 2	C 5 - (18) LPA #2	2 85	1.43	2	0.4	1 07	0.64	6 11	11.02
S2104	08/18/2000	08/18/2000	32 9	C 5 - (18) EPA #3	-0 22	0.94	1 15	0.27	2 82	0.44	8 28	7.87
S2105	08/18/2000	08/18/2000	33 2	C.5 - (18) EPA #4	3 5	1.47	1 25	0.4	2 05	0.66	26 32	12.25
S2106	08/18/2000	08/18/2000	33	C 5 - (18) EPA #5	0.43	1.87	1 28	0.58	2 89	0.83	15.02	11.42
S2107	08/18/2000	08/18/2000	33 6	C 5 - (18) EPA #6	3 21	1.71	1 63	0.47	1 26	0.76	15 06	14.11
S2108	08/18/2000	08/18/2000	35.7	A - (4) OB 1	3 86	1.27	0 61	0.34	2	0.67	11.1	10.67
S2109	08/18/2000	08/18/2000	31.1	A - (4) OB 2	7 93	1.7	1 62	0.45	0.79	0.73	21.76	13.75
S2110	08/18/2000	08/18/2000	31.2	A - (4) OB 3	5 09	1.6	1 11	0.43	1 04	0.71	31 38	13.21
S2111	08/18/2000	08/18/2000	33.1	A - (4) OB 4	4 02	1.68	1 76	0.47	2.49	0.75	-9.76	13.39
S2112	08/18/2000	08/18/2000	33.1	A - (4) OB 5	4 07	1.7	0.62	0.46	2.46	0.77	-0.9	14.08
S2113	08/18/2000	08/18/2000	32.8	A - (4) OB 6	2.16	1.42	0.86	0.39	2	0.65	23.8	12.32
S2114	08/21/2000	08/21/2000	33.8	A - (4)	2.72	1.27	1.02	0.34	1.86	0.58	11.16	10.64
S2115	08/21/2000	08/21/2000	32	A - (5)	1.41	1.03	0.85	0.35	1.28	0.49	42.87	12.3
S2116	08/21/2000	08/21/2000	32.3	A - (6)	5.12	2.46	2.46	0.84	3.33	1.08	4.32	13.45
S2117	08/21/2000	08/21/2000	31.8	A.5 - (7.5)	14.76	5.09	14.77	1.44	4.51	2.02	29.08	10.57

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2118	08/21/2000	08/21/2000	33.8	A.5 - (7)	26.05	11.57	57.86	3.3	19.02	4.54	4.21	55.71
S2119	08/21/2000	08/21/2000	33.4	A - (4.5) SPOT	3.14	1.41	2.87	0.4	3.07	0.83	18.14	11.12
S2120	08/21/2000	08/21/2000	34	A - (7) EPA #1	0.85	1.76	1.46	0.5	2.44	0.81	14.51	14.8
S2121	08/21/2000	08/21/2000	33.5	A - (7) EPA #2	1.8	1.37	4.23	0.39	2.73	0.61	14.78	10.3
S2122	08/21/2000	08/21/2000	32.7	A - (7) EPA #3	3.79	1.64	1.84	0.46	2.22	0.74	6.27	13.1
S2123	08/21/2000	08/21/2000	32.4	A - (7) EPA #4	2.16	1.35	1.53	0.38	2.6	0.62	11.11	11.17
S2124	08/21/2000	08/21/2000	34.4	A - (7) EPA #5	3.23	1.72	1.5	0.47	1.68	0.78	35.7	14.33
S2125	08/21/2000	08/21/2000	33.6	A - (7) EPA #6	1.72	1.39	2.01	0.39	2.43	0.63	5.69	11.24
S2126	08/21/2000	08/21/2000	32	A - (4.5) EPA #1	2.6	1.55	1.09	0.44	1.23	0.71	19.33	13.13
S2127	08/21/2000	08/21/2000	28.5	A - (4.5) EPA #2	1.9	1.07	1.16	0.3	1.58	0.49	18.14	9.1
S2128	08/21/2000	08/21/2000	32.7	A - (4.5) EPA #3	2.99	1.72	0.88	0.47	2.34	0.78	9.54	14.59
S2129	08/21/2000	08/21/2000	29.8	A - (4.5) EPA #4	-0.55	1.71	1.36	0.48	1.55	0.81	21.49	14.86
S2130	08/21/2000	08/21/2000	30.8	A - (4.5) EPA #5	1.36	1.34	0.5	0.37	2.61	0.64	8.96	11.72
S2131	08/21/2000	08/21/2000	30.4	A - (4.5) EPA #6	4.87	1.73	0.59	0.46	2	0.77	18.22	14.44
S2132	08/21/2000	08/21/2000	34.5	A - (5.5) EPA #1	-0.07	1.48	0.2	0.41	3.97	0.71	-6.79	12.69
S2133	08/21/2000	08/21/2000	32.3	A - (5.5) EPA #2	-0.99	1.41	1.27	0.41	1.39	0.66	13.96	12.89
S2134	08/21/2000	08/21/2000	32.9	A - (5.5) EPA #3	-0.24	1.34	0.59	0.37	1.7	0.64	31.48	11.88
S2135	08/21/2000	08/21/2000	33.3	A - (5.5) EPA #4	2.34	1.06	0.04	0.28	1.34	0.49	35.65	9.57
S2136	08/21/2000	08/21/2000	33.6	A - (5.5) EPA #5	0.01	1.76	0.67	0.5	1.92	0.83	10.4	15.29
S2137	08/21/2000	08/21/2000	33.1	A - (5.5) EPA #6	2.28	1.45	0.94	0.4	1.05	0.66	5.56	12.37
S2138	08/21/2000	08/21/2000	33.2	F.5 - (15.5)	215.2	78.27	335.02	21.79	65.65	29.96	91.99	320.16
S2139	08/21/2000	08/22/2000	28.6	E.5 - (15.5) EZ	2.6	1.64	0.77	0.45	2.08	0.75	21.52	14.03
S2140	08/21/2000	08/22/2000	30.8	F - (15) EZ	3.27	1.44	0.67	0.4	1.59	0.86	-10.6	12.9
S2141	08/22/2000	08/22/2000	37.7	F - (15) EPA #1	4.2	1.1	0.37	0.3	2.23	0.5	11.22	9.25
S2142	08/22/2000	08/22/2000	37.6	F - (15) EPA #2	2.46	1.24	1.02	0.35	1.97	0.57	1.32	10.32
S2143	08/22/2000	08/22/2000	38.7	F - (15) EPA #3	2.51	1.43	0.53	0.39	2.46	0.66	12.52	12.31
S2144	08/22/2000	08/22/2000	37.5	F - (15) EPA #4	2.34	1.39	0.45	0.38	2.89	0.65	14.8	11.79
S2145	08/22/2000	08/22/2000	37.3	F - (15) EPA #5	4.19	1.15	0.91	0.31	1.6	0.51	18.03	9.6
S2146	08/22/2000	08/22/2000	38.8	F - (15) EPA #6	0.77	1.28	0.48	0.35	2.57	0.6	28.59	11.2
S2147	08/21/2000	08/22/2000	35.2	H - (17) FLOOR	-1.42	1.28	-0.24	0.35	1.09	0.51	33.62	12.3
S2148	08/21/2000	08/22/2000	41	E - (17.5) FLOOR	2.48	1.39	-0.67	0.37	1.56	0.67	27.66	13.1
S2149	08/21/2000	08/22/2000	39.1	F - (17) FLOOR	2.83	1.12	0.68	0.3	0.55	0.51	12.28	9.66
S2150	08/21/2000	08/22/2000	38.1	D - (17.5) FLOOR	-0.21	1.39	0.24	0.39	0.96	0.68	26.2	12.86
S2151	08/21/2000	08/22/2000	37.3	G - (17) FLOOR	1.96	1.19	0.22	0.33	1.55	0.56	-1.41	10.38
S2152	08/23/2000	08/23/2000	38	K - 20	6.52	1.36	1.2	0.37	9.38	0.84	-0.33	10.09
S2153	08/23/2000	08/23/2000	36.3	K - 20 EZ #1	1.9	1.6	0.48	0.44	2.86	0.74	26.26	13.74
S2154	08/23/2000	08/23/2000	36.1	K - 20 EZ #2	2.48	1.97	0.43	0.54	1.97	0.92	29.81	17.13
S2155	08/23/2000	08/23/2000	40.4	L - 20.5	9.79	5.6	2.92	1.48	27.21	2.56	18.65	34.91
S2156	08/23/2000	08/23/2000	36.2	L - 20.5 EZ	1.1	1.29	-0.02	0.35	0.97	0.61	30.25	11.59
S2157	08/24/2000	08/24/2000	36.7	L - 20.5 EPA #1	5.79	1.4	-0.31	0.37	2.37	0.65	-0.84	12.02
S2158	08/24/2000	08/24/2000	36.3	L - 20.5 EPA #2	1.24	1.35	-0.14	0.37	1.78	0.64	18.43	12.3
S2159	08/24/2000	08/24/2000	37.3	L - 20.5 EPA #3	0.92	1.29	0.93	0.36	2.62	0.61	-14.17	10.57
S2160	08/24/2000	08/24/2000	36.7	L - 20.5 EPA #4	3.85	1.78	-0.66	0.47	2.25	0.83	12.1	15.85

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location
S2161	08/24/2000	08/24/2000	36 8	L - 20 5 EPA #5
S2162	08/24/2000	08/24/2000	36 1	L - 20 5 EPA #6
S2163	08/24/2000	08/24/2000	39 6	J 5 - 21 EPA #1
S2164	08/24/2000	08/24/2000	39.5	J 5 - 21 EPA #2
S2165	08/24/2000	08/24/2000	39 6	J 5 - 21 EPA #3
S2166	08/24/2000	08/24/2000	38.1	J.5 - 21 EPA #4
S2167	08/24/2000	08/24/2000	40 4	J.5 - 21 EPA #5
S2168	08/24/2000	08/24/2000	37 9	J.5 - 21 EPA #6
S2169	08/24/2000	08/24/2000	35.6	K - 20 EPA #1
S2170	08/24/2000	08/24/2000	36 3	K - 20 EPA #2
S2171	08/24/2000	08/24/2000	36 2	K - 20 EPA #3
S2172	08/24/2000	08/24/2000	35 8	K - 20 EPA #4
S2173	08/24/2000	08/24/2000	35 7	K - 20 EPA #5
S2174	08/24/2000	08/24/2000	35 9	K - 20 EPA #6
S2175	08/24/2000	08/24/2000	22 5	I - 20 5
S2176	08/24/2000	08/24/2000	35	J 5 - 21
S2177	08/24/2000	08/25/2000	27 4	I - (21) #1
S2178	08/24/2000	08/25/2000	30 5	I - (21) #2
S2179	08/24/2000	08/25/2000	32 2	I - (21) #3
S2180	08/24/2000	08/25/2000	30	I - (21) #4
S2181	08/24/2000	08/25/2000	32 3	I - (21) OB #1
S2182	08/24/2000	08/25/2000	33 3	I - (21) OB #2
S2183	08/24/2000	08/25/2000	34 7	I - (21) OB #3
S2184	08/24/2000	08/25/2000	33 3	I - (21) OB #4
S2185	08/24/2000	08/25/2000	32 9	I - (21) OB #5
S2186	08/24/2000	08/25/2000	31 9	I - (21) OB #6
S2187	08/24/2000	08/25/2000	33	I - (21) OB #7
S2188	08/24/2000	08/25/2000	33 1	I - (21) OB #8
S2189	08/24/2000	08/25/2000	33 7	I - (21) OB #9
S2190	08/24/2000	08/25/2000	31 9	I - (21) OB QC
S2191	08/25/2000	08/25/2000	38.6	I - (20) EPA #1
S2192	08/25/2000	08/25/2000	38.7	I - (20) EPA #2
S2193	08/25/2000	08/25/2000	38.5	I - (20) EPA #3
S2194	08/25/2000	08/25/2000	39.4	I - (20) EPA #4
S2195	08/25/2000	08/25/2000	37.4	I - (20) EPA #5
S2196	08/25/2000	08/25/2000	38.2	I - (20) EPA #6
S2197	08/25/2000	08/25/2000	37.7	I - (21) EPA #1
S2198	08/25/2000	08/25/2000	38.8	I - (21) EPA #2
S2199	08/25/2000	08/25/2000	37.5	I - (21) EPA #3
S2200	08/25/2000	08/25/2000	38.4	I - (21) EPA #4
S2201	08/25/2000	08/25/2000	38.4	I - (21) EPA #5
S2202	08/25/2000	08/25/2000	38.4	I - (21) EPA #6
S2203	08/25/2000	08/25/2000	26.8	F.5 - (21.5) #1

NUTRANL RESULTS							
U-238		TH-232		RA-226		K-40	
Result	+/-	Result	+/-	Result	+/-	Result	+/-
0 41	1.2	-0 26	0.36	2.41	0.58	28 78	11
0 47	1.46	-0 03	0.4	2 14	0.71	19.84	10.07
4 13	1.25	1 47	0.34	2 29	0.57	26 54	10.36
1 61	1.66	0 86	0.34	2.78	0.74	19.65	10.07
3 6	1.02	0 09	0.28	4.21	0.82	20 35	11
3 61	1.08	0 34	0.26	2 42	0.49	40 81	9.29
4 37	1.32	1	0.36	2 59	0.6	17.71	11.08
4 78	1.16	1 05	0.31	2.73	0.55	11 67	9.89
-0 35	1.27	0 42	0.38	1.75	0.6	24.74	11.24
2 14	1.66	0.42	0.49	2.43	0.75	-6.19	13.1
5 25	1.21	0 03	0.32	2 04	0.55	12 31	10.52
0	1.56	0 89	0.44	1 78	0.72	14 27	13.6
1 07	1.58	0 13	0.44	3 19	0.75	-3 46	13.6
4 03	1.13	0 67	0.31	3 26	0.52	16 45	9.05
5 47	2.83	11 41	0.81	8.41	1.2	29 45	18.31
4 53	2.06	5 83	0.59	4 06	0.95	11.76	14.37
4 35	1.42	0 15	0.36	2 59	0.55	1 96	12.19
2 07	1.81	0 65	0.46	2 02	0.74	-10 89	15.41
3 07	1.56	-0 57	0.42	3 58	0.75	13 51	13.06
2 09	1.22	0 41	0.33	0 97	0.56	39 91	10.06
1 97	1.11	0 67	0.3	2 3	0.61	29.18	9.46
0 8	1.66	0 38	0.42	0 95	0.74	16 5	14.63
1	1.41	0 22	0.38	2 52	0.66	19 26	12.17
2 05	1.27	0 99	0.35	2 26	0.58	3 28	10.66
2 72	1.01	1 08	0.26	1 57	0.46	12 58	8.89
2 34	1.09	0 53	0.3	2 58	0.61	-2 3	9.25
1 27	1.39	0 42	0.35	3 12	0.65	-0 73	11.58
3 71	1.46	0 37	0.39	2 35	0.67	-2 06	12.26
3 23	1.5	-0 16	0.41	2.87	0.71	12 24	13.1
3 02	1.52	0 38	0.41	2.01	0.71	18 5	13.28
3.47	1.64	-0.18	0.44	2 11	0.75	6 46	13.89
0 06	1.31	0.05	0.37	2.47	0.65	9 84	11.64
1.48	1.63	0.86	0.46	1.45	0.76	8.48	14.32
2.93	1.4	0.24	0.37	1.82	0.65	21.11	13.22
-0 76	1.44	-0 22	0.39	2.19	0.65	30.36	13.07
0.51	1.37	0 23	0.38	2.35	0.65	13.68	12.56
2.78	1.21	0.62	0.34	2.2	0.67	5.63	10.46
1.82	1	0.11	0.37	1.7	0.48	18.78	9
3.16	0.97	0.25	0.26	3.2	0.48	2.16	8.17
3.87	1.29	-0.25	0.34	3.12	0.61	-7.27	10.81
3.66	1.55	-0.02	0.43	2.66	0.74	-3.78	13.56
2.76	1.7	0.28	0.46	1.51	0.79	17.26	15.25
3.14	1.36	0.05	0.38	4.32	0.63	-4.04	10.98

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2204	08/25/2000	08/25/2000	26.5	F.5 - (21.5) #2	0.59	1.54	0.15	0.42	3.68	0.74	15.88	13.31
S2205	08/25/2000	08/25/2000	28.2	F.5 - (21.5) #3	0.85	1.47	0.18	0.4	3.75	0.69	31.38	12.56
S2206	08/26/2000	08/26/2000	31.9	G - 21.5 EPA #1	3.93	1.91	0.57	0.56	2.01	0.6	23.74	11.32
S2207	08/26/2000	08/26/2000	31	G - 21.5 EPA #2	3.19	1.54	0.24	0.41	2.96	0.71	25.1	12.97
S2208	08/26/2000	08/26/2000	31.4	G - 21.5 EPA #3	1.99	1.4	1.1	0.39	2.36	0.64	3.59	11.68
S2209	08/26/2000	08/26/2000	33.7	G - 21.5 EPA #4	2.82	1.83	1.11	0.51	3.14	0.85	-14.12	14.52
S2210	08/26/2000	08/26/2000	33.7	G - 21.5 EPA #5	3.22	1.92	0.56	0.56	2.56	0.6	29.58	11.16
S2211	08/26/2000	08/26/2000	34.1	G - 21.5 EPA #6	3.14	1.46	0.57	0.4	2.25	0.66	27.29	12.66
S2212	08/28/2000	08/28/2000	29.7	J.5 - (14.5)	3.43	1.54	1.92	0.45	3.17	0.69	16.04	12.26
S2213	08/28/2000	08/28/2000	31.8	H - (14.5)	3.3	2.55	10.93	0.74	4.93	1.07	7.27	16.99
S2214	08/29/2000	08/29/2000	31.2	J-14.5 #1	-1.71	1.11	0.07	0.31	3.06	0.64	12.09	9.9
S2215	08/29/2000	08/29/2000	31.8	J-14.5 #2	-1.53	1.58	0.57	0.48	2.5	0.81	12.63	15.23
S2216	08/29/2000	08/29/2000	31	J-14.5 #3	2.24	1.42	0.5	0.39	1.63	0.65	15.43	12.14
S2217	08/29/2000	08/29/2000	32.5	J-14.5 #4	3.39	1.63	0.31	0.44	1.44	0.75	26.21	14.29
S2218	08/29/2000	08/29/2000	36.1	H-14.5 EPA #1	0.87	1.39	0.31	0.38	1.06	0.56	17.07	12.59
S2219	08/29/2000	08/29/2000	36.8	H-14.5 EPA #2	-0.61	1	0.56	0.29	0.89	0.47	13.58	9.15
S2220	08/29/2000	08/29/2000	36.8	H-14.5 EPA #3	3.44	1.25	-0.6	0.33	2.12	0.6	-2.78	11.26
S2221	08/29/2000	08/29/2000	37.2	H-14.5 EPA #4	1.39	1.53	0.49	0.43	0.6	0.71	22.85	13.96
S2222	08/29/2000	08/29/2000	35.6	H-14.5 EPA #5	-0.06	1.31	0.34	0.56	1.93	0.63	6.21	11.74
S2223	08/29/2000	08/29/2000	36	H-14.5 EPA #6	1.33	1.21	0.04	0.33	0.99	0.57	27.34	11.29
S2224	08/29/2000	08/29/2000	35.8	J-14 EPA #1	2.62	1.86	0.47	0.51	1.03	0.86	10.05	16.63
S2225	08/29/2000	08/29/2000	36.8	J-14 EPA #2	1.2	1.25	0.36	0.34	1.76	0.58	27.16	11.26
S2226	08/29/2000	08/29/2000	36.6	J-14 EPA #3	1.73	1.29	0.1	0.86	2.31	0.61	6.25	11.36
S2227	08/29/2000	08/29/2000	34.7	J-14 EPA #4	2.61	1.97	0.35	0.55	1.7	0.91	-10.16	17.6
S2228	08/29/2000	08/29/2000	34.2	J-14 EPA #5	0.33	1.23	0.84	0.34	0.2	0.56	19.89	11.04
S2229	08/29/2000	08/29/2000	36.4	J-14 EPA #6	0.83	1.42	0.27	0.39	1.98	0.67	12.76	12.52
S2230	08/29/2000	08/30/2000	30	F - 14.5	9.82	3.76	8.31	1.06	5.24	1.54	16.15	24.31
S2231	08/29/2000	08/30/2000	27.4	K.2 - 14 #1	-0.11	1.34	0.58	0.38	1.76	0.63	11.97	11.95
S2232	08/29/2000	08/30/2000	29.5	K.2 - 14 #2	2.47	1.94	0.27	0.54	2.36	0.9	13.23	17.34
S2233	08/29/2000	08/30/2000	28.7	K.2 - 14 #3	3.17	1.55	0.22	0.42	2.37	0.72	-2.52	13.23
S2234	08/29/2000	08/30/2000	27	K.2 - 14 #4	0.75	1.62	0.15	0.45	2.13	0.77	30.03	14.7
S2235	08/29/2000	08/30/2000	28.5	J - 13.5 #1	2.62	0.95	-0.08	0.25	2.43	0.46	15.45	8.32
S2236	08/29/2000	08/30/2000	28.1	J - 13.5 #2	2.59	1.89	0.75	0.47	1.29	0.77	-5.96	14.56
S2237	08/29/2000	08/30/2000	30	J - 13.5 #3	-2.49	1.96	1.04	0.57	1.09	0.95	29.02	17.97
S2238	08/29/2000	08/30/2000	29.1	J - 13.5 #4	4.15	1.67	-0.02	0.46	2.3	0.78	12.95	14.89
S2239	08/30/2000	08/30/2000	38.9	K.5 - 14 EPA #1	-0.47	1.31	-0.1	0.36	3.12	0.64	0.61	11.65
S2240	08/30/2000	08/30/2000	36.9	K.5 - 14 EPA #2	2.92	1.59	0.48	0.44	1.26	0.72	0.41	13.5
S2241	08/30/2000	08/30/2000	37.4	K.5 - 14 EPA #3	1.84	1.72	0.33	0.48	1.65	0.82	5.15	15.21
S2242	08/30/2000	08/30/2000	39.3	K.5 - 14 EPA #4	-0.37	1.42	0.32	0.39	1.48	0.67	25.8	12.75
S2243	08/30/2000	08/30/2000	37.2	K.5 - 14 EPA #5	3.19	1.72	-0.36	0.46	2.48	0.81	26.44	15.4
S2244	08/30/2000	08/30/2000	37.5	K.5 - 14 EPA #6	2.34	1.5	0.52	0.41	1.86	0.69	-7.64	12.78
S2245	08/30/2000	08/30/2000	36.7	F - 15 EPA #1	-1.82	1.24	0.44	0.35	1.36	0.61	14.55	11.53
S2246	08/30/2000	08/30/2000	37.5	F - 15 EPA #2	-1.05	1.61	0.48	0.46	0.73	0.78	10.47	14.98

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S2247	08/30/2000	08/30/2000	36.6	F - 15 EPA #3	2.67	[illegible]	-0.16	[illegible]	1.72	[illegible]	8.06	[illegible]
S2248	08/30/2000	08/30/2000	37.3	F - 15 EPA #4	0.66	[illegible]	0.23	[illegible]	0.21	[illegible]	21.96	[illegible]
S2249	08/30/2000	08/30/2000	37.2	F - 15 EPA #5	1.16	[illegible]	0	[illegible]	1.45	[illegible]	12.59	[illegible]
S2250	08/30/2000	08/30/2000	37.8	F - 15 EPA #6	0.75	[illegible]	-0.05	[illegible]	1.32	[illegible]	24.82	[illegible]
S2251	08/30/2000	08/30/2000	35	J - 13.5 EPA #1	-0.31	[illegible]	1.6	[illegible]	1.57	[illegible]	-10.9	[illegible]
S2252	08/30/2000	08/30/2000	35.4	J - 13.5 EPA #2	3.13	[illegible]	0.58	[illegible]	0.76	[illegible]	31.22	[illegible]
S2253	08/30/2000	08/30/2000	35.7	J - 13.5 EPA #3	1.78	[illegible]	0.48	[illegible]	2.09	[illegible]	11.89	[illegible]
S2254	08/30/2000	08/30/2000	35.3	J - 13.5 EPA #4	1.47	[illegible]	0.37	[illegible]	2.86	[illegible]	0.15	[illegible]
S2255	08/30/2000	08/30/2000	35.1	J - 13.5 EPA #5	2.62	[illegible]	0.54	[illegible]	1.26	[illegible]	26.03	[illegible]
S2256	08/30/2000	08/30/2000	35	J - 13.5 EPA #6	0.64	[illegible]	1.02	[illegible]	0.58	[illegible]	27.74	[illegible]
S2257	08/30/2000	08/31/2000	28.5	D - 13.5	-250.23	[illegible]	79.96	[illegible]	554.9	[illegible]	730.8	[illegible]
S2258	08/30/2000	08/31/2000	33.2	H - 11 OB #1	-4.32	[illegible]	1.48	[illegible]	4.03	[illegible]	88.21	[illegible]
S2259	08/30/2000	08/31/2000	34.9	H - 11 OB #2	5.98	[illegible]	2.16	[illegible]	3.13	[illegible]	94.64	[illegible]
S2260	08/30/2000	08/31/2000	34.2	H - 11 OB #3	4.74	[illegible]	0.94	[illegible]	3.86	[illegible]	-5.04	[illegible]
S2261	08/30/2000	08/31/2000	34.6	H - 11 OB #4	2.48	[illegible]	2.18	[illegible]	1.78	[illegible]	15.45	[illegible]
S2262	08/30/2000	08/31/2000	35.2	H - 11 OB #5	2.78	[illegible]	1.65	[illegible]	3.74	[illegible]	5.96	[illegible]
S2263	08/30/2000	08/31/2000	33.3	H - 11 OB #QC	2.71	[illegible]	2.1	[illegible]	2.06	[illegible]	12.39	[illegible]
S2264	08/30/2000	08/31/2000	26.9	D - 14	3.66	[illegible]	0.13	[illegible]	1.63	[illegible]	13.23	[illegible]
S2265	08/30/2000	08/31/2000	31.2	E -14	1.18	[illegible]	0.91	[illegible]	1.83	[illegible]	30.12	[illegible]
S2266	08/30/2000	08/31/2000	31.9	F- 14	0.71	[illegible]	0.89	[illegible]	2.54	[illegible]	3.49	[illegible]
S2267	08/30/2000	08/31/2000	31.9	G - 14	1.79	1.43	0.37	0.39	1.29	0.67	17.83	12.66
S2268	08/30/2000	08/31/2000	32.4	H - 14	0.68	1.46	0.32	0.41	1.15	0.69	22.96	13.49
S2269	08/30/2000	08/31/2000	31.8	I - 14	2.05	1.01	0.31	0.27	2.06	0.48	13.73	9.16
S2270	08/30/2000	08/31/2000	25.1	J - 14.5	0.24	1.42	0.88	0.4	0.91	0.66	27.75	12.78
S2271	08/30/2000	08/31/2000	32.9	K - 14	0.67	1.9	-0.26	0.52	1.63	0.91	27.06	17.68
S2272	08/30/2000	08/31/2000	35.3	L - 14	0.24	1.21	0.08	0.33	1.54	0.69	10.17	10.99
S2273	08/30/2000	08/31/2000	35.5	E - 12.5	0.14	1.15	0.71	0.62	0.85	0.54	3.24	10.23
S2274	08/30/2000	08/31/2000	35.6	F - 12.5	2.31	1.14	0.02	0.31	1.22	0.63	9.72	10.21
S2275	08/30/2000	08/31/2000	35.9	G - 12.5	0.52	1.27	-0.19	0.35	1.22	0.61	22.37	11.95
S2276	08/30/2000	08/31/2000	35.1	H - 12.5	2.6	1.68	0.29	0.46	1.28	0.79	-4.22	14.63
S2277	08/31/2000	08/31/2000	34.7	D - 13.5 EPA #1	2.38	1.44	1.63	0.4	0.59	0.65	23.25	12.31
S2278	08/31/2000	08/31/2000	37.5	D - 13.5 EPA #2	2.17	1.55	1.11	0.43	2.55	0.79	-5.52	12.56
S2279	08/31/2000	08/31/2000	37.5	D - 13.5 EPA #3	1.16	1.24	0.78	0.34	2.06	0.67	24.99	10.59
S2280	08/31/2000	08/31/2000	36.5	D - 13.5 EPA #4	-0.3	1.21	0.47	0.36	2.82	0.62	30.14	11.48
S2281	08/31/2000	08/31/2000	35.9	D - 13.5 EPA #5	0.32	1.7	0.57	0.47	3.35	0.85	7.59	14.38
S2282	08/31/2000	08/31/2000	35.9	D - 13.5 EPA #6	1.19	1.67	0.87	0.43	2.37	0.75	19.92	13.94
S2283	08/31/2000	08/31/2000	36.6	I - 11 EPA #1	1.17	1.35	2.09	0.36	2.45	0.62	8.94	10.81
S2284	08/31/2000	08/31/2000	37.5	I - 11 EPA #2	3.5	1.64	1.42	0.45	2.43	0.76	27.33	13.59
S2285	08/31/2000	08/31/2000	36.1	I - 11 EPA #3	1.71	1.48	1.58	0.41	2.27	0.67	10.88	11.06
S2286	08/31/2000	08/31/2000	37.1	I - 11 EPA #4	2	1.7	2.56	0.47	1	0.75	20.6	13.83
S2287	08/31/2000	08/31/2000	38.9	I - 11 EPA #5	2.22	1.34	1.17	0.37	3.22	0.62	12	10.82
S2288	08/31/2000	08/31/2000	36.1	I - 11 EPA #6	5.08	1.17	1.63	0.31	1.86	0.62	23.61	9.4
S2289	08/31/2000	08/31/2000	34.9	H - (9.5)	12.64	3.17	8.48	0.89	4.23	1.3	31.45	21.24

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2290	08/31/2000	08/31/2000	25.4	I - (9.5)	3.54	1.44	1.81	0.39	1.75	0.64	37.94	11.8
S2291	08/31/2000	09/01/2000	20.6	J.5 - 9.5 OB #1	-7.38	3.86	1.93	0.88	2.44	1.55	129.64	31
S2292	08/31/2000	09/01/2000	20.7	J.5 - 9.5 OB #2	-8.38	4.88	2	1.16	3.14	1.97	136.46	35.48
S2293	08/31/2000	09/01/2000	20.5	J.5 - 9.5 OB #3	-11.21	3.26	1.93	0.92	3.6	1.54	117.49	28.43
S2294	08/31/2000	09/01/2000	21	J.5 - 9.5 OB #4	-12.5	3.36	1.36	0.94	3.11	1.63	140.61	31.09
S2295	08/31/2000	09/01/2000	21	J.5 - 9.5 OB #5	-7.54	3.74	2.4	1.02	3.87	1.75	136.18	31.59
S2296	08/31/2000	09/01/2000	22	J.5 - 9.5 OB QC	-0.91	2.17	1.22	0.58	3.09	0.99	78.25	18.09
S2297	09/01/2000	09/01/2000	22.2	J - 9.5 SPOT #1	1.94	1.68	0.9	0.47	2.55	0.78	9.02	14.22
S2298	09/01/2000	09/01/2000	20.6	J - 9.5 SPOT #2	2.09	1.32	0.83	0.35	1.9	0.8	44.41	11.24
S2299	09/01/2000	09/01/2000	31.4	E - 10	0.58	1.2	0.18	0.33	2.34	0.55	13	10.56
S2300	09/01/2000	09/01/2000	33.2	F - 10	-0.63	1.36	0.66	0.58	1.28	0.64	8.44	12.01
S2301	09/01/2000	09/01/2000	36	G - 10	1.59	1.16	-0.88	0.31	2.69	0.57	11.48	10.64
S2302	09/01/2000	09/01/2000	29.5	I.5 - (10) EPA #1	5.1	1.87	0.67	0.6	2.41	0.83	11.52	15.4
S2303	09/01/2000	09/01/2000	29.7	I.5 - (10) EPA #2	1.88	0.94	0.98	0.26	2.61	0.44	10.28	7.53
S2304	09/01/2000	09/01/2000	29.8	I.5 - (10) EPA #3	3.15	2.01	0.91	0.58	2.54	0.94	6.73	16.74
S2305	09/01/2000	09/01/2000	29.5	I.5 - (10) EPA #4	2.93	1.19	0.38	0.32	2.95	0.56	15.49	9.95
S2306	09/01/2000	09/01/2000	27.6	I.5 - (10) EPA #5	1.36	1.42	0.29	0.39	3.97	0.67	8	12.07
S2307	09/01/2000	09/01/2000	29.5	I.5 - (10) EPA #6	-1.88	1.39	0.97	0.39	2.23	0.66	41.75	12.33
S2308	09/01/2000	09/01/2000	34.9	H.5 - (10) EPA #1	1.31	1.25	1.49	0.35	2.8	0.57	12.94	10.18
S2309	09/01/2000	09/01/2000	32.2	H.5 - (10) EPA #2	3.03	1.15	1.68	0.32	2.71	0.53	-14.5	9.12
S2310	09/01/2000	09/01/2000	34.6	H.5 - (10) EPA #3	3.02	1.45	1.23	0.41	3.39	0.67	-6.79	11.71
S2311	09/01/2000	09/01/2000	34.7	H.5 - (10) EPA #4	3.29	1.36	1.3	0.37	2.2	0.51	22.6	11.21
S2312	09/01/2000	09/01/2000	33.5	H.5 - (10) EPA #5	-0.14	1.32	1.92	0.55	2.04	0.6	28.31	11.18
S2313	09/01/2000	09/01/2000	34.2	H.5 - (10) EPA #6	-0.15	1.54	1.17	0.43	3.13	0.73	18.2	12.85
S2314	09/01/2000	09/01/2000	30.2	L - 11 SPOT	3.83	2.04	8.03	0.59	3.27	0.86	0.54	13.6
S2315	09/05/2000	09/05/2000	32.5	H.5 - 9 EPA #1	2.85	0.83	2.03	0.23	1.44	0.37	23.53	6.53
S2316	09/05/2000	09/05/2000	31.3	H.5 - 9 EPA #2	4.71	1.44	1.53	0.4	2.06	0.65	3	11.47
S2317	09/05/2000	09/05/2000	32.9	H.5 - 9 EPA #3	5.25	1.73	2.23	0.48	1.7	0.76	3.42	13.67
S2318	09/05/2000	09/05/2000	33.3	H.5 - 9 EPA #4	4.21	1.67	0.92	0.45	3.9	0.76	8.86	13.41
S2319	09/05/2000	09/05/2000	32.6	H.5 - 9 EPA #5	-0.29	1.54	1.16	0.43	3.3	0.72	3.58	12.62
S2320	09/05/2000	09/05/2000	32.5	H.5 - 9 EPA #6	3.49	1.14	1.75	0.32	2.62	0.52	8.66	9.1
S2321	09/05/2000	09/05/2000	32	L - 11 EPA #1	3.07	1.33	-0.02	0.35	3.05	0.62	22.05	11.38
S2322	09/05/2000	09/05/2000	32.3	L - 11 EPA #2	1.04	0.95	1.09	0.26	3.13	0.44	20.85	8.01
S2323	09/05/2000	09/05/2000	30.9	L - 11 EPA #3	2.85	1.56	1.54	0.43	1.65	0.7	8.37	12.81
S2324	09/05/2000	09/05/2000	31.4	L - 11 EPA #4	2.79	1.65	0.28	0.46	3.58	0.78	14.98	14.1
S2325	09/05/2000	09/05/2000	30.4	L - 11 EPA #5	2.92	1.56	0.94	0.43	1.89	0.72	22.49	13.43
S2326	09/05/2000	09/05/2000	31.2	L - 11 EPA #6	-1.54	1.52	1.9	0.44	1.72	0.71	16.33	12.95
S2327	09/05/2000	09/05/2000	30.5	H.5 - 9 (-2)	59.73	15.35	56.99	5.06	20.69	7	16.69	85.99
S2328	09/06/2000	09/06/2000	33.9	H - 9	1.26	1.19	0.14	0.33	2.28	0.56	-6.1	10.47
S2329	09/06/2000	09/06/2000	31.5	F - 9	5.66	1.5	0.22	0.4	1.51	0.68	3.94	12.61
S2330	09/06/2000	09/06/2000	36.3	G - 8.5	3.33	1.2	0.09	0.32	0.68	0.56	-7.19	10.59
S2331	09/06/2000	09/06/2000	33	I - 9	4.18	1.55	-0.01	0.41	0.94	0.71	14.11	13.63
S2332	09/06/2000	09/06/2000	30.2	E.5 - 9.5	1.27	0.86	-0.07	0.24	2.25	0.41	-7.41	7.67

Nutranl Sample ID (File Name)	Collected	Analyzed	Weight	Location	NUTRANL RESULTS U-238 Result	+/-	TH-232 Result	+/-	RA-226 Result	+/-	K-40 Result	+/-
S2333	09/06/2000	09/06/2000	34.2	H - 8.5	0.64	[illegible]	0.63	[illegible]	1.62	[illegible]	-14.34	[illegible]
S2334	09/06/2000	09/06/2000	33.3	F - 8.5	3.16	[illegible]	0.1	[illegible]	1.68	[illegible]	-0.06	[illegible]
S2335	09/06/2000	09/06/2000	34	G - 8	0.59	[illegible]	1.16	[illegible]	0.82	[illegible]	-1.6	[illegible]
S2336	09/06/2000	09/06/2000	28	F - 8.5 EPA #1	2.84	[illegible]	0.66	[illegible]	2.6	[illegible]	0.84	[illegible]
S2337	09/06/2000	09/06/2000	27	F - 8.5 EPA #2	2.78	[illegible]	0.63	[illegible]	1.45	[illegible]	6.45	[illegible]
S2338	09/06/2000	09/06/2000	28.8	F - 8.5 EPA #3	3.59	[illegible]	0.74	[illegible]	0.9	[illegible]	24.8	[illegible]
S2339	09/06/2000	09/06/2000	25.7	F - 8.5 EPA #4	2.47	[illegible]	0.71	[illegible]	1.68	[illegible]	6.67	[illegible]
S2340	09/06/2000	09/06/2000	27.1	F - 8.5 EPA #5	2.43	[illegible]	0.53	[illegible]	1.35	[illegible]	24.65	[illegible]
S2341	09/06/2000	09/06/2000	27.4	F - 8.5 EPA #6	2.52	[illegible]	0.14	[illegible]	1.83	[illegible]	12.56	[illegible]
S2342	09/06/2000	09/06/2000	38.4	N - 11 SPOT #1	23.25	[illegible]	23.38	[illegible]	7.32	[illegible]	-0.45	[illegible]
S2343	09/06/2000	09/06/2000	38.7	N - 11 SPOT #2	19.68	[illegible]	28.53	[illegible]	7.91	[illegible]	21.99	[illegible]
S2344	09/06/2000	09/06/2000	26.7	N 5 - 11 #1	1.69	[illegible]	0.04	[illegible]	2.95	[illegible]	-7.22	[illegible]
S2345	09/06/2000	09/06/2000	28.7	N 5 - 11 #2	1.55	[illegible]	0.72	[illegible]	1.83	[illegible]	3.55	[illegible]
S2346	09/06/2000	09/06/2000	30.8	N 5 - 11 #3	1.14	[illegible]	1.37	[illegible]	1.1	[illegible]	14.6	[illegible]
S2347	09/07/2000	09/07/2000	37.6	K - 10	0.88	[illegible]	-0.38	[illegible]	1.47	[illegible]	22.52	[illegible]
S2348	09/07/2000	09/07/2000	35.5	I - 9	1.02	[illegible]	0.26	[illegible]	1.2	[illegible]	17.97	[illegible]
S2349	09/07/2000	09/07/2000	36.9	M 5 - 12.5	0.6	[illegible]	0.27	[illegible]	0.37	[illegible]	14.39	[illegible]
S2350	09/07/2000	09/07/2000	34.9	L - 10	4.6	[illegible]	-0.23	[illegible]	1.83	[illegible]	-11.06	[illegible]
S2351	09/07/2000	09/07/2000	35.4	M - 10.5	1.92	[illegible]	0.45	[illegible]	0.19	[illegible]	12.27	[illegible]
S2352	09/07/2000	09/07/2000	35.5	L - 11	2.56	[illegible]	0.29	[illegible]	0.67	[illegible]	-2.12	[illegible]
S2353	09/07/2000	09/07/2000	35.1	K 5 - 12	0.46	[illegible]	-0.39	[illegible]	1.58	[illegible]	19.1	[illegible]
S2354	09/08/2000	09/08/2000	24.1	N - 11 EPA #1	3.1	[illegible]	0.52	[illegible]	1.18	[illegible]	12.82	[illegible]
S2355	09/08/2000	09/08/2000	26.3	N - 11 EPA #2	0.78	1.12	0.17	0.81	1.37	0.53	20.86	10.14
S2356	09/08/2000	09/08/2000	28.4	N - 11 EPA #3	3.06	1.34	0	0.36	1.75	0.62	8.68	11.65
S2357	09/08/2000	09/08/2000	27.3	N - 11 EPA #4	2.61	1.86	0.46	0.46	1.26	0.77	3.31	14.72
S2358	09/08/2000	09/08/2000	27.7	N - 11 EPA #5	1.36	1.68	0.28	0.47	2.37	0.78	-6.1	14.5
S2359	09/08/2000	09/08/2000	25.9	N - 11 EPA #6	4.36	1.47	-0.02	0.89	0.82	0.67	28.81	13.36
S2360	09/08/2000	09/11/2000	40	K - 5	-0.22	1.52	0.19	0.42	1.63	0.73	10.33	13.77
S2361	09/08/2000	09/11/2000	36.3	K - 6	1.57	0.99	-0.03	0.27	1.98	0.47	-5.45	8.62
S2362	09/08/2000	09/11/2000	33.6	K - 7	1.39	1.15	-0.47	0.81	1.74	0.69	8.5	10.75
S2363	09/08/2000	09/11/2000	34.7	K - 8	3.41	0.93	-0.28	0.85	2.23	0.44	-5.27	8.09
S2364	09/08/2000	09/11/2000	35.2	K - 9	2.32	1.6	0.2	0.43	1.34	0.73	10.56	13.6
S2365	09/12/2000	09/12/2000	37.2	A - 1	1.33	1.41	0.18	0.4	1.57	0.67	-8.21	12.57
S2366	09/12/2000	09/12/2000	37.8	A - 2	1.37	[illegible]	0.14	[illegible]	1.69	[illegible]	1.13	[illegible]
S2367	09/12/2000	09/12/2000	37.1	A - 3	-0.9	[illegible]	-0.08	[illegible]	1.93	[illegible]	9.48	[illegible]
S2368	09/12/2000	09/12/2000	36.9	A - 4	1.55	[illegible]	-0.32	[illegible]	1.69	[illegible]	3.21	[illegible]
S2369	09/12/2000	09/12/2000	34.2	B - 1	-1.74	[illegible]	0.7	[illegible]	0.96	[illegible]	3.14	[illegible]
S2370	09/12/2000	09/12/2000	36.3	B - 2	2.9	[illegible]	0.09	[illegible]	1.09	[illegible]	7.48	[illegible]
S2371	09/12/2000	09/12/2000	36.7	B - 3	3.97	[illegible]	-0.47	[illegible]	2.61	[illegible]	1.9	[illegible]
S2372	09/12/2000	09/12/2000	36.8	C - 1	3.25	[illegible]	-0.53	[illegible]	3.18	[illegible]	-9.05	[illegible]
S2373	09/12/2000	09/12/2000	34.7	C - 2	-0.09	[illegible]	-0.07	[illegible]	2.74	[illegible]	31.24	[illegible]
S2374	09/12/2000	09/12/2000	34.2	C - 3	1.14	[illegible]	0.38	[illegible]	2.06	[illegible]	3.34	[illegible]
S2375	09/13/2000	09/13/2000	33.3	D - 6.5	19.91	[illegible]	15.33	[illegible]	9.12	[illegible]	32.56	[illegible]

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2376	09/13/2000	09/13/2000	35.7	C - 7	2.85	1.7	1.43	0.46	3.96	0.77	17.44	13.49
S2377	09/14/2000	09/14/2000	36.4	A.5 - 5	3.69	1.66	0.2	0.44	0.68	0.76	8.69	14.43
S2378	09/14/2000	09/14/2000	36.9	B - 4.5	2.26	1.35	0.47	0.38	1.9	0.82	-13.49	11.54
S2379	09/14/2000	09/14/2000	37.3	C - 5	0.84	1.11	-0.2	0.3	2.19	0.53	-7.17	9.87
S2380	09/14/2000	09/14/2000	35.9	D - 2.5	-0.8	1.59	0.36	0.45	0.48	0.75	27.06	14.9
S2381	09/14/2000	09/14/2000	36.4	D.5 - 4.5	2.82	1.46	-0.03	0.39	0.87	0.68	10.42	13.22
S2382	09/14/2000	09/14/2000	37.1	E - 5	3.85	1.47	-0.44	0.39	1.13	0.68	26.2	13.42
S2383	09/15/2000	09/15/2000	25.4	C - 7 EPA #1	-10.15	3.24	1.36	0.9	2.47	1.53	129.3	29.14
S2384	09/15/2000	09/15/2000	22.7	C - 7 EPA #2	-9.58	3.37	1.22	0.99	3.24	1.59	125.12	29.72
S2385	09/15/2000	09/15/2000	26.3	C - 7 EPA #3	3.35	1.47	-0.16	0.39	2.74	0.68	19.39	12.87
S2386	09/15/2000	09/15/2000	26.4	C - 7 EPA #4	3.36	1.41	0.47	0.39	1.96	0.66	-1.46	11.91
S2387	09/15/2000	09/15/2000	24.8	C - 7 EPA #5	3.52	1.6	-0.19	0.48	2.4	0.84	18.67	15.75
S2388	09/15/2000	09/15/2000	26.3	C - 7 EPA #6	-0.47	1.2	0.48	0.35	1.59	0.59	28.76	11.22
S2389	09/15/2000	09/15/2000	29.7	D - 6.5 EPA #1	1.99	1.45	0.95	0.4	2.88	0.68	-5.74	11.69
S2390	09/15/2000	09/15/2000	28.5	D - 6.5 EPA #2	3.35	1.43	1.33	0.39	1.11	0.64	20.64	12.08
S2391	09/15/2000	09/15/2000	26	D - 6.5 EPA #3	-3.42	1.58	0.51	0.45	2.12	0.75	40.81	14.88
S2392	09/15/2000	09/15/2000	27.5	D - 6.5 EPA #4	1.56	1.62	0.26	0.45	2.67	0.76	4.6	13.87
S2393	09/15/2000	09/15/2000	29.7	D - 6.5 EPA #5	0.27	1.53	0.67	0.43	2.14	0.73	10.58	13.1
S2394	09/15/2000	09/15/2000	26.4	D - 6.5 EPA #6	3.69	1.76	0.83	0.48	1.83	0.79	13.52	14.64
S2395	09/21/2000	09/22/2000	34.7	B - 15.5	17.53	5.2	15.92	1.45	8.84	2.1	32.71	30.04
S2396	09/21/2000	09/22/2000	28.8	B.5-15	24.11	9.38	16.72	2.58	11.54	3.7	2.54	51.52
S2397	09/21/2000	09/22/2000	29.5	B.2-15	27.81	12.45	41.07	3.49	20.63	4.91	-2.74	61.39
S2398	09/21/2000	09/22/2000	35	B-15 AFTER DIG	-0.93	2.07	2.3	0.59	1.75	0.93	17.03	16.75
S2399	09/21/2000	09/22/2000	36.3	M-9	1.63	1.6	0.23	0.43	2.51	0.74	6.86	13.38
S2400	09/21/2000	09/22/2000	35	L.5-9	0.21	1.54	0.07	0.42	2.28	0.73	34.93	13.89
S2401	09/21/2000	09/22/2000	36.7	M-5.5	1.78	1.25	0.59	0.35	1.92	0.58	-6.57	10.66
S2402	09/21/2000	09/22/2000	33.3	M-8	4.91	1.7	-0.25	0.45	2.51	0.78	-2.97	14.34
S2403	09/21/2000	09/22/2000	37	M-6.5	3.93	1.25	0.07	0.34	1.54	0.57	17.03	10.9
S2404	09/21/2000	09/22/2000	31.2	L.5-6	3.69	1.33	0.52	0.36	1.45	0.6	0.76	11.32
S2405	09/21/2000	09/22/2000	34.9	L.5-7	2.89	1.58	-0.05	0.42	1.79	0.73	32.9	14.23
S2406	09/22/2000	09/22/2000	24.6	B.5-15 EPA #1	-0.17	1.43	0.5	0.4	2.09	0.67	7.38	12.54
S2407	09/22/2000	09/22/2000	24.4	B.5-15 EPA #2	1.17	1.91	0.78	0.53	2.17	0.87	2.45	16.06
S2408	09/22/2000	09/22/2000	23.5	B.5-15 EPA #3	2.94	1.42	0.66	0.39	2.26	0.66	7.83	11.97
S2409	09/22/2000	09/22/2000	24	B.5-15 EPA #4	0.7	1.48	0.69	0.41	2.21	0.69	3.75	12.74
S2410	09/22/2000	09/22/2000	24.9	B.5-15 EPA #5	3.93	1.21	1.31	0.33	1.11	0.54	4.94	9.87
S2411	09/22/2000	09/22/2000	22	B.5-15 EPA #6	1.72	1.66	0.38	0.45	1.59	0.78	25	14.81
S2412	09/22/2000	09/22/2000	24.5	RE-G2 #1	16.43	9.13	24.46	2.6	6.1	3.51	8.43	49.92
S2413	09/22/2000	09/22/2000	19.8	RE-G2 #2	11.74	4.94	12.45	1.4	3.43	1.96	22.43	30.67
S2414	09/22/2000	09/22/2000	23	RE-G2 #3	7.66	3.22	6.75	0.91	3.65	1.33	7.62	22.19
S2415	09/22/2000	09/23/2000	39.9	C-7	-0.58	1.67	0.71	0.47	3.74	0.79	16.98	14.3
S2416	09/22/2000	09/23/2000	33.4	B.5-7	41.6	17.6	45.92	4.9	17.76	6.75	3.35	84.13
S2417	09/22/2000	09/23/2000	33.1	E-7.5	19.52	6.47	17.43	1.81	10.42	2.6	11.35	36.3
S2418	09/22/2000	09/23/2000	21.6	C.5-10	15.08	4.21	6.48	1.16	6.54	1.73	-15.47	26.85

					NUTRANL RESULTS								
Nutranl Sample ID					U-238		TH-232		RA-226		K-40		
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-	
S2419	09/25/2000	09/25/2000	30.7	RE #1	11.56	5.32	7.52	1.49	5	2.14	7.79	34.42	
S2420	09/25/2000	09/25/2000	33.3	RE #2	20.26	5.68	11.35	1.57	5.48	2.25	19.17	34.52	
S2421	09/25/2000	09/25/2000	24.3	RE WATER PIPE	47.29	12.8	28.89	5.13	13.74	7.06	16.82	94.24	
S2422	09/25/2000	09/25/2000	34.9	B - 11	3.74	1.9	0.79	0.52	2.07	0.86	10.83	16.17	
S2423	09/25/2000	09/25/2000	33.1	B - 12	3.25	1.91	-0.23	0.51	3.64	0.89	15.91	16.21	
S2424	09/25/2000	09/25/2000	29.1	C - 11	2.13	1.44	0.85	0.4	1.45	0.67	2.91	12.51	
S2425	09/25/2000	09/25/2000	40.4	C - 12.5	3.26	1.69	-0.45	0.46	2.89	0.8	1.57	14.94	
S2426	09/26/2000	09/26/2000	20.4	C.5 - 10.5 EPA #1	0.3	1.25	0.19	0.35	2.67	0.8	-3.76	10.92	
S2427	09/26/2000	09/26/2000	18.2	C.5 - 10.5 EPA #2	-0.01	1.31	-0.49	0.36	3.13	0.64	-2.11	11.77	
S2428	09/26/2000	09/26/2000	18.4	C.5 - 10.5 EPA #3	2	1.26	-0.54	0.34	2.56	0.6	13.52	11.25	
S2429	09/26/2000	09/26/2000	22.3	C.5 - 10.5 EPA #4	1.18	1.06	-0.1	0.28	1.88	0.5	13.12	9.45	
S2430	09/26/2000	09/26/2000	17.3	C.5 - 10.5 EPA #5	0.59	1.84	-0.3	0.51	1.55	0.87	25.3	17.2	
S2431	09/26/2000	09/26/2000	18.8	C.5 - 10.5 EPA #6	1.05	1.04	0.7	0.29	1.02	0.48	-4.74	9.01	
S2432	09/26/2000	09/26/2000	23.7	D - 7 EPA #1	3.51	1.26	0.31	0.34	2.09	0.58	5.73	10.51	
S2433	09/26/2000	09/26/2000	24.3	D - 7 EPA #2	2.26	1.64	0.27	0.45	2.64	0.76	-3.63	13.89	
S2434	09/26/2000	09/26/2000	22.2	D - 7 EPA #3	3.04	1.46	0.42	0.4	1.72	0.66	10.5	12.44	
S2435	09/26/2000	09/26/2000	24	D - 7 EPA #4	1.01	1.47	0.98	0.41	1.37	0.68	20.02	12.64	
S2436	09/26/2000	09/26/2000	24.7	D - 7 EPA #5	-0.53	1.5	0.52	0.42	1.96	0.7	15.97	13.16	
S2437	09/26/2000	09/26/2000	26.2	D - 7 EPA #6	2.7	1.35	0.34	0.38	2.03	0.62	24.99	11.68	
S2438	09/26/2000	09/26/2000	22.4	E - 7.5 EPA #1	-0.26	1.27	0.83	0.35	0.74	0.59	34.28	11.35	
S2439	09/26/2000	09/26/2000	24.4	E - 7.5 EPA #2	-0.2	1.19	0.36	0.34	2.31	0.56	-7.66	10.47	
S2440	09/26/2000	09/26/2000	22.8	E - 7.5 EPA #3	1.41	1.06	0.45	0.29	0.53	0.49	17.76	9.53	
S2441	09/26/2000	09/26/2000	21.9	E - 7.5 EPA #4	3.37	1.23	0.12	0.93	2.4	0.57	-10.12	10.29	
S2442	09/26/2000	09/26/2000	26.1	E - 7.5 EPA #5	0.27	1.2	0.42	0.33	0.83	0.56	41.43	10.9	
S2443	09/26/2000	09/26/2000	27.5	E - 7.5 EPA #6	0.9	1.16	0.3	0.32	1.4	0.54	12.08	10.43	
S2444	09/27/2000	09/27/2000	34.5	C - 2	0.82	1.34	0.5	0.37	1.84	0.62	13.13	11.78	
S2445	09/27/2000	09/27/2000	30.5	B - 9.5	-1.4	1.48	0.71	0.42	1.9	0.7	23.62	13.24	
S2446	09/27/2000	09/27/2000	32.8	A - 11	2.45	1.17	-0.57	0.31	2.84	0.56	23.2	10.38	
S2447	09/27/2000	09/27/2000	33.4	A.5 - 13	1.9	1.46	0.1	0.4	1.61	0.68	12.83	13.08	
S2448	09/27/2000	09/27/2000	33.7	B - 12.5	3.91	1.31	-0.36	0.34	1.47	0.61	13.41	11.77	
S2449	09/27/2000	09/27/2000	32.8	B - 11.5	3.67	1.44	0.5	0.39	0.87	0.65	12.72	12.44	
S2450	09/27/2000	09/27/2000	37.4	C - 10	2.17	1.51	0.22	0.41	2.38	0.7	8.28	12.78	
S2451	09/28/2000	09/28/2000	25.3	RIVER EAST #1	1.82	0.97	-0.32	0.26	2.23	0.46	23.43	8.7	
S2452	09/28/2000	09/28/2000	20.7	RIVER EAST #2	1.95	1.21	0.09	0.33	1.54	0.56	13.07	10.69	
S2453	10/05/2000	10/05/2000	31.1	RIVER EAST LINE 2.2	11.2	2.97	2.55	0.8	3.93	1.26	15.64	21.85	
S2454	10/05/2000	10/05/2000	33.2	C-14 FLOOR	0.91	1.24	-0.15	0.33	1.36	0.59	22.01	11.38	
S2455	10/05/2000	10/05/2000	35.7	C-15.5 FLOOR	1.52	1.44	-0.29	0.39	1.36	0.69	3.4	13.04	
S2456	10/05/2000	10/05/2000	36.2	C-17 FLOOR	5.61	36.2	-0.31	0.44	1.58	0.75	2.74	13.98	
S2457	10/06/2000	10/06/2000	23.5	RV SOIL	2.34	1.34	-0.4	0.36	5.04	0.84	6.45	11.09	
S2458	10/06/2000	10/06/2000	20.6	RV ROCK	7.69	1.48	2.87	0.41	3.66	0.65	14.47	11.14	
S2459	10/10/2000	10/10/2000	26.7	M-20 EPA # 1	0.86	0.94	0.49	0.26	1.82	0.44	16.79	8.21	
S2460	10/10/2000	10/10/2000	29	M-20 EPA # 2	3.96	1.41	0.51	0.38	1.37	0.64	8.19	11.98	
S2461	10/10/2000	10/10/2000	28.6	M-20 EPA # 3	1.29	1.27	-0.27	0.34	2.73	0.6	17.55	11.2	

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2462	10/10/2000	10/10/2000	30.7	M-20 EPA # 4	2.85	1.5	0.29	0.4	1.64	0.69	34.55	13.38
S2463	10/10/2000	10/10/2000	32.5	M-20 EPA # 5	4.16	1.44	-0.3	0.36	3.04	0.67	4.7	12.52
S2464	10/10/2000	10/10/2000	29.5	M-20 EPA # 6	1.98	1.49	-0.28	0.4	2.74	0.7	15.99	13.14
S2465	10/09/2000	10/10/2000	31.5	M-22 LIFT 1	-1.07	1.34	-0.05	0.37	1.56	0.66	21.32	12.5
S2466	10/09/2000	10/10/2000	31.5	M-21 LIFT 1	3.37	1.75	0.7	0.48	0.82	0.8	20.25	15.1
S2467	10/09/2000	10/10/2000	34.4	M-21 LIFT 2	3.88	1.26	0.08	0.34	2.64	0.58	28.93	10.86
S2468	10/09/2000	10/10/2000	37.8	M-21 LIFT 3	0.36	1.34	-0.08	0.37	1.13	0.64	21.18	12.27
S2469	10/09/2000	10/10/2000	26.1	M-20 LIFT 1	-1	1.26	-0.16	0.35	2.3	0.61	21.4	11.67
S2470	10/09/2000	10/10/2000	25.4	M-20 LIFT 2	1.78	1.28	0.57	0.35	2.65	0.6	0.14	10.7
S2471	10/09/2000	10/10/2000	36.8	M-20 LIFT 3	-1.42	1.39	0.55	0.38	0.49	0.64	35.97	12.73
S2472	10/09/2000	10/10/2000	28	M-19 LIFT 1	-1.46	1.4	0.65	0.4	0.7	0.66	19.95	12.94
S2473	10/09/2000	10/10/2000	26.9	M-19 LIFT 2	-0.5	1.06	0.07	0.29	1.9	0.51	6.69	9.55
S2474	10/09/2000	10/10/2000	29.8	M-19 LIFT 3	2.35	1.72	0.23	0.47	0.23	0.78	20.26	15.74
S2475	10/09/2000	10/10/2000	29.9	L-20.5	8.4	1.97	0.47	0.52	8.63	0.91	30.54	14.99
S2476	10/09/2000	10/10/2000	28.6	M-19.5	15.29	2.61	1.25	0.69	12.05	1.17	3.3	17.69
S2477	10/09/2000	10/10/2000	40.3	M-20	3.19	1.54	0.56	0.41	6.94	0.73	14.02	11.89
S2478	10/09/2000	10/10/2000	25.4	L-22	14.56	5.74	15.56	1.61	9.91	2.32	-0.33	32.58
S2479	10/09/2000	10/10/2000	35.6	M-25 LIFT 1	1.65	1.67	0.67	0.46	0.77	0.76	20.31	14.96
S2480	10/09/2000	10/10/2000	36.5	M-25 LIFT 2	-0.98	1.41	0.02	0.39	2.18	0.68	35.82	13.04
S2481	10/09/2000	10/10/2000	36.5	M-25 LIFT 3	1.37	1.16	-0.23	0.31	1.24	0.54	14.91	10.63
S2482	10/09/2000	10/10/2000	37.6	M-24 LIFT 1	0.36	1.25	0.01	0.34	1.8	0.59	12.01	11.19
S2483	10/09/2000	10/10/2000	38	M-24 LIFT 2	2.88	1.41	-0.22	0.37	2.29	0.66	19.08	12.42
S2484	10/09/2000	10/10/2000	30.5	M-24 LIFT 3	-1.75	1.6	0.23	0.44	0.52	0.76	34.26	14.7
S2485	10/09/2000	10/10/2000	33.8	M-23 LIFT 1	0.16	1.26	0.55	0.35	2.75	0.59	10.42	10.61
S2486	10/09/2000	10/10/2000	31.8	L-26 LIFT 1	1.14	1.38	-0.33	0.37	2.48	0.66	15.91	12.38
S2487	10/09/2000	10/10/2000	30.7	L-26 LIFT 2	0.02	1.66	-0.32	0.46	3.46	0.81	3.11	14.86
S2488	10/09/2000	10/10/2000	32.8	L-26 LIFT 3	0.67	1.55	0.41	0.43	1.21	0.72	29.29	13.95
S2489	10/09/2000	10/10/2000	32.1	L-25.5 LIFT 1	-1.75	1.44	0.57	0.39	1.28	0.67	49.71	12.95
S2490	10/09/2000	10/10/2000	36.1	L-25.5 LIFT 2	1.61	1.68	-0.14	0.46	2.11	0.81	2.83	15.1
S2491	10/09/2000	10/10/2000	32.5	L-25.5 LIFT 3	2.35	1.48	-0.07	0.4	2.44	0.7	1.63	13
S2492	10/09/2000	10/11/2000	34.4	L-24 LIFT 1	-1.77	1.41	0.72	0.4	1.25	0.66	30.19	12.84
S2493	10/09/2000	10/11/2000	31.8	L-24 LIFT 2	4.79	1.79	-0.34	0.47	2.39	0.81	10.72	15.53
S2494	10/09/2000	10/11/2000	34.2	L-24 LIFT 3	1.63	1.57	0.55	0.44	1.61	0.73	15.56	13.7
S2495	10/09/2000	10/11/2000	32.6	L-23 LIFT 1	0.59	1.31	-0.34	0.36	3.39	0.63	16.16	11.7
S2496	10/09/2000	10/11/2000	30.8	L-22 LIFT 1	1.48	0.89	-0.02	0.25	2.67	0.43	-12.39	7.68
S2497	10/09/2000	10/11/2000	35.8	L-21 LIFT 1	2.86	1.99	0.04	0.53	2.31	0.92	29.78	17.42
S2498	10/09/2000	10/11/2000	31.6	L-21 LIFT 2	3.82	1.37	0.23	0.37	2.24	0.63	-3.45	11.25
S2499	10/09/2000	10/11/2000	40.5	L-21 LIFT 3	1.33	1.34	-0.34	0.36	2.01	0.63	22.91	12.01
S2500	10/09/2000	10/11/2000	27.4	L-20 LIFT 1	-0.15	1.15	0.44	0.32	2.63	0.55	9.89	10
S2501	10/09/2000	10/11/2000	33.1	L-20 LIFT 2	1.46	1.16	0.44	0.32	1.11	0.54	27.15	10.67
S2502	10/09/2000	10/11/2000	38.4	L-20 LIFT 3	-2.03	1.25	0.23	0.35	1.1	0.61	13.7	11.66
S2503	10/09/2000	10/11/2000	33.7	L-19 LIFT 1	0.8	1.45	-0.06	0.4	3.23	0.71	-10.76	12.53
S2504	10/09/2000	10/11/2000	34.7	L-19 LIFT 2	-0.95	1.49	0.07	0.41	2.63	0.74	12.31	13.25

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2505	10/09/2000	10/11/2000	40.6	L-19 LIFT 3	-1.18	0.94	0.59	0.27	1.38	0.44	8.42	8.49
S2506	10/09/2000	10/12/2000	41.5	L-22 EPA # 1	3.14	1.05	0.33	0.26	1.07	0.48	18.24	9.19
S2507	10/09/2000	10/12/2000	39.6	L-22 EPA # 2	-1.44	1.9	-0.52	0.51	2.43	0.91	42.24	17.56
S2508	10/09/2000	10/12/2000	41.4	L-22 EPA # 3	1.73	1.13	0.66	0.31	1.15	0.52	8.74	9.89
S2509	10/09/2000	10/12/2000	42.5	L-22 EPA # 4	-0.67	1.24	0.85	0.35	1	0.58	19.29	10.98
S2510	10/09/2000	10/12/2000	42.3	L-22 EPA # 5	1.03	1.45	0.52	0.4	1.42	0.66	7.13	12.66
S2511	10/09/2000	10/12/2000	41.4	L-22 EPA # 6	0.96	1.6	0.1	0.43	2.37	0.74	20.39	14.05
S2512	10/10/2000	10/12/2000	36.7	M-23 LIFT 2	2.03	1.25	-0.04	0.35	2.48	0.6	-7.43	11.05
S2513	10/10/2000	10/12/2000	38.7	M-23 LIFT 3	-0.79	1.32	0.19	0.37	1.86	0.63	5.35	11.79
S2514	10/10/2000	10/12/2000	37.2	M-22 LIFT 2	-0.85	1.34	0.55	0.36	1.67	0.64	8.4	11.84
S2515	10/10/2000	10/12/2000	35.8	M-22 LIFT 3	0.14	1.36	0.71	0.38	-0.48	0.62	19.78	12.78
S2516	10/10/2000	10/12/2000	33.4	L-22 LIFT 2	2.46	1.5	-0.14	0.44	2.57	0.76	-4.84	13.74
S2517	10/10/2000	10/12/2000	38.9	L-22 LIFT 3	0.24	1.06	-0.13	0.29	1.81	0.5	12.73	9.59
S2518	10/10/2000	10/12/2000	35.2	L-23 LIFT2	2.51	1.42	0.6	0.39	1.75	0.66	13.32	11.93
S2519	10/10/2000	10/12/2000	35.9	L-23 LIFT 3	-0.86	1.13	-0.1	0.31	1.42	0.55	17.09	10.45
S2520	10/10/2000	10/12/2000	35.5	J.5-26 LIFT 1	4.26	1.21	0.11	0.32	2.71	0.55	6.56	10.29
S2521	10/10/2000	10/12/2000	32.3	J.5-26 LIFT 2	2.83	1.16	-0.11	0.31	3.15	0.64	9.58	9.77
S2522	10/11/2000	10/12/2000	36.4	F-25.5 LIFT 1	0.11	1.54	-0.1	0.42	2.11	0.75	9.86	13.9
S2523	10/11/2000	10/12/2000	30.4	F-25.5 LIFT 2	1.67	1.35	-0.43	0.36	2.26	0.65	12.29	12.15
S2524	10/11/2000	10/12/2000	33.9	F-24.5 LIFT 2	4.36	1.32	0.2	0.35	1.89	0.6	8.91	11.09
S2525	10/11/2000	10/12/2000	33.5	F-24.5 LIFT 3	-0.04	1.2	0.17	0.34	1.1	0.57	4.28	11.04
S2526	10/11/2000	10/12/2000	33.2	I-24 LIFT 2	-0.47	1.35	0.37	0.37	1.98	0.65	12.34	11.98
S2527	10/11/2000	10/12/2000	39.2	I-24 LIFT 3	-0.3	1.47	0.25	0.41	1.87	0.89	8.37	12.94
S2528	10/11/2000	10/12/2000	40.3	I-25 LIFT 3	4.34	1.32	0.01	0.35	1.24	0.6	-5.68	11.19
S2529	10/11/2000	10/12/2000	34.8	J.5-24.5 LIFT 3	-0.67	1.13	0.14	0.31	1.42	0.54	21.71	10.38
S2530	10/11/2000	10/12/2000	39.4	F-25 LIFT 3	1.95	1.09	-0.2	0.29	2.12	0.51	11.28	9.64
S2531	10/12/2000	10/12/2000	32.2	CON ED #1	1.62	1.34	-0.1	0.36	0.92	0.63	36.88	12.55
S2532	10/12/2000	10/12/2000	37	CON ED #2	-1.03	1	0.64	0.28	0.27	0.46	26.36	9.08
S2533	10/12/2000	10/12/2000	27	CON ED #3	1.44	1.38	1.08	0.39	2.69	0.65	-10.96	11.28
S2534	10/14/2000	10/16/2000	34.6	C.5-25 LIFT 1	-0.18	1.36	0.26	0.37	0.97	0.64	33.57	12.56
S2535	10/14/2000	10/16/2000	33.5	C.5-25 LIFT 2	0.99	1.57	1.02	0.43	0.39	0.71	36.06	13.66
S2536	10/14/2000	10/16/2000	35.1	C.5-24.5 LIFT 1	2.93	2.02	0.8	0.55	2.35	0.91	10.95	16.83
S2537	10/14/2000	10/16/2000	34.7	B.5-26 LIFT 1	2.87	1.57	0.15	0.42	1.06	0.71	12.94	13.98
S2538	10/14/2000	10/16/2000	30.1	B.5-26 LIFT 2	0.29	1.49	-0.47	0.41	2.91	0.73	4.55	13.34
S2539	10/14/2000	10/16/2000	35.8	B.5-26 LIFT 3	0.38	1.7	0.58	0.47	0.47	0.8	10.61	15.4
S2540	10/14/2000	10/16/2000	33.8	B.5-25 LIFT 1	4.9	1.48	0.28	0.39	1.18	0.67	9.34	12.47
S2541	10/14/2000	10/16/2000	30.3	B.5-25 LIFT 2	-1.16	1.36	-0.23	0.37	2.05	0.66	20.64	12.29
S2542	10/14/2000	10/16/2000	37.8	B.5-25 LIFT 3	0.78	1.41	-0.34	0.39	2.69	0.69	4.12	12.56
S2543	10/14/2000	10/16/2000	35.3	C.5-26 LIFT 1	1.68	1.56	0.37	0.43	1.16	0.73	21.22	14.03
S2544	10/14/2000	10/16/2000	32.4	C.5-26 LIFT 2	1.75	1.54	0.86	0.42	0.81	0.7	-1.17	13.25
S2545	10/14/2000	10/16/2000	34.5	C.5-26 LIFT 3	1.65	1.59	-0.11	0.42	2.07	0.74	22.88	14.18
S2546	10/16/2000	10/17/2000	37.8	B.5-24 LIFT 1	0.05	1.34	0.57	0.37	0.71	0.62	29.48	12.26
S2547	10/16/2000	10/17/2000	37.6	B.5-24 LIFT 2	2.28	1.38	-0.05	0.37	1.92	0.63	23.86	11.97

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2548	10/16/2000	10/17/2000	38.1	B.5-24 LIFT 3	0.08	1.32	0.43	0.37	0.02	0.62	28.35	12.47
S2549	10/16/2000	10/17/2000	35.4	C.5-24 LIFT 1	2.32	1.22	-0.2	0.33	2	0.57	28.17	11.09
S2550	10/16/2000	10/17/2000	23.6	C.5-24 LIFT 2	5.33	1.71	0.22	0.46	2.64	0.75	-3.6	14.1
S2551	10/16/2000	10/17/2000	37.2	C.5-24 LIFT 3	-0.57	1.25	0.36	0.35	1.31	0.6	11.08	11.37
S2552	10/16/2000	10/17/2000	36.9	C.5-25 LIFT 3	0.84	1.79	0.48	0.49	-0.29	0.83	43.24	16.68
S2553	10/17/2000	10/18/2000	31.8	I.5-25 LIFT 3	1.03	1.13	-0.09	0.3	1.33	0.53	47.71	10.3
S2554	10/17/2000	10/18/2000	34.8	C.5-22 LIFT 1	0.2	1.29	0.26	0.35	1.9	0.61	15.46	11.32
S2555	10/17/2000	10/18/2000	34.2	C.5-22 LIFT 2	0.4	1.36	0.12	0.37	1.79	0.64	38.3	12.37
S2556	10/17/2000	10/18/2000	33.1	C.5-22 LIFT 3	-0.41	1.05	0.42	0.29	0.59	0.49	14.13	9.52
S2557	10/17/2000	10/18/2000	36.9	B.5-22 LIFT 1	2.96	1.37	-0.15	0.37	1.87	0.64	18.48	12.15
S2558	10/17/2000	10/18/2000	34.1	B.5-22 LIFT 2	1.78	1.04	0.11	0.28	1.6	0.49	19.05	9.22
S2559	10/17/2000	10/18/2000	38.2	B.5-22 LIFT 3	0.49	0.89	-0.11	0.24	1.89	0.42	16.94	7.95
S2560	10/17/2000	10/18/2000	37.3	B.5-23 LIFT 1	0.86	1.36	0.84	0.38	0.97	0.63	22.1	11.9
S2561	10/17/2000	10/18/2000	38.6	B.5-23 LIFT 2	2.64	1.45	0.79	0.4	2.08	0.66	-18.72	11.85
S2562	10/17/2000	10/18/2000	38.5	B.5-23 LIFT 3	2.35	1.56	-0.65	0.41	2.36	0.75	5.19	14.09
S2563	10/17/2000	10/18/2000	34.6	C.5-21 LIFT 1	-1.67	1.81	0.92	0.51	0.72	0.87	31.33	16.56
S2564	10/18/2000	10/19/2000	37.3	C.5-23 LIFT 1	2.43	1.71	0.55	0.47	1.72	0.79	6.64	14.65
S2565	10/18/2000	10/19/2000	30.5	C.5-23 LIFT 2	2.94	1.2	0.37	0.32	1.66	0.55	27.94	10.64
S2566	10/18/2000	10/19/2000	34.5	C.5-23 LIFT 3	2.3	1.33	0.03	0.36	0.75	0.61	17.93	12.16
S2567	10/18/2000	10/19/2000	28.3	D-21 EZ	10.87	2.43	1.26	0.64	15.2	1.12	19.76	16.69
S2568	10/18/2000	10/19/2000	35.6	C.5-21 LIFT 1	2.27	1.43	0.52	0.39	1.03	0.66	4.33	12.4
S2569	10/18/2000	10/19/2000	35.7	C.5-21LIFT 2	0.34	1.56	0.55	0.43	0.64	0.72	19.34	13.98
S2570	10/18/2000	10/19/2000	36.2	C.5-21 LIFT 3	-0.68	1.61	-0.22	0.44	2.04	0.77	15.05	14.51
S2571	10/18/2000	10/19/2000	34.7	C.5-20 LIFT 1	-0.16	1.17	1	0.33	1.33	0.54	5.77	10.17
S2572	10/18/2000	10/19/2000	33.7	C.5-20 LIFT 2	2.55	1.54	0.38	0.42	1.97	0.72	8.17	13.32
S2573	10/18/2000	10/19/2000	36.3	C.5-20 LIFT 3	1	0.94	-0.23	0.26	1.49	0.44	2.91	8.53
S2574	10/18/2000	10/19/2000	35.5	C.5-19 LIFT 1	1.56	1.44	0.3	0.39	0.88	0.66	26.78	12.87
S2575	10/18/2000	10/19/2000	35	C.5-19 LIFT 2	1.31	1.16	-0.06	0.31	2.72	0.54	27.23	9.95
S2576	10/18/2000	10/19/2000	37.3	B.5-21 LIFT 1	0.3	1.26	-0.55	0.34	3.01	0.61	12.58	11.35
S2577	10/18/2000	10/19/2000	37.3	B.5-21 LIFT 2	0.79	1.7	0.14	0.47	1.82	0.81	14.04	15.36
S2578	10/18/2000	10/19/2000	37.5	B.5-21 LIFT 3	0.93	1.28	0.16	0.35	0.43	0.6	29	11.76
S2579	10/18/2000	10/19/2000	31.6	B.5-20 LIFT 1	0.39	1.24	0.32	0.34	2.22	0.58	19.95	10.96
S2580	10/18/2000	10/19/2000	33.7	B.5-20 LIFT 2	0.05	1.46	0.74	0.4	1.01	0.67	33.8	12.94
S2581	10/18/2000	10/19/2000	41.1	B.5-20 LIFT 3	0.47	1.33	0.12	0.37	1.25	0.62	24.78	12.39
S2582	10/18/2000	10/19/2000	34.8	B.5-19 LIFT 1	2.28	1.06	0.28	0.29	2.45	0.5	-1.86	9.01
S2583	10/18/2000	10/19/2000	35.9	B.5-19 LIFT 2	0.36	1.36	0.84	0.38	1.14	0.63	11.53	11.99
S2584	10/20/2000	10/20/2000	32.8	D-21.5 EPA #1	-1.12	1.46	-0.17	0.4	1.73	0.71	19.48	13.37
S2585	10/20/2000	10/20/2000	31.7	D-21.5 EPA #2	1.23	1.21	-0.22	0.33	1.22	0.58	12.89	11.33
S2586	10/20/2000	10/20/2000	34	D-21.5 EPA #3	-2.77	1.32	-0.15	0.37	2.14	0.65	6.79	12.04
S2587	10/20/2000	10/20/2000	31.1	D-21.5 EPA #4	2.7	1.52	0.1	0.41	0.56	0.7	8.64	13.6
S2588	10/20/2000	10/20/2000	30.5	D-21.5 EPA #5	-0.26	1.29	0.28	0.35	2.07	0.61	15.11	11.76
S2589	10/20/2000	10/20/2000	28.2	D-21.5 EPA #6	0.37	1.01	-0.51	0.27	1.18	0.49	19.35	9.52
S2590	10/19/2000	10/20/2000	36.5	M-2 LIFT 4	2.21	1.45	0.15	0.39	1.73	0.67	0.64	12.81

					NUTRANL RESULTS							
Nutranl Sample ID					U-238		TH-232		RA-226		K-40	
(File Name)	Collected	Analyzed	Weight	Location	Result	+/-	Result	+/-	Result	+/-	Result	+/-
S2591	10/19/2000	10/20/2000	36.8	M-3 LIFT 4	0.67	1.51	-0.1	0.41	1.91	0.71	12.62	13.58
S2592	10/19/2000	10/20/2000	37.1	M-4 LIFT 4	1.36	1.6	1.07	0.45	0.25	0.72	11.54	13.97
S2593	10/19/2000	10/20/2000	37.1	M-5 LIFT 4	4.35	1.79	-0.33	0.47	1.51	0.82	12.66	15.73
S2594	10/19/2000	10/20/2000	36.4	N-2 LIFT 4	2.39	1.57	0.22	0.43	2.46	0.74	-18.74	13.4
S2595	10/19/2000	10/20/2000	37.1	N-3 LIFT 4	-0.98	1.53	0.6	0.43	1.34	0.73	7.05	13.6
S2596	10/19/2000	10/20/2000	37.5	N-4 LIFT 4	2.06	1.7	-0.31	0.46	3.24	0.81	2.91	14.61
S2597	10/19/2000	10/20/2000	38.9	N-5 LIFT 4	3.57	1.81	0.09	0.48	1.29	0.83	32.39	16.17
S2598	10/20/2000	10/24/2000	28.3	RE LINE 17-3'	3.73	1.41	0.4	0.38	1.58	0.64	5.67	11.94
S2599	10/20/2000	10/24/2000	27.9	RE LINE 17-5'	2.97	1.54	0.36	0.42	2.49	0.71	3.81	13.1
S2600	10/24/2000	10/24/2000	21.8	RE WATER MAIN #1	0.72	1.36	0.08	0.37	2.08	0.64	17.06	12.11
S2601	10/24/2000	10/24/2000	17.6	RE WATER MAIN #2	0.11	1.25	0.71	0.35	4.58	0.59	5.12	10.29
S2602	10/24/2000	10/24/2000	36	B-17.5 8K	13.62	2.57	4.5	0.69	3.91	1.06	15.74	17.67
S2603	10/24/2000	10/24/2000	32.1	B-17.5 11K	7.7	4.16	5.89	1.16	7.19	1.76	41.32	28.68
S2604	10/26/2000	10/26/2000	41	B-17.5 AFTER DIG	1.39	1.42	-0.33	0.36	1.97	0.67	30.87	12.66
S2605	10/25/2000	10/26/2000	18.3	RE LINE 17-7'	2.01	2.68	0.24	0.74	4.76	1.24	0.95	21.61
S2606	10/25/2000	10/26/2000	25.6	RE LINE 17-6'	2.88	1.08	-0.58	0.28	2.7	0.51	8.77	9.43
S2607	10/27/2000	10/27/2000	38.3	B-17.5 EPA # 1	0.77	1.72	-0.37	0.46	1.95	0.81	19.59	15.86
S2608	10/27/2000	10/27/2000	38.1	B-17.5 EPA # 2	0.07	1.26	0.14	0.35	0.56	0.59	26.03	11.73
S2609	10/27/2000	10/27/2000	39.4	B-17.5 EPA # 3	0.66	1.46	-0.04	0.4	1.7	0.68	9.25	13.26
S2610	10/27/2000	10/27/2000	38.2	B-17.5 EPA # 4	1.24	1.79	-0.2	0.43	1.59	0.83	24.88	16.12
S2611	10/27/2000	10/27/2000	40.6	B-17.5 EPA # 5	-0.06	1.35	0.29	0.38	1.6	0.64	-2.34	11.88
S2612	10/27/2000	10/27/2000	39.3	B-17.5 EPA # 6	1.6	1.42	-0.3	0.36	2.46	0.67	13.84	12.71
S2613	10/27/2000	10/27/2000	49.2	EFFLUENT SEDIMENT 1	-1.08	1.34	0.63	0.38	0.38	0.63	24.76	12.28
S2614	10/27/2000	10/27/2000	47.2	EFFLUENT SEDIMENT 2	6.09	1.45	-0.17	0.38	0.94	0.64	10.54	12.66
S2615	10/27/2000	10/27/2000	24.1	EFFLUENT WATER 1	1.42	1.11	-0.47	0.3	1.4	0.53	-13.57	10.14
S2616	10/27/2000	10/27/2000	23.7	EFFLUENT WATER 2	-0.1	1.79	-0.67	0.49	1.22	0.88	13.29	17.68
S2617	10/31/2000	10/31/2000	18.6	L-(-7)-8'	2.55	1.69	0.69	0.46	2.56	0.77	13.23	13.87
S2618	10/31/2000	10/31/2000	20.6	K-(-8)-8'	-0.08	1.31	0.34	0.36	1.73	0.61	22.83	11.61
S2619	11/02/2000	11/02/2000	37.5	N. GAS (-3.5)	1.68	1.34	-0.1	0.36	1.88	0.63	8.88	11.95
S2620	11/02/2000	11/02/2000	35.1	N. GAS (-3')	0.23	1.64	-0.26	0.45	2.93	0.76	6.45	14.34

ATTACHMENT J

AIR MONITORING RESULTS

AIR MONITORING

HIGH VOLUME PUMPS
DAY AFTER ANALYSIS
4 DAY ANALYSIS

Air Sampling Methodology for Grand Pier Project

Chicago, IL
4/16/00

References:

- *Kerr McGee Removal Action Work Plan Appendix B – Air Monitoring Plan*
- *Kerr McGee Quality Assurance Project Plan – Air Monitoring SOP Doc. 212*
- *Kerr McGee Health and Safety Plan Doc. 400 sec 7 "Personnel Exposure and Air Quality Monitoring*
- *32 IAC 340 Appendix A*
- *NUREG 1400 Air Sampling in the Workplace*

1. All air monitoring and analysis meet or exceed the specifications outlined in the above-mentioned Kerr McGee Scoping and Planning Documents.

2. In order to detect below the most limiting effluent release criteria, all air monitoring will be reported in average weekly concentrations. Daily air samples will be taken from each site perimeter and analyzed the next morning for gross alpha activity, and after four days, to allow for the decay of short-lived radon progeny. The analysis performed after four days will serve as the official concentration. The day after analysis is performed for comparison purposes only.

3. High volume air samples will be used to collect air samples. "Ashless" filter paper, with a manufacturers stated counting efficiency of 0.70, will be utilized. Each day, a 1.75-inch diameter cutout will be obtained and analyzed on the Ludlum 43-10 alpha well. The minimum detectable concentrations were *determined to be below* $4x10^{-15}$ $\mu Ci/ml$ *(see attached). These calculations are* not part of the Kerr-McGee Procedures, as Table 3-4 of the Quality Assurance Program only specifies several air-sampling pumps. The Staplex pumps that will be used on this project are similar to the SAIC AVS-60A listed in this table.

4. Only one cutout will be needed for each sample obtained. A sampling uniformity test was performed and determined that activity variance is less than +/- 5% throughout the 8 x 10 inch filter paper.

5. The worksheet that will be used calculates the data in a slightly different order than specified, however, the end results are the same. (e.g. volume analyzed is calculated first and then plugged into equation)

6. NUREG 1400 Appendix A explains how averaging multiple concentration measurements improves both precision and detection capability. Analysis of effluent release will be reported on a weekly basis, as was the case, on the Lindsay Light II/ River East Project (summer 1999). The following calculation will be used to report effluent concentrations:

Equation A.9 *NUREG 1400*

$$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$$

where C= effluent concentration in μCi/ml
T_s= duration of sample collection

Concentration will be determined daily using the following calculation

Equation 6.9 *NUREG 1400*

$$C = \frac{R_n}{E\ F\ K\ T_s\ cf\ (5)}$$

Where:

R_n = net count rate; $R_n = R_g - R_b = \frac{N_g}{T_g} - \frac{N_b}{T_b}$

E = fractional filter efficiency

F = air flow rate through the air sampler, cm^3/min

Cubic feet per hour x 28.316 liters/cfh x 1000 ml/ liter

K = Counting efficiency in cpm/ μCi

T_s = duration of sample collection

Cf = collection vs. analyzed ratio: conversion factor = 0.035

note: cf is not part of original NUREG calculation. It has been added to account for the fact that we are only analyzed 3.5% of total sample

5 = Samples are analyzed for gross alpha activity, per SOP 212, gross alpha concentration is to be divided by five to determine Th-232 concentration

Minimum Detectable Concentration Calculation

Staplex TFIA High Volume Air Samples analyzed on Ludlum 43-10 Alpha Counter

$$MDC = \frac{2.71}{n\,E\,F\,K\,T_s\,T_g\,cf} + \frac{3.29\sqrt{R_b\left[\frac{1}{T_b} + \frac{1}{T_g}\right]}}{n^{1/2}\,E\,F\,K\,T_s\,cf}$$

NUREG 1400 *Air Sampling in the Workplace* Appendix A (eq A.17)

n = number of sampling intervals
E = fractional filter efficiency
F = airlow rate through the sampler in cm^3 / min
K= counting efficiency in cpm /µCi
T_s= duration of sample collection in min
T_g = gross counting time
T_b = background counting time
R_n = net count rate in cpm
R_b = background count rate in cpm
C = concentration of radioactive material in the air in µCi/cm^3
Cf = count vs sample conversion **this is not part of NUREG 1400, however analysis volume must be taken into account

n = 5 days of sampling minimum per week
E= 0.7 (referred to as filter retention factor on air sampling form)
F= 1.13 x 10^6 cm^3/min (or ml/min)
40ft^3/min x 28.316 liters/ft^3 x 1000ml/l = 1.13 x 10^6 ml/min
K=699300
0.315 count / disintegration x 2.22 x10^6 dis/µCi = 699300 cpm/µCi
T_s= 480 min
Based on a minimum of 8 hours per day
T_g= 30 min
T_b= 600 min
Cf = 0.035
8"x 10" original filter size = 80 $inches^2$
0.3 inch border is covered by sampler plate and not sampled = 10.8 $inches^2$
filter cutout = πr^2 = $(0.875")^2(3.14)$ = 2.41 inches"
actual sample area = 80 $inches^2$ – 10.8 $inches^2$ = 69.2 $inches^2$
sample analyzed vs. sample collected ratio = 2.41 / 69.2 = 0.035
r_b = 0.58 cpm , based on 600 min background count on 4/10-4/11/00

$$MDC = \frac{2.71}{(5)(0.7)(1.13E6)(699300)(0.035)(480)(30)} + \frac{3.29\sqrt{(0.58)\left[\frac{1}{(600)} + \frac{1}{(30)}\right]}}{(2.24)(0.7)(1.13E6)(699300)(0.035)(480)(30)}$$

= 2.69 x10^{-15} µCi/ ml (gross alpha weekly MDC)
= 5.39 x10^{-16} µCi/ ml (gross alpha ÷ 5, for Th-232)

Both MDC's are below the most limiting effluent release criteria, specified in Kerr McGee Air Monitoring Procedure SOP-212 (Th-232 = 4 x10^{-15} µCi/ml)

Minimum Detectable Concentration Calculation - PAMS

Sensidyne Personal Air Monitor Samples analyzed on Ludlum 43-10 Alpha Counter

$$MDC = \frac{2.71}{n\,E\,F\,K\,T_s\,T_g} + \frac{3.29\sqrt{R_b\left[\frac{1}{T_b} + \frac{1}{T_g}\right]}}{n^{1/2}\,E\,F\,K\,T_s}$$

NUREG 1400 *Air Sampling in the Workplace* Appendix A (eq A.17)

n = number of sampling intervals
E = fractional filter efficiency
F = airlow rate through the sampler in cm^3 / min
K= counting efficiency in cpm /μCi
T_s= duration of sample collection in min
T_g = gross counting time
T_b = background counting time
R_n = net count rate in cpm
R_b = background count rate in cpm
C = concentration of radioactive material in the air in $\mu Ci/cm^3$

n = 5 days of sampling minimum per week
E= 1.0 37mm 0.8 μm MCE Filters
F= 2.5 $x10^3$ cm^3/min (or ml/min)
2.5 liters per minute x 1000ml/l = 2500 ml/min
K=699300
0.315 count / disintegration x 2.22 $x10^6$ dis/μCi = 699300 cpm/μCi
T_s= 480 min
Based on a minimum of 8 hours per day
T_g= 30 min
T_b= 600 min

r_b = 0.58 cpm , based on 600 min background count on 4/10-4/11/00

$$MDC = \frac{2.71}{(5)(1.0)(2500)(699300)(480)(30)} + \frac{3.29\sqrt{(0.58)\left[\frac{1}{(600)} + \frac{1}{(30)}\right]}}{(2.24)(1.0)(2500)(699300)(480)(30)}$$

= 2.98 $x10^{-14}$ μCi/ ml (gross alpha weekly MDC)
= 5.96 $x10^{-15}$ μCi/ ml (gross alpha ÷ 5, for Th-232)

Both MDC's are below 30% of the DAC value, specified in Kerr McGee Air Monitoring Procedure SOP-212 (Th-232 = 5 $x10^{-13}$ μCi/ml x 30% = 1.5 x 10^{-13})

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
W1006	4/13/00	7:41am	4:31pm	527	33	1.72E+07	4/14/00	154	18	4.533	1.07E-13	4/18/00	22	17	0.167	3.95E-15	98.77%
N1007	4/14/00	6:55am	3:33pm	518	42	2.16E+07	4/17/00	18	18	0	0.00E+00	4/19/00	16	17	0	0.00E+00	0.00%
S1007	4/14/00	6:45am	3:36pm	531	34	1.79E+07	4/17/00	29	18	0.367	8.37E-15	4/19/00	17	17	0	0.00E+00	0.00%
E1007	4/14/00	8:45am	3:46pm	421	36	1.50E+07	4/17/00	38	18	0.667	1.81E-14	4/19/00	14	17	0	0.00E+00	0.00%
W1007	4/14/00	8:45am	3:40pm	415	31	1.27E+07	4/17/00	35	18	0.567	1.82E-14	4/19/00	18	17	0.033	1.07E-15	26.70%
N1008	4/18/00	6:42am	4:14pm	572	34	1.93E+07	4/19/00	61	17	1.467	3.11E-14	4/24/00	18	16	0.067	1.41E-15	35.33%
S1008	4/18/00	6:52am	4:20pm	568	40	2.25E+07	4/19/00	105	17	2.933	5.32E-14	4/24/00	15	16	0	0.00E+00	0.00%
E1008	4/18/00	6:55am	4:14pm	562	33	1.84E+07	4/19/00	109	17	3.067	6.82E-14	4/24/00	14	16	0	0.00E+00	0.00%
W1008	4/18/00	6:40am	4:15pm	575	55	3.13E+07	4/19/00	84	17	2.233	2.91E-14	4/24/00	13	16	0	0.00E+00	0.00%
N1009	4/19/00	8:20am	12:45pm	265	35	9.19E+06	** no day after analysis performed					4/24/00	16	16	0	0.00E+00	0.00%
S1009	4/19/00	7:58am	12:45pm	287	47	1.34E+07	** see attached comment sheet					4/24/00	15	16	0	0.00E+00	0.00%
E1009	4/19/00	7:55am	12:45pm	290	45	1.29E+07	**					4/24/00	21	16	0.167	5.27E-15	131.63%
W1009	4/19/00	8:06am	12:45pm	279	50	1.38E+07	**					4/24/00	16	16	0	0.00E+00	0.00%
###	Rained out on Thursday April 20, 2000 - No site work or air monitoring performed ###																
###	Rained out on Friday April 21, 2000 - No site work or air monitoring performed ###																
N1010	4/24/00	8:15am	5:25pm	550	44	2.40E+07	4/25/00	46	18	0.933	1.59E-14	4/28/00	14	18	0	0.00E+00	0.00%
S1010	4/24/00	8:10am	5:07pm	537	35	1.86E+07	4/25/00	56	18	1.267	2.78E-14	4/28/00	18	18	0	0.00E+00	0.00%
E1010	4/24/00	8:07am	5:07pm	540	47	2.52E+07	4/25/00	51	18	1.1	1.79E-14	4/28/00	17	18	0	0.00E+00	0.00%
W1010	4/24/00	8:02am	5:25pm	563	50	2.79E+07	4/25/00	63	18	1.5	2.20E-14	4/28/00	19	18	0.033	4.88E-16	12.20%
N1011	4/25/00	7:55am	4:26pm	511	43	2.18E+07	4/26/00	46	16	1	1.88E-14	4/29/00	16	17	0	0.00E+00	0.00%
S1011	4/25/00	7:55am	4:33pm	518	30	1.54E+07	4/26/00	61	16	1.5	3.98E-14	4/29/00	17	17	0	0.00E+00	0.00%
E1011	4/25/00	7:55am	4:35pm	520	45	2.32E+07	4/26/00	18	16	0.067	1.17E-15	4/29/00	15	17	0	0.00E+00	0.00%
W1011	4/25/00	7:55am	4:26pm	511	50	2.53E+07	4/26/00	22	16	0.2	3.23E-15	4/29/00	17	17	0	0.00E+00	0.00%
N1012	4/26/00	7:35am	5:19pm	584	36	2.08E+07	4/27/00	32	17	0.5	9.80E-15	5/1/00	16	17	0	0.00E+00	0.00%
S1012	4/26/00	7:25am	5:20pm	595	42	2.48E+07	4/27/00	63	17	1.533	2.53E-14	5/1/00	19	17	0.067	1.10E-15	27.49%
E1012	4/26/00	7:25am	5:20pm	595	47	2.77E+07	4/27/00	47	17	1	1.47E-14	5/1/00	18	17	0.033	4.91E-16	12.28%
W1012	4/26/00	7:35am	5:25pm	590	59	3.45E+07	4/27/00	72	17	1.833	2.17E-14	5/1/00	17	17	0	0.00E+00	0.00%
N1013	4/27/00	7:35am	4:22pm	527	35	1.83E+07	4/28/00	50	18	1.067	2.38E-14	5/2/00	15	16	0	0.00E+00	0.00%
S1013	4/27/00	7:22am	4:25pm	543	38	2.04E+07	4/28/00	69	18	1.7	3.40E-14	5/2/00	16	16	0	0.00E+00	0.00%
E1013	4/27/00	7:22am	4:25pm	543	39	2.10E+07	4/28/00	24	18	0.2	3.89E-15	5/2/00	16	16	0	0.00E+00	0.00%
W1013	4/27/00	7:35am	4:22pm	527	39	2.04E+07	4/28/00	105	18	2.9	5.82E-14	5/2/00	14	16	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

							day after analysis					four day analysis					% of Limit
Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4 00E-15 uCi/ml
N1014	4/28/00	7:45am	4:42pm	537	39	2 08E+07	4/29/00	84	17	2 233	4 40E-14	5/3/00	15	17	0	0 00E+00	0 00%
S1014	4/28/00	7:31am	4:50pm	559	35	1 94E+07	4/29/00	45	17	0 933	1 97E-14	5/3/00	22	17	0 167	3 51E-15	87 80%
E1014	4/28/00	7:28am	4:45pm	557	35	1 93E+07	4/29/00	67	17	1 667	3 52E-14	5/3/00	16	17	0	0 00E+00	0 00%
W1014	4/28/00	7 43am	4 55pm	552	35	1 91E+07	4/29/00	151	17	4 467	9 53E-14	5/3/00	17	17	0	0 00E+00	0 00%
N1015	4/29/00	8 02am	3 18pm	436	59	2 55E+07	5/1/00	29	17	0 4	6 41E 15	5/4/00	20	18	0 067	1 07E-15	26 71%
S1015	4/29/00	8 08am	3 12pm	424	34	1 43E+07	5/1/00	27	17	0 333	9 53E 15	5/4/00	15	18	0	0 00E+00	0 00%
E1015	4/29/00	8 05am	3 12pm	427	38	1 61E+07	5/1/00	18	17	0 033	8 47E 16	5/4/00	18	18	0	0 00E+00	0 00%
W1015	4/29/00	8 00am	3 20pm	440	59	2 57E+07	5/1/00	16	17	0	0 00E+00	5/4/00	16	18	0	0 00E+00	0 00%
N1016	5/1/00	8 24am	4 19pm	475	57	2 68E+07	5/2/00	93	16	2 567	3 91E-14	5/5/00	18	19	0	0 00E+00	0 00%
S1016	5/1/00	8 28am	4 42pm	494	36	1 76E+07	5/2/00	187	16	5 7	1 32E 13	5/5/00	16	19	0	0 00E+00	0 00%
E1016	5/1/00	8 26am	4 48pm	502	41	2 04E+07	5/2/00	241	16	7 5	1 50E 13	5/5/00	21	19	0 067	1 34E 15	33 38%
W1016	5/1/00	8 22am	4:17pm	475	62	2 92E+07	5/2/00	139	16	4 1	5 74E-14	5/5/00	19	19	0	0 00E+00	0 00%
N1017	5/2/00	7 26am	6 20pm	654	48	3 11E+07	5/3/00	37	17	0 667	8 76E 15	5/8/00	15	19	0	0 00E+00	0 00%
S1017	5/2/00	7 22am	6 25pm	663	33	2 17E+07	5/3/00	46	17	0 967	1 82E 14	5/8/00	18	19	0	0 00E+00	0 00%
E1017	5/2/00	7 20am	6 40pm	680	33	2 22E+07	5/3/00	30	17	0 433	7 96E 15	5/8/00	19	19	0	0 00E+00	0 00%
W1017	5/2/00	7 26am	6 22pm	656	55	3 58E+07	5/3/00	76	17	1 967	2 25E 14	5/8/00	18	19	0	0 00E+00	0 00%
N1018	5/3/00	7 14am	4 48pm	574	36	2 05E+07	5/4/00	93	18	2 5	4 99E 14	5/9/00	17	17	0	0 00E+00	0 00%
S1018	5/3/00	7:13am	4:52pm	579	38	2 18E+07	5/4/00	95	18	2 567	4 81E-14	5/9/00	15	17	0	0 00E+00	0.00%
E1018	5/3/00	7:12am	4 55pm	583	37	2.14E+07	5/4/00	64	18	1 533	2.93E-14	5/9/00	18	17	0 033	6.37E-16	15 93%
W1018	5/3/00	7:12am	4:45pm	573	50	2.84E+07	5/4/00	128	18	3 667	5 28E-14	5/9/00	16	17	0	0 00E+00	0.00%
N1019	5/4/00	7:24am	5:07pm	583	30	1.73E+07	5/5/00	181	19	5.4	1.27E-13	5/9/00	15	17	0	0.00E+00	0.00%
S1019	5/4/00	7:25am	3:16pm	471	31	1.45E+07	5/5/00	138	19	3.967	1.12E-13	5/9/00	21	17	0.133	3.76E-15	94.12%
E1019	5/4/00	7:20am	6:00pm	640	25	1.59E+07	5/5/00	155	19	4.533	1.17E-13	5/9/00	17	17	0	0.00E+00	0.00%
W1019	5/4/00	7:18am	5:07pm	589	46	2.69E+07	5/5/00	212	19	6.433	9.79E-14	5/9/00	19	17	0.067	1.01E-15	25.36%
N1020	5/5/00	7:04am	5:18pm	614	46	2.80E+07	5/8/00	24	19	0.167	2.43E-15	5/10/00	17	18	0	0.00E+00	0.00%
S1020	5/5/00	7:14am	5:11pm	597	37	2.19E+07	5/8/00	27	19	0.267	4.98E-15	5/10/00	14	18	0	0.00E+00	0.00%
E1020	5/5/00	7:14am	5:05pm	592	35	2.05E+07	5/8/00	19	19	0	0.00E+00	5/10/00	18	18	0	0.00E+00	0.00%
W1020	5/5/00	7:05am	5:22pm	617	46	2.81E+07	5/8/00	22	19	0.1	1.45E-15	5/10/00	17	18	0	0.00E+00	0.00%
N1021	5/8/00	7:36am	8:42pm	786	31	2.41E+07	5/9/00	201	17	6.133	1.04E-13	5/12/00	20	16	0.133	2.26E-15	56.40%
S1021	5/8/00	7:40am	8:40pm	780	40	3.09E+07	5/9/00	288	17	9.033	1.19E-13	5/12/00	16	16	0	0.00E+00	0.00%
E1021	5/8/00	7:51am	8:00pm	729	34	2.46E+07	5/9/00	187	17	5.667	9.43E-14	5/12/00	18	16	0.067	1.11E-15	27.72%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
W1021	5/8/00	7:34am	8:45pm	791	45	3.53E+07	5/9/00	286	17	8.967	1.04E-13	5/12/00	19	16	0.1	1.16E-15	28.95%
N1022	5/9/00	7:31am	2:55pm	444	30	1.32E+07	5/10/00	19	18	0.033	1.03E-15	5/15/00	15	17	0	0.00E+00	0.00%
S1022	5/9/00	7:22am	2:55pm	453**	31	1.39E+07	5/10/00	38	18	0.667	1.96E-14	5/15/00	19	17	0.067	1.96E-15	48.93%
E1022	5/9/00	7:26am	2:55pm	449	37	1.65E+07	5/10/00	27	18	0.3	7.44E-15	5/15/00	17	17	0	0.00E+00	0.00%
W1022	5/9/00	7:30am	2:55pm	445	53	2.34E+07	5/10/00	22	18	0.133	2.33E-15	5/15/00	17	17	0	0.00E+00	0.00%
N1023	5/10/00	7:28am	5:20pm	592	28	1.64E+07	5/11/00	21	16	0.167	4.15E-15	5/15/00	15	17	0	0.00E+00	0.00%
S1023	5/10/00	7:20am	5:27pm	607	40	2.41E+07	5/11/00	43	16	0.9	1.53E-14	5/15/00	16	17	0	0.00E+00	0.00%
E1023	5/10/00	7:20am	5:20pm	600	35	2.08E+07	5/11/00	48	16	1.067	2.09E-14	5/15/00	15	17	0	0.00E+00	0.00%
W1023	5/10/00	7:28am	5:25pm	597	55	3.25E+07	5/11/00	43	16	0.9	1.13E-14	5/15/00	17	17	0	0.00E+00	0.00%
N1024	5/11/00	7:10am	5:08pm	598	37	2.19E+07	5/12/00	69	16	1.767	3.29E-14	5/16/00	21	17	0.133	2.48E-15	62.11%
S1024	5/11/00	7:10am	5:01pm	591	35	2.05E+07	5/12/00	42	16	0.867	1.73E-14	5/16/00	19	17	0.067	1.33E-15	33.22%
E1024	5/11/00	7:11am	5:01pm	590	34	1.99E+07	5/12/00	29	16	0.433	8.91E-15	5/16/00	16	17	0	0.00E+00	0.00%
W1024	5/11/00	7:11am	5:08pm	597	47	2.78E+07	5/12/00	126	16	3.667	5.39E-14	5/16/00	17	17	0	0.00E+00	0.00%
N1025	5/12/00	7:07am	4:12pm	545	33	1.78E+07	5/15/00	26	17	0.3	6.88E-15	5/17/00	16	19	0	0.00E+00	0.00%
S1025	5/12/00	7:15am	4:26pm	551	35	1.91E+07	5/15/00	40	17	0.767	1.64E-14	5/17/00	18	19	0	0.00E+00	0.00%
E1025	5/12/00	7:15am	4:22pm	547	32	1.73E+07	5/15/00	28	17	0.367	8.64E-15	5/17/00	20	19	0.033	7.85E-16	19.63%
W1025	5/12/00	7:07am	4:15pm	548	48	2.61E+07	5/15/00	29	17	0.4	6.27E-15	5/17/00	18	19	0	0.00E+00	0.00%
N1026	5/15/00	9:10am	4:40pm	450	35	1.56E+07	5/16/00	47	17	1	2.62E-14	5/19/00	14	16	0	0.00E+00	0.00%
S1026	5/15/00	9:03am	4:44pm	461	45	2.06E+07	5/16/00	57	17	1.333	2.65E-14	5/19/00	15	16	0	0.00E+00	0.00%
E1026	5/15/00	9:06am	4:44pm	458	43	1.95E+07	5/16/00	48	17	1.033	2.16E-14	5/19/00	15	16	0	0.00E+00	0.00%
W1026	5/15/00	9:10am	4:40pm	450	36	1.61E+07	5/16/00	78	17	2.033	5.17E-14	5/19/00	16	16	0	0.00E+00	0.00%
N1027	5/16/00	7:12am	5:44pm	632	38	2.38E+07	5/17/00	391	19	12.4	2.13E-13	5/22/00	16	17	0	0.00E+00	0.00%
S1027	5/16/00	7:13am	5:40pm	627	37	2.30E+07	5/17/00	128	19	3.633	6.46E-14	5/22/00	15	17	0	0.00E+00	0.00%
E1027	5/16/00	7:08am	5:41pm	633	38	2.38E+07	5/17/00	99	19	2.667	4.57E-14	5/22/00	18	17	0.033	5.71E-16	14.28%
W1027	5/16/00	7:06am	5:45pm	639	46	2.91E+07	5/17/00	389	19	12.33	1.73E-13	5/22/00	23	17	0.2	2.81E-15	70.13%
N1028	5/17/00	7:10am	5:48pm	638	42	2.66E+07	5/18/00	188	16	5.733	8.82E-14	5/22/00	16	17	0	0.00E+00	0.00%
S1028	5/17/00	7:12am	5:45pm	633	33	2.07E+07	5/18/00	241	16	7.5	1.48E-13	5/22/00	19	17	0.067	1.32E-15	32.89%
E1028	5/17/00	7:22am	5:45pm	623	33	2.04E+07	5/18/00	174	16	5.267	1.06E-13	5/22/00	17	17	0	0.00E+00	0.00%
W1028	5/17/00	7:10am	5:52pm	642	44	2.80E+07	5/18/00	245	16	7.633	1.11E-13	5/22/00	18	17	0.033	4.86E-16	12.16%
N1029	5/18/00	7:10am	4:25pm	555	35	1.93E+07	5/19/00	28	16	0.4	8.49E-15	5/23/00	16	16	0	0.00E+00	0.00%
S1029	5/18/00	7:04am	4:05pm	541	43	2.31E+07	5/19/00	63	16	1.567	2.78E-14	5/23/00	22	16	0.2	3.54E-15	88.61%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4 00E-15 uCi/ml
E1029	5/18/00	7:06am	4:28pm	562	38	2.12E+07	5/19/00	25	16	0.3	5.79E-15	5/23/00	19	16	0.1	1.93E-15	48.26%
W1029	5/18/00	7:02am	4:20pm	558	48	2.65E+07	5/19/00	42	16	0.867	1.33E-14	5/23/00	17	16	0.033	5.13E-16	12.83%
N1030	5/19/00	7:10am	4:45pm	575	35	1.99E+07	5/22/00	16	17	0	0.00E+00	5/24/00	18	19	0	0.00E+00	0.00%
S1030	5/19/00	7:02am	4:40pm	578	39	2.23E+07	5/22/00	18	17	0.033	6.10E-16	5/24/00	19	19	0	0.00E+00	0.00%
E1030	5/19/00	7:07am	4:40pm	573	42	2.39E+07	5/22/00	16	17	0	0.00E+00	5/24/00	21	19	0.067	1.14E-15	28.55%
W1030	5/19/00	7:04am	4:45pm	581	45	2.59E+07	5/22/00	26	17	0.3	4.73E-15	5/24/00	17	19	0	0.00E+00	0.00%
N1031	5/22/00	7:15am	4:48pm	573	35	1.99E+07	5/23/00	239	16	7.433	1.53E-13	5/26/00	18	19	0	0.00E+00	0.00%
S1031	5/22/00	7:21am	4:55pm	574	55	3.13E+07	5/23/00	172	16	5.2	6.79E-14	5/26/00	16	19	0	0.00E+00	0.00%
E1031	5/22/00	7:23am	4:50pm	567	40	2.25E+07	5/23/00	304	16	9.6	1.75E-13	5/26/00	19	19	0	0.00E+00	0.00%
W1031	5/22/00	7:12am	5:00pm	588	50	2.91E+07	5/23/00	89	16	2.433	3.41E-14	5/26/00	19	19	0	0.00E+00	0.00%
N1032	5/23/00	7:10am	4:45pm	575	41	2.34E+07	5/24/00	182	19	5.433	9.50E-14	5/28/00	16	16	0	0.00E+00	0.00%
S1032	5/23/00	7:05am	5:15pm	610	28	1.69E+07	5/24/00	247	19	7.6	1.83E-13	5/28/00	18	16	0.067	1.61E-15	40.23%
E1032	5/23/00	7:08am	5:11pm	603	29	1.73E+07	5/24/00	217	19	6.6	1.56E-13	5/28/00	19	16	0.1	2.36E-15	58.94%
W1032	5/23/00	7:07am	4:47pm	580	54	3.10E+07	5/24/00	105	19	2.867	3.77E-14	5/28/00	16	16	0	0.00E+00	0.00%
N1033	5/24/00	6:55am	6:20am	685	43	2.92E+07	5/25/00	155	18	4.567	6.39E-14	5/28/00	18	16	0.067	9.33E-16	23.33%
S1033	5/24/00	7:04am	6:20pm	676	34	2.28E+07	5/25/00	126	18	3.6	6.46E-14	5/28/00	15	16	0	0.00E+00	0.00%
E1033	5/24/00	7:06am	6:23pm	677	26	1.74E+07	5/25/00	97	18	2.633	6.17E-14	5/28/00	16	16	0	0.00E+00	0.00%
W1033	5/24/00	6:50am	6:22pm	692	45	3.09E+07	5/25/00	148	18	4.333	5.74E-14	5/28/00	17	16	0.033	4.41E-16	11.03%
N1034	5/25/00	7:05am	6:35pm	690	35	2.39E+07	5/26/00	143	19	4.133	7.06E-14	5/30/00	15	17	0	0.00E+00	0.00%
S1034	5/25/00	6:52am	6:30pm	698	44	3.04E+07	5/26/00	111	19	3.067	4.12E-14	5/30/00	16	17	0	0.00E+00	0.00%
E1034	5/25/00	6:50am	6:28pm	698	34	2.35E+07	5/26/00	129	19	3.667	6.37E-14	5/30/00	18	17	0.033	5.79E-16	14.48%
W1034	5/25/00	7:00am	6:34pm	694	37	2.54E+07	5/26/00	173	19	5.133	8.24E-14	5/30/00	21	17	0.133	2.14E-15	53.52%
N1035	5/26/00	7:04am	3:40pm	516	38	1.94E+07	***no day after analysis performed					5/31/00	14	16	0	0.00E+00	0.00%
S1035	5/26/00	7:00am	3:42pm	522	37	1.91E+07	due to Memorial Day Weekend.					5/31/00	16	16	0	0.00E+00	0.00%
E1035	5/26/00	7:02am	3:41pm	519	38	1.95E+07	4 day analysis only.					5/31/00	18	16	0.067	1.39E-15	34.84%
W1035	5/26/00	7:00am	3:46pm	526	38	1.98E+07						5/31/00	16	16	0	0.00E+00	0.00%
N1036	5/30/00	7:05am	4:25pm	560	43	2.39E+07	5/31/00	135	16	3.967	6.79E-14	6/2/00	16	17	0	0.00E+00	0.00%
S1036	5/30/00	7:07am	4:25pm	558	38	2.10E+07	5/31/00	121	16	3.5	6.80E-14	6/2/00	18	17	0.033	6.48E-16	16.20%
E1036	5/30/00	7:05am	4:37pm	572	43	2.44E+07	5/31/00	84	16	2.267	3.80E-14	6/2/00	17	17	0	0.00E+00	0.00%
W1036	5/30/00	7:02am	4:20pm	558	46	2.54E+07	5/31/00	132	16	3.867	6.21E-14	6/2/00	18	17	0.033	5.35E-16	13.38%
N1037	5/31/00	7:07am	3:20pm	493	40	1.95E+07	6/1/00	113	16	3.233	6.76E-14	6/5/00	20	17	0.1	2.09E-15	52.26%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
S1037	5/31/00	7:00am	3:18pm	498	38	1.88E+07	6/1/00	133	16	3.9	8.50E-14	6/5/00	17	17	0	0.00E+00	0.00%
E1037	5/31/00	6:58am	3:15pm	497	33	1.63E+07	6/1/00	148	16	4.4	1.11E-13	6/5/00	15	17	0	0.00E+00	0.00%
W1037	5/31/00	10:18am	3:14pm	296	45	1.32E+07	6/1/00	112	16	3.2	9.90E-14	6/5/00	17	17	0	0.00E+00	0.00%
N1038	6/1/00	8:05am	3:57pm	472	32	1.50E+07	6/2/00	111	17	3.133	8.55E-14	6/6/00	20	16	0.133	3.64E-15	90.98%
S1038	6/1/00	8:00am	4:00pm	480	45	2.14E+07	6/2/00	99	17	2.733	5.22E-14	6/6/00	17	16	0.033	6.36E-16	15.90%
E1038	6/1/00	8:01am	4:00pm	479	40	1.90E+07	6/2/00	52	17	1.167	2.51E-14	6/6/00	19	16	0.1	2.15E-15	53.79%
W1038	6/1/00	7:55am	3:51pm	476	52	2.45E+07	6/2/00	116	17	3.3	5.50E-14	6/6/00	17	16	0.033	5.55E-16	13.88%
N1039	6/2/00	7:55am	6:08pm	613	40	2.43E+07	6/5/00	16	17	0	0.00E+00	6/7/00	15	16	0	0.00E+00	0.00%
S1039	6/2/00	8:02am	6:04pm	602	36	2.15E+07	6/5/00	21	17	0.133	2.54E-15	6/7/00	19	16	0.1	1.90E-15	47.56%
E1039	6/2/00	8:07am	6:01pm	594	40	2.35E+07	6/5/00	25	17	0.267	4.63E-15	6/7/00	17	16	0.033	5.78E-16	14.46%
W1039	6/2/00	8:05am	5:50pm	585	44	2.55E+07	6/5/00	18	17	0.033	5.34E-16	6/7/00	16	16	0	0.00E+00	0.00%
N1040	6/5/00	1:00pm	4:10pm	190	37	6.97E+06	6/6/00	22	16	0.2	1.17E-14	6/9/00	16	17	0	0.00E+00	0.00%
S1040	6/5/00	1:14pm	4:05pm	171	50	8.47E+06	6/6/00	23	16	0.233	1.13E-14	6/9/00	19	17	0.067	3.21E-15	80.36%
E1040	6/5/00	1:16pm	4:02pm	166	57	9.38E+06	6/6/00	19	16	0.1	4.36E-15	6/9/00	16	17	0	0.00E+00	0.00%
W1040	6/5/00	8:16am	3:40pm	444	30	1.32E+07	6/6/00	38	16	0.733	2.27E-14	6/9/00	16	17	0	0.00E+00	0.00%
N1041	6/6/00	7:21am	8:20pm	779	34	2.62E+07	6/7/00	31	16	0.5	7.78E-15	6/12/00	15	16	0	0.00E+00	0.00%
S1041	6/6/00	7:24am	8:22pm	778	31	2.39E+07	6/7/00	27	16	0.367	6.27E-15	6/12/00	18	16	0.067	1.14E-15	28.49%
E1041	6/6/00	7:26am	8:24pm	778	33	2.54E+07	6/7/00	18	16	0.067	1.07E-15	6/12/00	14	16	0	0.00E+00	0.00%
W1041	6/6/00	7:27am	8:04pm	757	40	3.00E+07	6/7/00	54	16	1.267	1.72E-14	6/12/00	16	16	0	0.00E+00	0.00%
N1042	6/7/00	8:12am	5:50pm	578	35	2.00E+07	6/8/00	143	18	4.167	8.49E-14	6/12/00	17	16	0.033	6.79E-16	16.98%
S1042	6/7/00	8:00am	5:52pm	592	38	2.23E+07	6/8/00	162	18	4.8	8.80E-14	6/12/00	15	16	0	0.00E+00	0.00%
E1042	6/7/00	8:02am	5:47pm	585	40	2.32E+07	6/8/00	109	18	3.033	5.34E-14	6/12/00	15	16	0	0.00E+00	0.00%
W1042	6/7/00	8:09am	5:45pm	576	35	2.00E+07	6/8/00	153	18	4.5	9.20E-14	6/12/00	16	16	0	0.00E+00	0.00%
N1043	6/8/00	9:15am	5:28pm	493	39	1.91E+07	6/9/00	279	17	8.733	1.87E-13	6/13/00	18	16	0.067	1.43E-15	35.74%
S1043	6/8/00	8:00am	5:19pm	559	35	1.94E+07	6/9/00	167	17	5	1.05E-13	6/13/00	15	16	0	0.00E+00	0.00%
E1043	6/8/00	8:02am	5:21pm	559	34	1.88E+07	6/9/00	198	17	6.033	1.31E-13	6/13/00	16	16	0	0.00E+00	0.00%
W1043	6/8/00	9:00am	4:13pm	433	39	1.67E+07	6/9/00	144	17	4.233	1.03E-13	6/13/00	18	16	0.067	1.63E-15	40.69%
N1044	6/9/00	8:00am	4:44pm	524	35	1.82E+07	6/12/00	18	16	0.067	1.50E-15	6/14/00	17	15	0.067	1.50E-15	37.46%
S1044	6/9/00	8:03am	4:40pm	517	33	1.69E+07	6/12/00	22	16	0.2	4.83E-15	6/14/00	16	15	0.033	8.05E-16	20.14%
E1044	6/9/00	8:09am	4:38pm	509	30	1.51E+07	6/12/00	17	16	0.033	9.00E-16	6/14/00	15	15	0	0.00E+00	0.00%
W1044	6/9/00	8:14am	4:26pm	492	37	1.80E+07	6/12/00	24	16	0.267	6.04E-15	6/14/00	15	15	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

							day after analysis					four day analysis					% of Limit
Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4 00E-15 uCi/ml
N1045	6/12/00	8:55am	4:55pm	480	43	2 05E+07	6/13/00	44	16	0.933	1 86E-14	6/16/00	16	16	0	0.00E+00	0.00%
S1045	6/12/00	8:45am	4:55pm	490	45	2.19E+07	6/13/00	25	16	0.3	5 61E-15	6/16/00	15	16	0	0 00E+00	0.00%
E1045	6/12/00	8:50am	1.30pm	280	48	1 33E+07	6/13/00	19	16	0 1	3 07E-15	6/16/00	18	16	0 067	2 04E-15	51 12%
W1045	6/12/00	8:40am	4 50pm	490	40	1 94E+07	6/13/00	41	16	0 833	1 75E 14	6/16/00	16	16	0	0 00E+00	0 00%
N1046	6/13/00	7 57am	5 58pm	601	33	1 97E+07	6/14/00	49	15	1 133	2 36E 14	6/19/00	20	16	0 133	2 77E 15	69 29%
S1046	6/13/00	8 05am	5 54pm	589	39	2 28E+07	6/14/00	24	15	0 3	5 38E 15	6/19/00	15	16	0	0 00E+00	0 00%
E1046	6/13/00	*** No Sample Collected Today because of Cut Extension Cord						***									
W1046	6/13/00	8 00am	6:02pm	602	29	1 73E+07	6/14/00	52	15	1 233	2 91E 14	6/19/00	16	16	0	0 00E+00	0 00%
N1047	6/14/00	8 04am	2 55pm	411	36	1 47E+07	6/15/00	36	16	0 667	1 86E 14	6/19/00	16	16	0	0 00E+00	0 00%
S1047	6/14/00	8 00am	2 58pm	418	31	1 28E+07	6/15/00	99	16	2 767	8 80E 14	6/19/00	19	16	0 1	3 18E-15	79 54%
E1047	6/14/00	8 04am	3 02pm	418	35	1 45E+07	6/15/00	64	16	1 6	4 51E 14	6/19/00	18	16	0 067	1 88E 15	46 96%
W1047	6/14/00	8 05am	3 04pm	419	40	1 66E+07	6/15/00	36	16	0 667	1 64E 14	6/19/00	16	16	0	0 00E+00	0 00%
N1048	6/15/00	*** No Sample Collected Today Due to Broken Sampler ***															
S1048	6/15/00	8 13am	2 38pm	385	40	1 53E+07	6/16/00	29	16	0 433	1 16E 14	6/20/00	16	18	0	0 00E+00	0 00%
E1048	6/15/00	8 13am	2:31pm	378	38	1 42E+07	6/16/00	32	16	0 533	1 53E 14	6/20/00	18	18	0	0 00E+00	0 00%
W1048	6/15/00	8 09am	2 30pm	381	35	1 32E+07	6/16/00	27	16	0 367	1 13E 14	6/20/00	17	18	0	0 00E+00	0 00%
N1049	6/16/00	8 07am	3 09pm	422	38	1 59E+07	6/19/00	19	16	0 1	2 57E 15	6/21/00	17	17	0	0 00E+00	0 00%
S1049	6/16/00	8 05am	3 08pm	423	45	1 89E+07	6/19/00	18	16	0 067	1 44E 15	6/21/00	19	17	0 067	1 44E-15	36.10%
E1049	6/16/00	8:05am	3:11pm	426	48	2.03E+07	6/19/00	59	16	1 433	2 89E-14	6/21/00	18	17	0 033	6.72E-16	16.80%
W1049	6/16/00	8:00am	3:17pm	437	40	1.73E+07	6/19/00	30	16	0.467	1.10E-14	6/21/00	16	17	0	0.00E+00	0.00%
N1050	6/19/00	*** No Sample Collected Today Due to Broken Sampler ***															
S1050	6/19/00	8:26am	3:28pm	422	45	1.88E+07	6/20/00	80	18	2 067	4.49E-14	6/26/00	15	17	0	0.00E+00	0.00%
E1050	6/19/00	8:25am	3:25pm	420	50	2.08E+07	6/20/00	74	18	1.867	3.66E-14	6/26/00	17	17	0	0.00E+00	0.00%
W1050	6/19/00	8:22am	3:30pm	428	52	2.21E+07	6/20/00	91	18	2.433	4.51E-14	6/26/00	17	17	0	0.00E+00	0.00%
### No Air Monitoring Performed on 6/20/00 - No Onsite Work or Excavation Today																	
### No Air Monitoring Performed on 6/21/00 - No Onsite Work or Excavation Today																	
### No Air Monitoring Performed on 6/22/00 - No Onsite Work or Excavation Today																	
### No Air Monitoring Performed on 6/23/00 - No Onsite Work or Excavation Today																	
N1051	6/26/00	8:09am	4:05pm	476	55	2.59E+07	6/27/00	84	16	2.267	3.57E-14	6/30/00	18	16	0.067	1.05E-15	26.25%
S1051	6/26/00	8:03am	4:15pm	492	65	3.17E+07	6/27/00	67	16	1.7	2.19E-14	6/30/00	15	16	0	0.00E+00	0.00%
E1051	6/26/00	8:05am	4:03pm	478	58	2.75E+07	6/27/00	42	16	0.867	1.29E-14	6/30/00	16	16	0	0.00E+00	0.00%
W1051	6/26/00	8:00am	4:00pm	480	48	2.28E+07	6/27/00	53	16	1.233	2.21E-14	6/30/00	16	16	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	% of Limit 4.00E-15 uCi/ml
N1052	6/27/00	8:09am	4:14pm	485	50	2.40E+07	6/28/00	60	16	1.467	2.49E-14	7/3/00	15	15	0	0.00E+00	0.00%
S1052	6/27/00	8:13am	4:18pm	485	33	1.59E+07	6/28/00	75	16	1.967	5.07E-14	7/3/00	17	15	0.067	1.72E-15	42.93%
E1052	6/27/00	8:15am	4:20pm	485	58	2.79E+07	6/28/00	87	16	2.367	3.47E-14	7/3/00	15	15	0	0.00E+00	0.00%
W1052	6/27/00	8:16am	4:25pm	489	54	2.62E+07	6/28/00	43	16	0.9	1.41E-14	7/3/00	16	15	0.033	5.20E-16	13.01%
N1053	6/28/00	8:04am	4:30pm	506	54	2.71E+07	6/29/00	123	15	3.6	5.43E-14	7/3/00	20	15	0.167	2.51E-15	62.87%
S1053	6/28/00	8:00am	4:36pm	516	37	1.89E+07	6/29/00	108	15	3.1	6.69E-14	7/3/00	15	15	0	0.00E+00	0.00%
E1053	6/28/00	8:03am	4:33pm	510	35	1.77E+07	6/29/00	87	15	2.4	5.54E-14	7/3/00	15	15	0	0.00E+00	0.00%
W1053	6/28/00	8:07am	4:37pm	510	55	2.78E+07	6/29/00	77	15	2.067	3.04E-14	7/3/00	16	15	0.033	4.90E-16	12.25%
N1054	6/29/00	8:05am	5:15pm	550	55	3.00E+07	6/30/00	93	16	2.567	3.50E-14	7/5/00	20	16	0.133	1.82E-15	45.43%
S1054	6/29/00	8:00am	5:14pm	554	40	2.20E+07	6/30/00	44	16	0.933	1.74E-14	7/5/00	15	16	0	0.00E+00	0.00%
E1054	6/29/00	8:02am	5:13pm	551	40	2.18E+07	6/30/00	69	16	1.767	3.30E-14	7/5/00	16	16	0	0.00E+00	0.00%
W1054	6/29/00	7:57am	5:17pm	560	48	2.66E+07	6/30/00	51	16	1.167	1.79E-14	7/5/00	17	16	0.033	5.11E-16	12.78%
N1055	6/30/00	7:57am	5:38pm	581	48	2.76E+07	7/3/00	27	15	0.4	5.91E-15	7/5/00	19	16	0.1	1.48E-15	36.96%
S1055	6/30/00	8:21am	5:35pm	554	43	2.36E+07	7/3/00	21	15	0.2	3.46E-15	7/5/00	18	16	0.067	1.15E-15	28.84%
E1055	6/30/00	8:03am	5:31pm	568	40	2.25E+07	7/3/00	18	15	0.1	1.81E-15	7/5/00	15	16	0	0.00E+00	0.00%
W1055	6/30/00	8:07am	5:40pm	573	43	2.44E+07	7/3/00	22	15	0.233	3.90E-15	7/5/00	16	16	0	0.00E+00	0.00%
N1056	7/3/00	7:55am	2:23pm	388	53	2.04E+07	***no day after analysis performed					7/7/00	13	17	0	0.00E+00	0.00%
S1056	7/3/00	No Sample	- Broken Pump				due to Fourth of July Holiday.										
E1056	7/3/00	8:09am	2:27pm	378	38	1.42E+07	4 day analysis only.					7/7/00	18	17	0.033	9.57E-16	23.92%
W1056	7/3/00	8:02am	2:24pm	382	38	1.44E+07						7/7/00	17	17	0	0.00E+00	0.00%
### No work today due to 4th of July = No air samples collected ###																	
N1057	7/5/00	8:00am	4:35pm	515	58	2.96E+07	7/6/00	57	16	1.367	1.89E-14	7/10/00	20	15	0.167	2.30E-15	57.51%
S1057	7/5/00	No Sample	- Broken Pump														
E1057	7/5/00	8:16am	4:40pm	504	28	1.40E+07	7/6/00	34	16	0.6	1.75E-14	7/10/00	15	15	0	0.00E+00	0.00%
W1057	7/5/00	8:03am	4:40pm	517	44	2.25E+07	7/6/00	44	16	0.933	1.69E-14	7/10/00	16	15	0.033	6.04E-16	15.10%
N1058	7/6/00	10:55am	4:01pm	306	58	1.76E+07	7/7/00	65	17	1.6	3.72E-14	7/11/00	15	16	0	0.00E+00	0.00%
S1058	7/6/00	No Sample	- Broken Pump														
E1058	7/6/00	10:55am	3:57pm	302	37	1.11E+07	7/7/00	48	17	1.033	3.81E-14	7/11/00	16	16	0	0.00E+00	0.00%
W1058	7/6/00	10:58am	4:02pm	304	50	1.51E+07	7/7/00	37	17	0.667	1.81E-14	7/11/00	14	16	0	0.00E+00	0.00%
N1059	7/7/00	8:08am	4:30pm	502	52	2.59E+07	7/10/00	18	15	0.1	1.58E-15	7/12/00	13	15	0	0.00E+00	0.00%
S1059	7/7/00	No Sample	- Broken Pump														

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit 4 00E-15 uCi/ml
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	
E1059	7/7/00	8:10am	4:32pm	502	28	1 39E+07	7/10/00	20	15	0.167	4 89E-15	7/12/00	15	15	0	0 00E+00	0 00%
W1059	7/7/00	8:07am	4:31pm	504	49	2.45E+07	7/10/00	24	15	0.3	5.01E-15	7/12/00	17	15	0 067	1.11E-15	27 82%
###	Rained out on Monday July 10, 2000 - No site work or air monitoring performed ###														0		
N1060	7/11/00	8:03am	4:50pm	527	61	3 19E+07	7/12/00	69	15	1 8	2 31E-14	7/17/00	16	17	0	0 00E+00	0 00%
S1060	7/11/00	8 20am	4 54pm	514	20	1 02E+07	7/12/00	60	15	1 5	6 02E 14	7/17/00	19	17	0 067	2 67E 15	66 84%
E1060	7/11/00	8.15am	4.57pm	522	35	1 81E +07	7/12/00	51	15	1 2	2 71E 14	7/17/00	15	17	0	0 00E+00	0 00%
W1060	7/11/00	8 05am	4 55pm	530	50	2 63E+07	7/12/00	56	15	1 367	2 13E 14	7/17/00	17	17	0	0 00E+00	0 00%
N1061	7/12/00	8 12am	4 58pm	526	53	2 76E+07	7/13/00	105	15	3	4 44E 14	7/17/00	18	17	0 033	4 93E 16	12 32%
S1061	7/12/00	8 09am	4 48pm	519	23	1 18E+07	7/13/00	75	15	2	6 91E 14	7/17/00	16	17	0	0 00E+00	0 00%
E1061	7/12/00	8 06am	4 45pm	519	33	1 70E+07	7/13/00	74	15	1 967	4 73E 14	7/17/00	16	17	0	0 00E+00	0 00%
W1061	7/12/00	8:16am	4:45pm	509	53	2 67E+07	7/13/00	81	15	2 2	3 36E-14	7/17/00	14	17	0	0 00E+00	0 00%
N1062	7/13/00	7 57am	6 15pm	618	43	2 63E+07	7/14/00	99	16	2 767	4 29E 14	7/18/00	16	17	0	0 00E+00	0 00%
S1062	7/13/00	7 59am	6 09pm	610	35	2 12E+07	7/14/00	67	16	1 7	3 28E 14	7/18/00	15	17	0	0 00E+00	0 00%
E1062	7/13/00	8 07am	6 07pm	600	42	2 50E+07	7/14/00	87	16	2 367	3 87E 14	7/18/00	15	17	0	0 00E+00	0 00%
W1062	7/13/00	8 14am	6 06pm	592	51	2 99E+07	7/14/00	64	16	1 6	2 18E-14	7/18/00	17	17	0	0 00E+00	0 00%
N1063	7/14/00	8 00am	3 50pm	470	42	1 96E+07	7/17/00	24	17	0 233	4 87E 15	7/19/00	15	15	0	0 00E+00	0 00%
S1063	7/14/00	8 07am	3 42pm	455	36	1 62E+07	7/17/00	57	17	1 333	3 36E 14	7/19/00	16	15	0 033	8 39E 16	20 97%
E1063	7/14/00	8.02am	3 47pm	465	31	1 43E+07	7/17/00	22	17	0 167	4 77E 15	7/19/00	17	15	0 067	1 91E-15	47.67%
W1063	7/14/00	8:12am	3.45pm	453	38	1 71E+07	7/17/00	18	17	0.033	7 98E-16	7/19/00	15	15	0	0.00E+00	0.00%
N1064	7/17/00	8:06am	6:08pm	602	44	2.63E+07	7/18/00	223	17	6.867	1.07E-13	7/21/00	19	17	0.067	1.04E-15	25.94%
S1064	7/17/00	8:04am	6:18pm	614	40	2.43E+07	7/18/00	171	17	5.133	8.62E-14	7/21/00	15	17	0	0.00E+00	0.00%
E1064	7/17/00	8:11am	12:00pm	229	33	7.49E+06	7/18/00	189	17	5.733	3.13E-13	7/21/00	18	17	0.033	1.82E-15	45.46%
W1064	7/17/00	8:15am	6:05pm	590	40	2.34E+07	7/18/00	63	17	1.533	2.68E-14	7/21/00	16	17	0	0.00E+00	0.00%
N1065	7/18/00	8:04am	5:02pm	538	36	1.92E+07	7/19/00	33	15	0 6	1.28E-14	7/24/00	16	16	0	0.00E+00	0.00%
S1065	7/18/00	8:02am	4:47pm	525	39	2.03E+07	7/19/00	28	15	0.433	8.73E-15	7/24/00	15	16	0	0.00E+00	0.00%
E1065	7/18/00	8:08am	4:52pm	524	34	1.77E+07	7/19/00	24	15	0.3	6.94E-15	7/24/00	18	16	0.067	1.54E-15	38.57%
W1065	7/18/00	8:07am	4:53pm	526	48	2.50E+07	7/19/00	22	15	0.233	3.81E-15	7/24/00	15	16	0	0.00E+00	0.00%
N1066	7/19/00	8:01am	4:35pm	514	36	1.83E+07	7/20/00	43	16	0.9	2.01E-14	7/24/00	17	16	0.033	7.43E-16	18.57%
S1066	7/19/00	8:05am	4:30pm	505	40	2.00E+07	7/20/00	31	16	0.5	1.02E-14	7/24/00	16	16	0	0.00E+00	0.00%
E1066	7/19/00	8:10am	4:30pm	500	38	1.88E+07	7/20/00	27	16	0.367	7.96E-15	7/24/00	15	16	0	0.00E+00	0.00%
W1066	7/19/00	8:03am	4:37pm	514	51	2.60E+07	7/20/00	54	16	1.267	1.99E-14	7/24/00	15	16	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
N1067	7/20/00	8:19am	5:10pm	531	38	2.00E+07	7/21/00	224	17	6.9	1.41E-13	7/25/00	19	17	0.067	1.36E-15	34.05%
S1067	7/20/00	7:58am	5:02pm	544	35	1.89E+07	7/21/00	71	17	1.8	3.90E-14	7/25/00	16	17	0	0.00E+00	0.00%
E1067	7/20/00	8:02am	5:07pm	545	39	2.11E+07	7/21/00	186	17	5.633	1.09E-13	7/25/00	15	17	0	0.00E+00	0.00%
W1067	7/20/00	8:17am	5:08pm	531	53	2.79E+07	7/21/00	135	17	3.933	5.76E-14	7/25/00	16	17	0	0.00E+00	0.00%
N1068	7/21/00	8:01am	4:12pm	491	35	1.70E+07	7/24/00	30	16	0.467	1.12E-14	7/26/00	18	16	0.067	1.60E-15	39.98%
S1068	7/21/00	8:05am	4:10pm	485	39	1.87E+07	7/24/00	21	16	0.167	3.63E-15	7/26/00	18	16	0.067	1.45E-15	36.33%
E1068	7/21/00	8:07am	4:21pm	494	40	1.96E+07	7/24/00	19	16	0.1	2.09E-15	7/26/00	16	16	0	0.00E+00	0.00%
W1068	7/21/00	8:13am	4:17pm	484	45	2.16E+07	7/24/00	26	16	0.333	6.31E-15	7/26/00	16	16	0	0.00E+00	0.00%
N1069	7/24/00	8:22am	5:02pm	520	39	2.01E+07	7/25/00	41	17	0.8	1.63E-14	7/28/00	18	15	0.1	2.03E-15	50.82%
S1069	7/24/00	8:18am	5:00pm	522	42	2.17E+07	7/25/00	28	17	0.367	6.89E-15	7/28/00	15	15	0	0.00E+00	0.00%
E1069	7/24/00	8:26am	5:05pm	519	25	1.29E+07	7/25/00	30	17	0.433	1.38E-14	7/28/00	16	15	0.033	1.06E-15	26.48%
W1069	7/24/00	8:30am	4:58pm	508	50	2.52E+07	7/25/00	31	17	0.467	7.57E-15	7/28/00	15	15	0	0.00E+00	0.00%
N1070	7/25/00	7:59am	4:38pm	519	42	2.16E+07	7/26/00	150	16	4.467	8.45E-14	7/31/00	21	17	0.133	2.52E-15	63.04%
S1070	7/25/00	8:04am	4:32pm	508	35	1.76E+07	7/26/00	105	16	2.967	6.88E-14	7/31/00	16	17	0	0.00E+00	0.00%
E1070	7/25/00	8:05am	4:00pm	475	38	1.79E+07	7/26/00	99	16	2.767	6.32E-14	7/31/00	17	17	0	0.00E+00	0.00%
W1070	7/25/00	8:01am	4:36pm	515	41	2.09E+07	7/26/00	117	16	3.367	6.57E-14	7/31/00	20	17	0.1	1.95E-15	48.81%
N1071	7/26/00	7:58am	4:13pm	495	44	2.16E+07	7/27/00	152	16	4.533	8.58E-14	7/31/00	16	17	0	0.00E+00	0.00%
S1071	7/26/00	8:02am	4:17pm	495	33	1.62E+07	7/27/00	148	16	4.4	1.11E-13	7/31/00	17	17	0	0.00E+00	0.00%
E1071	7/26/00	8:06am	4:25pm	499	33	1.63E+07	7/27/00	132	16	3.867	9.68E-14	7/31/00	16	17	0	0.00E+00	0.00%
W1071	7/26/00	8:01am	4:14pm	493	37	1.81E+07	7/27/00	119	16	3.433	7.76E-14	7/31/00	17	17	0	0.00E+00	0.00%
N1072	7/27/00	8:14am	4:00pm	466	37	1.71E+07	7/28/00	279	15	8.8	2.10E-13	8/1/00	20	15	0.167	3.99E-15	99.63%
S1072	7/27/00	8:08am	4:05pm	477	35	1.65E+07	7/28/00	252	15	7.9	1.95E-13	8/1/00	16	15	0.033	8.23E-16	20.58%
E1072	7/27/00	8:04am	4:08pm	484	35	1.68E+07	7/28/00	248	15	7.767	1.89E-13	8/1/00	15	15	0	0.00E+00	0.00%
W1072	7/27/00	8:17am	4:03pm	466	41	1.89E+07	7/28/00	267	15	8.4	1.81E-13	8/1/00	15	15	0	0.00E+00	0.00%
N1073	7/28/00	7:56am	4:09pm	493	37	1.81E+07	***no day after analysis performed					8/2/00	17	18	0	0.00E+00	0.00%
S1073	7/28/00	8:05am	4:17pm	492	39	1.90E+07	due to rain out on Monday, July 31.					8/2/00	16	18	0	0.00E+00	0.00%
E1073	7/28/00	8:07am	4:20pm	493	35	1.71E+07	4 day analysis only.					8/2/00	22	18	0.133	3.19E-15	79.64%
W1073	7/28/00	7:59am	4:06pm	487	38	1.83E+07						8/2/00	17	18	0	0.00E+00	0.00%
###	Rained out on Monday July 31, 2000 - No site work or air monitoring performed ###																
N1074	8/1/00	7:56am	3:41pm	465	37	1.71E+07	8/2/00	91	18	2.433	5.83E-14	8/7/00	22	18	0.133	3.19E-15	79.87%
S1074	8/1/00	8:03am	3:38pm	455	39	1.76E+07	8/2/00	67	18	1.633	3.79E-14	8/7/00	16	18	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit 4 00E-15 uCi/ml
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	
E1074	8/1/00	8:06am	3:35pm	449	35	1.56E+07	8/2/00	48	18	1	2.62E-14	8/7/00	18	18	0	0.00E+00	0.00%
W1074	8/1/00	7:59am	3:40pm	461	38	1.74E+07	8/2/00	72	18	1.8	4.24E-14	8/7/00	19	18	0.033	7.84E-16	19.61%
N1075	8/2/00	8:09am	3:50pm	461	38	1.74E+07	8/3/00	111	16	3.167	7.45E-14	8/7/00	16	18	0	0.00E+00	0.00%
S1075	8/2/00	8:15am	3:56pm	461	36	1.64E+07	8/3/00	164	16	4.933	1.23E-13	8/7/00	17	18	0	0.00E+00	0.00%
E1075	8/2/00	8:17am	3:58pm	461	36	1.64E+07	8/3/00	168	16	5.067	1.26E-13	8/7/00	18	18	0	0.00E+00	0.00%
W1075	8/2/00	8:12am	3:48pm	456	43	1.94E+07	8/3/00	127	16	3.7	7.78E-14	8/7/00	23	18	0.167	3.50E-15	87.60%
N1076	8/3/00	7:58am	4:36pm	518	43	2.21E+07	8/4/00	34	17	0.567	1.05E-14	8/8/00	18	15	0.1	1.85E-15	46.27%
S1076	8/3/00	8:05am	4:42pm	517	35	1.79E+07	8/4/00	22	17	0.167	3.80E-15	8/8/00	15	15	0	0.00E+00	0.00%
E1076	8/3/00	8:10am	4:47pm	517	40	2.05E+07	8/4/00	38	17	0.7	1.40E-14	8/8/00	21	15	0.2	3.99E-15	99.68%
W1076	8/3/00	8:00am	4:38pm	518	40	2.05E+07	8/4/00	40	17	0.767	1.53E-14	8/8/00	18	15	0.1	1.99E-15	49.74%
N1077	8/4/00	8:05am	4:46pm	521	37	1.91E+07	8/7/00	20	18	0.067	1.43E-15	8/9/00	14	14	0	0.00E+00	0.00%
S1077	8/4/00	8:01am	4:53pm	532	38	2.00E+07	8/7/00	18	18	0	0.00E+00	8/9/00	15	14	0.033	6.80E-16	16.99%
E1077	8/4/00	8:24am	5:07pm	523	36	1.87E+07	8/7/00	22	18	0.133	2.92E-15	8/9/00	14	14	0	0.00E+00	0.00%
W1077	8/4/00	8:06am	4:48pm	522	48	2.48E+07	8/7/00	19	18	0.033	5.48E-16	8/9/00	14	14	0	0.00E+00	0.00%
N1078	8/7/00	7:57am	5:53pm	596	33	1.95E+07	8/8/00	57	15	1.4	2.93E-14	8/11/00	18	16	0.067	1.40E-15	34.93%
S1078	8/7/00	8:02am	6:05pm	603	35	2.09E+07	8/8/00	51	15	1.2	2.34E-14	8/11/00	16	16	0	0.00E+00	0.00%
E1078	8/7/00	8:21am	6:04pm	583	35	2.02E+07	8/8/00	69	15	1.8	3.64E-14	8/11/00	17	16	0.033	6.73E-16	16.84%
W1078	8/7/00	8:00am	5:57pm	597	38	2.25E+07	8/8/00	33	15	0.6	1.09E-14	8/11/00	15	16	0	0.00E+00	0.00%
N1079	8/8/00	8:07am	4:53pm	526	33	1.72E+07	8/9/00	107	14	3.1	7.36E-14	8/14/00	20	17	0.1	2.38E-15	59.38%
S1079	8/8/00	8:13am	5:02pm	529	35	1.83E+07	8/9/00	69	14	1.833	4.08E-14	8/14/00	15	17	0	0.00E+00	0.00%
E1079	8/8/00	8:24am	4:58pm	514	35	1.78E+07	8/9/00	48	14	1.133	2.60E-14	8/14/00	16	17	0	0.00E+00	0.00%
W1079	8/8/00	8:10am	5:08pm	538	38	2.03E+07	8/9/00	42	14	0.933	1.88E-14	8/14/00	17	17	0	0.00E+00	0.00%
N1080	8/9/00	9:37am	5:06pm	449	35	1.56E+07	8/10/00	101	16	2.833	7.43E-14	8/14/00	16	17	0	0.00E+00	0.00%
S1080	8/9/00	8:00am	5:11pm	551	35	1.91E+07	8/10/00	113	16	3.233	6.91E-14	8/14/00	18	17	0.033	7.13E-16	17.81%
E1080	8/9/00	8:03am	5:00pm	537	32	1.70E+07	8/10/00	118	16	3.4	8.16E-14	8/14/00	15	17	0	0.00E+00	0.00%
W1080	8/9/00	9:53am	4:56pm	423	30	1.26E+07	8/10/00	42	16	0.867	2.82E-14	8/14/00	17	17	0	0.00E+00	0.00%
N1081	8/10/00	7:56am	5:11pm	555	37	2.04E+07	8/11/00	57	16	1.367	2.74E-14	8/15/00	15	15	0	0.00E+00	0.00%
S1081	8/10/00	8:02am	4:10pm	488	35	1.69E+07	8/11/00	48	16	1.067	2.57E-14	8/15/00	18	15	0.1	2.41E-15	60.34%
E1081	8/10/00	8:05am	5:18pm	553	33	1.81E+07	8/11/00	51	16	1.167	2.64E-14	8/15/00	16	15	0.033	7.53E-16	18.83%
W1081	8/10/00	7:59am	5:13pm	554	33	1.81E+07	8/11/00	22	16	0.2	4.51E-15	8/15/00	14	15	0	0.00E+00	0.00%
N1082	8/11/00	8:01am	4:28pm	507	39	1.96E+07	8/14/00	17	17	0	0.00E+00	8/16/00	15	16	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
S1082	8/11/00	8:08am	4:32pm	504	34	1.70E+07	8/14/00	23	17	0.2	4.81E-15	8/16/00	16	16	0	0.00E+00	0.00%
E1082	8/11/00	8:12am	4:41pm	509	35	1.77E+07	8/14/00	18	17	0.033	7.71E-16	8/16/00	19	16	0.1	2.31E-15	57.85%
W1082	8/11/00	8:05am	9:00am	55	45	2.45E+06	8/14/00	16	17	0	0.00E+00	8/16/00	15	16	0	0.00E+00	0.00%
N1083	8/14/00	9:12am	4:39pm	447	43	1.90E+07	8/15/00	101	15	2.867	6.15E-14	8/18/00	14	16	0	0.00E+00	0.00%
S1083	8/14/00	8:00am	4:20pm	500	35	1.73E+07	8/15/00	155	15	4.667	1.10E-13	8/18/00	20	16	0.133	3.14E-15	78.53%
E1083	8/14/00	8:08am	4:30pm	502	35	1.74E+07	8/15/00	127	15	3.733	8.76E-14	8/18/00	18	16	0.067	1.56E-15	39.11%
W1083	8/14/00 *not used today - brushes being changed																
N1084	8/15/00	8:01am	4:04pm	483	37	1.77E+07	8/16/00	217	16	6.7	1.55E-13	8/21/00	19	15	0.133	3.08E-15	76.90%
S1084	8/15/00	8:12am	3:51pm	459	35	1.59E+07	8/16/00	130	16	3.8	9.75E-14	8/21/00	15	15	0	0.00E+00	0.00%
E1084	8/15/00	8:20am	3:30pm	430	40	1.70E+07	8/16/00	151	16	4.5	1.08E-13	8/21/00	16	15	0.033	7.99E-16	19.97%
W1084	8/15/00	8:04am	4:00pm	476	35	1.65E+07	8/16/00	117	16	3.367	8.33E-14	8/21/00	14	15	0	0.00E+00	0.00%
N1085	8/16/00	8:02am	4:19pm	497	36	1.77E+07	8/17/00	57	18	1.3	3.00E-14	8/21/00	17	15	0.067	1.54E-15	38.40%
S1085	8/16/00	8:10am	4:15pm	485	33	1.59E+07	8/17/00	48	18	1	2.58E-14	8/21/00	15	15	0	0.00E+00	0.00%
E1085	8/16/00	8:27am	4:15pm	468	43	1.99E+07	8/17/00	53	18	1.167	2.39E-14	8/21/00	18	15	0.1	2.05E-15	51.21%
W1085	8/16/00	8:06am	4:17pm	491	44	2.14E+07	8/17/00	23	18	0.167	3.18E-15	8/21/00	15	15	0	0.00E+00	0.00%
N1086	8/17/00	10:02am	4:44pm	402	40	1.59E+07	8/18/00	119	16	3.433	8.80E-14	8/22/00	19	17	0.067	1.71E-15	42.73%
S1086	8/17/00	9:56am	4:38pm	402	33	1.31E+07	8/18/00	68	16	1.733	5.39E-14	8/22/00	16	17	0	0.00E+00	0.00%
E1086	8/17/00	10:07am	4:47pm	400	37	1.47E+07	8/18/00	39	16	0.767	2.14E-14	8/22/00	17	17	0	0.00E+00	0.00%
W1086	8/17/00	10:04am	4:40pm	396	47	1.84E+07	8/18/00	46	16	1	2.22E-14	8/22/00	15	17	0	0.00E+00	0.00%
N1087	8/18/00	7:56am	4:04pm	488	36	1.74E+07	8/21/00	18	15	0.1	2.35E-15	8/23/00	16	16	0	0.00E+00	0.00%
S1087	8/18/00	8:04am	3:30pm	446	33	1.46E+07	8/21/00	16	15	0.033	9.34E-16	8/23/00	15	16	0	0.00E+00	0.00%
E1087	8/18/00	8:40am	3:57pm	437	35	1.52E+07	8/21/00	20	15	0.167	4.49E-15	8/23/00	15	16	0	0.00E+00	0.00%
W1087	8/18/00 *not used today - brand new pump w/o fusebox																
N1088	8/21/00	7:59am	4:05pm	486	42	2.02E+07	8/22/00	91	17	2.467	4.98E-14	8/25/00	18	16	0.067	1.35E-15	33.66%
S1088	8/21/00	8:01am	4:08pm	487	43	2.08E+07	8/22/00	32	17	0.5	9.84E-15	8/25/00	14	16	0	0.00E+00	0.00%
E1088	8/21/00	8:18am	4:05pm	467	38	1.76E+07	8/22/00	74	17	1.9	4.41E-14	8/25/00	19	16	0.1	2.32E-15	58.08%
W1088	8/21/00	8:21am	4:01pm	460	48	2.19E+07	8/22/00	56	17	1.3	2.43E-14	8/25/00	16	16	0	0.00E+00	0.00%
N1089	8/22/00	8:03am	4:04pm	481	49	2.34E+07	8/23/00	193	16	5.9	1.03E-13	8/28/00	14	15	0	0.00E+00	0.00%
S1089	8/22/00	7:59am	4:08pm	489	48	2.33E+07	8/23/00	225	16	6.967	1.22E-13	8/28/00	15	15	0	0.00E+00	0.00%
E1089	8/22/00	7:55am	4:09pm	494	43	2.11E+07	8/23/00	181	16	5.5	1.07E-13	8/28/00	15	15	0	0.00E+00	0.00%
W1089	8/22/00	8:08am	4:02pm	474	49	2.30E+07	8/23/00	132	16	3.867	6.86E-14	8/28/00	16	15	0.033	5.92E-16	14.79%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

							day after analysis					four day analysis					% of Limit
Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4 00E-15 uCi/ml
N1090	8/23/00	8 00am	4 07pm	487	44	2 12E+07	8/24/00	146	17	4 3	8 27E-14	8/28/00	16	15	0 033	6 41E-16	16 03%
S1090	8/23/00	8:04am	4:06pm	482	39	1.86E+07	8/24/00	121	17	3 467	7 60E-14	8/28/00	15	15	0	0.00E+00	0 00%
E1090	8/23/00	8:00am	4:12pm	492	45	2 19E+07	8/24/00	96	17	2 633	4 90E-14	8/28/00	18	15	0 1	1 86E-15	46 55%
W1090	8/23/00	8 02am	4 02pm	480	49	2 33E+07	8/24/00	87	17	2 333	4 09E-14	8/28/00	14	15	0	0 00E+00	0 00%
N1091	8/24/00	8 04am	5 30pm	566	40	2 24E+07	8/25/00	28	16	0 4	7 28E 15	8/29/00	20	17	0 1	1 82E 15	45 52%
S1091	8/24/00	8 04am	6 43pm	639	32	2 03E+07	8/25/00	21	16	0 167	3 36E 15	8/29/00	16	17	0	0 00E+00	0 00%
E1091	8/24/00	8 10am	6 40pm	630	45	2 81E+07	8/25/00	24	16	0 267	3 88E-15	8/29/00	18	17	0 033	4 85E 16	12 12%
W1091	8/24/00	8 06am	5 30pm	564	41	2 29E+07	8/25/00	27	16	0 367	6 54E-15	8/29/00	16	17	0	0 00E+00	0 00%
N1092	8/25/00	8:16am	5 07pm	531	35	1 84E+07	8/28/00	29	15	0 467	1 04E 14	8/30/00	20	17	0 1	2 22E-15	55 46%
S1092	8/25/00	8:13am	5 12pm	515	30	1 53E+07	8/28/00	18	15	0 1	2 67E 15	8/30/00	16	17	0	0 00E+00	0 00%
E1092	8/25/00	8 08am	4 57pm	529	38	1 99E+07	8/28/00	19	15	0 133	2 73E 15	8/30/00	19	17	0.067	1 37E 15	34 18%
W1092	8/25/00	8 21am	5 02pm	521	50	2 58E+07	8/28/00	21	15	0 2	3 17E 15	8/30/00	15	17	0	0 00E+00	0 00%
N1093	8/28/00	8 10am	4 02pm	472	40	1 87E+07	8/29/00	106	17	2 967	6 48E 14	9/1/00	17	17	0	0 00E+00	0 00%
S1093	8/28/00	8 05am	3 52pm	467	30	1 39E+07	8/29/00	62	17	1 5	4 41E 14	9/1/00	16	17	0	0 00E+00	0 00%
E1093	8/28/00	8 22am	4 12pm	470	33	1 54E+07	8/29/00	85	17	2 267	6 02E 14	9/1/00	20	17	0 1	2 66E 15	66 45%
W1093	8/28/00	8 17am	3 37pm	440	49	2 14E+07	8/29/00	64	17	1 567	3 00E 14	9/1/00	16	17	0	0 00E+00	0 00%
N1094	8/29/00	8 04am	4 45pm	521	45	2 32E+07	8/30/00	204	17	6 233	1 10E 13	9/5/00	15	17	0	0 00E+00	0 00%
S1094	8/29/00	8 16am	5 00pm	524	44	2 28E+07	8/30/00	252	17	7 833	1 40E-13	9/5/00	18	17	0.033	5 96E-16	14 90%
E1094	8/29/00	8:25am	4:48pm	503	40	1 99E+07	8/30/00	168	17	5 033	1 03E-13	9/5/00	16	17	0	0.00E+00	0 00%
W1094	8/29/00	8:06am	4:42pm	516	43	2.20E+07	8/30/00	141	17	4 133	7 68E-14	9/5/00	17	17	0	0.00E+00	0 00%
N1095	8/30/00	8:10am	5:31pm	561	38	2.11E+07	8/31/00	319	16	10.1	1.95E-13	9/5/00	15	17	0	0.00E+00	0.00%
S1095	8/30/00	8:03am	5:24pm	561	33	1.83E+07	8/31/00	188	16	5.733	1.28E-13	9/5/00	16	17	0	0.00E+00	0.00%
E1095	8/30/00	8:05am	5:33pm	568	38	2.14E+07	8/31/00	85	16	2.3	4.39E-14	9/5/00	16	17	0	0.00E+00	0.00%
W1095	8/30/00	8:05am	5:28pm	563	50	2.79E+07	8/31/00	240	16	7.467	1.09E-13	9/5/00	17	17	0	0.00E+00	0.00%
N1096	8/31/00	7:55am	4:35pm	520	38	1.96E+07	9/1/00	143	17	4.2	8.76E-14	9/6/00	19	18	0.033	6.95E-16	17.39%
S1096	8/31/00	8:00am	5:20pm	560	30	1.66E+07	9/1/00	132	17	3.833	9.41E-14	9/6/00	17	18	0	0.00E+00	0.00%
E1096	8/31/00	7:58am	5:27pm	569	38	2.14E+07	9/1/00	64	17	1.567	2.99E-14	9/6/00	21	18	0.1	1.91E-15	47.67%
W1096	8/31/00	7:57am	4:35pm	518	38	1.95E+07	9/1/00	159	17	4.733	9.91E-14	9/6/00	18	18	0	0.00E+00	0.00%
N1097	9/1/00	7:53am	3:42pm	469	40	1.86E+07	***no day after analysis performed due to					9/6/00	15	18	0	0.00E+00	0.00%
S1097	9/1/00	8:04am	3:38pm	454	33	1.48E+07	Labor Day Holiday on Monday, September 4					9/6/00	15	18	0	0.00E+00	0.00%
E1097	9/1/00	8:00am	3:45pm	465	40	1.84E+07	4 day analysis only.					9/6/00	16	18	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
W1097	9/1/00	8:06am	3:42pm	456	43	1.94E+07						9/6/00	19	18	0.033	7.01E-16	17.52%
### No Work Today 9/4/00 Due to Labor Day Holiday = No Air Samples Collected ###																	
N1098	9/5/00	Sample could not be located after collection, no sample analysis performed															
S1098	9/5/00	8:01am	4:00pm	479	33	1.57E+07	9/6/00	31	18	0.433	1.13E-14	9/11/00	16	18	0	0.00E+00	0.00%
E1098	9/5/00	8:05am	4:04pm	479	43	2.04E+07	9/6/00	47	18	0.967	1.93E-14	9/11/00	17	18	0	0.00E+00	0.00%
W1098	9/5/00	7:59am	3:58pm	479	49	2.33E+07	9/6/00	36	18	0.6	1.05E-14	9/11/00	14	18	0	0.00E+00	0.00%
N1099	9/6/00	8:00am	4:02pm	482	36	1.72E+07	9/7/00	71	17	1.8	4.28E-14	9/11/00	20	18	0.067	1.58E-15	39.60%
S1099	9/6/00	8:05am	4:00pm	475	30	1.41E+07	9/7/00	43	17	0.867	2.51E-14	9/11/00	17	18	0	0.00E+00	0.00%
E1099	9/6/00	8:08am	4:01pm	473	38	1.78E+07	9/7/00	45	17	0.933	2.14E-14	9/11/00	16	18	0	0.00E+00	0.00%
W1099	9/6/00	8:02am	3:59pm	477	53	2.51E+07	9/7/00	58	17	1.367	2.23E-14	9/11/00	17	18	0	0.00E+00	0.00%
N1100	9/7/00	8:04am	4:00pm	476	33	1.56E+07	9/8/00	148	18	4.333	1.14E-13	9/12/00	16	15	0.033	8.75E-16	21.87%
S1100	9/7/00	8:10am	3:48pm	458	46	2.09E+07	9/8/00	132	18	3.8	7.44E-14	9/12/00	15	15	0	0.00E+00	0.00%
E1100	9/7/00	8:16am	4:08pm	472	40	1.87E+07	9/8/00	68	18	1.667	3.64E-14	9/12/00	17	15	0.067	1.46E-15	36.39%
W1100	9/7/00	8:06am	3:50pm	464	48	2.21E+07	9/8/00	113	18	3.167	5.86E-14	9/12/00	15	15	0	0.00E+00	0.00%
N1101	9/8/00	8:05am	4:01pm	476	43	2.03E+07	9/11/00	33	18	0.5	1.01E-14	9/13/00	17	16	0.033	6.71E-16	16.78%
S1101	9/8/00	8:10am	3:52pm	462	38	1.74E+07	9/11/00	25	18	0.233	5.48E-15	9/13/00	18	16	0.067	1.57E-15	39.14%
E1101	9/8/00	8:04am	4:07pm	483	39	1.87E+07	9/11/00	26	18	0.267	5.84E-15	9/13/00	18	16	0.067	1.46E-15	36.48%
W1101	9/8/00	8:07am	3:58pm	471	43	2.01E+07	9/11/00	24	18	0.2	4.07E-15	9/13/00	15	16	0	0.00E+00	0.00%
N1102	9/11/00	8:05am	3:05pm	420	45	1.87E+07	9/12/00	141	15	4.2	9.16E-14	9/15/00	17	17	0	0.00E+00	0.00%
S1102	9/11/00	8:00am	3:15pm	435	53	2.28E+07	9/12/00	157	15	4.733	8.46E-14	9/15/00	19	17	0.067	1.19E-15	29.80%
E1102	9/11/00	8:17am	3:06pm	409	43	1.74E+07	9/12/00	144	15	4.3	1.01E-13	9/15/00	16	17	0	0.00E+00	0.00%
W1102	9/11/00	8:07am	3:07pm	420	48	2.00E+07	9/12/00	110	15	3.167	6.48E-14	9/15/00	15	17	0	0.00E+00	0.00%
N1103	9/12/00	8:00am	3:44pm	464	35	1.61E+07	9/13/00	28	16	0.4	1.02E-14	9/18/00	18	16	0.067	1.69E-15	42.31%
S1103	9/12/00	8:06am	3:50pm	464	45	2.07E+07	9/13/00	33	16	0.567	1.12E-14	9/18/00	17	16	0.033	6.58E-16	16.45%
E1103	9/12/00	8:10am	3:50pm	460	40	1.82E+07	9/13/00	29	16	0.433	9.71E-15	9/18/00	15	16	0	0.00E+00	0.00%
W1103	9/12/00	8:02am	3:42pm	460	50	2.28E+07	9/13/00	24	16	0.267	4.78E-15	9/18/00	14	16	0	0.00E+00	0.00%
N1104	9/13/00	7:56am	3:10pm	434	33	1.42E+07	9/14/00	36	15	0.7	2.01E-14	9/18/00	19	16	0.1	2.88E-15	71.96%
S1104	9/13/00	8:02am	3:42pm	460	33	1.50E+07	9/14/00	48	15	1.1	2.99E-14	9/18/00	20	16	0.133	3.62E-15	90.53%
E1104	9/13/00	8:07am	3:51pm	464	38	1.75E+07	9/14/00	60	15	1.5	3.51E-14	9/18/00	14	16	0	0.00E+00	0.00%
W1104	9/13/00	7:59am	3:10pm	431	40	1.71E+07	9/14/00	57	15	1.4	3.35E-14	9/18/00	16	16	0	0.00E+00	0.00%
### No Work Today 9/14/00 Due to Rain = No Air Samples Collected ###																	
### No Digging Onsite Today 9/15/00 = No Air Samples Collected ###																	

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit 4 00E-15 uCi/ml
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	
N1105	9/18/00	8:03am	3:35pm	452	43	1 93E+07	9/19/00	146	17	4 3	9 12E-14	9/22/00	15	17	0	0 00E+00	0 00%
S1105	9/18/00	8:10am	3:40pm	450	43	1 92E+07	9/19/00	135	17	3 933	8 38E-14	9/22/00	21	17	0 133	2 84E-15	71 02%
E1105	9/18/00	8:05am	3:42pm	457	43	1 95E+07	9/19/00	180	17	5 433	1 14E-13	9/22/00	16	17	0	0 00E+00	0 00%
W1105	9/18/00	8:20am	3 30pm	430	43	1 83E+07	9/19/00	135	17	3 933	8 77E-14	9/22/00	17	17	0	0 00E+00	0 00%
N1106	9/19/00	8 10am	3 46pm	456	40	1 81E+07	9/20/00	192	18	5 8	1 31E-13	9/23/00	17	15	0 067	1 51E-15	37 67%
S1106	9/19/00	8 05am	3 42pm	457	39	1 77E+07	9/20/00	195	18	5 9	1 36E-13	9/23/00	15	15	0	0 00E+00	0 00%
E1106	9/19/00	8 15am	3 57pm	462	43	1 97E+07	9/20/00	188	18	5 667	1 18E-13	9/23/00	16	15	0 033	6 92E-16	17 29%
W1106	9/19/00	8 12am	3 45pm	453	38	1 71E+07	9/20/00	167	18	4 967	1 19E-13	9/23/00	15	15	0	0 00E+00	0 00%
N1107	9/20/00	8 03am	3 36pm	453	40	1 80E+07	9/21/00	85	15	2 333	5 31E-14	9/25/00	19	16	0 1	2 28E-15	56 88%
S1107	9/20/00	7 52am	3 44pm	472	39	1 82E+07	9/21/00	179	15	5 467	1 22E-13	9/25/00	16	16	0	0 00E+00	0 00%
E1107	9/20/00	8 06am	3 50pm	464	40	1 84E+07	9/21/00	108	15	3 1	6 89E-14	9/25/00	16	16	0	0 00E+00	0 00%
W1107	9/20/00	8 04am	3 40pm	456	39	1 76E+07	9/21/00	102	15	2 9	6 72E-14	9/25/00	15	16	0	0 00E+00	0 00%
N1108	9/21/00	8 42am	4 10pm	448	38	1 69E+07	9/22/00	46	17	0 967	2 34E-14	9/26/00	17	17	0	0 00E+00	0 00%
S1108	9/21/00	8 40am	4 10pm	450	34	1 52E+07	9/22/00	43	17	0 867	2 34E-14	9/26/00	16	17	0	0 00E+00	0 00%
E1108	9/21/00	8 45am	5 40pm	535	40	2 12E+07	9/22/00	30	17	0 433	8 35E-15	9/26/00	18	17	0 033	6 42E-16	16 05%
W1108	9/21/00	8 46am	5 45pm	539	39	2 08E+07	9/22/00	38	17	0 7	1 37E-14	9/26/00	17	17	0	0 00E+00	0 00%
N1109	9/22/00	8 05am	5 07pm	542	37	1 99E+07	9/23/00	64	15	1 633	3 36E-14	9/27/00	15	16	0	0 00E+00	0 00%
S1109	9/22/00	8 15am	5 10pm	535	38	2 01E+07	9/23/00	106	15	3 033	6 15E-14	9/27/00	14	16	0	0 00E+00	0.00%
E1109	9/22/00	8:16am	5:06pm	530	39	2.05E+07	9/23/00	85	15	2.333	4 65E-14	9/27/00	18	16	0.067	1 33E-15	33.24%
W1109	9/22/00	8:13am	5:04pm	531	43	2.26E+07	9/23/00	72	15	1.9	3.43E-14	9/27/00	16	16	0	0.00E+00	0 00%
N1110	9/23/00	8:15am	3:16pm	421	43	1.79E+07	9/25/00	28	16	0.4	9.11E-15	9/28/00	20	17	0.1	2.28E-15	56.93%
S1110	9/23/00	8:07am	3:18pm	431	38	1.62E+07	9/25/00	21	16	0.167	4.20E-15	9/28/00	16	17	0	0.00E+00	0.00%
E1110	9/23/00	8:03am	3:20pm	437	40	1.73E+07	9/25/00	18	16	0.067	1.57E-15	9/28/00	15	17	0	0.00E+00	0.00%
W1110	9/23/00	8:05am	3:15pm	430	45	1.92E+07	9/25/00	16	16	0	0.00E+00	9/28/00	16	17	0	0.00E+00	0 00%
N1111	9/25/00	7:58am	4:28pm	510	45	2.27E+07	9/26/00	20	17	0.1	1.80E-15	9/29/00	18	16	0.067	1.20E-15	29.94%
S1111	9/25/00	8:01am	4:32pm	511	33	1.67E+07	9/26/00	26	17	0.3	7.33E-15	9/29/00	16	16	0	0.00E+00	0.00%
E1111	9/25/00	7:52am	4:27pm	515	41	2.09E+07	9/26/00	33	17	0.533	1.04E-14	9/29/00	19	16	0.1	1.95E-15	48.81%
W1111	9/25/00	8:03am	4:30pm	507	53	2.66E+07	9/26/00	24	17	0.233	3.58E-15	9/29/00	16	16	0	0.00E+00	0.00%
N1112	9/26/00	8:03am	3:30pm	447	43	1.90E+07	9/27/00	31	16	0.5	1.07E-14	10/2/00	18	18	0	0.00E+00	0.00%
S1112	9/26/00	8:00am	3:40pm	460	38	1.73E+07	9/27/00	44	16	0.933	2.20E-14	10/2/00	16	18	0	0.00E+00	0.00%
E1112	9/26/00	8:32am	3:37pm	425	40	1.68E+07	9/27/00	38	16	0.733	1.78E-14	10/2/00	17	18	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
W1112	9/26/00	8:05am	3:32pm	447	45	1.99E+07	9/27/00	30	16	0.467	9.56E-15	10/2/00	18	18	0	0.00E+00	0.00%
N1113	9/27/00	8:00am	3:55pm	475	40	1.88E+07	9/28/00	124	17	3.567	7.74E-14	10/2/00	19	18	0.033	7.23E-16	18.08%
S1113	9/27/00	7:55am	4:00pm	485	35	1.68E+07	9/28/00	122	17	3.5	8.50E-14	10/2/00	18	18	0	0.00E+00	0.00%
E1113	9/27/00	8:07am	3:55pm	468	43	1.99E+07	9/28/00	90	17	2.433	4.98E-14	10/2/00	16	18	0	0.00E+00	0.00%
W1113	9/27/00	8:05am	3:50pm	465	50	2.30E+07	9/28/00	48	17	1.033	1.83E-14	10/2/00	16	18	0	0.00E+00	0.00%
### No Excavation Activities Performed Today, 9/28/00 = No Air Samples Collected																	
### No Excavation Activities Performed Today, 9/29/00 = No Air Samples Collected																	
N1114	10/2/00	8:00am	3:55pm	475	40	1.88E+07	10/3/00	205	15	6.333	1.37E-13	10/6/00	21	18	0.1	2.17E-15	54.24%
S1114	10/2/00	8:04am	3:58pm	474	35	1.64E+07	10/3/00	266	15	8.367	2.08E-13	10/6/00	17	18	0	0.00E+00	0.00%
E1114	10/2/00	8:02am	3:55pm	473	43	2.02E+07	10/3/00	189	15	5.8	1.18E-13	10/6/00	20	18	0.067	1.35E-15	33.78%
W1114	10/2/00	8:07am	3:52pm	465	47	2.17E+07	10/3/00	163	15	4.933	9.31E-14	10/6/00	19	18	0.033	6.29E-16	15.72%
N1115	10/3/00	8:01am	3:45pm	464	39	1.79E+07	10/4/00	55	18	1.233	2.81E-14	10/9/00	16	16	0	0.00E+00	0.00%
S1115	10/3/00	7:41am	3:40pm	479	45	2.14E+07	10/4/00	34	18	0.533	1.02E-14	10/9/00	18	16	0.067	1.28E-15	31.88%
E1115	10/3/00	7:55am	3:40pm	465	40	1.84E+07	10/4/00	56	18	1.267	2.81E-14	10/9/00	15	16	0	0.00E+00	0.00%
W1115	10/3/00	8:04am	3:45pm	461	43	1.96E+07	10/4/00	41	18	0.767	1.59E-14	10/9/00	18	16	0.067	1.39E-15	34.66%
N1116	10/4/00	8:00am	3:25pm	445	35	1.54E+07	10/5/00	37	17	0.667	1.76E-14	10/9/00	15	16	0	0.00E+00	0.00%
S1116	10/4/00	8:04am	3:30pm	446	50	2.21E+07	10/5/00	33	17	0.533	9.86E-15	10/9/00	16	16	0	0.00E+00	0.00%
E1116	10/4/00	8:10am	3:41pm	451	40	1.79E+07	10/5/00	26	17	0.3	6.86E-15	10/9/00	20	16	0.133	3.05E-15	76.17%
W1116	10/4/00	8:03am	3:27pm	444	48	2.11E+07	10/5/00	28	17	0.367	7.09E-15	10/9/00	16	16	0	0.00E+00	0.00%
N1117	10/5/00	8:01am	3:49pm	468	44	2.04E+07	10/6/00	34	18	0.533	1.07E-14	10/10/00	18	17	0.033	6.67E-16	16.68%
S1117	10/5/00	7:35am	3:30pm	475	45	2.12E+07	10/6/00	41	18	0.767	1.48E-14	10/10/00	19	17	0.067	1.29E-15	32.14%
E1117	10/5/00	8:04am	3:56pm	472	41	1.92E+07	10/6/00	23	18	0.167	3.55E-15	10/10/00	15	17	0	0.00E+00	0.00%
W1117	10/5/00	8:12am	3:45pm	453	50	2.24E+07	10/6/00	26	18	0.267	4.85E-15	10/10/00	16	17	0	0.00E+00	0.00%
N1118	10/6/00	8:01am	3:57pm	476	42	1.98E+07	10/9/00	18	16	0.067	1.37E-15	10/11/00	18	17	0.033	6.87E-16	17.18%
S1118	10/6/00	8:03am	4:03pm	480	38	1.81E+07	10/9/00	26	16	0.333	7.53E-15	10/11/00	16	17	0	0.00E+00	0.00%
E1118	10/6/00	8:17am	4:08pm	471	40	1.87E+07	10/9/00	23	16	0.233	5.11E-15	10/11/00	16	17	0	0.00E+00	0.00%
W1118	10/6/00	8:06am	3:59pm	473	48	2.25E+07	10/9/00	17	16	0.033	6.05E-16	10/11/00	17	17	0	0.00E+00	0.00%
N1119	10/9/00	7:55am	5:34pm	579	39	2.24E+07	10/10/00	66	17	1.633	2.98E-14	10/13/00	14	15	0	0.00E+00	0.00%
S1119	10/9/00	7:44am	5:28pm	584	35	2.03E+07	10/10/00	109	17	3.067	6.19E-14	10/13/00	15	15	0	0.00E+00	0.00%
E1119	10/9/00	8:08am	5:37pm	569	39	2.20E+07	10/10/00	61	17	1.467	2.72E-14	10/13/00	15	15	0	0.00E+00	0.00%
W1119	10/9/00	7:59am	5:32pm	573	45	2.56E+07	10/10/00	63	17	1.533	2.45E-14	10/13/00	16	15	0.033	5.33E-16	13.32%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

							day after analysis					four day analysis					% of Limit
Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4 00E-15 uCi/ml
N1120	10/10/00	8:05am	4:00pm	475	40	1 88E+07	10/11/00	39	17	0 733	1 59E-14	10/14/00	15	16	0	0 00E+00	0 00%
S1120	10/10/00	7:30am	3:50pm	500	43	2.13E+07	10/11/00	53	17	1.2	2.30E-14	10/14/00	17	16	0.033	6.39E-16	15.98%
E1120	10/10/00	8:14am	3:50pm	456	45	2 03E+07	10/11/00	57	17	1 333	2 68E-14	10/14/00	14	16	0	0 00E+00	0 00%
W1120	10/10/00	8:10am	4:00pm	470	40	1 86E+07	10/11/00	61	17	1 467	3 22E-14	10/14/00	15	16	0	0 00E+00	0 00%
N1121	10/11/00	8 05am	3 55pm	470	40	1 86E+07	10/12/00	98	18	2 667	5 85E 14	10/16/00	14	15	0	0 00E+00	0 00%
S1121	10/11/00	8 10am	4 02pm	472	39	1 82E+07	10/12/00	123	18	3 5	7 84E 14	10/16/00	15	15	0	0 00E+00	0 00%
E1121	10/11/00	8 18am	4 10pm	472	43	2 01E+07	10/12/00	81	18	2 1	4 27E-14	10/16/00	17	15	0 067	1 35E-15	33 85%
W1121	10/11/00	8 12am	3 51pm	459	48	2 18E+07	10/12/00	113	18	3 167	5 93E 14	10/16/00	14	15	0	0 00E+00	0 00%
N1122	10/12/00	7 55am	3 55pm	480	35	1 66E+07	10/13/00	115	15	3 333	8 18E 14	10/17/00	18	16	0 067	1 64E 15	40 90%
S1122	10/12/00	7 30am	4 02pm	512	40	2 03E+07	10/13/00	118	15	3 433	6 91E-14	10/17/00	17	16	0 033	6 71E-16	16 77%
E1122	10/12/00	8 09am	4 10pm	481	39	1 86E+07	10/13/00	94	15	2 633	5 79E-14	10/17/00	15	16	0	0 00E+00	0 00%
W1122	10/12/00	7 57am	3 52pm	475	47	2 21E+07	10/13/00	78	15	2 1	3 88E 14	10/17/00	15	16	0	0 00E+00	0 00%
N1123	10/13/00	8 12am	4 17pm	485	34	1 63E+07	10/14/00	317	16	10 03	2 51E 13	10/18/00	16	17	0	0 00E+00	0 00%
S1123	10/13/00	7 30am	4 23pm	533	35	1 85E+07	10/14/00	228	16	7 067	1 56E-13	10/18/00	15	17	0	0 00E+00	0 00%
E1123	10/13/00	8 13am	4 20pm	487	35	1 69E+07	10/14/00	212	16	6 533	1 58E-13	10/18/00	16	17	0	0 00E+00	0 00%
W1123	10/13/00	8 15am	4 12pm	477	40	1 89E+07	10/14/00	201	16	6 167	1 33E-13	10/18/00	18	17	0 033	7 20E 16	18 01%
N1124	10/14/00	8 20am	3.40pm	440	38	1 66E+07	10/16/00	51	15	1 2	2 96E 14	10/19/00	18	16	0 067	1 64E-15	41 09%
S1124	10/14/00	7:26am	3 46pm	500	38	1 88E+07	10/16/00	57	15	1 4	3 04E 14	10/19/00	16	16	0	0 00E+00	0.00%
E1124	10/14/00	8:25am	3.50pm	445	35	1 54E+07	10/16/00	33	15	0.6	1 59E-14	10/19/00	15	16	0	0 00E+00	0 00%
W1124	10/14/00	8:17am	3:39pm	442	43	1 88E+07	10/16/00	48	15	1.1	2.39E-14	10/19/00	17	16	0.033	7 23E-16	18 08%
N1125	10/16/00	8:02am	5:05pm	543	35	1.88E+07	10/17/00	31	16	0.5	1.08E-14	10/20/00	14	15	0	0.00E+00	0.00%
S1125	10/16/00	7:57am	5:14pm	557	43	2.37E+07	10/17/00	28	16	0.4	6.89E-15	10/20/00	18	15	0.1	1.72E-15	43.03%
E1125	10/16/00	8:11am	4:56pm	525	40	2.08E+07	10/17/00	25	16	0.3	5.89E-15	10/20/00	15	15	0	0.00E+00	0.00%
W1125	10/16/00	8:03am	5:01pm	538	50	2.67E+07	10/17/00	27	16	0.367	5.62E-15	10/20/00	15	15	0	0.00E+00	0.00%
N1126	10/17/00	8:01am	5:41pm	580	32	1.84E+07	10/18/00	95	17	2.6	5.78E-14	10/21/00	15	15	0	0.00E+00	0.00%
S1126	10/17/00	7:42am	5:48pm	606	38	2.28E+07	10/18/00	88	17	2.367	4.24E-14	10/21/00	14	15	0	0.00E+00	0.00%
E1126	10/17/00	8:07am	5:32pm	565	35	1.96E+07	10/18/00	90	17	2.433	5.07E-14	10/21/00	15	15	0	0.00E+00	0.00%
W1126	10/17/00	8:03am	5:45pm	582	50	2.88E+07	10/18/00	67	17	1.667	2.36E-14	10/21/00	16	15	0.033	4.72E-16	11.81%
N1127	10/18/00	8:01am	4:06pm	485	35	1.68E+07	10/19/00	134	16	3.933	9.55E-14	10/23/00	15	17	0	0.00E+00	0.00%
S1127	10/18/00	10:05am	3:52pm	347	40	1.38E+07	10/19/00	169	16	5.1	1.51E-13	10/23/00	19	17	0.067	1.98E-15	49.50%
E1127	10/18/00	8:08am	4:00pm	472	43	2.01E+07	10/19/00	44	16	0.933	1.90E-14	10/23/00	16	17	0	0.00E+00	0.00%

Area Air Monitoring Summary Sheet - Staplex High Volume Pumps (Daily Analysis)

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	cubic ft/ min (CFM)	sample volume analyzed	day after analysis					four day analysis					% of Limit
							date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	4.00E-15 uCi/ml
W1127	10/18/00	8:05am	3:57pm	472	46	2.15E+07	10/19/00	92	16	2.533	4.81E-14	10/23/00	16	17	0	0.00E+00	0.00%
N1128	10/19/00	7:49am	3:54pm	485	33	1.59E+07	10/20/00	155	15	4.667	1.20E-13	10/24/00	20	18	0.067	1.72E-15	42.93%
S1128	10/19/00	8:05am	4:02pm	477	38	1.80E+07	10/20/00	238	15	7.433	1.69E-13	10/24/00	20	18	0.067	1.52E-15	37.91%
E1128	10/19/00	9:00am	3:56pm	416	35	1.44E+07	10/20/00	66	15	1.7	4.81E-14	10/24/00	17	18	0	0.00E+00	0.00%
W1128	10/19/00	8:00am	3:52pm	472	40	1.87E+07	10/20/00	137	15	4.067	8.88E-14	10/24/00	18	18	0	0.00E+00	0.00%
N1129	10/20/00	7:58am	4:00pm	482	35	1.67E+07	10/21/00	186	15	5.7	1.39E-13	10/25/00	19	16	0.1	2.44E-15	61.09%
S1129	10/20/00	7:42am	4:12pm	510	33	1.67E+07	10/21/00	249	15	7.8	1.91E-13	10/25/00	16	16	0	0.00E+00	0.00%
E1129	10/20/00	7:46am	4:10pm	504	38	1.90E+07	10/21/00	158	15	4.767	1.03E-13	10/25/00	15	16	0	0.00E+00	0.00%
W1129	10/20/00	8:01am	4:05pm	484	38	1.82E+07	10/21/00	128	15	3.767	8.44E-14	10/25/00	19	16	0.1	2.24E-15	56.04%
N1130	10/21/00	7:58am	3:05pm	427	43	1.82E+07	10/23/00	40	17	0.767	1.72E-14	10/26/00	19	17	0.067	1.50E-15	37.42%
S1130	10/21/00	7:40am	3:05pm	445	43	1.90E+07	10/23/00	45	17	0.933	2.01E-14	10/26/00	17	17	0	0.00E+00	0.00%
E1130	10/21/00	8:00am	2:50pm	410	40	1.63E+07	10/23/00	29	17	0.4	1.01E-14	10/26/00	18	17	0.033	8.38E-16	20.95%
W1130	10/21/00	8:07am	3:00pm	413	43	1.76E+07	10/23/00	21	17	0.133	3.10E-15	10/26/00	20	17	0.1	2.32E-15	58.03%

AIR MONITORING

LOW VOLUME PUMPS
4 DAY ANALYSIS

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis) **April 6 - April 13, 2000**

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN001	4/6/00	8:17am	4:13pm	476	12											
	4/7/00	7:56am	12:00pm	244	12											
	4/10/00	7:30am	3:00pm	450	12											
	4/11/00	9:37am	4:15pm	398	12											
	4/12/00	8:02am	4:57pm	539	12											
	4/13/00	7:44am	4:25pm	524	12											
				2631	12	3.16E+07	4/14/00	44	18	0.867	7.85E-15	4/18/00	15	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS001	4/6/00	8:32am	4:13pm	461	12											
	4/7/00	7:48am	12:00pm	252	12											
	4/10/00	8:19am	4:35pm	496	12											
	4/11/00	7:49am	4:00pm	491	12											
	4/12/00	8:27am	3:30pm	423	12											
	4/13/00	7:37am	4:27pm	530	12											
				2653	12	3.18E+07	4/14/00	43	18	0.833	7.49E-15	4/17/00	19	17	0.0667	5.99E-16
												Percentage of Release Limit				*14.97%*
LVE001	4/6/00	8:29am	4:10pm	461	12											
	4/7/00	7:45am	12:00pm	255	12											
	4/10/00	8:15am	4:55pm	520	12											
	4/11/00	7:47am	4:00pm	493	12											
	4/12/00	8:27am	3:30pm	423	12											
	4/13/00	7:37am	4:24pm	527	12											
				2679	12	3.21E+07	4/14/00	66	18	1.6	1.42E-14	4/17/00	21	17	0.1333	1.19E-15
												Percentage of Release Limit				*29.65%*
LVW001	4/6/00	8:14am	4:17pm	483	12											
	4/7/00	7:52am	12:00pm	248	12											
	4/10/00	7:28am	3:00pm	452	12											
	4/11/00	9:35am	4:15pm	400	12											
	4/12/00	8:00am	4:57pm	537	12											
	4/13/00	7:44am	4:31pm	527	12											
				2647	12	3.18E+07	4/14/00	54	18	1.2	1.08E-14	4/17/00	17	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

April 14 - April 21, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN002	4/14/00	8:17am	4:13pm	518	12											
	4/17/00	none performed		0	12											
	4/18/00	7:30am	3.00pm	572	12											
	4/19/00	9:37am	4:15pm	265	12											
	4/20/00	rained out		0	0											
	4/21/00	rained out		0	0											
				1355	12	1.63E+07						4/24/00	21	16	0.16667	2.93E-15
												Percentage of Release Limit				*73.29%*
LVS002	4/14/00	8:32am	4:13pm	531	12											
	4/17/00	none performed		0	0											
	4/18/00	8:19am	4:35pm	568	12											
	4/19/00	7:49am	4:00pm	287	12											
	4/20/00	rained out		0	0											
	4/21/00	rained out		0	0											
				1386	12	1.66E+07						4/24/00	18	16	0.06667	1.15E-15
												Percentage of Release Limit				*28.66%*
LVE002	4/14/00	8:29am	4:10pm	421	12											
	4/17/00	none performed		0	0											
	4/18/00	8:15am	4:55pm	562	12											
	4/19/00	7:47am	4:00pm	290	12											
	4/20/00	rained out		0	0											
	4/21/00	rained out		0	0											
				1273	12	1.53E+07						4/24/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVW002	4/14/00	8:14am	4:17pm	415	12											
	4/17/00	none performed		0	0											
	4/18/00	7:28am	3:00pm	575	12											
	4/19/00	9:35am	4:15pm	279	12											
	4/20/00	rained out		0	0											
	4/21/00	rained out		0	0											
				1269	12	1.52E+07						4/24/00	22	16	0.2	3.76E-15
												Percentage of Release Limit				*93.91%*

Note: No Day After analysis was performed because we were rained out on 4/20 and 4/21. The next day of work was Monday 4/24/00, which was four days after the final sample was collected. Therefore, the analysis performed on 4/24/00 will be considered the final concentration.

Although work was performed on 4/17/00, no air samples were collected due to rainy conditions. This weekly sample consists of only three days of sample collection.

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

April 24 - April 29, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN003	4/24/00	8:15am	5:25pm	550	12											
	4/25/00	7:55am	4:26pm	511	12											
	4/26/00	7:35am	5:19pm	584	12											
	4/27/00	7:35am	4:22pm	527	12											
	4/28/00	7:45am	4:42pm	537	12											
	4/29/00	8:02am	3:18pm	436	12											
				3145	12	3.77E+07	5/1/00	19	17	0.067	5.05E-16	5/3/00	16	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS003	4/24/00	8:10am	5:07pm	537	12											
	4/25/00	7:55am	4:33pm	518	12											
	4/26/00	7:25am	5:20pm	595	12											
	4/27/00	7:22am	4:25pm	543	12											
	4/28/00	7:31am	4:50pm	559	12											
	4/29/00	8:08am	3:12pm	424	12											
				3176	12	3.81E+07	5/1/00	18	17	0.033	2.50E-16	5/3/00	18	17	0.0333	2.50E-16
												Percentage of Release Limit				*6.25%*
LVE003	4/24/00	8:07am	5:07pm	540	12											
	4/25/00	7:55am	4:35pm	520	12											
	4/26/00	7:25am	5:20pm	595	12											
	4/27/00	7:22am	4:25pm	543	12											
	4/28/00	7:28am	4:45pm	557	12											
	4/29/00	8:05am	3:20pm	427	12											
				3182	12	3.82E+07	5/1/00	17	17	0	0.00E+00	5/3/00	16	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVW003	4/24/00	8:02am	5:25pm	563	12											
	4/25/00	7:55am	4:26pm	511	12											
	4/26/00	7:35am	5:25pm	590	12											
	4/27/00	7:35am	4:22pm	527	12											
	4/28/00	7:43am	4:55pm	552	12											
	4/29/00	8:00am	3:20pm	420	12											
				3163	12	3.80E+07	5/1/00	17	17	0	0.00E+00	5/3/00	21	17	0.1333	1.00E-15
												Percentage of Release Limit				*25.12%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

May 1 - May 6, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN004	5/1/00	8:24am	4:19pm	475	12											
	5/2/00	7:26am	6:20pm	654	12											
	5/3/00	7:14am	4:48pm	574	12											
	5/4/00	7:24am	5:07pm	583	12											
	5/5/00	7:04am	5:18pm	614	12											
	5/6/00	no work on Sat		0	0											
				2900	12	3.48E+07	5/8/00	22	19	0.1	8.22E-16	5/10/00	17	18	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS004	5/1/00	8:28am	4:42pm	494	12											
	5/2/00	7:22am	6:25pm	663	12											
	5/3/00	7:13am	4:52pm	579	12											
	5/4/00	7:25am	3:16pm	471	12											
	5/5/00	7:14am	5:11pm	597	12											
	5/6/00	no work on Sat		0	0											
				2804	12	3.36E+07	5/8/00	28	19	0.3	2.55E-15	5/10/00	18	18	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE004	5/1/00	8:26am	4:48pm	502	12											
	5/2/00	7:20am	6:40pm	680	12											
	5/3/00	7:12am	4:55pm	583	12											
	5/4/00	7:20am	6:00pm	640	12											
	5/5/00	7:14am	5:06pm	592	12											
	5/6/00	no work on Sat		0	0											
				2997	12	3.60E+07	5/8/00	23	19	0.133	1.06E-15	5/10/00	15	18	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVW004	5/1/00	8:22am	4:17pm	475	12											
	5/2/00	7:26am	6:42pm	656	12											
	5/3/00	7:12am	4:45pm	573	12											
	5/4/00	7:18am	5:07pm	589	12											
	5/5/00	7:05am	5:22pm	617	12											
	5/6/00	no work on Sat		0	0											
				2910	12	3.49E+07	5/8/00	29	19	0.333	2.73E-15	5/10/00	20	18	0.06667	5.46E-16
												Percentage of Release Limit				*13.65%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

May 8 - May 12, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN005	5/8/00	7:36am	8:42pm	786	12											
	5/9/00	7:31am	2:55pm	444	12											
	5/10/00	7:28am	5:20pm	592	12											
	5/11/00	7:10am	5:08pm	598	12											
	5/12/00	7:07am	4:12pm	545	12											
	5/13/00	no work on Sat		0	0											
				2965	12	3.56E+07	5/15/00	16	17	0	0.00E+00	5/17/00	19	19	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS005	5/8/00	7:40am	8:40pm	780	12											
	5/9/00	7:22am	2:55pm	453	12											
	5/10/00	7:20am	5:27pm	607	12											
	5/11/00	7:10am	5:01pm	591	12											
	5/12/00	7:15am	4:26pm	551	12											
	5/13/00	no work on Sat		0	0											
				2982	12	3.58E+07	5/15/00	28	17	0.367	2.93E-15	5/17/00	24	19	0.16667	1.33E-15
												Percentage of Release Limit				*33.30%*
LVE005	5/8/00	7:51am	8:00pm	729	12											
	5/9/00	7:26am	2:55pm	449	12											
	5/10/00	7:20am	5:20pm	600	12											
	5/11/00	7:11am	5:01pm	590	12											
	5/12/00	7:15am	4:22pm	547	12											
	5/13/00	no work on Sat		0	0											
				2915	12	3.50E+07	5/15/00	18	17	0.033	2.73E-16	5/17/00	17	19	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVW005	5/8/00	7:34am	8:45pm	791	12											
	5/9/00	7:30am	2:55pm	445	12											
	5/10/00	7:28am	5:25pm	597	12											
	5/11/00	7;11am	5:08pm	597	12											
	5/12/00	7:07am	4:15pm	548	12											
	5/13/00	no work on Sat		0	0											
				2978	12	3.57E+07	5/15/00	17	17	0	0.00E+00	5/17/00	18	19	0	0.00E+00
												Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

May 15 - May 19, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN006	5/15/00	9:10am	4:40pm	450	12		No day after analysis performed on low volume samples this week South and East pumps were found to be not working on the morning of 5/17/00 These pumps were not placed back into service, and only the North and West samples were collected for the entire week									
	5/16/00	7:12am	5:44pm	632	12											
	5/17/00	7:10am	5:48pm	638	12											
	5/18/00	7:10am	4:25pm	555	12											
	5/19/00	7:10am	4:45pm	575	12											
	5/20/00	no work on Sat		0	0											
				2850	12	3.42E+07						5/23/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS006	5/15/00	9:03am	4:44pm	461	12											
	5/16/00	7:13am	5:40pm	627	12											
	5/17/00	pump	broken	0	0											
	5/18/00	pump	broken	0	0											
	5/19/00	pump	broken	0	0											
	5/20/00	no work on Sat		0	0											
				1088	12	1.31E+07						5/23/00	15	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE006	5/15/00	9:06am	4:44pm	458	12											
	5/16/00	7:08am	5:41pm	633	12											
	5/17/00	pump	broken	0	0											
	5/18/00	pump	broken	0	0											
	5/19/00	pump	broken	0	0											
	5/20/00	no work on Sat		0	0											
				1091	12	1.31E+07						5/23/00	14	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVW006	5/15/00	9:10am	4:40pm	450	12											
	5/16/00	7:06am	5:45pm	639	12											
	5/17/00	7:10am	5:52pm	642	12											
	5/18/00	7:02am	4:20pm	558	12											
	5/19/00	7:04am	4:45pm	581	12											
	5/20/00	no work on Sat		0	0											
				2870	12	3.44E+07						5/23/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

May 22 - May 26, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN007	5/22/00	7:15am	4:48pm	573	12		No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week. East and West pumps were not run due to insufficient power supply.									
	5/23/00	7:10am	4:45pm	575	12											
	5/24/00	6:55am	6:20pm	685	12											
	5/25/00	7:05am	6:35pm	690	12											
	5/26/00	7:04am	3:40pm	516	12											
	5/27/00	no work on Sat		0	0											
				3039	12	3.65E+07						5/30/00	15	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS007	5/22/00	7:21am	4:55pm	574	12											
	5/23/00	7:05am	5:15pm	610	12											
	5/24/00	7:04am	6:20pm	676	12											
	5/25/00	6:52am	6:30pm	698	12											
	5/26/00	7:00am	3:42pm	522	12											
	5/27/00	no work on Sat		0	0											
				3080	12	3.70E+07						5/30/00	16	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE007	NOT USED THIS WEEK															
LVW007	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

May 30 - June 2, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN008	5/29/00 memorial day - no work						No day after analysis performed on low volume									
	5/30/00	7:05am	4:25pm	560	12		samples this week North and South									
	5/31/00	7:07am	3:20pm	493	12		pumps were the only low volume pumps in									
	6/1/00	8:05am	3:57pm	472	12		operation this week. East and West pumps									
	6/2/00	7:55am	6:08pm	613	12		were not run due to insufficient power supply									
	6/3/00	no work on Sat		0	0											
				2138	12	2.57E+07	On May 31, 2000, both the low volume North and					6/7/00	14	16	0	0.00E+00
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*0.00%*
LVS008	5/29/00 memorial day - no work						They are operating now on the North and South									
	5/30/00	7:07am	4:25pm	558	12		sides of Area A, and should no longer be used									
	5/31/00	10:18am	3:14pm	296	12		as a comparison between high and low volume									
	6/1/00	7:55am	3:51pm	476	12											
	6/2/00	8:05am	5:50pm	585	12		start and stop times correspond as follows									
	6/3/00	no work on Sat		0	0		LVN = High Vol North									
				1915	12	2.30E+07	LVS = High Vol West					6/7/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE008	NOT USED THIS WEEK															
LVW008	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

June 5 - June 9, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN009	6/5/00	1:00pm	4:10pm	190	12	
	6/6/00	7:21am	8:20pm	779	12	
	6/7/00	8:12am	5:50pm	578	12	
	6/8/00	9:15am	5:28pm	493	12	
	6/9/00	8:00am	4:44pm	524	12	
	6/10/00	no work on Sat		0	0	
				2564	12	3.08E+07
LVS009	6/5/00	8:16am	3:40pm	444	12	
	6/6/00	7:27am	8:04pm	757	12	
	6/7/00	8:09am	5:45pm	576	12	
	6/8/00	9:00am	4:13pm	433	12	
	6/9/00	8:14am	4:26pm	492	12	
	6/10/00	no work on Sat		0	0	
				2702	12	3.24E+07
LVE009	NOT USED THIS WEEK					
LVW009	NOT USED THIS WEEK					

day after analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol West

four day analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
6/14/00	15	15	0	0.00E+00
Percentage of Release Limit				*0.00%*
6/14/00	18	15	0.1	8.82E-16
Percentage of Release Limit				*22.05%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

June 12 - June 16, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN010	6/12/00	8:55am	4:55pm	480	12		No day after analysis performed on low volume									
	6/13/00	7:57am	5:58pm	601	12		samples this week. North and South									
	6/14/00	8.04am	2:55pm	411	12		pumps were the only low volume pumps in									
	6/15/00	8:15am	2:40pm	385	12		operation this week									
	6/16/00	8:07am	3.09pm	422	12											
	6/17/00	no work on Sat		0	0											
				2299	12	2.76E+07	On May 31, 2000, both the low volume North and					6/21/00	16	17	0	0.00E+00
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*0.00%*
LVS010	6/12/00	8.40am	4.50pm	490	12		They are operating now on the North and South									
	6/13/00	8.00am	6.02pm	602	12		sides of Area A, and should no longer be used									
	6/14/00	8.05am	3.04pm	419	12		as a comparison between high and low volume									
	6/15/00	8.09am	2.30pm	381	12											
	6/16/00	8.00am	3.17pm	437	12		start and stop times correspond as follows									
	6/17/00	no work on Sat		0	0		LVN = High Vol North									
				2329	12	2.79E+07	LVS = High Vol West					6/21/00	17	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE010	NOT USED THIS WEEK															
LVW010	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

June 19 - June 23, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN011	6/19/00	8:24am	3:31pm	427	12		No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.									
	6/20/00	not sampled**		0	12											
	6/21/00	not sampled**		0	12											
	6/22/00	not sampled**		0	12											
	6/23/00	no work on Fri		0	12											
	6/24/00	no work on Sat		0	0											
				427	12	5.12E+06	On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.					6/27/00	15	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS011	6/19/00	8:22am	3:30pm	428	12											
	6/20/00	not sampled**		0	12											
	6/21/00	not sampled**		0	12											
	6/22/00	not sampled**		0	12											
	6/23/00	no work on Fri		0	12											
	6/24/00	no work on Sat		0	0											
				428	12	5.14E+06	start and stop times correspond as follows: LVN = High Vol North LVS = High Vol West					6/27/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE011	NOT USED THIS WEEK						** Air Samples were only collected on Monday, June 19 because no excavation or equipment movement during the rest of the week due to concrete strike.									
LVW011	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

June 26 - June 30, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN012	6/26/00	8:09am	4:05pm	476	12		No day after analysis performed on low volume									
	6/27/00	8:09am	4:14pm	485	12		samples this week. North and South									
	6/28/00	8:04am	4:30pm	506	12		pumps were the only low volume pumps in									
	6/29/00	8:05am	5:15pm	550	12		operation this week.									
	6/30/00	7:57am	5:38pm	581	12											
	7/1/00	no work on Sat		0	0											
				2598	12	3.12E+07	On May 31, 2000, both the low volume North and					7/5/00	14	16	0	0.00E+00
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*0.00%*
LVS012	6/26/00	8:00am	4:00pm	480	12		They are operating now on the North and South									
	6/27/00	8:16am	4:25pm	489	12		sides of Area A, and should no longer be used									
	6/28/00	8:07am	4:37pm	510	12		as a comparison between high and low volume									
	6/29/00	7:57am	5:17pm	560	12											
	6/30/00	8:07am	5:40pm	573	12		start and stop times correspond as follows									
	7/1/00	no work on Sat		0	0		LVN = High Vol North									
				2612	12	3.13E+07	LVS = High Vol West					7/5/00	15	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE012	NOT USED THIS WEEK															
LVW012	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

July 3 - July 7, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN013	7/3/00	7:55am	2:33pm	388	12		No day after analysis performed on low volume									
	7/4/00	no work - holiday		0	12		samples this week. North and South									
	7/5/00	8:00am	4:35pm	515	12		pumps were the only low volume pumps in									
	7/6/00	10:55am	4:01pm	306	12		operation this week.									
	7/7/00	8:08am	4:30pm	502	12											
	7/8/00	no work on Sat		0	0											
				1711	12	2.05E+07	On May 31, 2000, both the low volume North and					7/12/00	16	15	0.03333	4.64E-16
							low volume South pumps were moved to Area A.					*Percentage of Release Limit*				*11.61%*
LVS013	7/3/00	8:02am	2:24pm	382	12		They are operating now on the North and South									
	7/4/00	*no work - holiday*		0	12		*sides of Area A, and should no longer be used*									
	7/5/00	8:03am	4:40pm	517	12		as a comparison between high and low volume.									
	7/6/00	10:58am	4:02pm	304	12											
	7/7/00	8:07am	4:31pm	504	12		start and stop times correspond as follows:									
	7/8/00	no work on Sat		0	0		LVN = High Vol North									
				1707	12	2.05E+07	LVS = High Vol West					7/12/00	14	15	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE013	NOT USED THIS WEEK															
LVW013	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

July 10 - July 14, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN014	7/10/00	no work - rain		0	12		No day after analysis performed on low volume									
	7/11/00	8:03am	4:50pm	527	12		samples this week North and South									
	7/12/00	8:12am	4:58pm	526	12		pumps were the only low volume pumps in									
	7/13/00	7:57am	6:15pm	618	12		operation this week.									
	7/14/00	8:00am	3:50pm	470	12											
	7/15/00	no work on Sat		0	0											
				2141	12	2.57E+07	On May 31, 2000, both the low volume North and					7/19/00	15	15	0	0.00E+00
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*0.00%*
LVS014	7/10/00	no work - rain		0	12		They are operating now on the North and South									
	7/11/00	8:05am	4:55pm	530	12		sides of Area A, and should no longer be used									
	7/12/00	8:16am	4:45pm	509	12		as a comparison between high and low volume									
	7/13/00	8:14am	6:06pm	592	12											
	7/14/00	8:12am	3:45pm	453	12		start and stop times correspond as follows									
	7/15/00	no work on Sat		0	0		LVN = High Vol North									
				2084	12	2.50E+07	LVS = High Vol West					7/19/00	16	15	0.03333	3.81E-16
												Percentage of Release Limit				*9.53%*
LVE014	NOT USED THIS WEEK															
LVW014	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

July 17 - July 21, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN015	7/17/00	8:06am	6:08pm	602	12		No day after analysis performed on low volume									
	7/18/00	8:04am	5:02pm	538	12		samples this week. North and South									
	7/19/00	8:01am	4:35pm	514	12		pumps were the only low volume pumps in									
	7/20/00	8:19am	5:10pm	531	12		operation this week.									
	7/21/00	8:01am	4:12pm	491	12											
	7/22/00	no work on Sat		0	0											
				2676	12	3.21E+07	On May 31, 2000, both the low volume North and					7/26/00	16	16	0	0.00E+00
							low volume South pumps were moved to Area A.					*Percentage of Release Limit*				*0.00%*
LVS015	7/17/00	8:04am	6:18pm	614	12		They are operating now on the North and South									
	7/18/00	8:02am	4:47pm	525	12		sides of Area A, and should no longer be used									
	7/19/00	8:05am	4:30pm	505	12		as a comparison between high and low volume.									
	7/20/00	7:58am	5:02pm	544	12											
	7/21/00	8:05am	4:10pm	485	12		start and stop times correspond as follows:									
	7/22/00	no work on Sat		0	0		LVN = High Vol North									
				2673	12	3.21E+07	LVS = High Vol South					7/26/00	15	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE015	NOT USED THIS WEEK															
LVW015	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

July 24 - July 28, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN016	7/24/00	8:22am	5:02pm	520	12		No day after analysis performed on low volume									
	7/25/00	7:59am	4:38pm	519	12		samples this week North and South									
	7/26/00	7:58am	4:13pm	495	12		pumps were the only low volume pumps in									
	7/27/00	8:14am	4:00pm	466	12		operation this week									
	7/28/00	7:56am	4:09pm	493	12											
	7/29/00	no work on Sat		0	0											
				2493	12	2.99E+07	On May 31, 2000, both the low volume North and					8/2/00	16	18	0	0.00E+00
							low volume South pumps were moved to Area A.					*Percentage of Release Limit*				*0.00%*
LVS016	7/24/00	8:18am	5:00pm	522	12		They are operating now on the North and South									
	7/25/00	8:04am	4:32pm	508	12		sides of Area A, and should no longer be used									
	7/26/00	8:02am	4:17pm	495	12		as a comparison between high and low volume									
	7/27/00	8:08am	4:05pm	477	12											
	7/28/00	8:05am	4:17pm	492	12		start and stop times correspond as follows:									
	7/29/00	no work on Sat		0	0		LVN = High Vol North									
				2494	12	2.99E+07	LVS = High Vol South					8/2/00	18	18	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE016	NOT USED THIS WEEK															
LVW016	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

July 31 - August 4, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN017	7/31/00	no work - rain		0	12	
	8/1/00	7:56am	3:41pm	465	12	
	8/2/00	8:09am	3:50pm	461	12	
	8/3/00	7:58am	4:36pm	518	12	
	8/4/00	8:05am	4:46pm	521	12	
	8/5/00	no work on Sat		0	0	
				1965	12	2.36E+07
LVS017	7/31/00	no work - rain		0	12	
	8/1/00	8:03am	3:38pm	455	12	
	8/2/00	8:15am	3:56pm	461	12	
	8/3/00	8:05am	4:42pm	517	12	
	8/4/00	8:01am	4:53pm	532	12	
	8/5/00	no work on Sat		0	0	
				1965	12	2.36E+07
LVE017	NOT USED THIS WEEK					
LVW017	NOT USED THIS WEEK					

day after analysis					four day analysis				
date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.									
On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.					8/9/00	15	14	0.03333	4.04E-16
					Percentage of Release Limit				*10.11%*
start and stop times correspond as follows: LVN = High Vol North LVS = High Vol South					8/9/00	14	14	0	0.00E+00
					Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

August 7 - August 11, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN018	8/7/00	7:57am	5:53pm	596	12		No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.									
	8/8/00	8:07am	4:53pm	526	12											
	8/9/00	9:37am	5:06pm	449	12											
	8/10/00	7:56am	5:11pm	555	12											
	8/11/00	8:01am	4:28pm	507	12											
	8/12/00	no work on Sat		0	0											
				2633	12	3.16E+07	On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.					8/16/00	14	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS018	8/7/00	8:02am	6:05pm	603	12											
	8/8/00	8:13am	5:02pm	529	12											
	8/9/00	8:00am	5:11pm	551	12											
	8/10/00	8:02am	4:10pm	488	12											
	8/11/00	8:08am	4:32pm	504	12											
	8/12/00	no work on Sat		0	0											
				2675	12	3.21E+07	start and stop times correspond as follows: LVN = High Vol North; LVS = High Vol South					8/16/00	18	16	0.06667	5.94E-16
												Percentage of Release Limit				*14.85%*
LVE018	NOT USED THIS WEEK															
LVW018	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

August 14 - August 18, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN019	8/14/00	9:12am	4:39pm	447	12	
	8/15/00	8:01am	4:04pm	483	12	
	8/16/00	8:02am	4:19pm	497	12	
	8/17/00	10:02am	4:44pm	402	12	
	8/18/00	7:56am	4:04pm	488	12	
	8/19/00	no work on Sat		0	0	
				2317	12	2.78E+07
LVS019	8/14/00	8:00am	4:20pm	500	12	
	8/15/00	8:12am	3:51pm	459	12	
	8/16/00	8:10am	4:15pm	485	12	
	8/17/00	9:56am	4:38pm	402	12	
	8/18/00	8:04am	3:30pm	446	12	
	8/19/00	no work on Sat		0	0	
				2292	12	2.75E+07
LVE019	NOT USED THIS WEEK					
LVW019	NOT USED THIS WEEK					

day after analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

four day analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
8/23/00	18	16	0.06667	6.86E-16
Percentage of Release Limit				*17.14%*
8/23/00	16	16	0	0.00E+00
Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

August 21 - August 25, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN020	8/21/00	7:59am	4:05pm	486	12		No day after analysis performed on low volume									
	8/22/00	8:03am	4:04pm	481	12		samples this week. North and South									
	8/23/00	8:00am	4:07pm	487	12		pumps were the only low volume pumps in									
	8/24/00	8:04am	5:30pm	566	12		operation this week									
	8/25/00	8:16am	5:07pm	531	12											
	8/26/00	no work on Sat		0	0											
				2551	12	3.06E+07	On May 31, 2000, both the low volume North and					8/30/00	20	17	0.1	9.34E-16
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*23.36%*
LVS020	8/21/00	8:01am	4:08pm	487	12		They are operating now on the North and South									
	8/22/00	7:59am	4:08pm	489	12		sides of Area A, and should no longer be used									
	8/23/00	8:04am	4:06pm	482	12		as a comparison between high and low volume.									
	8/24/00	8:04am	6:43pm	639	12											
	8/25/00	8:13am	5:12pm	515	12		start and stop times correspond as follows									
	8/26/00	no work on Sat		0	0		LVN = High Vol North									
				2612	12	3.13E+07	LVS = High Vol South					8/30/00	18	17	0.03333	3.04E-16
												Percentage of Release Limit				*7.60%*
LVE020	NOT USED THIS WEEK															
LVW020	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

August 28 - September 1, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN021	8/28/00	8:10am	4:02pm	472	12	
	8/29/00	8:04am	4:45pm	521	12	
	8/30/00	8:10am	5:31pm	561	12	
	8/31/00	7:55am	4:35pm	520	12	
	9/1/00	7:53am	3:42pm	469	12	
	9/2/00	no work on Sat		0	0	
				2543	12	3.05E+07
LVS021	8/28/00	8:05am	3:52pm	467	12	
	8/29/00	8:16am	5:00pm	524	12	
	8/30/00	8:03am	5:24pm	561	12	
	8/31/00	8:00am	5:20pm	560	12	
	9/1/00	8:04am	3:38pm	454	12	
	9/2/00	no work on Sat		0	0	
				2566	12	3.08E+07
LVE021	NOT USED THIS WEEK					
LVW021	NOT USED THIS WEEK					

day after analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

four day analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
9/6/00	19	18	0.03333	3.12E-16
Percentage of Release Limit				*7.81%*
9/6/00	20	18	0.06667	6.19E-16
Percentage of Release Limit				*15.48%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

September 4 - September 8, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN022	9/4/00	no work Labor Day		0	12		No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.									
	9/5/00	7:57am	3:56pm	479	12											
	9/6/00	8:00am	4:02pm	482	12											
	9/7/00	8:04am	4:00pm	476	12											
	9/8/00	8:05am	4:01pm	476	12											
	9/9/00	no work on Sat		0	0											
				1913	12	2.30E+07	On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume					9/13/00	20	16	0.13333	1.66E-15
												Percentage of Release Limit				*41.53%*
LVS022	9/4/00	no work Labor Day		0	12											
	9/5/00	8:01am	4:00pm	479	12											
	9/6/00	8:05am	4:00pm	475	12											
	9/7/00	8:10am	3:48pm	458	12											
	9/8/00	8:10am	3:52pm	462	12		start and stop times correspond as follows:									
	9/9/00	no work on Sat		0	0		LVN = High Vol North									
				1874	12	2.25E+07	LVS = High Vol South					9/13/00	15	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE022	NOT USED THIS WEEK															
LVW022	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

September 11 - September 15, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN023	9/11/00	8:05am	3:05pm	420	12	
	9/12/00	8:00am	3:44pm	464	12	
	9/13/00	7:56am	3:10pm	434	12	
	9/14/00	no work on Thurs		0	12	
	9/15/00	no work on Fri		0	12	
	9/16/00	no work on Sat		0	0	
				1318	12	1.58E+07
LVS023	9/11/00	8:00am	3:15pm	435	12	
	9/12/00	8:06am	3:50pm	464	12	
	9/13/00	8:02am	3:42pm	460	12	
	9/14/00	no work on Thurs		0	12	
	9/15/00	no work on Fri		0	12	
	9/16/00	no work on Sat		0	0	
				1359	12	1.63E+07
LVE023	NOT USED THIS WEEK					
LVW023	NOT USED THIS WEEK					

day after analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

* There were no excavation activities onsite on both 9/15/00 and 9/16/00. Therefore, no air samples were collected.

four day analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
9/20/00	21	18	0.1	1.81E-15
Percentage of Release Limit				*45.21%*
9/20/00	16	18	0	0.00E+00
Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

September 18 - September 23, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN024	9/18/00	8:03am	3:35pm	452	12		No day after analysis performed on low volume									
	9/19/00	8:10am	3:46pm	456	12		samples this week. North and South									
	9/20/00	8:03am	3:36pm	453	12		pumps were the only low volume pumps in									
	9/21/00	8:42am	4:10pm	448	12		operation this week.									
	9/22/00	8:05am	5:07pm	542	12											
	9/23/00	8:15am	3:16pm	421	0											
				2772	12	3.33E+07	On May 31, 2000, both the low volume North and					9/27/00	20	16	0.13333	1.15E-15
							low volume South pumps were moved to Area A					*Percentage of Release Limit*				*28.66%*
LVS024	9/18/00	8:10am	3:40pm	450	12		They are operating now on the North and South									
	9/19/00	8:05am	3:42pm	457	12		sides of Area A, and should no longer be used									
	9/20/00	7:52am	3:44pm	472	12		as a comparison between high and low volume									
	9/21/00	8:40am	4:10pm	450	12											
	9/22/00	8:15am	5:10pm	535	12		start and stop times correspond as follows:									
	9/23/00	8:07am	3:18pm	431	0		LVN = High Vol North									
				2795	12	3.35E+07	LVS = High Vol South					9/27/00	16	16	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE024	NOT USED THIS WEEK															
LVW024	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

September 25 - September 29, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN025	9/25/00	7:58am	4:28pm	510	12	
	9/26/00	8:03am	3:30pm	447	12	
	9/27/00	8:00am	3:55pm	475	12	
	9/28/00	none collected **		0	12	
	9/29/00	none collected **		0	12	
	9/30/00	no work on Sat		0	0	
				1432	12	1.72E+07
LVS025	9/25/00	8:10am	3:40pm	511	12	
	9/26/00	8:05am	3:42pm	460	12	
	9/27/00	7:52am	3:44pm	485	12	
	9/28/00	none collected **		0	12	
	9/29/00	none collected **		0	12	
	9/30/00	no work on Sat		0	0	
				1456	12	1.75E+07

LVE025 NOT USED THIS WEEK

LVW025 NOT USED THIS WEEK

day after analysis					four day analysis				
date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
					10/4/00	18	18	0	0.00E+00
					Percentage of Release Limit				*0.00%*
					10/4/00	17	18	0	0.00E+00
					Percentage of Release Limit				*0.00%*

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

** No samples were collected on 9/28/00 and 9/29/00 because there were no onsite excavation activities on those days.

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

October 2 - October 7, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN026	10/2/00	8:00am	3:55pm	475	12		No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.									
	10/3/00	8:01am	3:45pm	464	12											
	10/4/00	8:00am	3:25pm	445	12											
	10/5/00	8:01am	3:49pm	468	12											
	10/6/00	8:01am	3:57pm	476	12											
	10/7/00	no work on Sat		0	0											
				2328	12	2.79E+07	On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume					10/11/00	17	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVS026	10/2/00	8:04am	3:58pm	474	12											
	10/3/00	7:41am	3:40pm	479	12											
	10/4/00	8:04am	3:30pm	446	12											
	10/5/00	7:35am	3:30pm	475	12											
	10/6/00	8:03am	4:03pm	480	12											
	10/7/00	no work on Sat		0	0											
				2354	12	2.82E+07	start and stop times correspond as follows: LVN = High Vol North; LVS = High Vol South					10/11/00	18	17	0.033333	3.37E-16
												Percentage of Release Limit				*8.44%*
LVE026	NOT USED THIS WEEK															
LVW026	NOT USED THIS WEEK															

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

October 9 - October 14, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN027	10/9/00	7:55am	5:34pm	579	12	
	10/10/00	8:05am	4:00pm	475	12	
	10/11/00	8:05am	3:55pm	470	12	
	10/12/00	7:55am	3:55pm	480	12	
	10/13/00	8:12am	4:17pm	485	12	
	10/14/00	8:20am	3:40pm	440	0	
				2929	12	3.51E+07
LVS027	10/9/00	7:44am	5:28pm	584	12	
	10/10/00	7:30am	3:50pm	500	12	
	10/11/00	8:10am	4:02pm	472	12	
	10/12/00	7:30am	4:02pm	512	12	
	10/13/00	7:30am	4:23pm	533	12	
	10/14/00	7:26am	3:46pm	500	0	
				3101	12	3.72E+07
LVE027	NOT USED THIS WEEK					
LVW027	NOT USED THIS WEEK					

day after analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

four day analysis

date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
10/19/00	16	16	0	0.00E+00
Percentage of Release Limit				*0.00%*
10/19/00	14	16	0	0.00E+00
Percentage of Release Limit				*0.00%*

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

October 16 - October 21, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed	day after analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml	four day analysis: date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
LVN028	10/16/00	8:02am	5:05pm	543	12		No day after analysis performed on low volume									
	10/17/00	8:01am	5:41pm	580	12		samples this week North and South									
	10/18/00	8:01am	4:06pm	485	12		pumps were the only low volume pumps in									
	10/19/00	7:49am	3:54pm	485	12		operation this week									
	10/20/00	7:58am	4:00pm	482	12											
	10/21/00	7:58am	3:05pm	427	0											
				3002	12	3.60E+07	On May 31, 2000, both the low volume North and					10/26/00	15	17	0	0.00E+00
							low volume South pumps were moved to Area A.					*Percentage of Release Limit*				*0.00%*
LVS028	10/16/00	7:57am	5:14pm	557	12		They are operating now on the North and South									
	10/17/00	7:42am	5:48pm	606	12		sides of Area A, and should no longer be used									
	10/18/00	10:05am	3:52pm	347	12		as a comparison between high and low volume									
	10/19/00	8:05am	4:02pm	477	12											
	10/20/00	7:42am	4:12pm	510	12		start and stop times correspond as follows									
	10/21/00	7:40am	3:05pm	445	0		LVN = High Vol North									
				2942	12	3.53E+07	LVS = High Vol South					10/26/00	17	17	0	0.00E+00
												Percentage of Release Limit				*0.00%*
LVE028 NOT USED THIS WEEK																
LVW028 NOT USED THIS WEEK																

Area Air Monitoring Summary Sheet - Low Volume Pumps (Weekly Analysis)

October 23 - October 27, 2000

Grand Pier Project - Chicago, IL

Sample ID	date sampled	start time	stop time	total time sampled	liters/ min (LPM)	sample volume analyzed
LVN029	10/23/00	8:01am	3:45pm	464	12	
	10/24/00	8:02am	4:15pm	493	12	
	10/25/00	8:00am	4:10pm	490	12	
	10/26/00	8:00am	3:46pm	466	12	
	10/27/00	7:58am	3:24pm	446	12	
	10/28/00	no work on Sat		0	0	
				2359	12	2.83E+07
LVS029	10/23/00	7:36am	3:58pm	502	12	
	10/24/00	7:36am	4:21pm	525	12	
	10/25/00	7:35am	4:06pm	511	12	
	10/26/00	7:40am	3:42pm	482	12	
	10/27/00	7:32am	3:35pm	483	12	
	10/28/00	no work on Sat		0	0	
				2503	12	3.00E+07
LVE029	NOT USED THIS WEEK					
LVW029	NOT USED THIS WEEK					

No day after analysis performed on low volume samples this week. North and South pumps were the only low volume pumps in operation this week.

On May 31, 2000, both the low volume North and low volume South pumps were moved to Area A. They are operating now on the North and South sides of Area A, and should no longer be used as a comparison between high and low volume.

start and stop times correspond as follows:

LVN = High Vol North

LVS = High Vol South

day after analysis						four day analysis					
	date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml		date analyzed	gross counts	bkg counts	net cpm	Concentration in uCi/ml
							11/1/00	15	15	0	0.00E+00
							Percentage of Release Limit				*0.00%*
							11/1/00	16	15	0.03333	3.17E-16
							Percentage of Release Limit				*7.93%*

AIR MONITORING

HIGH VOLUME PUMPS
WEEKLY SUMMARIES

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #1 4/3/00-4/8/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/3/00	0	0.00E+00	0.00E+00	no work - training only
4/4/00	513	0.00E+00	0.00E+00	
4/5/00	440	0.00E+00	0.00E+00	2 day sample taken 4/4-4/5
4/6/00	476	0.00E+00	0.00E+00	
4/7/00	244	0.00E+00	0.00E+00	rain out at 12:00pm
4/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1673	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/3/00	0	0.00E+00	0.00E+00	no work - training only
4/4/00	533	0.00E+00	0.00E+00	
4/5/00	459	0.00E+00	0.00E+00	2 day sample taken 4/4-4/5
4/6/00	461	0.00E+00	0.00E+00	
4/7/00	252	0.00E+00	0.00E+00	rain out at 12:00pm
4/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1705	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = *0.00E+00 uCi/ml*

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/3/00	0	0.00E+00	0.00E+00	no work - training only
4/4/00	520	0.00E+00	0.00E+00	
4/5/00	470	0.00E+00	0.00E+00	2 day sample taken 4/4-4/5
4/6/00	461	0.00E+00	0.00E+00	
4/7/00	255	0.00E+00	0.00E+00	rain out at 12:00pm
4/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1706	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/3/00	0	0.00E+00	0.00E+00	no work - training only
4/4/00	513	0.00E+00	0.00E+00	
4/5/00	440	0.00E+00	0.00E+00	2 day sample taken 4/4-4/5
4/6/00	483	0.00E+00	0.00E+00	
4/7/00	248	0.00E+00	0.00E+00	rain out at 12:00pm
4/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1684	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #2 4/10/00-4/15/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/10/00	450	0.00E+00	0.00E+00	
4/11/00	398	0.00E+00	0.00E+00	
4/12/00	539	0.00E+00	0.00E+00	
4/13/00	524	0.00E+00	0.00E+00	
4/14/00	518	0.00E+00	0.00E+00	
4/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2429	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/10/00	496	6.44E-16	3.19E-13	
4/11/00	491	0.00E+00	0.00E+00	
4/12/00	423	1.08E-15	4.57E-13	
4/13/00	530	3.38E-15	1.79E-12	
4/14/00	531	0.00E+00	0.00E+00	
4/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2471	5.10E-15	2.57E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 1.04E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 25.98%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/10/00	520	0.00E+00	0.00E+00	
4/11/00	493	0.00E+00	0.00E+00	
4/12/00	423	3.71E-15	1.57E-12	
4/13/00	527	0.00E+00	0.00E+00	
4/14/00	421	0.00E+00	0.00E+00	
4/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2384	3.71E-15	1.57E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 6.58E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 16.46%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/10/00	452	2.70E-15	1.22E-12	
4/11/00	400	7.47E-16	2.99E-13	
4/12/00	537	0.00E+00	0.00E+00	
4/13/00	527	3.95E-15	2.08E-12	
4/14/00	415	1.07E-15	4.44E-13	
4/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2331	8.47E-15	4.04E-12	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**1.74E-15 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*43.38%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #3 4/17/00-4/22/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/17/00	0	0.00E+00	0.00E+00	no samples collected - rain
4/18/00	572	1.41E-15	8.07E-13	
4/19/00	265	0.00E+00	0.00E+00	
4/20/00	0	0.00E+00	0.00E+00	rained out
4/21/00	0	0.00E+00	0.00E+00	rained out
4/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	837	1.41E-15	8.07E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 9.64E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 24.09%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/17/00	0	0.00E+00	0.00E+00	no samples collected - rain
4/18/00	568	0.00E+00	0.00E+00	
4/19/00	287	0.00E+00	0.00E+00	
4/20/00	0	0.00E+00	0.00E+00	rained out
4/21/00	0	0.00E+00	0.00E+00	rained out
4/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	855	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/17/00	0	0.00E+00	0.00E+00	no samples collected - rain
4/18/00	562	0.00E+00	0.00E+00	
4/19/00	290	5.28E-15	1.53E-12	
4/20/00	0	0.00E+00	0.00E+00	rained out
4/21/00	0	0.00E+00	0.00E+00	rained out
4/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	852	5.28E-15	1.53E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 1.80E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 44.93%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/17/00	0	0.00E+00	0.00E+00	no samples collected - rain
4/18/00	575	0.00E+00	0.00E+00	
4/19/00	279	0.00E+00	0.00E+00	
4/20/00	0	0.00E+00	0.00E+00	rained out
4/21/00	0	0.00E+00	0.00E+00	rained out
4/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	854	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%

4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #4 4/24/00-4/29/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/24/00	550	0.00E+00	0.00E+00	
4/25/00	511	0.00E+00	0.00E+00	
4/26/00	584	0.00E+00	0.00E+00	
4/27/00	527	0.00E+00	0.00E+00	
4/28/00	537	0.00E+00	0.00E+00	
4/29/00	436	1.07E-15	4.67E-13	
	3145	1.07E-15	4.67E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.48E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 3.71%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/24/00	537	0.00E+00	0.00E+00	
4/25/00	518	0.00E+00	0.00E+00	
4/26/00	595	1.10E-15	6.55E-13	
4/27/00	543	0.00E+00	0.00E+00	
4/28/00	559	3.51E-15	1.96E-12	
4/29/00	424	0.00E+00	0.00E+00	
	3176	4.61E-15	2.62E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 8.24E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 20.60%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/24/00	540	0.00E+00	0.00E+00	
4/25/00	520	0.00E+00	0.00E+00	
4/26/00	595	4.91E-16	2.92E-13	
4/27/00	543	0.00E+00	0.00E+00	
4/28/00	557	0.00E+00	0.00E+00	
4/29/00	427	0.00E+00	0.00E+00	
	3182	4.91E-16	2.92E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 9.18E-17 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 2.30%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
4/24/00	563	4.88E-16	2.75E-13	
4/25/00	511	0.00E+00	0.00E+00	
4/26/00	590	0.00E+00	0.00E+00	
4/27/00	527	0.00E+00	0.00E+00	
4/28/00	552	0.00E+00	0.00E+00	
4/29/00	420	0.00E+00	0.00E+00	
	3163	4.88E-16	2.75E-13	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A-9 NUREG-1400

Time Weighted Weekly Effluent Concentration (West) = 8.69E-17 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 2.17%

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #5 5/1/00-5/5/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/1/00	475	0.00E+00	0.00E+00	
5/2/00	654	0.00E+00	0.00E+00	
5/3/00	574	0.00E+00	0.00E+00	
5/4/00	583	0.00E+00	0.00E+00	
5/5/00	614	0.00E+00	0.00E+00	
5/6/00	0	0.00E+00	0.00E+00	no work on Saturday
	2900	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/1/00	494	0.00E+00	0.00E+00	
5/2/00	663	0.00E+00	0.00E+00	
5/3/00	579	0.00E+00	0.00E+00	
5/4/00	471	3.76E-15	1.77E-12	
5/5/00	597	0.00E+00	0.00E+00	
5/6/00	0	0.00E+00	0.00E+00	no work on Saturday
	2804	3.76E-15	1.77E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 6.32E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 15.79%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/1/00	502	1.34E-15	6.73E-13	
5/2/00	680	0.00E+00	0.00E+00	
5/3/00	583	6.37E-16	3.71E-13	
5/4/00	640	0.00E+00	0.00E+00	
5/5/00	592	0.00E+00	0.00E+00	
5/6/00	0	0.00E+00	0.00E+00	no work on Saturday
	2997	1.98E-15	1.04E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 3.48E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 8.71%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/1/00	475	0 00E+00	0 00E+00	
5/2/00	656	0 00E+00	0 00E+00	
5/3/00	573	0 00E+00	0 00E+00	
5/4/00	589	1 01E-15	5 95E-13	
5/5/00	617	0 00E+00	0 00E+00	
5/6/00	0	0 00E+00	0 00E+00	no work on Saturday
	2910	1 01E-15	5 95E-13	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly	
Effluent Concentration (West) =	**2.04E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*5.11%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #6 5/8/00-5/12/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/8/00	786	2.26E-15	1.78E-12	
5/9/00	444	0.00E+00	0.00E+00	
5/10/00	592	0.00E+00	0.00E+00	
5/11/00	598	2.48E-15	1.48E-12	
5/12/00	545	0.00E+00	0.00E+00	
5/13/00	0	0.00E+00	0.00E+00	no work on Saturday
	2965	4.74E-15	3.26E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (North) = 1.10E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 27.48%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/8/00	780	0.00E+00	0.00E+00	
5/9/00	453	1.96E-15	8.88E-13	
5/10/00	607	0.00E+00	0.00E+00	
5/11/00	591	1.33E-15	7.86E-13	
5/12/00	551	0.00E+00	0.00E+00	
5/13/00	0	0.00E+00	0.00E+00	no work on Saturday
	2982	3.29E-15	1.67E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (South) = 5.61E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 14.03%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/8/00	729	1.11E-15	8.09E-13	
5/9/00	449	0.00E+00	0.00E+00	
5/10/00	600	0.00E+00	0.00E+00	
5/11/00	590	0.00E+00	0.00E+00	
5/12/00	547	7.85E-16	4.29E-13	
5/13/00	0	0.00E+00	0.00E+00	no work on Saturday
	2915	1.90E-15	1.24E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (East) = 4.25E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 10.62%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/8/00	791	1 16E-15	9 18E-13	
5/9/00	445	0 00E+00	0 00E+00	
5/10/00	597	0 00E+00	0 00E+00	
5/11/00	597	0 00E+00	0 00E+00	
5/12/00	548	0 00E+00	0 00E+00	
5/13/00	0	0 00E+00	0 00E+00	no work on Saturday
	2978	1 16E-15	9 18E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 3.08E-16 uCi/ml

Percentage of Release Limit of = 7.70%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL ***(Revised 6/7/00- Date Correction)**

North Monitor **Week #7 5/15/00-5/19/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/15/00	450	0.00E+00	0.00E+00	
5/16/00	632	0.00E+00	0.00E+00	
5/17/00	678	0.00E+00	0.00E+00	
5/18/00	555	0.00E+00	0.00E+00	
5/19/00	575	0.00E+00	0.00E+00	
5/20/00	0	0.00E+00	0.00E+00	no work on Saturday
	2890	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/15/00	461	0.00E+00	0.00E+00	
5/16/00	627	0.00E+00	0.00E+00	
5/17/00	633	1.32E-15	8.36E-13	
5/18/00	541	3.54E-15	1.92E-12	
5/19/00	578	0.00E+00	0.00E+00	
5/20/00	0	0.00E+00	0.00E+00	no work on Saturday
	2840	4.86E-15	2.75E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 9.69E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 24.21%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/15/00	458	0.00E+00	0.00E+00	
5/16/00	633	5.71E-16	3.61E-13	
5/17/00	623	0.00E+00	0.00E+00	
5/18/00	562	1.93E-15	1.08E-12	
5/19/00	573	1.14E-15	6.53E-13	
5/20/00	0	0.00E+00	0.00E+00	no work on Saturday
	2849	3.64E-15	2.10E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 7.37E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 18.42%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/15/00	450	0 00E+00	0 00E+00	
5/16/00	639	2 81E-15	1 80E-12	
5/17/00	642	4 86E-16	3 12E-13	
5/18/00	558	5 13E-16	2 86E-13	
5/19/00	581	0 00E+00	0 00E+00	
5/20/00	0	0 00E+00	0 00E+00	no work on Saturday
	2870	3 81E-15	2 39E-12	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**8.34E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*20.85%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL ***(Revised 6/7/00- Date Correction)**

North Monitor **Week #8 5/22/00-5/26/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/22/00	573	0.00E+00	0.00E+00	
5/23/00	575	0.00E+00	0.00E+00	
5/24/00	685	9.33E-16	6.39E-13	
5/25/00	690	0.00E+00	0.00E+00	
5/26/00	516	0.00E+00	0.00E+00	
5/27/00	0	0.00E+00	0.00E+00	no work on Saturday
	3039	9.33E-16	6.39E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 2.10E-16 uCi/ml

Percentage of Release Limit of = 5.26%

4E-15uCi/ml

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/22/00	574	0.00E+00	0.00E+00	
5/23/00	610	1.61E-15	9.82E-13	
5/24/00	676	0.00E+00	0.00E+00	
5/25/00	698	0.00E+00	0.00E+00	
5/26/00	522	0.00E+00	0.00E+00	
5/27/00	0	0.00E+00	0.00E+00	no work on Saturday
	3080	1.61E-15	9.82E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 3.19E-16 uCi/ml

Percentage of Release Limit of = 7.97%

4E-15uCi/ml

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/22/00	567	0.00E+00	0.00E+00	
5/23/00	603	2.36E-15	1.42E-12	
5/24/00	677	0.00E+00	0.00E+00	
5/25/00	698	5.79E-16	4.04E-13	
5/26/00	519	1.39E-15	7.21E-13	
5/27/00	0	0.00E+00	0.00E+00	no work on Saturday
	3064	4.33E-15	2.55E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 8.32E-16 uCi/ml

Percentage of Release Limit of = 20.79%

4E-15uCi/ml

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/22/00	588	0 00E+00	0 00E+00	
5/23/00	580	0 00E+00	0 00E+00	
5/24/00	692	4 41E-16	3 05E-13	
5/25/00	694	2 14E-15	1 49E-12	
5/26/00	526	0 00E+00	0 00E+00	
5/27/00	0	0 00E+00	0 00E+00	no work on Saturday
	3080	2 58E-15	1 79E-12	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**5.81E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*14.53%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #9 5/30/00-6/2/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/29/00	0	0.00E+00	0.00E+00	Memorial Day - No Work
5/30/00	560	0.00E+00	0.00E+00	
5/31/00	493	2.09E-15	1.03E-12	
6/1/00	472	3.64E-15	1.72E-12	
6/2/00	613	0.00E+00	0.00E+00	
6/3/00	0	0.00E+00	0.00E+00	no work on Saturday
	2138	5.73E-15	2.75E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.29E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 32.14%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/29/00	0	0.00E+00	0.00E+00	Memorial Day - No Work
5/30/00	558	6.48E-16	3.62E-13	
5/31/00	498	0.00E+00	0.00E+00	
6/1/00	480	6.36E-16	3.05E-13	
6/2/00	602	1.90E-15	1.14E-12	
6/3/00	0	0.00E+00	0.00E+00	no work on Saturday
	2138	3.18E-15	1.81E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 8.47E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 21.17%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/29/00	0	0.00E+00	0.00E+00	Memorial Day - No Work
5/30/00	572	0.00E+00	0.00E+00	
5/31/00	497	0.00E+00	0.00E+00	
6/1/00	479	2.15E-15	1.03E-12	
6/2/00	594	5.78E-16	3.43E-13	
6/3/00	0	0.00E+00	0.00E+00	no work on Saturday
	2142	2.73E-15	1.37E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 6.41E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 16.03%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
5/29/00	0	0.00E+00	0.00E+00	Memorial Day - No Work
5/30/00	558	5.35E-16	2.99E-13	
5/31/00	296	0.00E+00	0.00E+00	
6/1/00	476	5.55E-16	2.64E-13	
6/2/00	585	0.00E+00	0.00E+00	
6/3/00	0	0.00E+00	0.00E+00	no work on Saturday
	1915	1.09E-15	5.63E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 2.94E-16 uCi/ml

Percentage of Release Limit of = 7.35%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #10 6/5/00-6/9/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/5/00	190	0.00E+00	0.00E+00	
6/6/00	779	0.00E+00	0.00E+00	
6/7/00	578	6.79E-16	3.92E-13	
6/8/00	493	1.43E-15	7.05E-13	
6/9/00	524	1.50E-15	7.86E-13	
6/10/00	0	0.00E+00	0.00E+00	no work on Saturday
	2564	3.61E-15	1.88E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 7.35E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 18.36%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/5/00	171	3.21E-15	5.49E-13	
6/6/00	778	1.14E-15	8.87E-13	
6/7/00	592	0.00E+00	0.00E+00	
6/8/00	559	0.00E+00	0.00E+00	
6/9/00	517	8.05E-16	4.16E-13	
6/10/00	0	0.00E+00	0.00E+00	no work on Saturday
	2617	5.16E-15	1.85E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 7.08E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 17.69%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/5/00	166	0.00E+00	0.00E+00	
6/6/00	778	0.00E+00	0.00E+00	
6/7/00	*585*	*0.00E+00*	*0.00E+00*	
6/8/00	559	0.00E+00	0.00E+00	
6/9/00	509	0.00E+00	0.00E+00	
6/10/00	0	0.00E+00	0.00E+00	no work on Saturday
	2597	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/5/00	444	0 00E+00	0 00E+00	
6/6/00	757	0 00E+00	0 00E+00	
6/7/00	576	0 00E+00	0 00E+00	
6/8/00	433	1 63E-15	7 06E-13	
6/9/00	492	0 00E+00	0 00E+00	
6/10/00	0	0 00E+00	0 00E+00	no work on Saturday
	2702	1 63E-15	7 06E-13	

$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**2.61E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	6.53%

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #11 6/12/00-6/16/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/12/00	480	0.00E+00	0.00E+00	
6/13/00	601	2.77E-15	1.66E-12	
6/14/00	411	0.00E+00	0.00E+00	
6/15/00	0	0.00E+00	0.00E+00	pump not working today
6/16/00	422	0.00E+00	0.00E+00	
6/17/00	0	0.00E+00	0.00E+00	no work on Saturday
	1914	2.77E-15	1.66E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 8.70E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 21.74%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/12/00	490	0.00E+00	0.00E+00	
6/13/00	589	0.00E+00	0.00E+00	
6/14/00	418	3.18E-15	1.33E-12	
6/15/00	*385*	*0.00E+00*	*0.00E+00*	
6/16/00	423	1.44E-15	6.09E-13	
6/17/00	0	0.00E+00	0.00E+00	no work on Saturday
	2305	4.62E-15	1.94E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 8.41E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 21.02%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/12/00	280	2.04E-15	5.71E-13	
6/13/00	0	0.00E+00	0.00E+00	extension cord cut - no sample
6/14/00	418	1.88E-15	7.86E-13	
6/15/00	378	0.00E+00	0.00E+00	
6/16/00	426	6.72E-16	2.86E-13	
6/17/00	0	0.00E+00	0.00E+00	no work on Saturday
	1502	4.59E-15	1.64E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 1.09E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 27.35%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/12/00	490	0 00E+00	0 00E+00	
6/13/00	602	0 00E+00	0 00E+00	
6/14/00	419	0 00E+00	0 00E+00	
6/15/00	381	0 00E+00	0 00E+00	
6/16/00	437	0 00E+00	0 00E+00	
6/17/00	0	0 00E+00	0 00E+00	no work on Saturday
	2329	0 00E+00	0 00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #12 6/19/00-6/23/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/19/00	0	0.00E+00	0.00E+00	pump broken / replaced 6/22/00
6/20/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/21/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/22/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/23/00	0	0.00E+00	0.00E+00	no work on Friday
6/24/00	0	0.00E+00	0.00E+00	no work on Saturday
	0	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/19/00	422	0.00E+00	0.00E+00	
6/20/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/21/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/22/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/23/00	0	0.00E+00	0.00E+00	no work on Friday
6/24/00	0	0.00E+00	0.00E+00	no work on Saturday
	422	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/19/00	420	0.00E+00	0.00E+00	
6/20/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/21/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/22/00	0	0.00E+00	0.00E+00	not sampled - no excavating
6/23/00	0	0.00E+00	0.00E+00	no work on Friday
6/24/00	0	0.00E+00	0.00E+00	no work on Saturday
	420	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/19/00	428	0 00E+00	0 00E+00	
6/20/00	0	0 00E+00	0 00E+00	not sampled - no excavating
6/21/00	0	0 00E+00	0 00E+00	not sampled - no excavating
6/22/00	0	0 00E+00	0 00E+00	not sampled - no excavating
6/23/00	0	0 00E+00	0 00E+00	no work on Friday
6/24/00	0	0 00E+00	0 00E+00	no work on Saturday
	428	0 00E+00	0 00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = **0.00E+00 uCi/ml**

Percentage of Release Limit of = *0.00%*
4E-15uCi/ml

Note: Only one day of sample collection took place this week because of the concrete truck drivers strike No caisson drilling or excavating took place on 6/20,6/21,6/22, or 6/23

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #13 6/26/00-6/30/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/26/00	476	1.05E-15	5.00E-13	
6/27/00	485	0.00E+00	0.00E+00	
6/28/00	506	2.51E-15	1.27E-12	
6/29/00	550	1.82E-15	1.00E-12	
6/30/00	581	1.48E-15	8.60E-13	
7/1/00	0	0.00E+00	0.00E+00	no work on Saturday
	2598	6.86E-15	3.63E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.40E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 34.94%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/26/00	492	0.00E+00	0.00E+00	
6/27/00	485	1.72E-15	8.34E-13	
6/28/00	516	0.00E+00	0.00E+00	
6/29/00	554	0.00E+00	0.00E+00	
6/30/00	554	1.15E-15	6.37E-13	
7/1/00	0	0.00E+00	0.00E+00	no work on Saturday
	2601	2.87E-15	1.47E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 5.66E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 14.14%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/26/00	478	0.00E+00	0.00E+00	
6/27/00	485	0.00E+00	0.00E+00	
6/28/00	510	0.00E+00	0.00E+00	
6/29/00	551	0.00E+00	0.00E+00	
6/30/00	568	0.00E+00	0.00E+00	
7/1/00	0	0.00E+00	0.00E+00	no work on Saturday
	2592	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
6/26/00	480	0 00E+00	0 00E+00	
6/27/00	489	5 20E-16	2 54E-13	
6/28/00	510	4 90E-16	2 50E-13	
6/29/00	560	5 11E-16	2 86E-13	
6/30/00	573	0 00E+00	0 00E+00	
7/1/00	0	0 00E+00	0 00E+00	no work on Saturday
	2612	1 52E-15	7 90E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**3.03E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*7.56%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #14 7/3/00-7/7/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/3/00	388	0.00E+00	0.00E+00	
7/4/00	0	0.00E+00	0.00E+00	no work - 4th of July
7/5/00	515	2.30E-15	1.18E-12	
7/6/00	306	0.00E+00	0.00E+00	
7/7/00	502	0.00E+00	0.00E+00	
7/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1711	2.30E-15	1.18E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 6.92E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 17.31%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/3/00	0	0.00E+00	0.00E+00	see comments
7/4/00	0	0.00E+00	0.00E+00	no work - 4th of July
7/5/00	0	0.00E+00	0.00E+00	see comments
7/6/00	0	0.00E+00	0.00E+00	see comments
7/7/00	0	0.00E+00	0.00E+00	see comments
7/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	0	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/3/00	378	9.57E-16	3.62E-13	
7/4/00	0	0.00E+00	0.00E+00	no work - 4th of July
7/5/00	504	0.00E+00	0.00E+00	
7/6/00	302	0.00E+00	0.00E+00	
7/7/00	502	0.00E+00	0.00E+00	
7/8/00	0	0.00E+00	0.00E+00	no work on Saturday
	1686	9.57E-16	3.62E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 2.15E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 5.36%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/3/00	382	0 00E+00	0 00E+00	
7/4/00	0	0 00E+00	0 00E+00	no work - 4th of July
7/5/00	517	6 04E-16	3 12E-13	
7/6/00	304	0 00E+00	0 00E+00	
7/7/00	504	1 11E-15	5 59E-13	
7/8/00	0	0 00E+00	0 00E+00	no work on Saturday
	1707	1 71E-15	8 72E-13	

$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) = 5.11E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 12.77%

Comments: The South High Volume pump was found to be non-operational on Monday 7/3/00. A new pump could not be ordered until Wednesday July 5, due to the 4th of July holiday. The replacement pump was received on Thursday July 6, but still needed calibration. This was performed on Friday July 7. The pump was placed into service on Monday July 10. We now have a spare pump so there should not be any lapses in air sampling in the future. GAH

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #15 7/10/00-7/14/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/10/00	0	0.00E+00	0.00E+00	no work - rain
7/11/00	527	0.00E+00	0.00E+00	
7/12/00	526	4.93E-16	2.59E-13	
7/13/00	618	0.00E+00	0.00E+00	
7/14/00	470	0.00E+00	0.00E+00	
7/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2141	4.93E-16	2.59E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.21E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 3.03%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/10/00	0	0.00E+00	0.00E+00	no work - rain
7/11/00	514	2.67E-15	1.37E-12	
7/12/00	519	0.00E+00	0.00E+00	
7/13/00	610	0.00E+00	0.00E+00	
7/14/00	455	8.39E-16	3.82E-13	
7/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2098	3.51E-15	1.75E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 8.36E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 20.90%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/10/00	0	0.00E+00	0.00E+00	no work - rain
7/11/00	522	0.00E+00	0.00E+00	
7/12/00	519	0.00E+00	0.00E+00	
7/13/00	600	0.00E+00	0.00E+00	
7/14/00	465	1.91E-15	8.88E-13	
7/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2106	1.91E-15	8.88E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 4.22E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 10.54%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/10/00	0	0.00E+00	0.00E+00	no work - rain
7/11/00	530	0.00E+00	0.00E+00	
7/12/00	509	0.00E+00	0.00E+00	
7/13/00	592	0.00E+00	0.00E+00	
7/14/00	453	0.00E+00	0.00E+00	
7/15/00	0	0.00E+00	0.00E+00	no work on Saturday
	2084	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%

4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #16 7/17/00-7/21/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/17/00	602	1.04E-15	6.26E-13	
7/18/00	538	0.00E+00	0.00E+00	
7/19/00	514	7.43E-16	3.82E-13	
7/20/00	531	1.36E-15	7.22E-13	
7/21/00	491	1.60E-15	7.86E-13	
7/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	2676	4.74E-15	2.52E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 9.40E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 23.50%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/17/00	614	0.00E+00	0.00E+00	
7/18/00	525	0.00E+00	0.00E+00	
7/19/00	505	0.00E+00	0.00E+00	
7/20/00	544	0.00E+00	0.00E+00	
7/21/00	485	1.45E-15	7.03E-13	
7/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	2673	1.45E-15	7.03E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 2.63E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 6.58%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/17/00	229	1.82E-15	4.17E-13	
7/18/00	524	1.54E-15	8.07E-13	
7/19/00	500	0.00E+00	0.00E+00	
7/20/00	545	0.00E+00	0.00E+00	
7/21/00	494	0.00E+00	0.00E+00	
7/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	2292	3.36E-15	1.22E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 5.34E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 13.35%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/17/00	590	0.00E+00	0.00E+00	
7/18/00	526	0.00E+00	0.00E+00	
7/19/00	514	0.00E+00	0.00E+00	
7/20/00	531	0.00E+00	0.00E+00	
7/21/00	484	0.00E+00	0.00E+00	
7/22/00	0	0.00E+00	0.00E+00	no work on Saturday
	2645	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**0.00E+00 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*0.00%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #17 7/24/00-7/28/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/24/00	520	2.03E-15	1.06E-12	
7/25/00	519	2.52E-15	1.31E-12	
7/26/00	495	0.00E+00	0.00E+00	
7/27/00	466	3.99E-15	1.86E-12	
7/28/00	493	0.00E+00	0.00E+00	
7/29/00	0	0.00E+00	0.00E+00	no work on Saturday
	2493	8.54E-15	4.22E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.69E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 42.35%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/24/00	522	0.00E+00	0.00E+00	
7/25/00	508	0.00E+00	0.00E+00	
7/26/00	495	0.00E+00	0.00E+00	
7/27/00	477	8.23E-16	3.93E-13	
7/28/00	492	0.00E+00	0.00E+00	
7/29/00	0	0.00E+00	0.00E+00	no work on Saturday
	2494	8.23E-16	3.93E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 1.57E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 3.94%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/24/00	519	1.06E-15	5.50E-13	
7/25/00	475	0.00E+00	0.00E+00	
7/26/00	499	0.00E+00	0.00E+00	
7/27/00	484	0.00E+00	0.00E+00	
7/28/00	493	3.19E-15	1.57E-12	
7/29/00	0	0.00E+00	0.00E+00	no work on Saturday
	2470	4.25E-15	2.12E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 8.59E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 21.49%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/24/00	508	0 00E+00	0 00E+00	
7/25/00	515	1 95E-15	1 00E-12	
7/26/00	493	0 00E+00	0 00E+00	
7/27/00	466	0 00E+00	0 00E+00	
7/28/00	487	0 00E+00	0 00E+00	
7/29/00	0	0 00E+00	0 00E+00	no work on Saturday
	2469	1 95E-15	1 00E-12	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 4.07E-16 uCi/ml

Percentage of Release Limit of = 10.17%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #18 7/31/00-8/4/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/31/00	0	0.00E+00	0.00E+00	no work - rain
8/1/00	465	3.19E-15	1.48E-12	
8/2/00	461	0.00E+00	0.00E+00	
8/3/00	518	1.85E-15	9.58E-13	
8/4/00	521	0.00E+00	0.00E+00	
8/5/00	0	0.00E+00	0.00E+00	no work on Saturday
	1965	5.04E-15	2.44E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (North) = 1.24E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 31.06%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/31/00	0	0.00E+00	0.00E+00	no work - rain
8/1/00	455	0.00E+00	0.00E+00	
8/2/00	461	0.00E+00	0.00E+00	
8/3/00	517	0.00E+00	0.00E+00	
8/4/00	532	6.80E-16	3.62E-13	
8/5/00	0	0.00E+00	0.00E+00	no work on Saturday
	1965	6.80E-16	3.62E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (South) = 1.84E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 4.60%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/31/00	0	0.00E+00	0.00E+00	no work - rain
8/1/00	449	0.00E+00	0.00E+00	
8/2/00	461	0.00E+00	0.00E+00	
8/3/00	517	3.99E-15	2.06E-12	
8/4/00	523	0.00E+00	0.00E+00	
8/5/00	0	0.00E+00	0.00E+00	no work on Saturday
	1950	3.99E-15	2.06E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (East) = 1.06E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 26.45%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
7/31/00	0	0 00E+00	0 00E+00	no work - rain
8/1/00	461	7 84E-16	3 61E-13	
8/2/00	456	3 50E-15	1 60E-12	
8/3/00	518	1 99E-15	1 03E-12	
8/4/00	522	0 00E+00	0 00E+00	
8/5/00	0	0 00E+00	0 00E+00	no work on Saturday
	1957	6 27E-15	2 99E-12	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 1.53E-15 uCi/ml

Percentage of Release Limit of = 38.17%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #19 8/7/00-8/11/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/7/00	596	1.40E-15	8.34E-13	
8/8/00	526	2.38E-15	1.25E-12	
8/9/00	449	0.00E+00	0.00E+00	
8/10/00	555	0.00E+00	0.00E+00	
8/11/00	507	0.00E+00	0.00E+00	
8/12/00	0	0.00E+00	0.00E+00	no work on Saturday
	2633	3.78E-15	2.09E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (North) = 7.92E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 19.81%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/7/00	603	0.00E+00	0.00E+00	
8/8/00	529	0.00E+00	0.00E+00	
8/9/00	551	7.13E-16	3.93E-13	
8/10/00	488	2.41E-15	1.18E-12	
8/11/00	504	0.00E+00	0.00E+00	
8/12/00	0	0.00E+00	0.00E+00	no work on Saturday
	2675	3.12E-15	1.57E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (South) = 5.87E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 14.66%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/7/00	583	6.73E-16	3.92E-13	
8/8/00	514	0.00E+00	0.00E+00	
8/9/00	537	0.00E+00	0.00E+00	
8/10/00	553	7.53E-16	4.16E-13	
8/11/00	509	2.31E-15	1.18E-12	
8/12/00	0	0.00E+00	0.00E+00	no work on Saturday
	2696	3.74E-15	1.98E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (East) = 7.36E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 18.40%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/7/00	597	0.00E+00	0.00E+00	
8/8/00	538	0.00E+00	0.00E+00	
8/9/00	423	0.00E+00	0.00E+00	
8/10/00	554	0.00E+00	0.00E+00	
8/11/00	55	0.00E+00	0.00E+00	
8/12/00	0	0.00E+00	0.00E+00	no work on Saturday
	2167	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #20 8/14/00-8/18/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/14/00	447	0.00E+00	0.00E+00	
8/15/00	483	3.08E-15	1.49E-12	
8/16/00	497	1.54E-15	7.65E-13	
8/17/00	402	1.71E-15	6.87E-13	
8/18/00	488	0.00E+00	0.00E+00	
8/19/00	0	0.00E+00	0.00E+00	no work on Saturday
	2317	6.33E-15	2.94E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.27E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 31.73%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/14/00	500	3.14E-15	1.57E-12	
8/15/00	459	0.00E+00	0.00E+00	
8/16/00	485	0.00E+00	0.00E+00	
8/17/00	402	0.00E+00	0.00E+00	
8/18/00	446	0.00E+00	0.00E+00	
8/19/00	0	0.00E+00	0.00E+00	no work on Saturday
	2292	3.14E-15	1.57E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 6.85E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 17.12%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/14/00	502	1.56E-15	7.83E-13	
8/15/00	430	7.99E-16	3.44E-13	
8/16/00	468	2.05E-15	9.59E-13	
8/17/00	400	0.00E+00	0.00E+00	
8/18/00	437	0.00E+00	0.00E+00	
8/19/00	0	0.00E+00	0.00E+00	no work on Saturday
	2237	4.41E-15	2.09E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 9.33E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 23.31%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/14/00	0	0.00E+00	0.00E+00	not used - brushes being changed
8/15/00	476	0.00E+00	0.00E+00	
8/16/00	491	0.00E+00	0.00E+00	
8/17/00	396	0.00E+00	0.00E+00	
8/18/00	0	0.00E+00	0.00E+00	not used - new pump not working
8/19/00	0	0.00E+00	0.00E+00	no work on Saturday
	1363	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly	
Effluent Concentration (West) =	**0.00E+00 uCi/ml**
Percentage of Release Limit of =	*0.00%*
4E-15uCi/ml	

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #21 8/21/00-8/25/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/21/00	486	1.35E-15	6.56E-13	
8/22/00	481	0.00E+00	0.00E+00	
8/23/00	487	6.41E-16	3.12E-13	
8/24/00	566	1.82E-15	1.03E-12	
8/25/00	531	2.25E-15	1.19E-12	
8/26/00	0	0.00E+00	0.00E+00	no work on Saturday
	2551	6.06E-15	3.19E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.25E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 31.29%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/21/00	487	0.00E+00	0.00E+00	
8/22/00	489	0.00E+00	0.00E+00	
8/23/00	482	0.00E+00	0.00E+00	
8/24/00	639	0.00E+00	0.00E+00	
8/25/00	515	0.00E+00	0.00E+00	
8/26/00	0	0.00E+00	0.00E+00	no work on Saturday
	2612	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/21/00	467	2.32E-15	1.08E-12	
8/22/00	494	0.00E+00	0.00E+00	
8/23/00	492	1.86E-15	9.15E-13	
8/24/00	630	4.85E-16	3.06E-13	
8/25/00	529	1.37E-15	7.25E-13	
8/26/00	0	0.00E+00	0.00E+00	no work on Saturday
	2612	6.04E-15	3.03E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 1.16E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 28.99%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/21/00	460	0 00E+00	0 00E+00	
8/22/00	474	5 92E-16	2 81E-13	
8/23/00	480	0 00E+00	0 00E+00	
8/24/00	564	0 00E+00	0 00E+00	
8/25/00	531	0 00E+00	0 00E+00	
8/26/00	0	0 00E+00	0 00E+00	no work on Saturday
	2509	5 92E-16	2 81E-13	

$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 1.12E-16 uCi/ml

Percentage of Release Limit of = 2.80%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #22 8/28/00-9/1/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/28/00	472	0.00E+00	0.00E+00	
8/29/00	521	0.00E+00	0.00E+00	
8/30/00	561	0.00E+00	0.00E+00	
8/31/00	520	6.95E-16	3.61E-13	
9/1/00	469	0.00E+00	0.00E+00	
9/2/00	0	0.00E+00	0.00E+00	no work on Saturday
	2543	6.95E-16	3.61E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.42E-16 uCi/ml

Percentage of Release Limit of = 3.55%

4E-15uCi/ml

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/28/00	467	0.00E+00	0.00E+00	
8/29/00	524	5.96E-16	3.12E-13	
8/30/00	561	0.00E+00	0.00E+00	
8/31/00	560	0.00E+00	0.00E+00	
9/1/00	454	0.00E+00	0.00E+00	
9/2/00	0	0.00E+00	0.00E+00	no work on Saturday
	2566	5.96E-16	3.12E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 1.22E-16 uCi/ml

Percentage of Release Limit of = 3.04%

4E-15uCi/ml

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/28/00	470	2.66E-15	1.25E-12	
8/29/00	503	0.00E+00	0.00E+00	
8/30/00	568	0.00E+00	0.00E+00	
8/31/00	569	1.91E-15	1.09E-12	
9/1/00	465	0.00E+00	0.00E+00	
9/2/00	0	0.00E+00	0.00E+00	no work on Saturday
	2575	4.57E-15	2.34E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 9.08E-16 uCi/ml

Percentage of Release Limit of = 22.69%

4E-15uCi/ml

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
8/28/00	440	0 00E+00	0 00E+00	
8/29/00	516	0 00E+00	0 00E+00	
8/30/00	563	0 00E+00	0 00E+00	
8/31/00	518	0 00E+00	0 00E+00	
9/1/00	456	7 01E-16	3 20E-13	
9/2/00	0	0 00E+00	0 00E+00	no work on Saturday
	2493	7 01E-16	3 20E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**1.28E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*3.21%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #23 9/4/00-9/8/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/4/00	0	0.00E+00	0.00E+00	no work on Labor Day
9/5/00	0	0.00E+00	0.00E+00	sample not located *see daily sheet
9/6/00	482	1.58E-15	7.62E-13	
9/7/00	476	8.75E-16	4.17E-13	
9/8/00	476	6.71E-16	3.19E-13	
9/9/00	0	0.00E+00	0.00E+00	no work on Saturday
	1434	3.13E-15	1.50E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.04E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 26.11%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/4/00	0	0.00E+00	0.00E+00	no work on Labor Day
9/5/00	479	0.00E+00	0.00E+00	
9/6/00	475	0.00E+00	0.00E+00	
9/7/00	458	0.00E+00	0.00E+00	
9/8/00	462	1.57E-15	7.25E-13	
9/9/00	0	0.00E+00	0.00E+00	no work on Saturday
	1874	1.57E-15	7.25E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 3.87E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 9.68%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/4/00	0	0.00E+00	0.00E+00	no work on Labor Day
9/5/00	479	0.00E+00	0.00E+00	
9/6/00	473	0.00E+00	0.00E+00	
9/7/00	472	1.46E-15	6.89E-13	
9/8/00	483	1.46E-15	7.05E-13	
9/9/00	0	0.00E+00	0.00E+00	no work on Saturday
	1907	2.92E-15	1.39E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 7.31E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 18.28%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/4/00	0	0.00E+00	0.00E+00	no work on Labor Day
9/5/00	479	0.00E+00	0.00E+00	
9/6/00	477	0.00E+00	0.00E+00	
9/7/00	464	0.00E+00	0.00E+00	
9/8/00	471	0.00E+00	0.00E+00	
9/9/00	0	0.00E+00	0.00E+00	no work on Saturday
	1891	0.00E+00	0.00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly	
Effluent Concentration (West) =	**0.00E+00 uCi/ml**
Percentage of Release Limit of = 4E-15uCi/ml	*0.00%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #24 9/11/00-9/15/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/11/00	420	0.00E+00	0.00E+00	
9/12/00	464	1.69E-15	7.84E-13	
9/13/00	434	2.88E-15	1.25E-12	
9/14/00	0	0.00E+00	0.00E+00	no work on Thurs - rain
9/15/00	0	0.00E+00	0.00E+00	no excavation = no sampling on Fri
9/16/00	0	0.00E+00	0.00E+00	no work on Saturday
	1318	4.57E-15	2.03E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 1.54E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 38.58%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/11/00	435	1.19E-15	5.18E-13	
9/12/00	464	6.58E-16	3.05E-13	
9/13/00	460	3.62E-15	1.67E-12	
9/14/00	0	0.00E+00	0.00E+00	no work on Thurs - rain
9/15/00	0	0.00E+00	0.00E+00	no excavation = no sampling on Fri
9/16/00	0	0.00E+00	0.00E+00	no work on Saturday
	1359	5.47E-15	2.49E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 1.83E-15 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 45.77%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/11/00	409	0.00E+00	0.00E+00	
9/12/00	460	0.00E+00	0.00E+00	
9/13/00	464	0.00E+00	0.00E+00	
9/14/00	0	0.00E+00	0.00E+00	no work on Thurs - rain
9/15/00	0	0.00E+00	0.00E+00	no excavation = no sampling on Fri
9/16/00	0	0.00E+00	0.00E+00	no work on Saturday
	1333	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/11/00	420	0 00E+00	0 00E+00	
9/12/00	460	0 00E+00	0 00E+00	
9/13/00	431	0 00E+00	0 00E+00	
9/14/00	0	0 00E+00	0 00E+00	no work on Thurs - rain
9/15/00	0	0 00E+00	0 00E+00	no excavation = no sampling on Fri
9/16/00	0	0 00E+00	0 00E+00	no work on Saturday
	1311	0 00E+00	0 00E+00	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**0.00E+00 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*0.00%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #25 9/18/00-9/23/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/18/00	452	0.00E+00	0.00E+00	
9/19/00	456	1.51E-15	6.89E-13	
9/20/00	453	2.28E-15	1.03E-12	
9/21/00	448	0.00E+00	0.00E+00	
9/22/00	542	0.00E+00	0.00E+00	
9/23/00	421	2.28E-15	9.60E-13	
	2772	6.07E-15	2.68E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 9.67E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 24.18%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/18/00	450	2.84E-15	1.28E-12	
9/19/00	457	0.00E+00	0.00E+00	
9/20/00	472	0.00E+00	0.00E+00	
9/21/00	450	0.00E+00	0.00E+00	
9/22/00	535	0.00E+00	0.00E+00	
9/23/00	431	0.00E+00	0.00E+00	
	2795	2.84E-15	1.28E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 4.57E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 11.43%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/18/00	457	0.00E+00	0.00E+00	
9/19/00	462	6.92E-16	3.20E-13	
9/20/00	464	0.00E+00	0.00E+00	
9/21/00	535	6.42E-16	3.43E-13	
9/22/00	530	1.33E-15	7.05E-13	
9/23/00	437	0.00E+00	0.00E+00	
	2885	2.66E-15	1.37E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 4.74E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 11.86%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/18/00	430	0 00E+00	0 00E+00	
9/19/00	453	0 00E+00	0 00E+00	
9/20/00	456	0 00E+00	0 00E+00	
9/21/00	539	0 00E+00	0 00E+00	
9/22/00	531	0 00E+00	0 00E+00	
9/23/00	430	0 00E+00	0 00E+00	
	2839	0 00E+00	0 00E+00	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 0.00E+00 uCi/ml

Percentage of Release Limit of = 0.00%

4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #26 9/25/00-9/29/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/25/00	510	1.20E-15	6.12E-13	
9/26/00	447	0.00E+00	0.00E+00	
9/27/00	475	7.23E-16	3.43E-13	
9/28/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/29/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/30/00	0	0.00E+00	0.00E+00	no work on Saturday
	1432	1.92E-15	9.55E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 6.67E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 16.68%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/25/00	511	0.00E+00	0.00E+00	
9/26/00	460	0.00E+00	0.00E+00	
9/27/00	485	0.00E+00	0.00E+00	
9/28/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/29/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/30/00	0	0.00E+00	0.00E+00	no work on Saturday
	1456	0.00E+00	0.00E+00	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 0.00E+00 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 0.00%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/25/00	515	1.95E-15	1.00E-12	
9/26/00	425	0.00E+00	0.00E+00	
9/27/00	468	0.00E+00	0.00E+00	
9/28/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/29/00	0	0.00E+00	0.00E+00	no onsite excavation=none collected
9/30/00	0	0.00E+00	0.00E+00	no work on Saturday
	1408	1.95E-15	1.00E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 7.13E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 17.83%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
9/25/00	507	0 00E+00	0 00E+00	
9/26/00	447	0 00E+00	0 00E+00	
9/27/00	465	0 00E+00	0 00E+00	
9/28/00	0	0 00E+00	0 00E+00	no onsite excavation=none collected
9/29/00	0	0 00E+00	0 00E+00	no onsite excavation=none collected
9/30/00	0	0 00E+00	0 00E+00	no work on Saturday
	1419	0 00E+00	0 00E+00	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly	
Effluent Concentration (West) =	**0.00E+00 uCi/ml**
Percentage of Release Limit of = 4E-15uCi/ml	*0.00%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #27 10/2/00-10/7/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/2/00	475	2.17E-15	1.03E-12	
10/3/00	464	0.00E+00	0.00E+00	
10/4/00	445	0.00E+00	0.00E+00	
10/5/00	468	6.67E-16	3.12E-13	
10/6/00	476	6.87E-16	3.27E-13	
10/7/00	0	0.00E+00	0.00E+00	no work on Saturday
	2328	3.52E-15	1.67E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 7.17E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 17.93%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/2/00	474	0.00E+00	0.00E+00	
10/3/00	479	1.28E-15	6.13E-13	
10/4/00	446	0.00E+00	0.00E+00	
10/5/00	475	1.29E-15	6.13E-13	
10/6/00	480	0.00E+00	0.00E+00	
10/7/00	0	0.00E+00	0.00E+00	no work on Saturday
	2354	2.57E-15	1.23E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 5.21E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 13.02%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/2/00	473	1.35E-15	6.39E-13	
10/3/00	465	0.00E+00	0.00E+00	
10/4/00	451	3.05E-15	1.38E-12	
10/5/00	472	0.00E+00	0.00E+00	
10/6/00	471	0.00E+00	0.00E+00	
10/7/00	0	0.00E+00	0.00E+00	no work on Saturday
	2332	4.40E-15	2.01E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 8.64E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 21.59%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/2/00	465	6 29E-16	2 92E-13	
10/3/00	461	1 39E-15	6 41E-13	
10/4/00	444	0 00E+00	0 00E+00	
10/5/00	453	0 00E+00	0 00E+00	
10/6/00	473	0 00E+00	0 00E+00	
10/7/00	0	0 00E+00	0 00E+00	no work on Saturday
	2296	2 02E-15	9 33E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 4.06E-16 uCi/ml

Percentage of Release Limit of = 10 16%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #28 10/9/00-10/14/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/9/00	579	0.00E+00	0.00E+00	
10/10/00	475	0.00E+00	0.00E+00	
10/11/00	470	0.00E+00	0.00E+00	
10/12/00	480	1.64E-15	7.87E-13	
10/13/00	485	0.00E+00	0.00E+00	
10/14/00	440	0.00E+00	0.00E+00	
	2929	1.64E-15	7.87E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 2.69E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 6.72%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/9/00	584	0.00E+00	0.00E+00	
10/10/00	500	6.39E-16	3.20E-13	
10/11/00	472	0.00E+00	0.00E+00	
10/12/00	512	6.71E-16	3.44E-13	
10/13/00	533	0.00E+00	0.00E+00	
10/14/00	500	0.00E+00	0.00E+00	
	3101	1.31E-15	6.63E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 2.14E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 5.35%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/9/00	569	0.00E+00	0.00E+00	
10/10/00	456	0.00E+00	0.00E+00	
10/11/00	472	1.35E-15	6.37E-13	
10/12/00	481	0.00E+00	0.00E+00	
10/13/00	487	0.00E+00	0.00E+00	
10/14/00	445	0.00E+00	0.00E+00	
	2910	1.35E-15	6.37E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 2.19E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 5.47%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/9/00	573	5.33E-16	3.05E-13	
10/10/00	470	0.00E+00	0.00E+00	
10/11/00	459	0.00E+00	0.00E+00	
10/12/00	475	0.00E+00	0.00E+00	
10/13/00	477	7.20E-16	3.43E-13	
10/14/00	442	0.00E+00	0.00E+00	
	2896	1.25E-15	6.49E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly
Effluent Concentration (West) = 2.24E-16 uCi/ml

Percentage of Release Limit of = 5.60%
4E-15uCi/ml

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #29 10/16/00-10/21/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/16/00	543	0.00E+00	0.00E+00	
10/17/00	580	0.00E+00	0.00E+00	
10/18/00	485	0.00E+00	0.00E+00	
10/19/00	485	1.72E-15	8.34E-13	
10/20/00	482	2.44E-15	1.18E-12	
10/21/00	427	1.50E-15	6.41E-13	
	3002	5.66E-15	2.65E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 8.83E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 22.08%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/16/00	557	1.72E-15	9.58E-13	
10/17/00	606	0.00E+00	0.00E+00	
10/18/00	347	1.98E-15	6.87E-13	
10/19/00	477	1.52E-15	7.25E-13	
10/20/00	510	0.00E+00	0.00E+00	
10/21/00	445	0.00E+00	0.00E+00	
	2942	5.22E-15	2.37E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 8.06E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 20.14%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/16/00	525	0.00E+00	0.00E+00	
10/17/00	565	0.00E+00	0.00E+00	
10/18/00	472	0.00E+00	0.00E+00	
10/19/00	416	0.00E+00	0.00E+00	
10/20/00	504	0.00E+00	0.00E+00	
10/21/00	410	8.38E-16	3.44E-13	
	2892	8.38E-16	3.44E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 1.19E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 2.97%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/16/00	538	0 00E+00	0 00E+00	
10/17/00	582	4 72E-16	2 75E-13	
10/18/00	472	0 00E+00	0 00E+00	
10/19/00	472	0 00E+00	0 00E+00	
10/20/00	484	2 24E-15	1 08E-12	
10/21/00	413	2 32E-15	9 58E-13	
	2961	5 03E-15	2 32E-12	

$$C_{avg} = \frac{\Sigma T_s \cdot C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly Effluent Concentration (West) =	**7.83E-16 uCi/ml**
Percentage of Release Limit of 4E-15uCi/ml =	*19.56%*

Area Air Monitoring Summary Sheet - Weekly Effluent Concentration Report

Grand Pier Project, North Columbus Drive- Chicago, IL

North Monitor **Week #30 10/23/00-10/27/00 (High Volume)**

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/23/00	464	1.69E-15	7.84E-13	
10/24/00	493	7.96E-16	3.92E-13	
10/25/00	490	0.00E+00	0.00E+00	
10/26/00	466	0.00E+00	0.00E+00	
10/27/00	446	0.00E+00	0.00E+00	
10/28/00	0	0.00E+00	0.00E+00	no work on Saturday
	2359	2.49E-15	1.18E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (North) = 4.99E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 12.47%

South Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/23/00	502	7.20E-16	3.61E-13	
10/24/00	525	0.00E+00	0.00E+00	
10/25/00	511	0.00E+00	0.00E+00	
10/26/00	482	1.79E-15	8.63E-13	
10/27/00	483	0.00E+00	0.00E+00	
10/28/00	0	0.00E+00	0.00E+00	no work on Saturday
	2503	2.51E-15	1.22E-12	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (South) = 4.89E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 12.23%

East Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/23/00	461	0.00E+00	0.00E+00	
10/24/00	489	7.40E-16	3.62E-13	
10/25/00	489	0.00E+00	0.00E+00	
10/26/00	471	0.00E+00	0.00E+00	
10/27/00	458	0.00E+00	0.00E+00	
10/28/00	0	0.00E+00	0.00E+00	no work on Saturday
	2368	7.40E-16	3.62E-13	

$C_{avg} = \frac{\Sigma T_{s,i} C_i}{\Sigma T_s}$

Eq A.9 NUREG 1400

Time Weighted Weekly Effluent Concentration (East) = 1.53E-16 uCi/ml

Percentage of Release Limit of 4E-15uCi/ml = 3.82%

West Monitor

Date	Time Sampled (minutes)	Effluent Concentration in uCi/ml	Concentration x Sample Min / Day	Comments
10/23/00	456	0 00E+00	0 00E+00	
10/24/00	489	0 00E+00	0 00E+00	
10/25/00	487	0 00E+00	0 00E+00	
10/26/00	460	0 00E+00	0 00E+00	
10/27/00	452	1 35E-15	6 10E-13	
10/28/00	0	0 00E+00	0 00E+00	no work on Saturday
	2344	1 35E-15	6 10E-13	

$$C_{avg} = \frac{\Sigma T_s C_s}{\Sigma T_s}$$

Eq A 9 NUREG 1400

Time Weighted Weekly

Effluent Concentration (West) = 2.60E-16 uCi/ml

Percentage of Release Limit of = 6.51%

4E-15uCi/ml

AIR MONITORING

PERSONAL AIR MONITORS
DAY AFTER ANALYSIS

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
4/4/00	Glenn Huber	PM1000	458-474	3	270	810000	4/6/00	10	30	0.00	0.00E+00	
4/4/00	Roger Petty	PM1001	002-574	2.5	270	675000	4/6/00	16	30	0.00	0.00E+00	
4/5/00	Brett Barton	PM1002	458-474	3	440	1320000	4/6/00	24	30	0.00	0.00E+00	
4/5/00	Roger Petty	PM1003	002-574	2.5	443	1107500	4/6/00	9	30	0.00	0.00E+00	
4/5/00	Luis Medina	PM1004	002-675	2.5	55	137500	4/6/00	22	30	0.00	0.00E+00	
4/6/00	Brett Barton	PM1005	458-475	2.5	495	1237500	4/7/00	23	30	0.00	0.00E+00	
4/6/00	Roger Petty	PM1006	002-574	2.5	515	1287500	4/7/00	25	30	0.00	0.00E+00	
4/6/00	Luis Medina	PM1007	002-675	2.5	20	50000	4/7/00	18	30	0.00	0.00E+00	
4/7/00	Brett Barton	PM1008	458-475	2.5	240	600000	4/10/00	21	24	0.00	0.00E+00	
4/7/00	Roger Petty	PM1009	002-574	2.5	355	887500	4/10/00	24	24	0.00	0.00E+00	
4/7/00	Tristan Timm	PM1010	002-675	2.5	140	350000	4/10/00	19	24	0.00	0.00E+00	
4/10/00	Brett Barton	PM1011	458-475	2.5	555	1387500	4/11/00	17	22	0.00	0.00E+00	
4/10/00	Roger Petty	PM1012	002-574	2.5	580	1450000	4/11/00	14	22	0.00	0.00E+00	
4/10/00	Luis Medina	PM1013	002-675	2.5	75	187500	4/11/00	22	22	0.00	0.00E+00	
4/11/00	Joel Ahrweiler	PM1014	458-475	2.5	487	1217500	4/12/00	18	27	0.00	0.00E+00	
4/11/00	Roger Petty	PM1015	002-574	2.5	500	1250000	4/12/00	22	27	0.00	0.00E+00	
4/12/00	Roger Petty	PM1016	002-675	3	540	1620000	4/13/00	19	19	0.00	0.00E+00	
4/12/00	Joel Ahrweiler	PM1017	458-475	2.5	190	475000	4/13/00	18	19	0.00	0.00E+00	
4/12/00	Tristan Timm	PM1018	458-475	2.5	240	600000	4/13/00	19	19	0.00	0.00E+00	
4/13/00	Roger Petty	PM1019	002-574	2.5	523	1307500	4/14/00	18	18	0.00	0.00E+00	
4/13/00	Tristan Timm	PM1020	458-475	2.5	517	1292500	4/14/00	18	18	0.00	0.00E+00	
4/13/00	Brett Barton	PM1021	002-675	2.5	308	770000	4/14/00	15	18	0.00	0.00E+00	
4/14/00	Roger Petty	PM1022	002-675	2.5	530	1325000	4/17/00	16	18	0.00	0.00E+00	
4/14/00	Brett Barton	PM1023	002-574	2.5	300	750000	4/17/00	18	18	0.00	0.00E+00	
4/14/00	Tristan Timm	PM1024	458-475	2.5	510	1275000	4/17/00	16	18	0.00	0.00E+00	
4/17/00	Roger Petty	PM1025	002-675	2.5	580	1450000	4/18/00	26	17	0.30	5.92E-14	***
4/17/00	Tristan Timm	PM1026	458-475	2.5	450	1125000	4/18/00	17	17	0.00	0.00E+00	
4/17/00	Brett Barton	PM1027	002-574	2.5	425	1062500	4/18/00	15	17	0.00	0.00E+00	
4/18/00	Roger Petty	PM1028	002-574	2.5	600	1500000	4/19/00	16	17	0.00	0.00E+00	
4/18/00	Luis Medina	PM1029	002-675	2.5	100	250000	4/19/00	14	17	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
4/18/00	Brett Barton	PM1030	458-474	2.5	420	1050000	4/19/00	17	17	0.00	0.00E+00	
4/18/00	Tristan Timm	PM1031	458-475	2.5	420	1050000	4/19/00	17	17	0.00	0.00E+00	
4/19/00	Roger Petty	PM1032	002-675	2.5	245	612500	4/20/00	18	19	0.00	0.00E+00	
4/19/00	Luis Medina	PM1033	002-574	2.5	115	287500	4/20/00	18	19	0.00	0.00E+00	
4/19/00	Brett Barton	PM1034	458-474	2.5	330	825000	4/20/00	22	19	0.10	3.47E-14	***
4/19/00	Tristan Timm	PM1035	458-475	2.5	220	550000	4/20/00	14	19	0.00	0.00E+00	
4/24/00	Tristan Timm	PM1036	458-474	2.5	529	1322500	4/25/00	147	18	4.30	9.30E-13	***
4/24/00	Roger Petty	PM1037	002-675	2.5	562	1405000	4/25/00	77	18	1.97	4.00E-13	***
4/24/00	Joel Ahrweiler	PM1038	458-475	2.5	525	1312500	4/25/00	48	18	1.00	2.18E-13	***
4/25/00	Roger Petty	PM1039	002-574	2.5	545	1362500	4/26/00	26	16	0.33	7.00E-14	***
4/25/00	Tristan Timm	PM1040	458-474	2.5	555	1387500	4/26/00	66	16	1.67	3.44E-13	***
4/26/00	Luis Medina	PM1041	002-574	2.5	150	375000	4/27/00	14	17	0.00	0.00E+00	
4/26/00	Roger Petty	PM1042	002-675	2.5	563	1407500	4/27/00	16	17	0.00	0.00E+00	
4/26/00	Glenn Huber	PM1043	458-474	2.5	130	325000	4/27/00	17	17	0.00	0.00E+00	
4/26/00	Joel Ahrweiler	PM1044	458-474	2.5	285	712500	4/27/00	26	17	0.30	1.20E-13	***
4/26/00	Tristan Timm	PM1045	458-475	2.5	550	1375000	4/27/00	28	17	0.37	7.63E-14	***
4/27/00	Tristan Timm	PM1046	458-475	2.5	475	1187500	4/28/00	18	18	0.00	0.00E+00	
4/27/00	Brett Barton	PM1047	458-474	2.5	280	700000	4/28/00	18	18	0.00	0.00E+00	
4/27/00	Roger Petty	PM1048	002-675	2.5	439	1097500	4/28/00	16	18	0.00	0.00E+00	
4/27/00	Luis Medina	PM1049	002-574	2.5	235	587500	4/28/00	17	18	0.00	0.00E+00	
4/28/00	Tristan Timm	PM1050	458-475	2.5	525	1312500	4/29/00	14	17	0.00	0.00E+00	
4/28/00	Roger Petty	PM1051	002-574	2.5	538	1345000	4/29/00	17	17	0.00	0.00E+00	
4/28/00	Brett Barton	PM1052	458-474	2.5	300	750000	4/29/00	16	17	0.00	0.00E+00	
4/29/00	Brett Barton	PM1053	458-475	2.5	445	1112500	5/1/00	12	17	0.00	0.00E+00	
4/29/00	Tristan Timm	PM1054	458-474	2.5	330	825000	5/1/00	14	17	0.00	0.00E+00	
4/29/00	Roger Petty	PM1055	002-574	2.5	450	1125000	5/1/00	16	17	0.00	0.00E+00	
5/1/00	Tristan Timm	PM1056	458-475	2.5	375	937500	5/2/00	27	16	0.37	1.12E-13	***
5/1/00	Brett Barton	PM1057	458-474	2.5	480	1200000	5/2/00	25	16	0.30	7.15E-14	***
5/1/00	Roger Petty	PM1058	002-574	2.5	545	1362500	5/2/00	22	16	0.20	4.20E-14	***
5/2/00	Tristan Timm	PM1059	458-475	2.5	559	1397500	5/3/00	15	17	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
5/2/00	Roger Petty	PM1060	002-675	2.5	600	1500000	5/3/00	14	17	0.00	0.00E+00	
5/3/00	Brett Barton	PM1061	002-675	2.5	180	450000	5/4/00	16	18	0.00	0.00E+00	
5/3/00	Glenn Huber	PM1062	002-675	2.5	145	362500	5/4/00	18	18	0.00	0.00E+00	
5/3/00	Roger Petty	PM1063	002-574	2.5	600	1500000	5/4/00	24	18	0.20	3.81E-14	***
5/3/00	Tristan Timm	PM1064	458-475	2.5	590	1475000	5/4/00	23	18	0.17	3.23E-14	***
5/4/00	Brett Barton	PM1065	002-574	2.5	130	325000	5/5/00	16	19	0.00	0.00E+00	
5/4/00	Tristan Timm	PM1066	458-475	2.5	510	1275000	5/5/00	18	19	0.00	0.00E+00	
5/4/00	Roger Petty	PM1067	002-675	2.5	595	1487500	5/5/00	25	19	0.20	3.85E-14	***
5/4/00	Luis Medina	PM1068	002-574	2.5	545	1362500	5/5/00	18	19	0.00	0.00E+00	
5/4/00	Mark Placek	PM1069	458-475	2.5	130	325000	5/5/00	17	19	0.00	0.00E+00	
5/5/00	Luis Medina	PM1070	002-675	2.5	419	1047500	5/8/00	19	19	0.00	0.00E+00	
5/5/00	Brett Barton	PM1071	458-474	2.5	555	1387500	5/8/00	17	19	0.00	0.00E+00	
5/5/00	Tristan Timm	PM1072	458-475	2.5	405	1012500	5/8/00	18	19	0.00	0.00E+00	
5/5/00	Roger Petty	PM1073	002-574	2.5	605	1512500	5/8/00	23	19	0.13	2.52E-14	***
5/8/00	Tristan Timm	PM1074	458-475	2.5	540	1350000	5/9/00	73	17	1.87	3.95E-13	***
5/8/00	Brett Barton	PM1075	002-574	2.5	300	750000	5/9/00	24	17	0.23	8.90E-14	***
5/8/00	Roger Petty	PM1076	002-766	2.5	560	1400000	5/9/00	17	17	0.00	0.00E+00	
5/8/00	Luis Medina	PM1077	002-675	2.5	335	837500	5/9/00	20	17	0.10	3.41E-14	***
5/9/00	### No PAMS were worn because there was not any work performed in exclusion zones today (heavy rain) ###											
5/10/00	Brett Barton	PM1078	002-766	2.5	330	825000	5/11/00	16	16	0.00	0.00E+00	
5/10/00	Tristan Timm	PM1079	458-475	2.5	580	1450000	5/11/00	18	16	0.07	1.31E-14	***
5/10/00	Luis Medina	PM1080	458-474	2.5	432	1080000	5/11/00	15	16	0.00	0.00E+00	
5/10/00	Roger Petty	PM1081	002-574	2.5	577	1442500	5/11/00	14	16	0.00	0.00E+00	
5/10/00	Tom Layden	PM1082	002-675	2.5	215	537500	5/11/00	18	16	0.07	3.55E-14	***
5/10/00	Bob Senase	PM1083	002-766	2.5	215	537500	5/11/00	16	16	0.00	0.00E+00	
5/11/00	Roger Petty	PM1084	002-766	2.5	564	1410000	5/12/00	21	16	0.17	3.38E-14	***
5/11/00	Luis Medina	PM1085	002-675	2.5	558	1395000	5/12/00	15	16	0.00	0.00E+00	
5/11/00	Brett Barton	PM1086	002-574	2.5	555	1387500	5/12/00	16	16	0.00	0.00E+00	
5/11/00	Tristan Timm	PM1087	458-475	2.5	525	1312500	5/12/00	18	16	0.07	1.45E-14	***
5/12/00	Tristan Timm	PM1088	002-574	2.5	435	1087500	5/15/00	16	17	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
5/12/00	Roger Petty	PM1089	002-675	2.5	495	1237500	5/15/00	17	17	0.00	0.00E+00	
5/12/00	Brett Barton	PM1090	002-766	2.5	420	1050000	5/15/00	15	17	0.00	0.00E+00	
5/15/00	Tristan Timm	PM1091	458-475	2.5	535	1337500	5/16/00	20	17	0.10	2.14E-14	***
5/15/00	Roger Petty	PM1092	002-675	2.5	440	1100000	5/16/00	31	17	0.47	1.21E-13	***
5/15/00	Joel Ahrweiler	PM1093	002-766	2.5	505	1262500	5/16/00	17	17	0.00	0.00E+00	
5/16/00	Roger Petty	PM1094	002-675	2.5	507	1267500	5/17/00	41	19	0.73	1.65E-13	***
5/16/00	Tristan Timm	PM1095	002-574	2.5	505	1262500	5/17/00	28	19	0.30	6.80E-14	***
5/16/00	Joel Ahrweiler	PM1096	002-766	2.5	375	937500	5/17/00	27	19	0.27	6.14E-14	***
5/17/00	Joel Ahrweiler	PM1097	002-675	2.5	167	417500	5/18/00	16	16	0.00	0.00E+00	
5/17/00	Roger Petty	PM1098	002-766	2.5	532	1330000	5/18/00	35	16	0.63	1.36E-13	***
5/17/00	Tristan Timm	PM1099	458-475	2.5	528	1320000	5/18/00	15	16	0.00	0.00E+00	
5/18/00	Joel Ahrweiler	PM1100	458-475	2.5	60	150000	5/19/00	16	16	0.00	0.00E+00	
5/18/00	Tristan Timm	PM1101	002-574	2.5	533	1332500	5/19/00	15	16	0.00	0.00E+00	
5/18/00	Roger Petty	PM1102	002-766	2.5	500	1250000	5/19/00	19	16	0.10	2.29E-14	***
5/19/00	Joel Ahrweiler	PM1103	458-475	2.5	180	450000	5/22/00	15	17	0.00	0.00E+00	
5/19/00	Roger Petty	PM1104	002-675	2.5	498	1245000	5/22/00	16	17	0.00	0.00E+00	
5/19/00	Tristan Timm	PM1105	458-474	2.5	436	1090000	5/22/00	16	17	0.00	0.00E+00	
5/22/00	Tristan Timm	PM1106	458-474	2.5	576	1440000	5/23/00	23	16	0.23	4.63E-14	***
5/22/00	Brett Barton	PM1107	458-475	2.5	445	1112500	5/23/00	18	16	0.07	1.71E-14	***
5/22/00	Roger Petty	PM1108	002-675	2.5	583	1457500	5/23/00	34	16	0.60	1.18E-13	***
5/22/00	Bob Senase	PM1109	002-574	2.5	238	595000	5/23/00	15	16	0.00	0.00E+00	
5/23/00	Luis Medina	PM1110	002-675	2.5	75	187500	5/24/00	17	19	0.00	0.00E+00	
5/23/00	Brett Barton	PM1111	002-574	2.5	385	962500	5/24/00	24	19	0.17	4.95E-14	***
5/23/00	Tristan Timm	PM1112	458-474	2.5	650	1625000	5/24/00	19	19	0.00	0.00E+00	
5/23/00	Siju George	PM1113	002-766	2.5	570	1425000	5/24/00	18	19	0.00	0.00E+00	
5/23/00	Roger Petty	PM1114	458-475	2.5	550	1375000	5/24/00	28	19	0.30	6.24E-14	***
5/24/00	Tristan Timm	PM1115	458-474	2.5	565	1412500	5/25/00	18	18	0.00	0.00E+00	
5/24/00	Brett Barton	PM1116	002-766	2.5	540	1350000	5/25/00	24	18	0.20	4.24E-14	***
5/24/00	Roger Petty	PM1117	002-675	2.5	612	1530000	5/25/00	16	18	0.00	0.00E+00	
5/25/00	Roger Petty	PM1118	002-574	2.5	600	1500000	5/26/00	18	19	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
5/25/00	Tristan Timm	PM1119	458-474	2.5	600	1500000	5/26/00	16	19	0.00	0.00E+00	
5/25/00	Brett Barton	PM1120	002-675	2.5	525	1312500	5/26/00	19	19	0.00	0.00E+00	
5/25/00	Mike	PM1121	002-766	2.5	189	472500	5/26/00	17	19	0.00	0.00E+00	
5/26/00	Roger Petty	PM1122	002-766	2.5	445	1112500	5/30/00	17	17	0.00	0.00E+00	
5/26/00	Tristan Timm	PM1123	458-475	2.5	445	1112500	5/30/00	15	17	0.00	0.00E+00	
5/26/00	Brett Barton	PM1124	002-574	2.5	380	950000	5/30/00	17	17	0.00	0.00E+00	
5/30/00	Roger Petty	PM1125	002-675	2.5	400	1000000	5/31/00	23	16	0.23	6.67E-14	***
5/30/00	Tristan Timm	PM1126	458-475	2.5	469	1172500	5/31/00	22	16	0.20	4.88E-14	***
5/30/00	Brett Barton	PM1127	002-766	2.5	310	775000	5/31/00	16	16	0.00	0.00E+00	
5/31/00	Roger Petty	PM1128	002-675	2.5	420	1050000	6/1/00	24	16	0.27	7.26E-14	***
5/31/00	Tristan Timm	PM1129	458-475	2.5	480	1200000	6/1/00	21	16	0.17	3.97E-14	***
5/31/00	Brett Barton	PM1130	002-766	2.5	480	1200000	6/1/00	28	16	0.40	9.53E-14	***
6/1/00	Tristan Timm	PM1131	458-474	2.5	495	1237500	6/2/00	16	17	0.00	0.00E+00	
6/1/00	Brett Barton	PM1132	002-766	2.5	315	787500	6/2/00	24	17	0.23	8.47E-14	***
6/1/00	Roger Petty	PM1133	002-574	2.5	495	1237500	6/2/00	17	17	0.00	0.00E+00	
6/2/00	Brett Barton	PM1134	002-675	2.5	610	1525000	6/5/00	15	17	0.00	0.00E+00	
6/2/00	Tristan Timm	PM1135	002-766	2.5	610	1525000	6/5/00	17	17	0.00	0.00E+00	
6/2/00	Roger Petty	PM1136	002-574	2.5	520	1300000	6/5/00	16	17	0.00	0.00E+00	
6/5/00	Brett Barton	PM1137	002-766	2.5	525	1312500	6/6/00	25	16	0.30	6.54E-14	***
6/5/00	Tristan Timm	PM1138	002-574	2.5	520	1300000	6/6/00	16	16	0.00	0.00E+00	
6/5/00	Roger Petty	PM1139	002-675	2.5	540	1350000	6/6/00	15	16	0.00	0.00E+00	
6/6/00	Glenn Huber	PM1140	002-766	2.5	120	300000	6/7/00	15	16	0.00	0.00E+00	
6/6/00	Tristan Timm	PM1141	002-574	2.5	480	1200000	6/7/00	20	16	0.13	3.18E-14	***
6/6/00	Roger Petty	PM1142	002-675	2.5	510	1275000	6/7/00	16	16	0.00	0.00E+00	
6/7/00	Roger Petty	PM1143	002-766	2.5	578	1445000	6/8/00	18	18	0.00	0.00E+00	
6/7/00	Tristan Timm	PM1144	002-675	2.5	600	1500000	6/8/00	26	18	0.27	5.08E-14	***
6/8/00	Tristan Timm	PM1145	002-766	2.5	541	1352500	6/9/00	22	17	0.17	3.52E-14	***
6/8/00	Roger Petty	PM1146	002-675	2.5	540	1350000	6/9/00	20	17	0.10	2.12E-14	***
6/9/00	Tristan Timm	PM1147	002-675	2.5	460	1150000	6/12/00	15	16	0.00	0.00E+00	
6/9/00	Roger Petty	PM1148	002-766	2.5	450	1125000	6/12/00	16	16	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
6/9/00	Glenn Huber	PM1149	002-574	2.5	293	732500	6/12/00	16	16	0.00	0.00E+00	
6/12/00	Andy Skwarek	PM1150	002-675	2.5	315	787500	6/13/00	16	16	0.00	0.00E+00	
6/12/00	Mike Smit	PM1151	002-766	2.5	218	545000	6/13/00	15	16	0.00	0.00E+00	
6/12/00	Tristan Timm	PM1152	002-574	2.5	454	1135000	6/13/00	18	16	0.07	1.68E-14	***
6/16/00	Tristan Timm	PM1153	002-766	2.5	452	1130000	6/19/00	15	16	0.00	0.00E+00	
6/16/00	Roger Petty	PM1154	002-675	2.5	450	1125000	6/19/00	16	16	0.00	0.00E+00	
6/19/00	Tristan Timm	PM1155	002-574	2.5	171	427500	6/20/00	16	18	0.00	0.00E+00	
6/19/00	Roger Petty	PM1156	002-675	2.5	428	1070000	6/20/00	18	18	0.00	0.00E+00	
7/5/00	Andy Skwarek	PM1157	002-766	2.5	60	150000	7/6/00	16	16	0.00	0.00E+00	
7/5/00	Brett Barton	PM1158	002-574	2.5	60	150000	7/6/00	15	16	0.00	0.00E+00	
7/7/00	Brett Barton	PM1159	002-675	2.5	520	1300000	7/10/00	14	15	0.00	0.00E+00	
7/7/00	Roger Petty	PM1160	002-574	2.5	520	1300000	7/10/00	15	15	0.00	0.00E+00	
7/11/00	Glenn Huber	PM1161	002-574	2.5	496	1240000	7/12/00	15	15	0.00	0.00E+00	
7/11/00	Roger Petty	PM1162	002-675	2.5	500	1250000	7/12/00	14	15	0.00	0.00E+00	
7/12/00	Toby Shewan	PM1163	002-574	2.5	440	1100000	7/13/00	14	15	0.00	0.00E+00	
7/12/00	Andy Skwarek	PM1164	002-766	2.5	85	212500	7/13/00	13	15	0.00	0.00E+00	
7/13/00	Toby Shewan	PM1165	002-766	2.5	255	637500	7/14/00	20	16	0.13	5.98E-14	***
7/18/00	Andy Skwarek	PM1166	002-574	2.5	425	1062500	7/19/00	15	15	0.00	0.00E+00	
7/18/00	Toby Shewan	PM1167	002-766	2.5	386	965000	7/19/00	14	15	0.00	0.00E+00	
7/19/00	Andy Skwarek	PM1168	002-574	2.5	330	825000	7/20/00	15	16	0.00	0.00E+00	
7/19/00	Toby Shewan	PM1169	002-766	2.5	330	825000	7/20/00	15	16	0.00	0.00E+00	
7/20/00	Andy Skwarek	PM1170	002-766	2.5	550	1375000	7/21/00	23	17	0.20	4.16E-14	***
7/20/00	Toby Shewan	PM1171	002-574	2.5	560	1400000	7/21/00	21	17	0.13	2.72E-14	***
7/21/00	Toby Shewan	PM1172	002-766	2.5	495	1237500	7/24/00	15	16	0.00	0.00E+00	
7/21/00	Andy Skwarek	PM1173	002-574	2.5	495	1237500	7/24/00	14	16	0.00	0.00E+00	
7/24/00	Toby Shewan	PM1174	458-475	2.5	30	75000	7/25/00	15	17	0.00	0.00E+00	
7/24/00	Andy Skwarek	PM1175	002-675	2.5	35	87500	7/25/00	15	17	0.00	0.00E+00	
8/1/00	Toby Shewan	PM1176	002-766	2.5	265	662500	8/2/00	20	18	0.07	2.88E-14	***
8/1/00	Andy Skwarek	PM1177	002-574	2.5	445	1112500	8/2/00	23	18	0.17	4.28E-14	***
8/7/00	Toby Shewan	PM1178	002-766	2.5	285	712500	8/8/00	15	15	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
8/7/00	Andy Skwarek	PM1179	002-574	2.5	285	712500	8/8/00	14	15	0.00	0.00E+00	
8/9/00	Toby Shewan	PM1180	002-766	2.5	490	1225000	8/10/00	15	16	0.00	0.00E+00	
8/9/00	Andy Skwarek	PM1181	002-574	2.5	490	1225000	8/10/00	16	16	0.00	0.00E+00	
8/10/00	Andy Skwarek	PM1182	002-766	2.5	355	887500	8/11/00	15	16	0.00	0.00E+00	
8/10/00	Toby Shewan	PM1183	002-675	2.5	355	887500	8/11/00	15	16	0.00	0.00E+00	
8/14/00	Andy Skwarek	PM1184	002-766	2.5	445	1112500	8/15/00	18	15	0.10	2.57E-14	***
8/14/00	Toby Shewan	PM1185	002-675	2.5	445	1112500	8/15/00	23	15	0.27	6.86E-14	***
8/15/00	Brett Barton	PM1186	002-766	2.5	510	1275000	8/16/00	15	16	0.00	0.00E+00	
8/15/00	Andy Skwarek	PM1187	002-675	2.5	510	1275000	8/16/00	15	16	0.00	0.00E+00	
8/16/00	Andy Skwarek	PM1188	002-574	2.5	190	475000	8/17/00	15	18	0.00	0.00E+00	
8/16/00	Brett Barton	PM1189	002-675	2.5	190	475000	8/17/00	16	18	0.00	0.00E+00	
8/17/00	Toby Shewan	PM1190	002-766	2.5	245	612500	8/18/00	15	16	0.00	0.00E+00	
8/17/00	Andy Skwarek	PM1191	002-574	2.5	245	612500	8/18/00	14	16	0.00	0.00E+00	
8/18/00	Andy Skwarek	PM1192	002-574	2.5	430	1075000	8/21/00	13	15	0.00	0.00E+00	
8/18/00	Toby Shewan	PM1193	002-675	2.5	430	1075000	8/21/00	15	15	0.00	0.00E+00	
8/21/00	Brett Barton	PM1194	002-766	2.5	100	250000	8/22/00	27	17	0.33	3.81E-13	***
8/21/00	Andy Skwarek	PM1195	002-574	2.5	220	550000	8/22/00	20	17	0.10	5.20E-14	***
8/23/00	Andy Skwarek	PM1196	002-766	2.5	180	450000	8/24/00	15	17	0.00	0.00E+00	
8/23/00	Brett Barton	PM1197	002-574	2.5	180	450000	8/24/00	17	17	0.00	0.00E+00	
8/24/00	Toby Shewan	PM1198	002-766	2.5	620	1550000	8/25/00	15	16	0.00	0.00E+00	
8/24/00	Andy Skwarek	PM1199	002-574	2.5	635	1587500	8/25/00	16	16	0.00	0.00E+00	
8/25/00	Toby Shewan	PM1200	002-675	2.5	480	1200000	8/28/00	15	15	0.00	0.00E+00	
8/28/00	Andy Skwarek	PM1201	002-675	2.5	270	675000	8/29/00	17	17	0.00	0.00E+00	
8/28/00	Toby Shewan	PM1202	002-574	2.5	285	712500	8/29/00	14	17	0.00	0.00E+00	
8/29/00	Andy Skwarek	PM1203	002-766	2.5	495	1237500	8/30/00	42	17	0.83	1.93E-13	***
8/29/00	Toby Shewan	PM1204	002-574	2.5	495	1237500	8/30/00	29	17	0.40	9.24E-14	***
8/30/00	Glenn Huber	PM1205	002-574	2.5	80	200000	8/31/00	15	16	0.00	0.00E+00	
8/30/00	Andy Skwarek	PM1206	002-766	2.5	80	200000	8/31/00	14	16	0.00	0.00E+00	
8/31/00	Toby Shewan	PM1207	002-574	2.5	180	450000	9/1/00	16	17	0.00	0.00E+00	
8/31/00	Andy Skwarek	PM1208	002-766	2.5	180	450000	9/1/00	16	17	0.00	0.00E+00	

Personal Air Monitoring Summary Sheet (PAM's -Daily Analysis)

Grand Pier Project - Chicago, IL

*** All PAM's with elevated counts on day after analysis are recounted after 4 days (see attached)

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)	
9/1/00	Andy Skwarek	PM1209	002-766	2.5	405	1012500	9/5/00	15	17	0.00	0.00E+00	
9/1/00	Toby Shewan	PM1210	002-574	2.5	355	887500	9/5/00	17	17	0.00	0.00E+00	
9/5/00	Andy Skwarek	PM1211	002-766	2.5	390	975000	9/6/00	21	18	0.10	2.93E-14	***
9/5/00	Toby Shewan	PM1212	002-574	2.5	390	975000	9/6/00	16	18	0.00	0.00E+00	
9/6/00	Andy Skwarek	PM1213	002-766	2.5	225	562500	9/7/00	14	17	0.00	0.00E+00	
9/6/00	Toby Shewan	PM1214	002-574	2.5	225	562500	9/7/00	15	17	0.00	0.00E+00	
9/13/00	Andy Skwarek	PM1215	002-766	2.5	90	225000	9/14/00	15	15	0.00	0.00E+00	
9/13/00	Toby Shewan	PM1216	002-675	2.5	90	225000	9/14/00	14	15	0.00	0.00E+00	
9/21/00	Andy Skwarek	PM1217	002-766	2.5	210	525000	9/22/00	15	17	0.00	0.00E+00	
9/21/00	Glenn Huber	PM1218	002-675	2.5	210	525000	9/22/00	16	17	0.00	0.00E+00	
9/22/00	Toby Shewan	PM1219	002-675	2.5	150	375000	9/23/00	14	15	0.00	0.00E+00	
10/17/00	Andy Skwarek	PM1220	002-574	2.5	550	1375000	10/18/00	16	16	0.00	0.00E+00	
10/17/00	Toby Shewan	PM1221	002-766	2.5	550	1375000	10/18/00	14	16	0.00	0.00E+00	
10/25/00	Toby Shewan	PM1222	002-574	2.5	435	1087500	10/26/00	17	17	0.00	0.00E+00	
10/25/00	Andy Skwarek	PM1223	002-766	2.5	435	1087500	10/26/00	15	17	0.00	0.00E+00	

AIR MONITORING

PERSONAL AIR MONITORS
4 DAY ANALYSIS

Personal Air Monitoring Summary Sheet (PAM's -4 Day Analysis)

Grand Pier Project - Chicago, IL

***Note: All samples on this page were analyzed after 4 days to allow for thorium daughter decay

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)
4/17/00	Roger Petty	PM1025	002-675	2.5	580	1450000	4/24/00	16	16	0.00	0.00E+00
4/19/00	Brett Barton	PM1034	458-474	2.5	330	825000	4/24/00	17	16	0.03	1.16E-14
4/24/00	Tristan Timm	PM1036	458-474	2.5	529	1322500	4/28/00	19	18	0.03	7.21E-15
4/24/00	Roger Petty	PM1037	002-675	2.5	562	1405000	4/28/00	15	18	0.00	0.00E+00
4/24/00	Brett Barton	PM1038	458-475	2.5	525	1312500	4/28/00	16	18	0.00	0.00E+00
4/25/00	Roger Petty	PM1039	002-574	2.5	545	1362500	4/29/00	14	17	0.00	0.00E+00
4/25/00	Tristan Timm	PM1040	458-474	2.5	555	1387500	4/29/00	16	17	0.00	0.00E+00
4/26/00	Joel Ahrweiler	PM1044	458-474	2.5	285	712500	5/1/00	14	17	0.00	0.00E+00
4/26/00	Tristan Timm	PM1045	458-475	2.5	550	1375000	5/1/00	16	17	0.00	0.00E+00
5/1/00	Tristan Timm	PM1056	458-475	2.5	375	937500	5/5/00	19	19	0.00	0.00E+00
5/1/00	Brett Barton	PM1057	458-474	2.5	480	1200000	5/5/00	20	19	0.03	7.94E-15
5/1/00	Roger Petty	PM1058	002-574	2.5	545	1362500	5/5/00	17	19	0.00	0.00E+00
5/3/00	Roger Petty	PM1063	002-574	2.5	600	1500000	5/8/00	16	19	0.00	0.00E+00
5/3/00	Tristan Timm	PM1064	458-475	2.5	590	1475000	5/8/00	19	19	0.00	0.00E+00
5/4/00	Roger Petty	PM1067	002-675	2.5	595	1487500	5/9/00	17	17	0.00	0.00E+00
5/5/00	Roger Petty	PM1073	002-574	2.5	605	1512500	5/10/00	17	18	0.00	0.00E+00
5/8/00	Tristan Timm	PM1074	458-475	2.5	540	1350000	5/12/00	18	16	0.07	1.41E-14
5/8/00	Brett Barton	PM1075	002-574	2.5	300	750000	5/12/00	16	16	0.00	0.00E+00
5/8/00	Luis Medina	PM1077	002-675	2.5	335	837500	5/12/00	15	16	0.00	0.00E+00
5/10/00	Tristan Timm	PM1079	458-475	2.5	580	1450000	5/16/00	16	17	0.00	0.00E+00
5/10/00	Tom Layden	PM1082	002-675	2.5	215	537500	5/16/00	17	17	0.00	0.00E+00
5/11/00	Roger Petty	PM1084	002-766	2.5	564	1410000	5/16/00	17	17	0.00	0.00E+00
5/11/00	Tristan Timm	PM1087	458-475	2.5	525	1312500	5/16/00	14	17	0.00	0.00E+00
5/15/00	Tristan Timm	PM1091	458-475	2.5	535	1337500	5/19/00	14	16	0.00	0.00E+00
5/15/00	Roger Petty	PM1092	002-675	2.5	440	1100000	5/19/00	16	16	0.00	0.00E+00
5/16/00	Roger Petty	PM1094	002-675	2.5	507	1267500	5/22/00	17	17	0.00	0.00E+00
5/16/00	Tristan Timm	PM1095	002-574	2.5	505	1262500	5/22/00	15	17	0.00	0.00E+00
5/16/00	Joel Ahrweiler	PM1096	002-766	2.5	375	937500	5/22/00	15	17	0.00	0.00E+00
5/17/00	Roger Petty	PM1098	002-766	2.5	532	1330000	5/22/00	17	17	0.00	0.00E+00
5/18/00	Roger Petty	PM1102	002-766	2.5	500	1250000	5/23/00	15	16	0.00	0.00E+00

Personal Air Monitoring Summary Sheet (PAM's -4 Day Analysis)

Grand Pier Project - Chicago, IL

***Note: All samples on this page were analyzed after 4 days to allow for thorium daughter decay

Date Collected	Name	Sample ID	PAM #	Flow Rate (lpm)	Total Time Sampled	Total Sample Volume (ml)	Analysis Date	Gross Counts (30 min)	Bkg Counts (30 min)	Net CPM	Sample Concentration (uCi/ml)
5/22/00	Tristan Timm	PM1106	458-474	2.5	576	1440000	5/26/00	19	19	0.00	0.00E+00
5/22/00	Brett Barton	PM1107	458-475	2.5	445	1112500	5/26/00	18	19	0.00	0.00E+00
5/22/00	Roger Petty	PM1108	002-675	2.5	583	1457500	5/26/00	21	19	0.07	1.31E-14
5/23/00	Brett Barton	PM1111	002-574	2.5	385	962500	5/28/00	15	16	0.00	0.00E+00
5/23/00	Roger Petty	PM1114	458-475	2.5	550	1375000	5/28/00	16	16	0.00	0.00E+00
5/24/00	Brett Barton	PM1116	002-766	2.5	540	1350000	5/28/00	14	16	0.00	0.00E+00
5/30/00	Roger Petty	PM1125	002-675	2.5	400	1000000	6/2/00	15	17	0.00	0.00E+00
5/30/00	Tristan Timm	PM1126	458-475	2.5	469	1172500	6/2/00	17	17	0.00	0.00E+00
5/31/00	Roger Petty	PM1128	002-675	2.5	420	1050000	6/5/00	14	17	0.00	0.00E+00
5/31/00	Tristan Timm	PM1129	458-475	2.5	480	1200000	6/5/00	17	17	0.00	0.00E+00
5/31/00	Brett Barton	PM1130	002-766	2.5	480	1200000	6/5/00	16	17	0.00	0.00E+00
6/1/00	Brett Barton	PM1132	002-766	2.5	315	787500	6/5/00	16	17	0.00	0.00E+00
6/5/00	Brett Barton	PM1137	002-766	2.5	525	1312500	6/9/00	17	17	0.00	0.00E+00
6/6/00	Tristan Timm	PM1141	002-574	2.5	480	1200000	6/12/00	15	16	0.00	0.00E+00
6/7/00	Tristan Timm	PM1144	002-675	2.5	600	1500000	6/12/00	16	16	0.00	0.00E+00
6/8/00	Tristan Timm	PM1145	002-766	2.5	541	1352500	6/13/00	15	16	0.00	0.00E+00
6/8/00	Roger Petty	PM1146	002-675	2.5	540	1350000	6/13/00	16	16	0.00	0.00E+00
6/12/00	Tristan Timm	PM1152	002-574	2.5	454	1135000	6/16/00	15	16	0.00	0.00E+00
7/13/00	Toby Shewan	PM1165	002-766	2.5	255	637500	7/18/00	16	17	0.00	0.00E+00
7/20/00	Andy Skwarek	PM1170	002-766	2.5	550	1375000	7/25/00	15	17	0.00	0.00E+00
7/20/00	Toby Shewan	PM1171	002-574	2.5	560	1400000	7/25/00	16	17	0.00	0.00E+00
8/1/00	Toby Shewan	PM1176	002-766	2.5	265	662500	8/7/00	16	18	0.00	0.00E+00
8/1/00	Andy Skwarek	PM1177	002-574	2.5	445	1112500	8/7/00	17	18	0.00	0.00E+00
8/14/00	Andy Skwarek	PM1184	002-766	2.5	445	1112500	8/18/00	14	16	0.00	0.00E+00
8/14/00	Toby Shewan	PM1185	002-675	2.5	445	1112500	8/18/00	16	16	0.00	0.00E+00
8/21/00	Brett Barton	PM1194	002-766	2.5	100	250000	8/25/00	15	16	0.00	0.00E+00
8/21/00	Andy Skwarek	PM1195	002-574	2.5	220	550000	8/25/00	16	16	0.00	0.00E+00
8/29/00	Andy Skwarek	PM1203	002-766	2.5	495	1237500	9/5/00	14	17	0.00	0.00E+00
8/29/00	Toby Shewan	PM1204	002-574	2.5	495	1237500	9/5/00	15	17	0.00	0.00E+00
9/5/00	Andy Skwarek	PM1211	002-766	2.5	390	975000	9/11/00	14	18	0.00	0.00E+00

ATTACHMENT K

FIELD SURVEY RESULTS

AREA B SURVEYS: SHEET PILE EXCAVATIONS

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

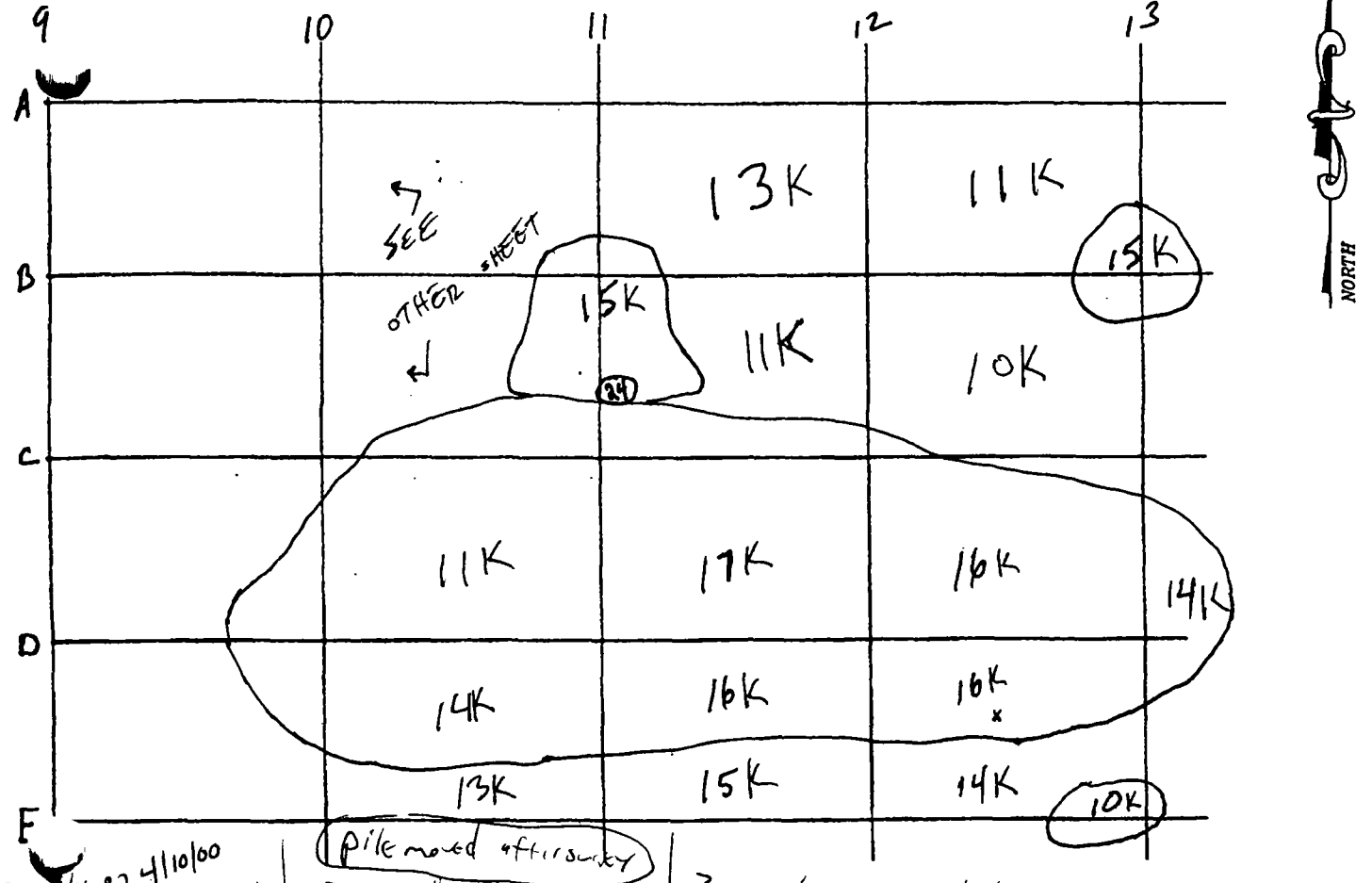
LARGE HILL SURVEY DAY 1

DATE: 4/4/00 & 4/13/00 (after move and survey) TECHNICIAN: BRENT BARTON

INST. MODEL: 2221 Unshielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: Hill Survey

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



3 samples on 4/10/00 D5-11 E-11.5 D-10

pile moved after survey

4 samples on 4/10/00 C-12.5 C-13

3 samples on 4/4/00 D-12 E-12 D.5-12.5

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

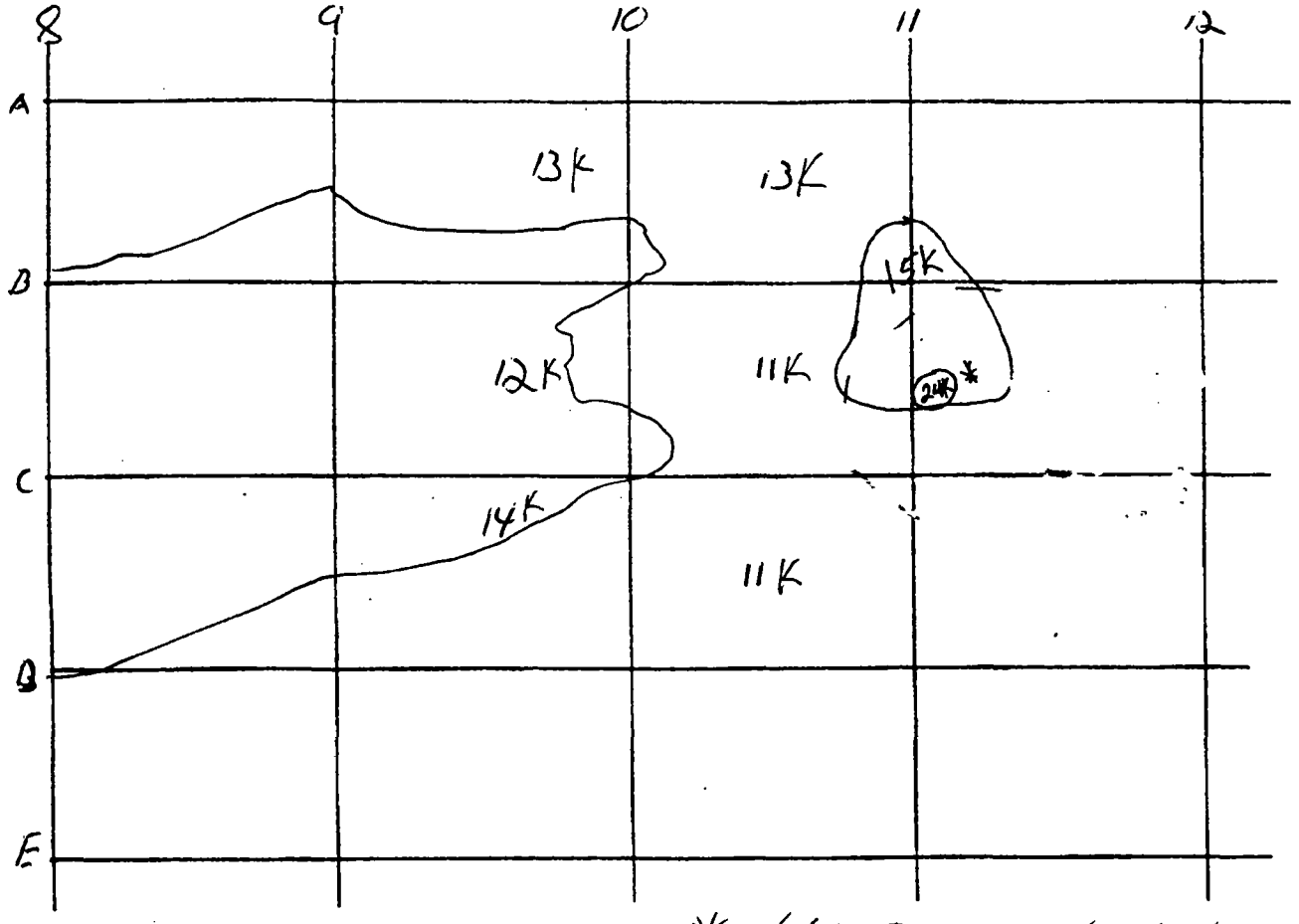
Large HELL SURVEY DAY ONE

DATE: 4-4-00 TECHNICIAN: T.T

INST. MODEL: 2221 Unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



* hot spot excavated and placed on plastic on 4/10/00

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

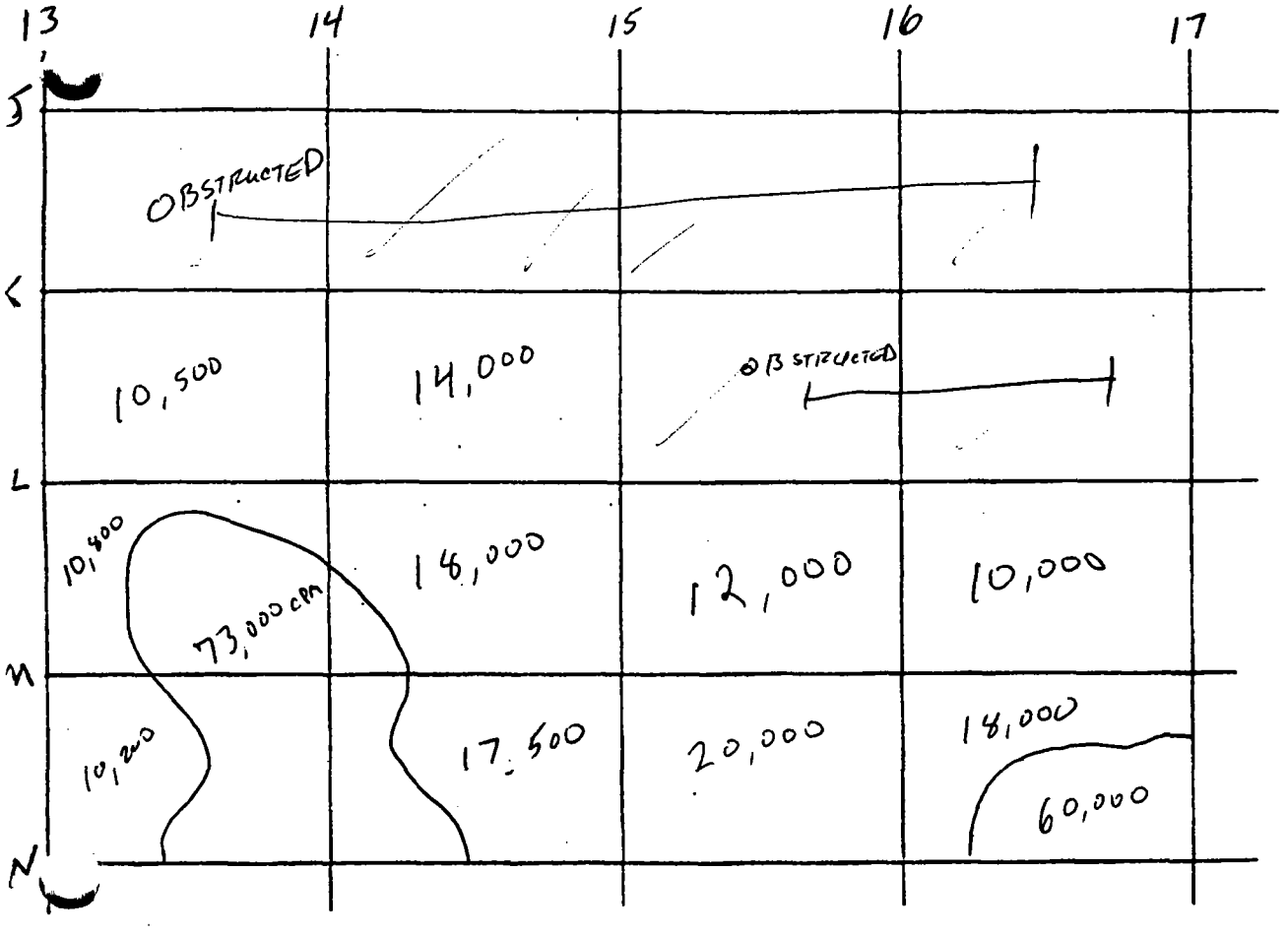
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00 TECHNICIAN: BRETT BARTON/SOL

INST. MODEL: Ludlum 2221 ushielded SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/00 LIFT ELEVATION: 0

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

K-13

STS Consultants Ltd.

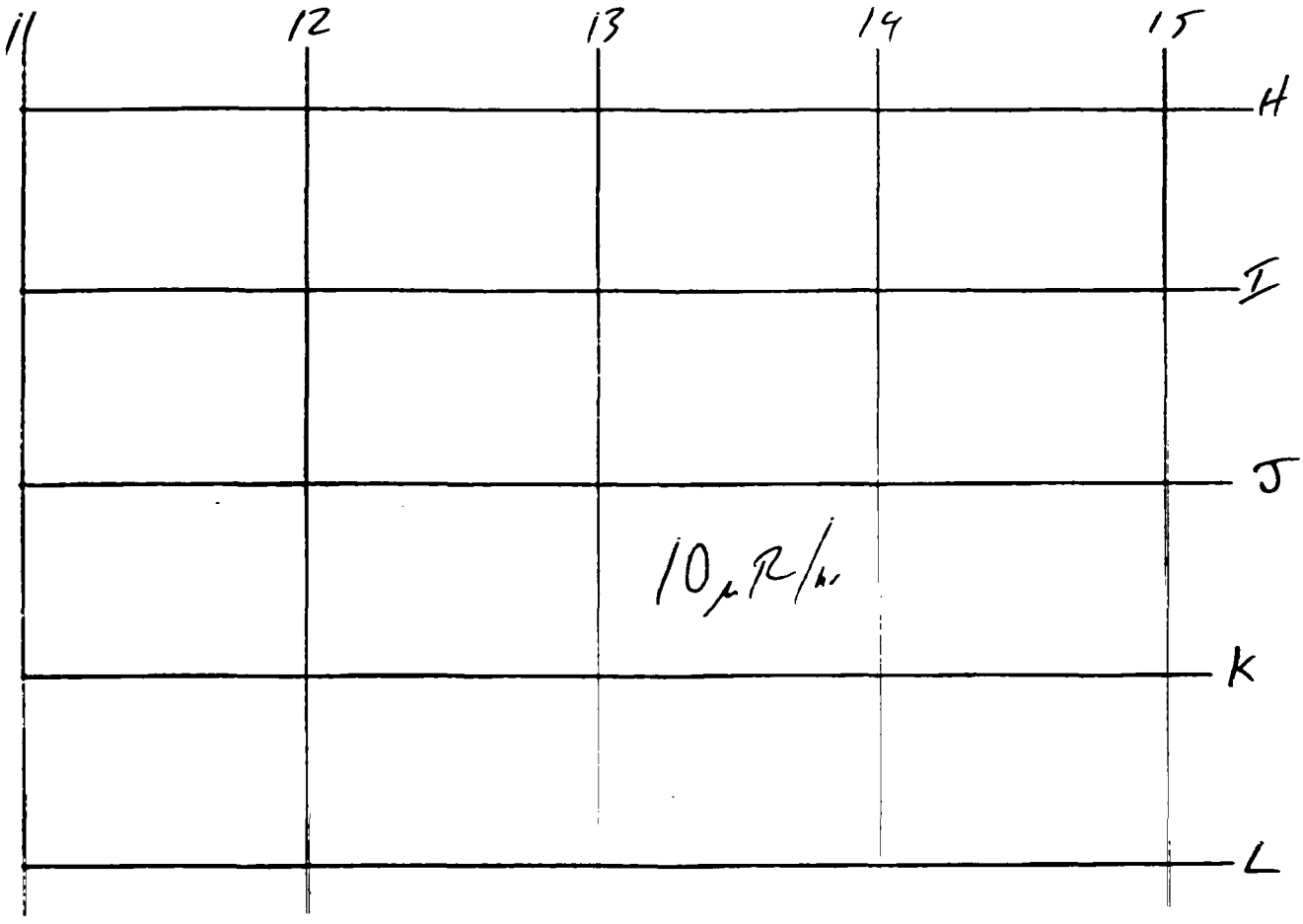
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 3 SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

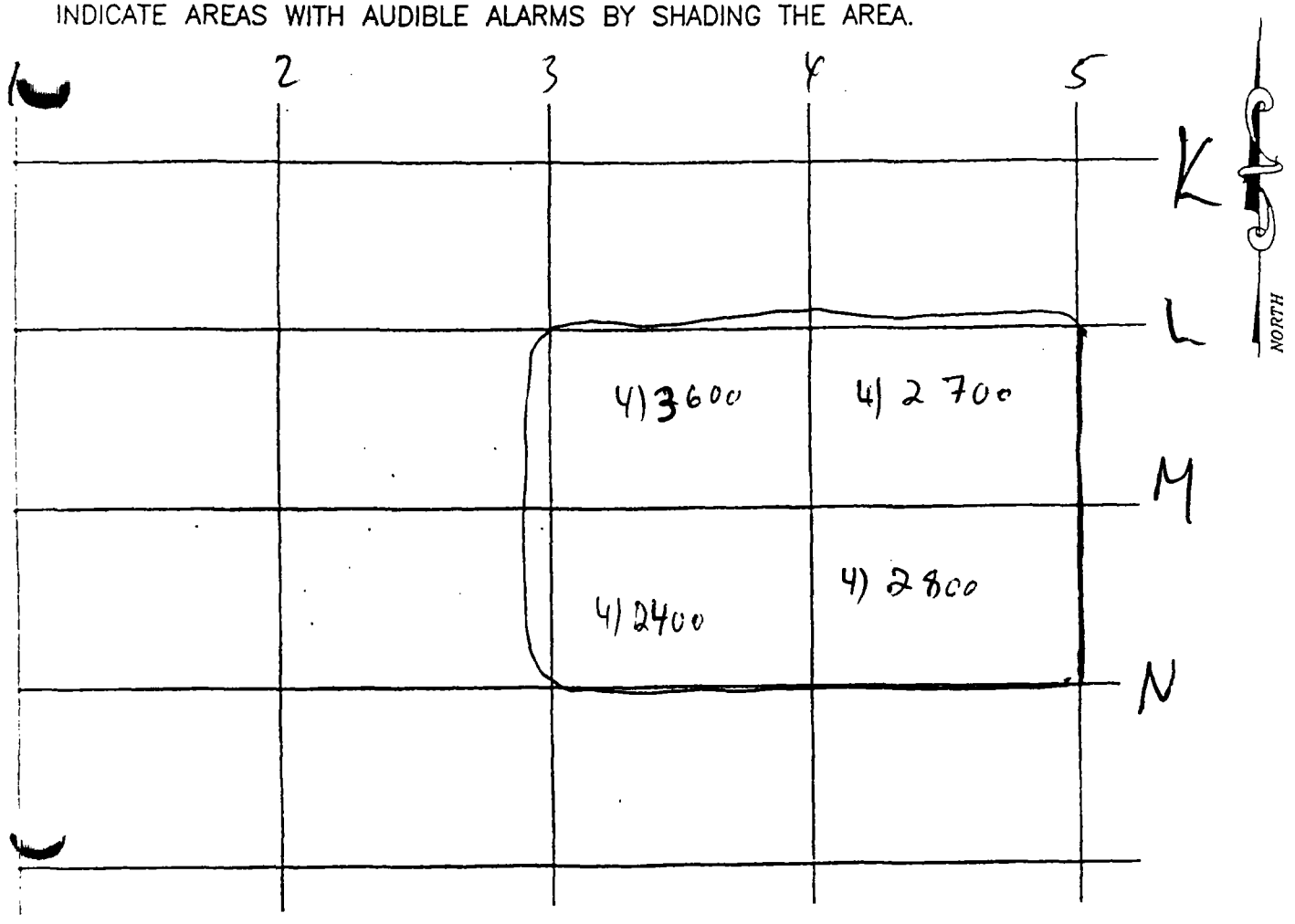
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/19/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 127212

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 4th [redacted] back fill

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00

TECHNICIAN: J Ahrweiler, T. Timm (4/24; 4/25 & 4/28)

INST. MODEL: Ludlum Model 3

SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? yes

LIFT ELEVATION: Before and After Interior Road Survey

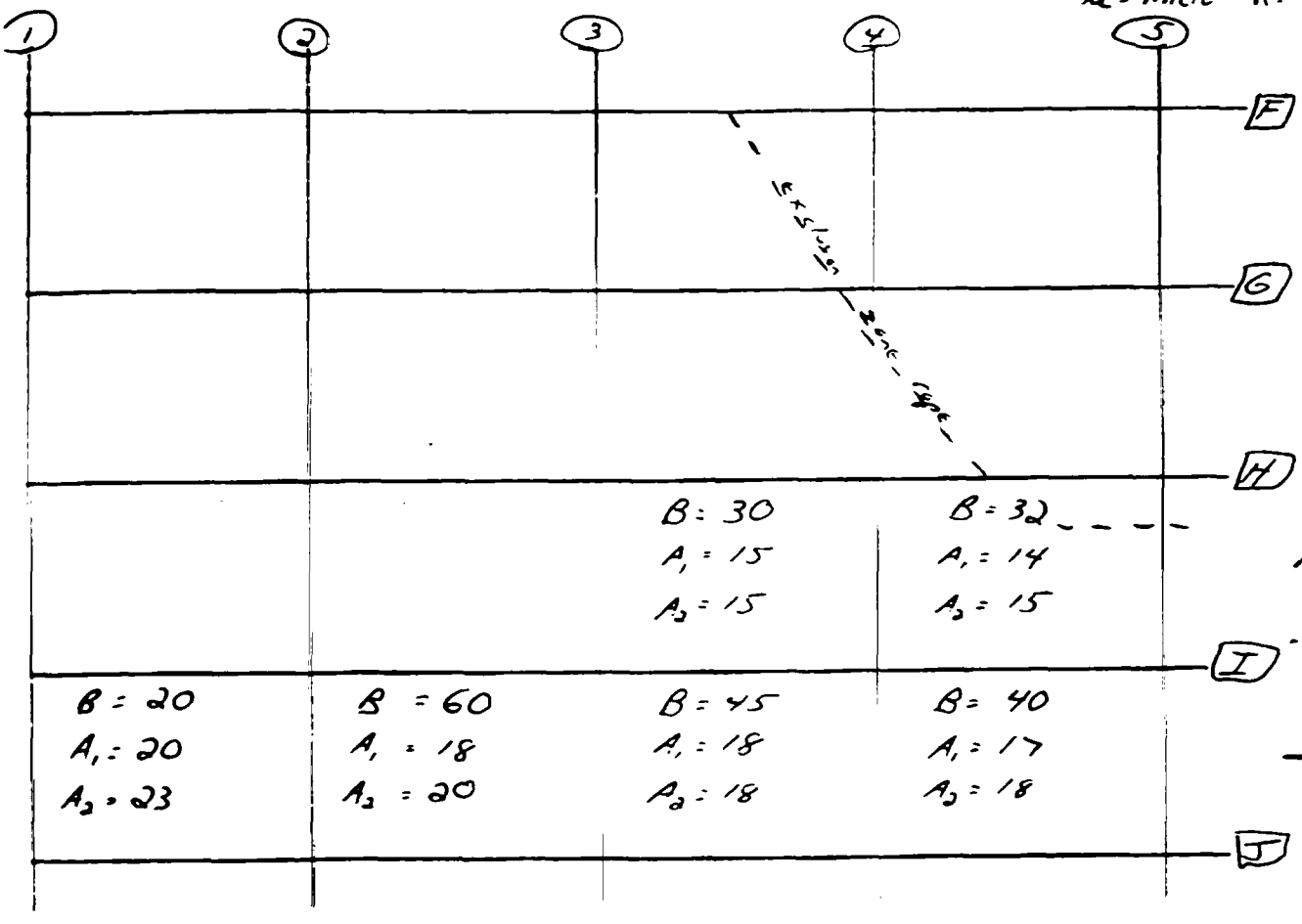
WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN [redacted].

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

* All readings in μR/hr *

μ = micro R = roentgen hr = ho



Legend

B = 44" above gr before road bu

A1 = 44" above ro after constructi

A2 = 36" above ro after constructi

- - - - = exclusion zone boundary rop

— = road

Note: 3 separate readings are recorded for each grid that road occupies. 4/24/00 = before road built
4/25/00 = after road built
4/[illegible] = after [illegible] built per Larry Jensen (36" instead of 4

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00

TECHNICIAN: J. Ahrweiler, T. Timm (4/24 & 4/25 & 4/28)

INST. MODEL: Ludlum Model 3

SERIAL NO.: 124358

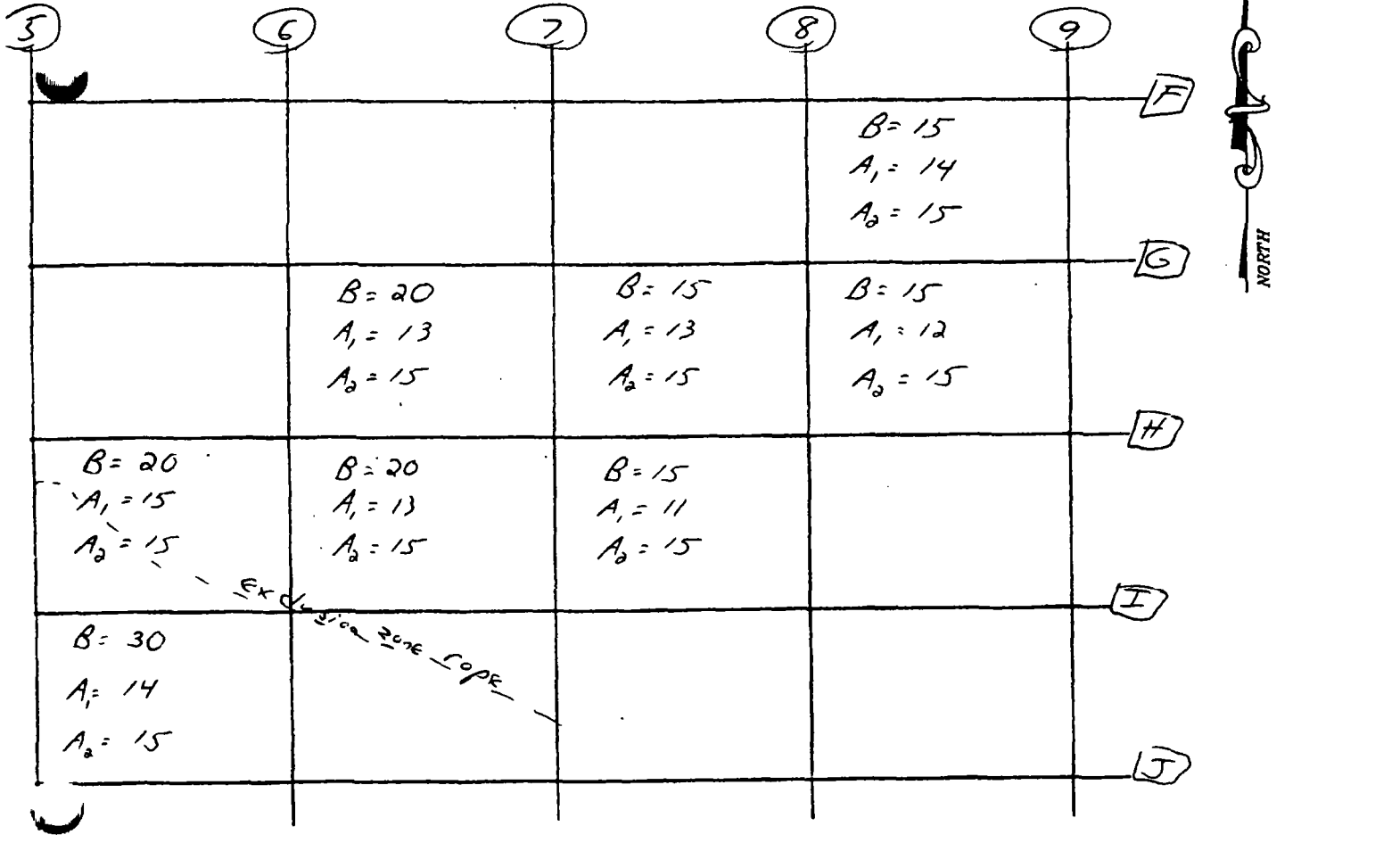
INST. CALIBRATED (Y/N)? YES

LIFT ELEVATION: Before and After Interior Road survey

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN ~~CPS~~.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

* All readings in μR/hr * (μ = micro)



Note: 4/24 & 4/25 data was previously submitted on separate grid survey forms. GAH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants, Ltd.

Sheet 1 of 2

Date: 4/25/00 Technician: 25/[illegible] 24/Joel

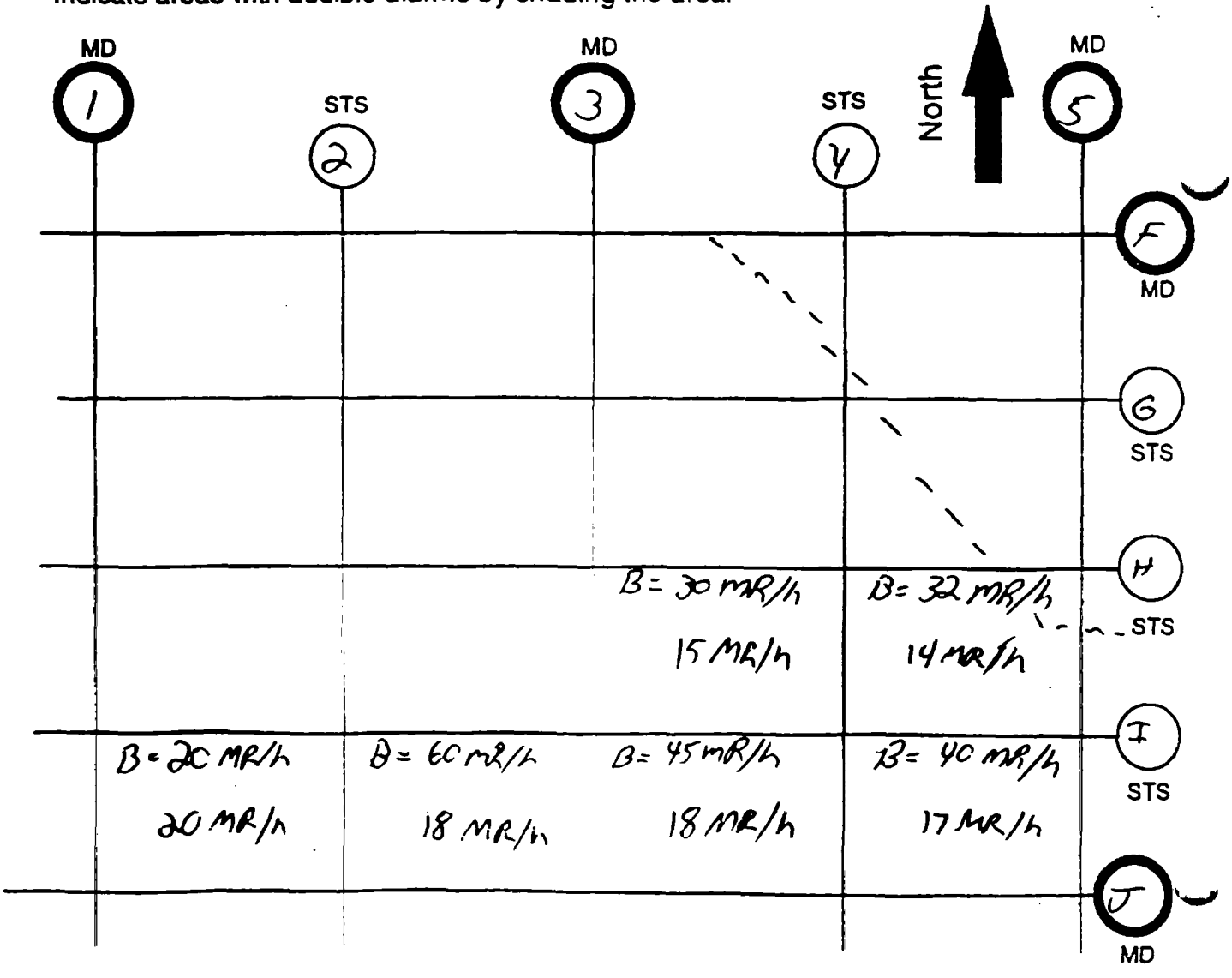
Inst. Model: 3 Ludlum MR/h Serial No.: 124358

Inst. Calibrated (y/n)? _____ Lift Elevation: Before and after Road

Write column lines in corresponding circles. Indicate excavated area with heavy line.

Intersecting lines require 30 second counts. Record counts at intersections in CPM.

Indicate areas with audible alarms by shading the area.



B = Before

STS Consultants, Ltd.

Sheet 2 of 2

Date: 4-25-00 Technician: 25th Tristan 24th Joe I

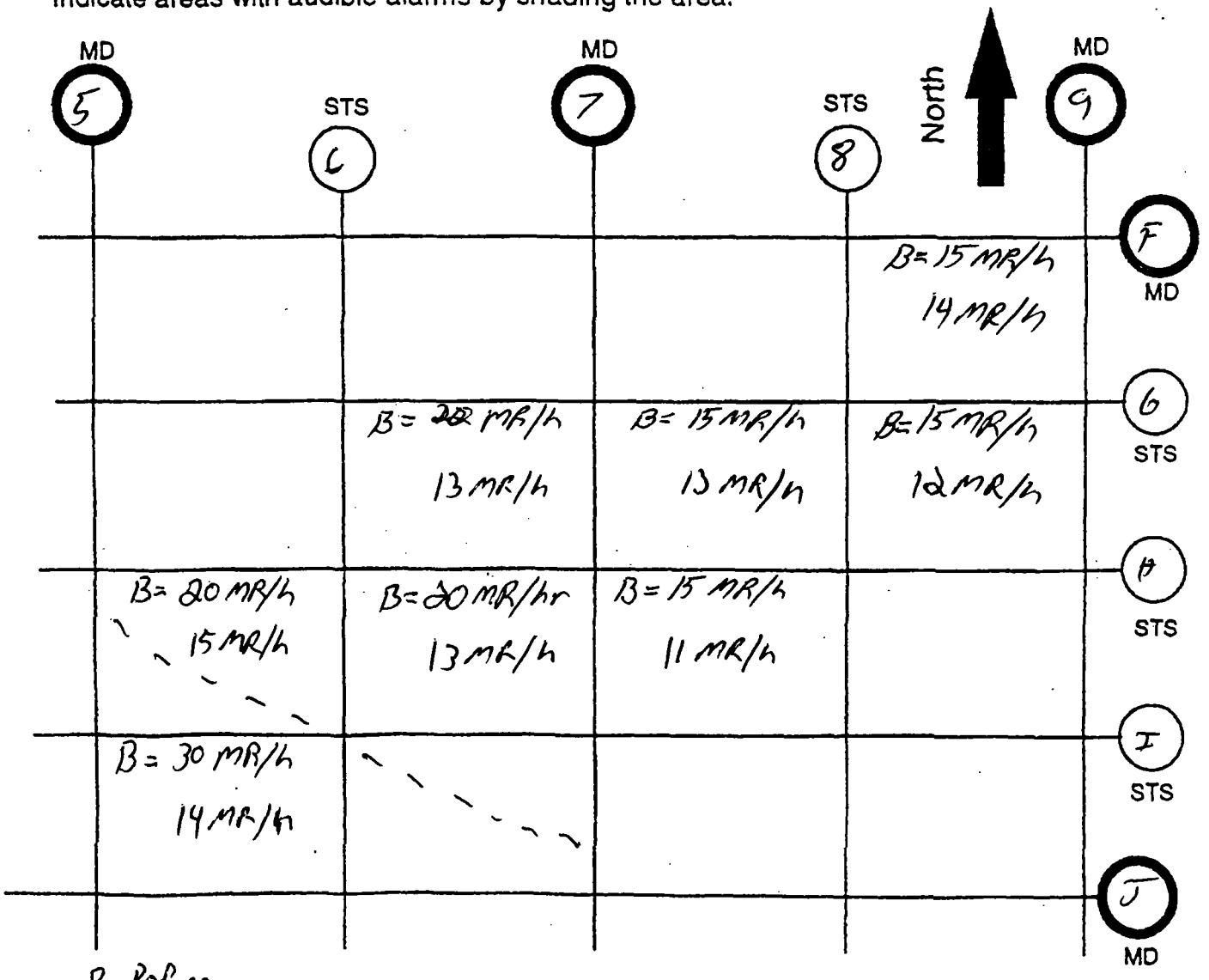
Inst. Model: 3 Ludlum (MR/h) Serial No.: 124358

Inst. Calibrated (y)n)? _____ Lift Elevation: Before and after Road

Write column lines in corresponding circles. Indicate excavated area with heavy line.

Intersecting lines require 30 second counts. Record counts at intersections in CPM.

Indicate areas with audible alarms by shading the area.



B= Before

STS Consultants Ltd.

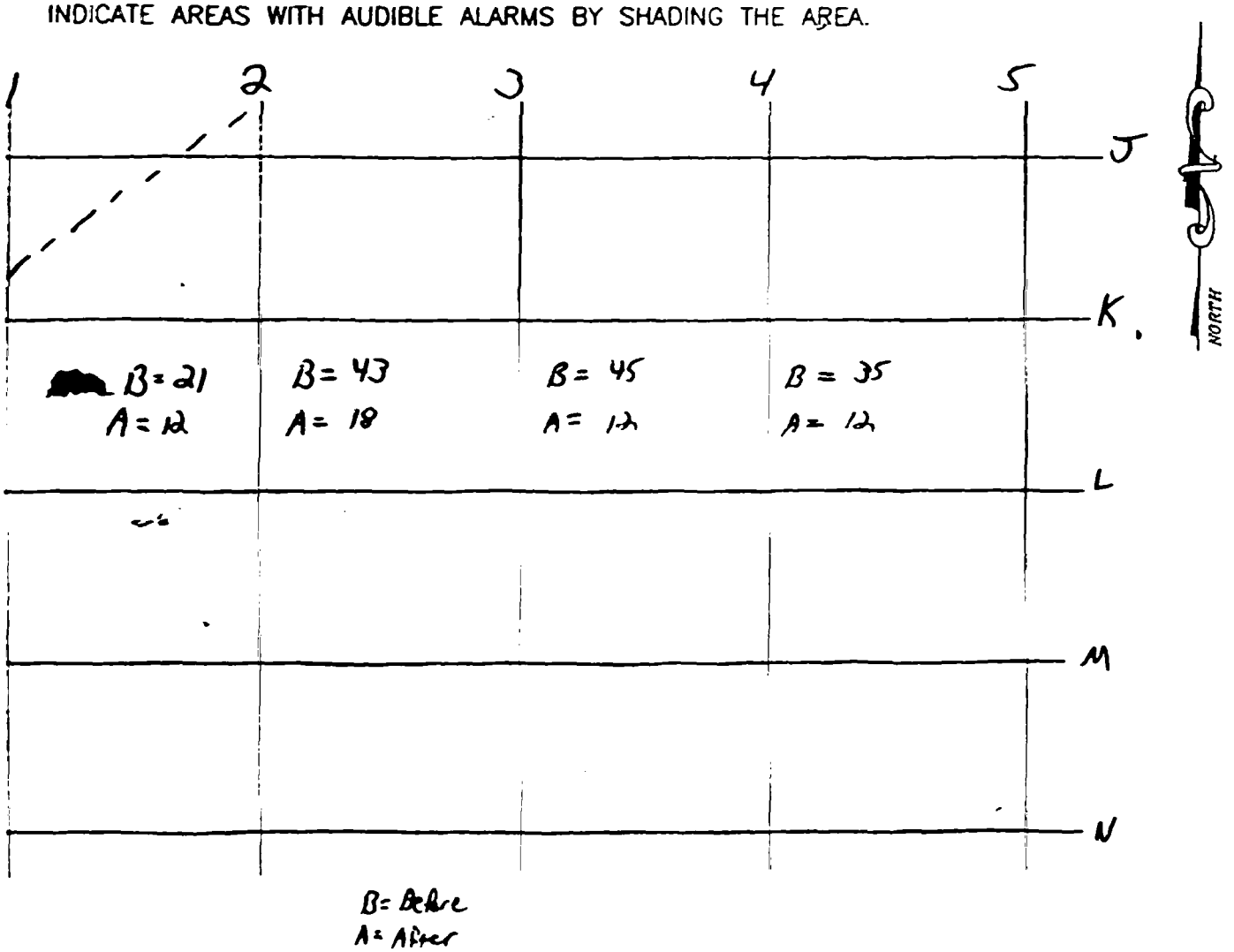
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-26-00 / 5-9-00 TECHNICIAN: Talston

INST. MODEL: Ludlum 3 MR/h SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Before and after Pour

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



B = Before
A = After

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-26-00 / 5-9-00

TECHNICIAN: Tristan Timm

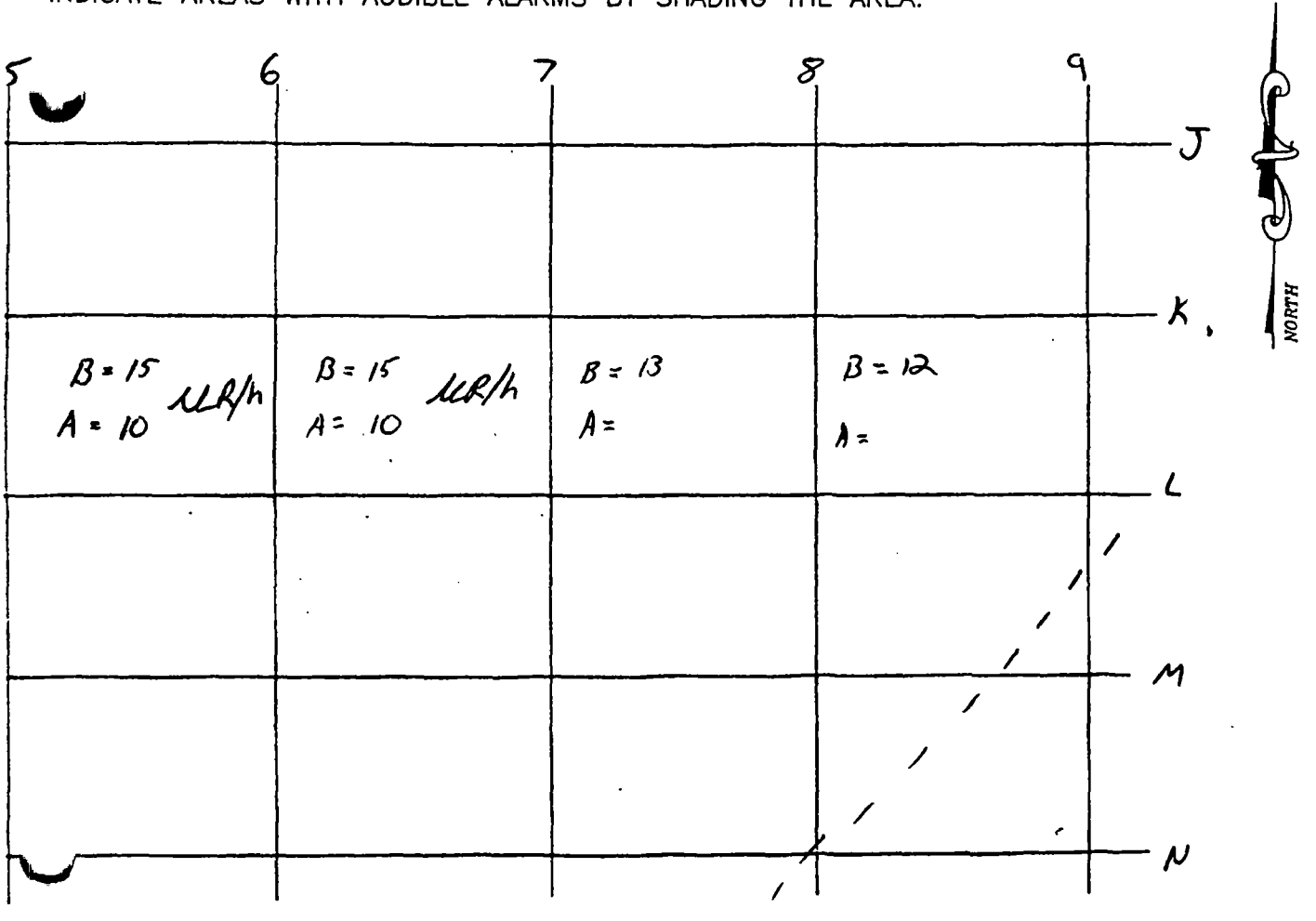
INST. MODEL: Ludlum 3

SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: Before and After Road

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

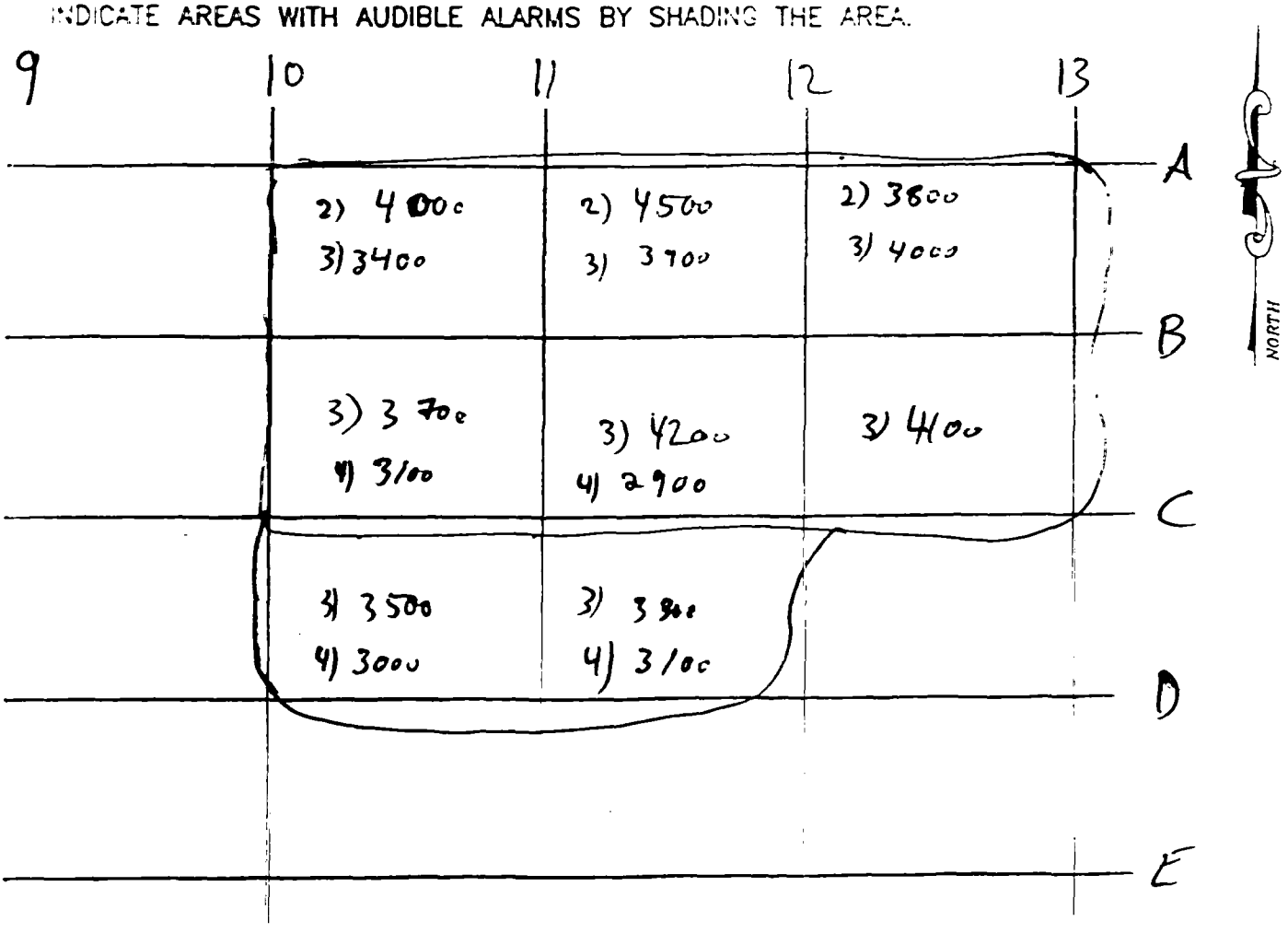
and 10/24 (4th lift)

DATE: 9/27/00 TECHNICIAN: Toby Swan

INST. MODEL: 3221 shielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: road bay for sheet piles (some lifts already done)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

Survey completed on 8' wall running on grid line (1) (wall between axes A & B)

DATE: 6/1/00

TECHNICIAN: Brent Barron

INST. MODEL: Fudline 2221 (shielded)

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION:

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

	M	L	K	J
8'				
	7400	12,100	10,100	6800
6'				
	7850	11,400	8100	5400
4'				
	5800	13,300	6100	5200
2'				
	←	OBSTRUCTED & Debris		→

NORTH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

sheet 2 of 2

DATE: 6/1/00

TECHNICIAN: Brett Barton

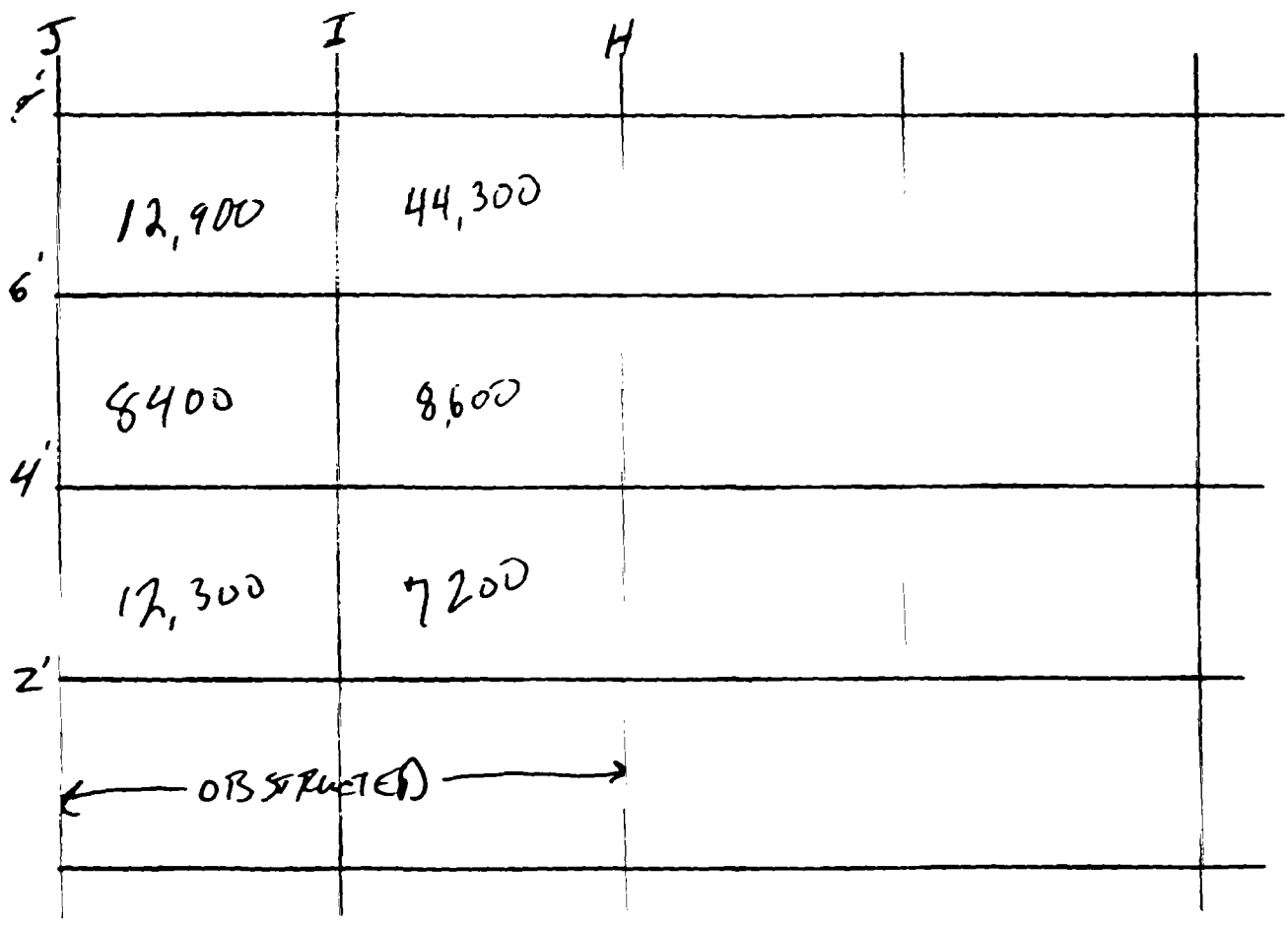
INST. MODEL: Ludlum 2221 (shielded)

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION:

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LI
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

AREA B SURVEYS: BASEMENT EXCAVATION

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

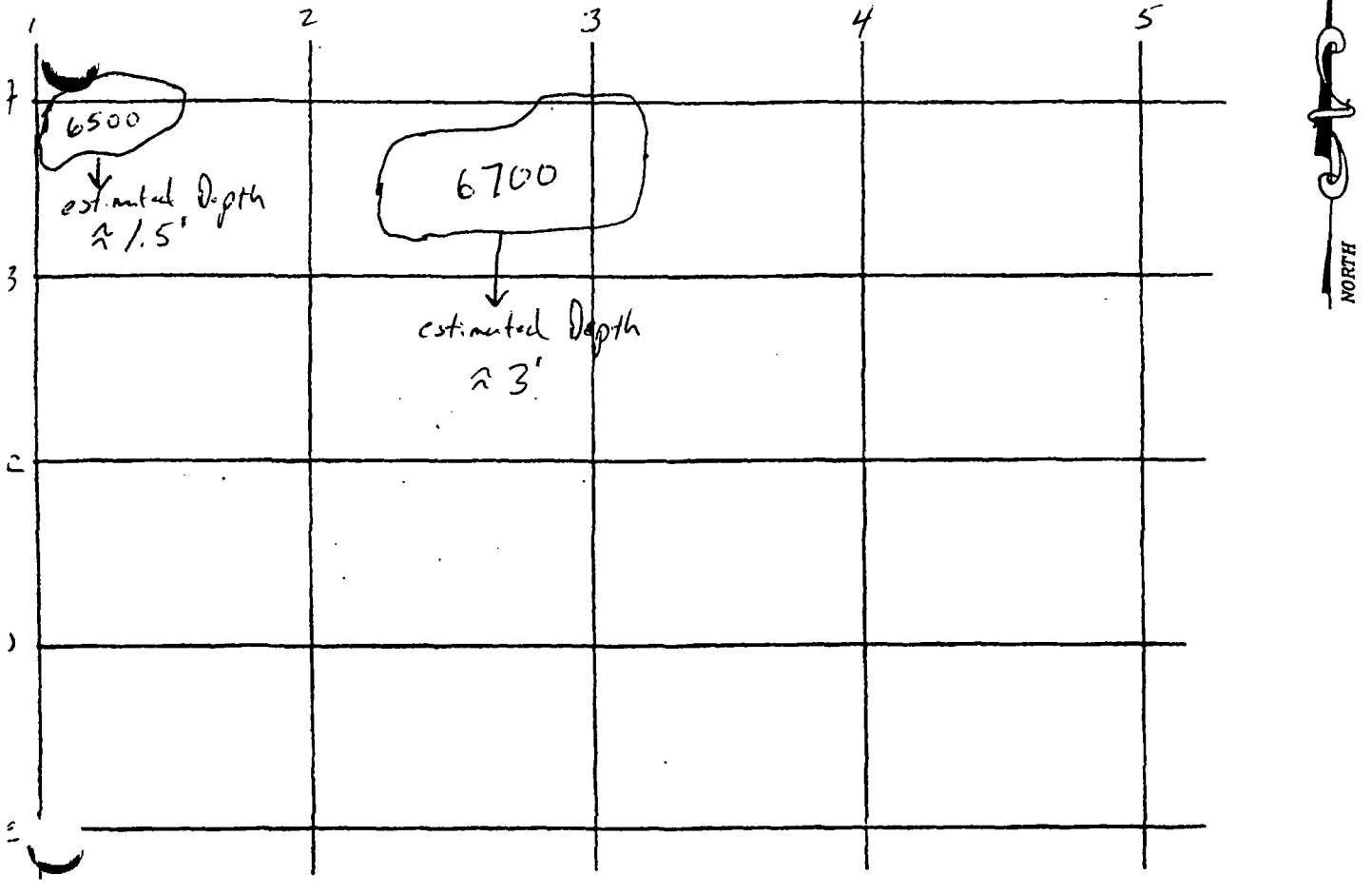
Survey performed 4/27/00
post-decontamination

DATE: 4/27/00 TECHNICIAN: Brett Barton

INST. MODEL: ~~Ludlum 2221~~ Ludlum 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/31/00 LIFT ELEVATION: —

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

1 of 1

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/18/00

TECHNICIAN: Joel M. Alroeller

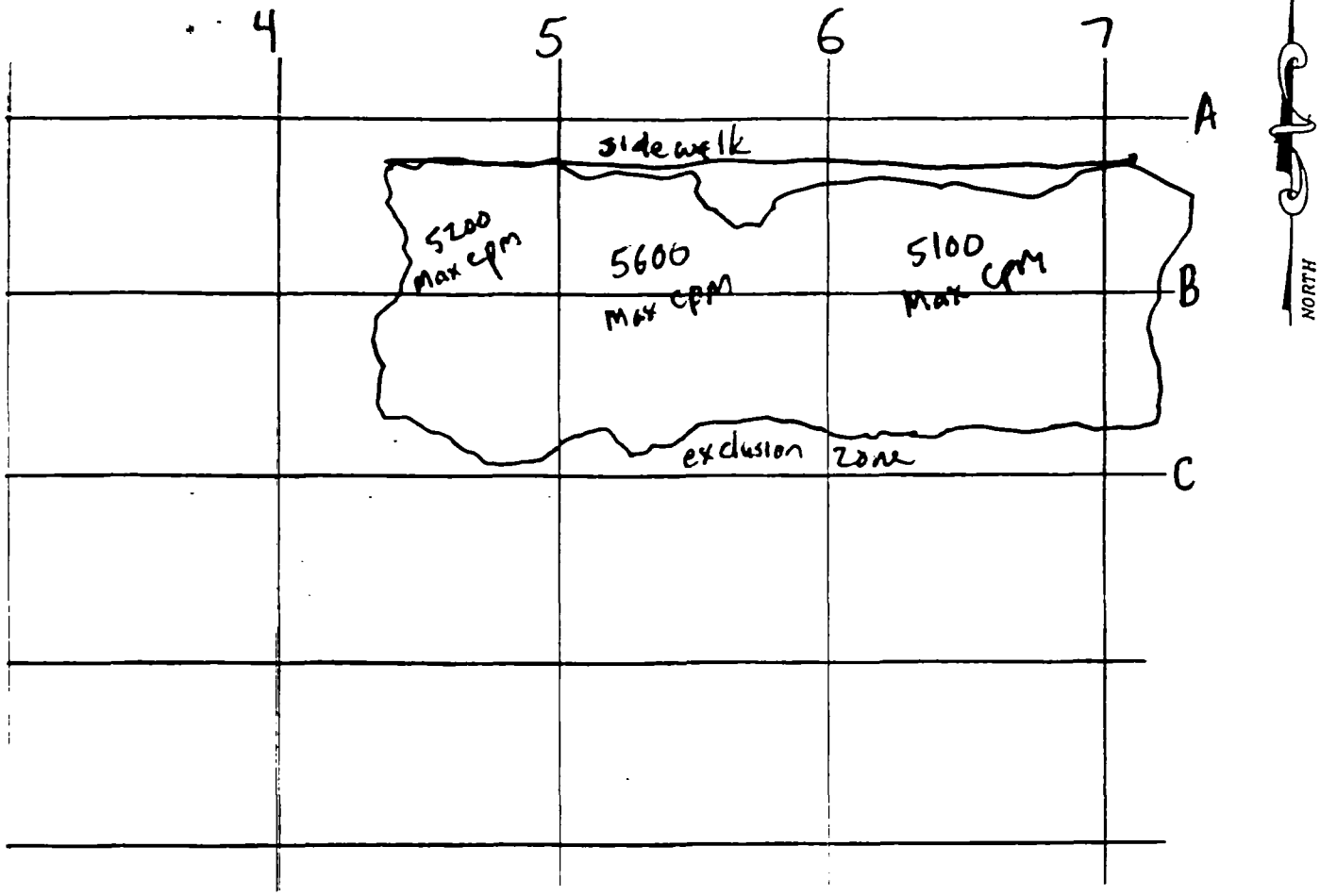
INST. MODEL: 2200 (sh. c/dcd)

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: post decon. exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/13/00

TECHNICIAN: Toby Sherman

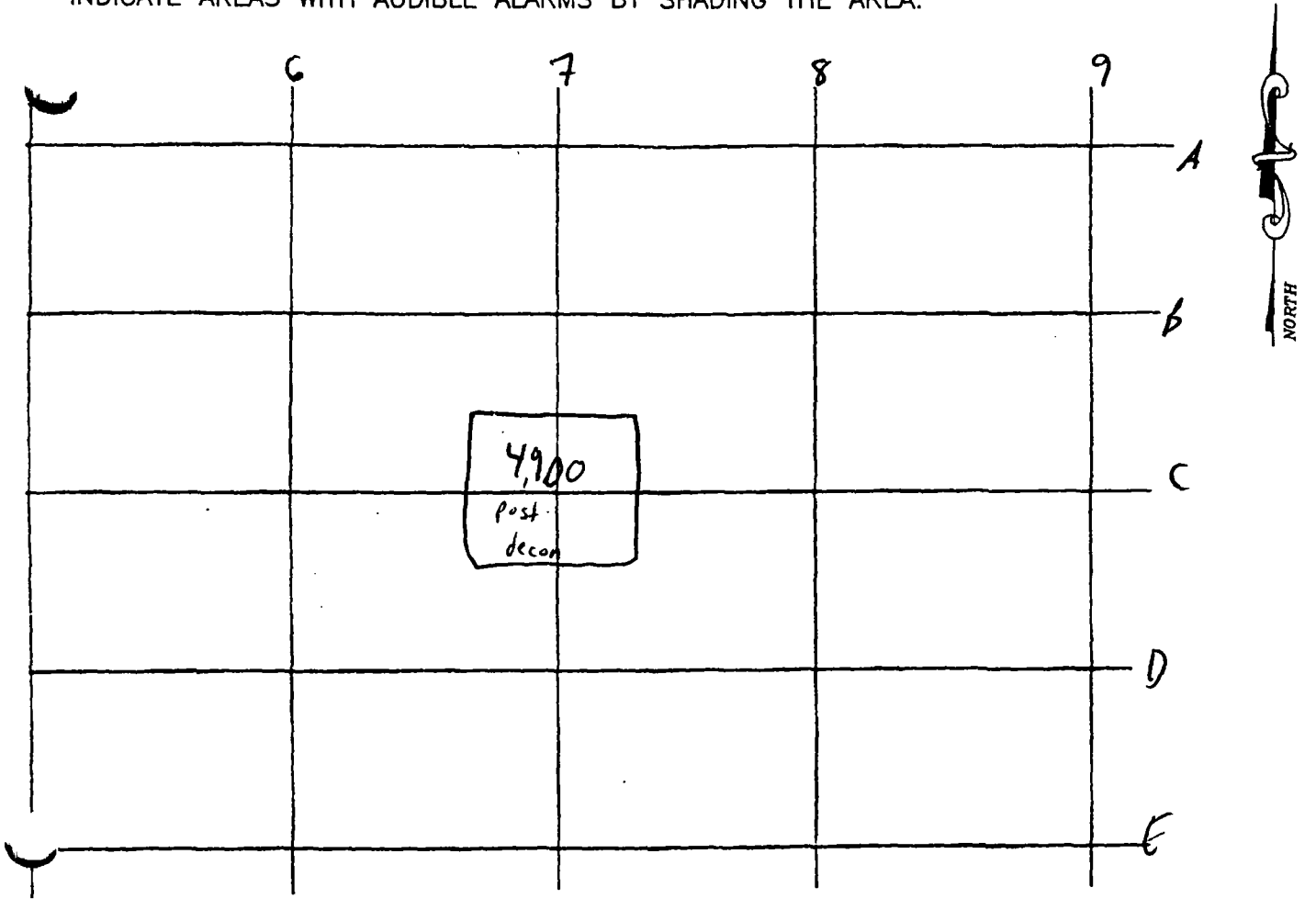
INST. MODEL: 2221 shielded

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)?

LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

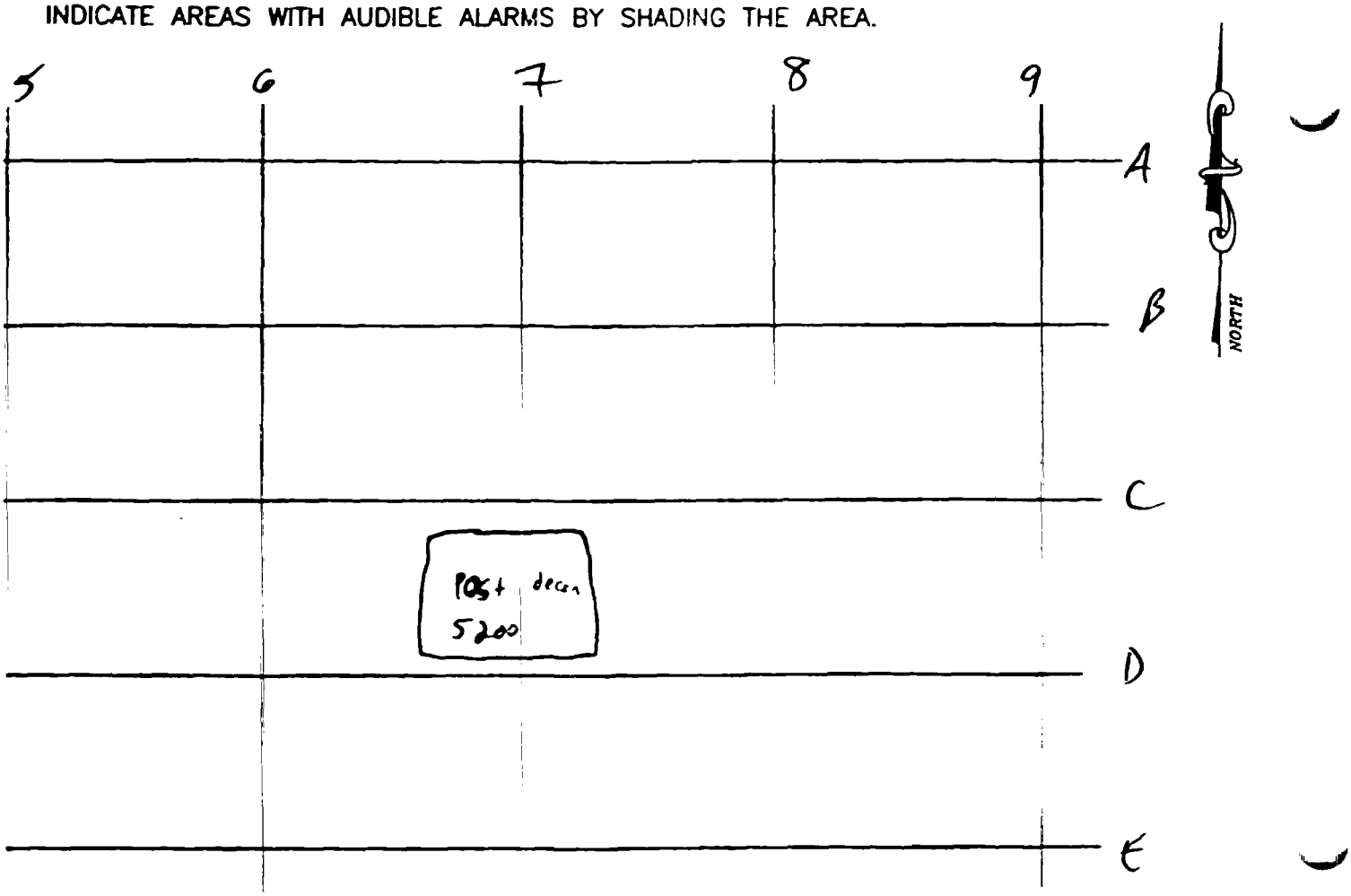
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/22/00 TECHNICIAN: Toby Steven

INST. MODEL: 2221 shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion Zone (Post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

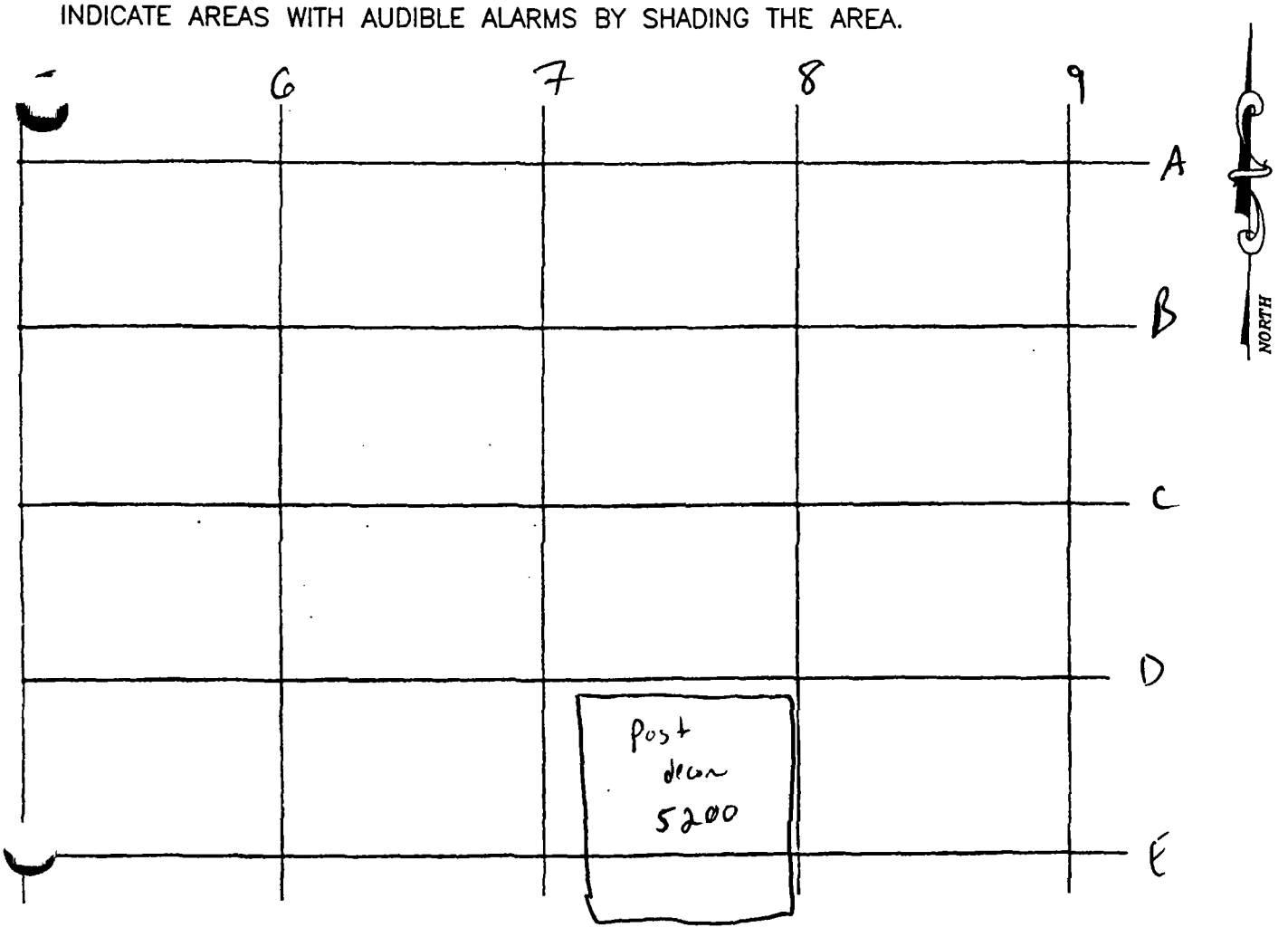
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/22/00 TECHNICIAN: Tob, Shawn

INST. MODEL: 2221 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

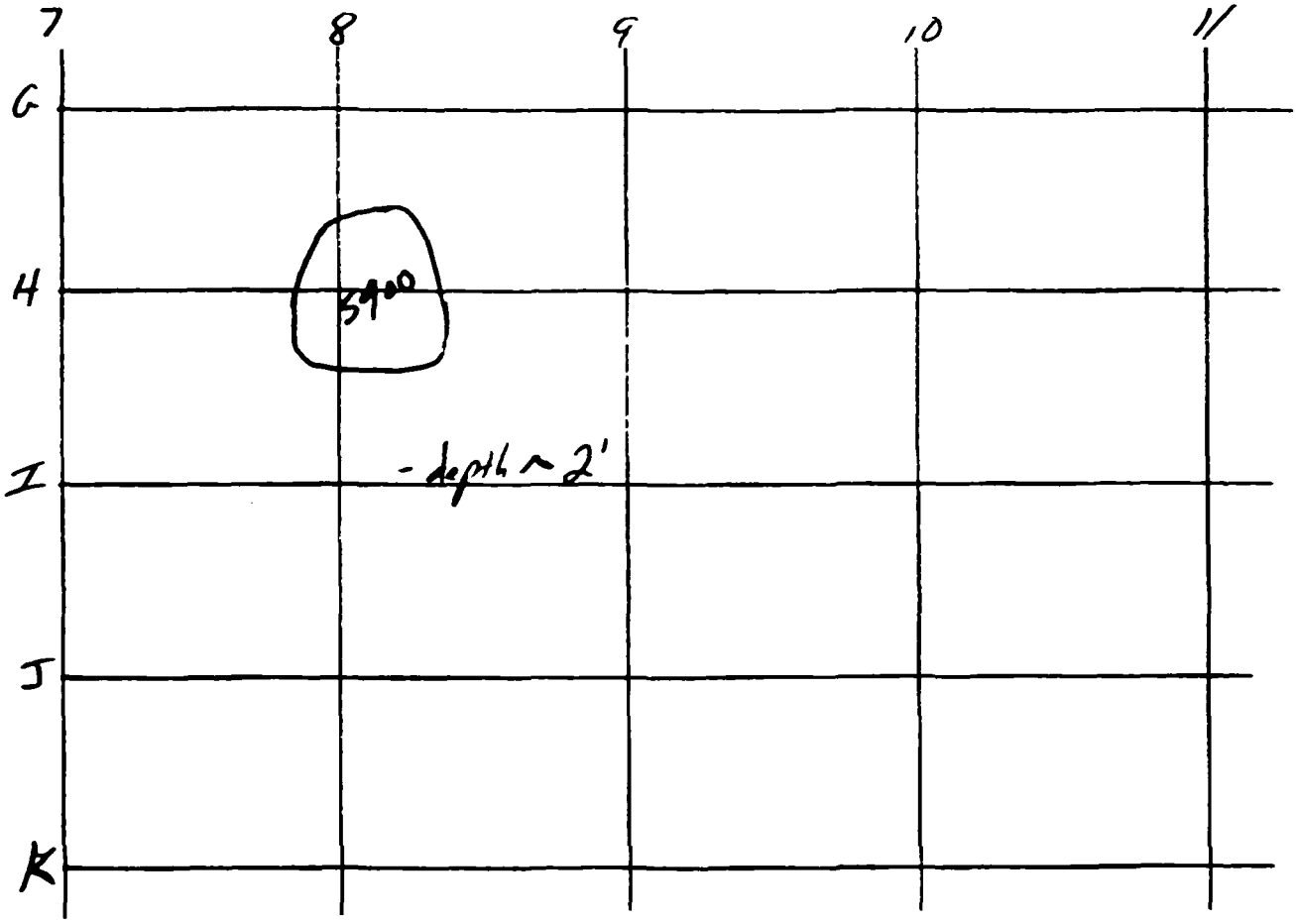
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/30/00 TECHNICIAN: Brent Barron

INST. MODEL: Cadillac 2221 (shielded) SERIAL NO.: 132544

INST. CALIBRATED (Y/N)? 5/5/00 LIFT ELEVATION: exclusion Zone after remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

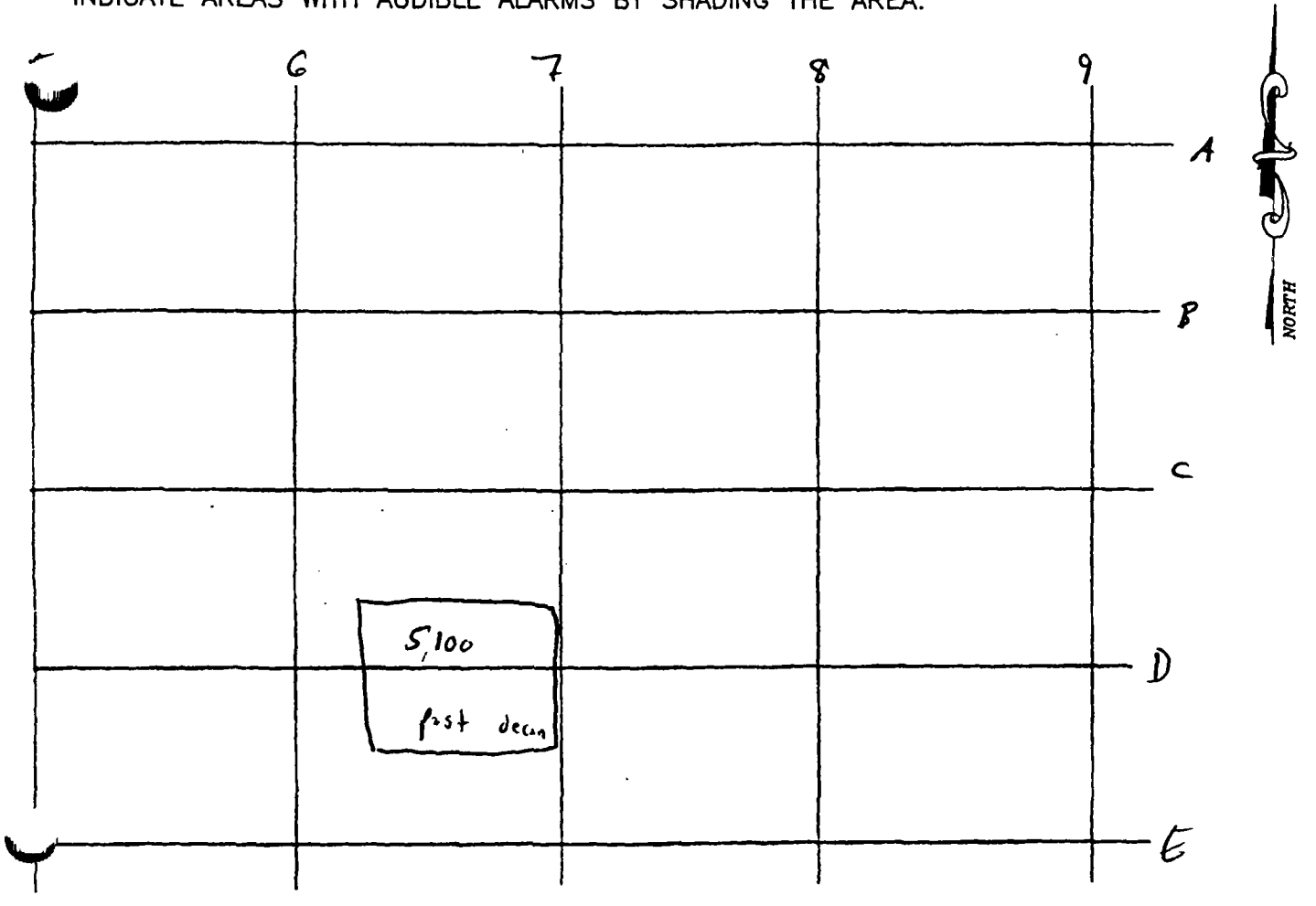
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/13/00 TECHNICIAN: Toby Slemm

INST. MODEL: 222 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

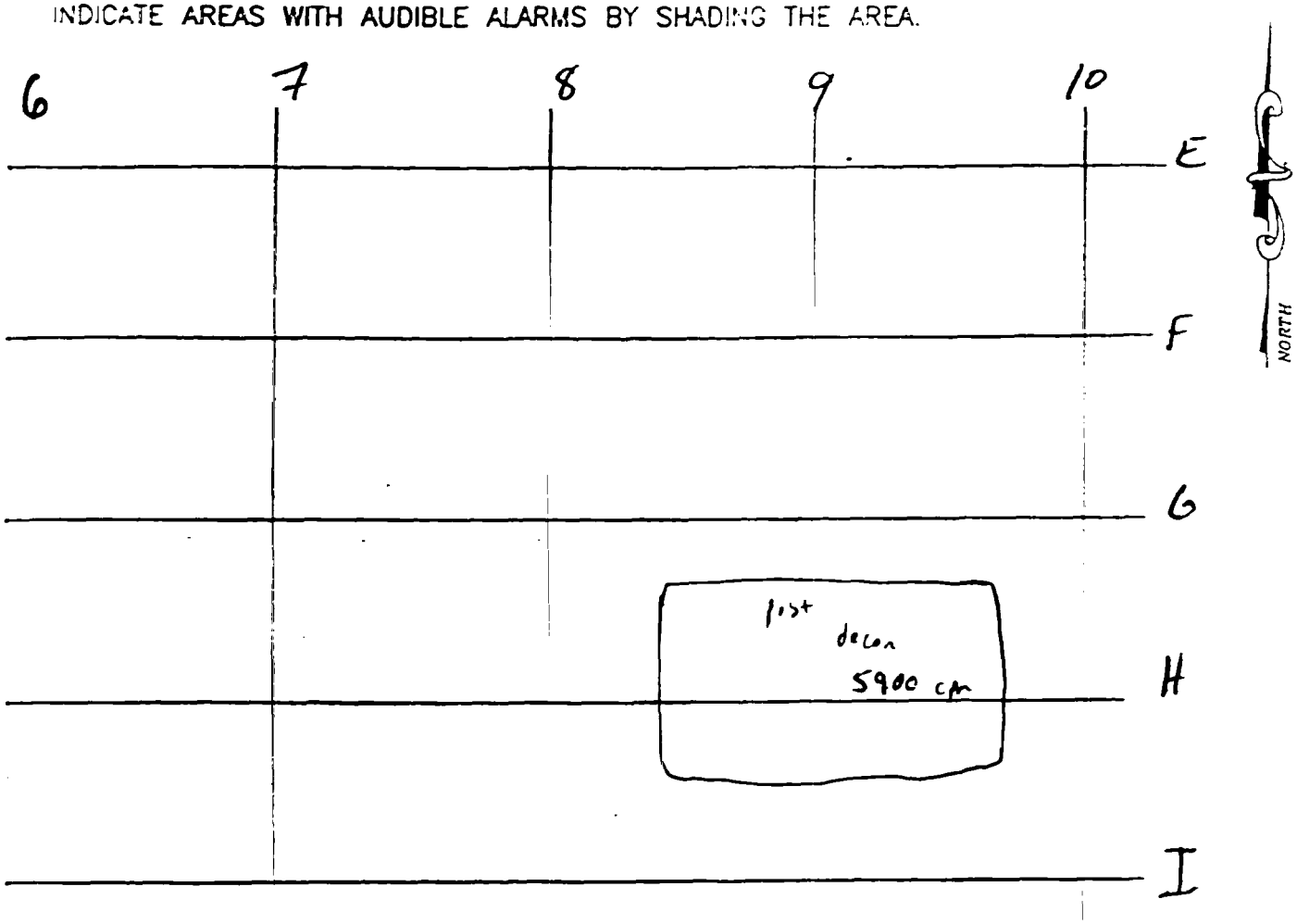
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/5/00 TECHNICIAN: Toby Shevan

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

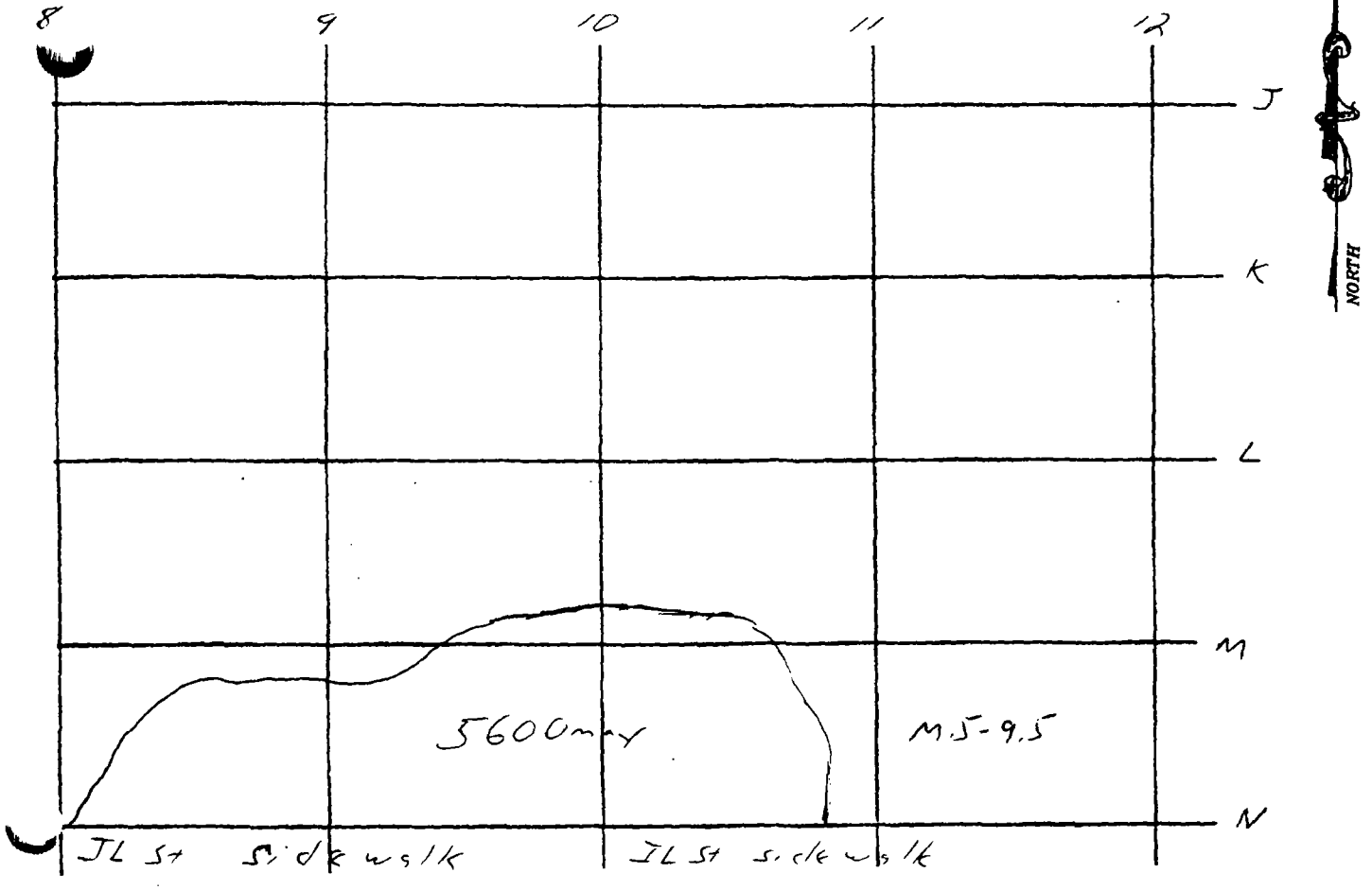
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00 TECHNICIAN: G. Hebe

INST. MODEL: Ludlum 2221 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: 6' Excavation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00

TECHNICIAN: Brett Barton

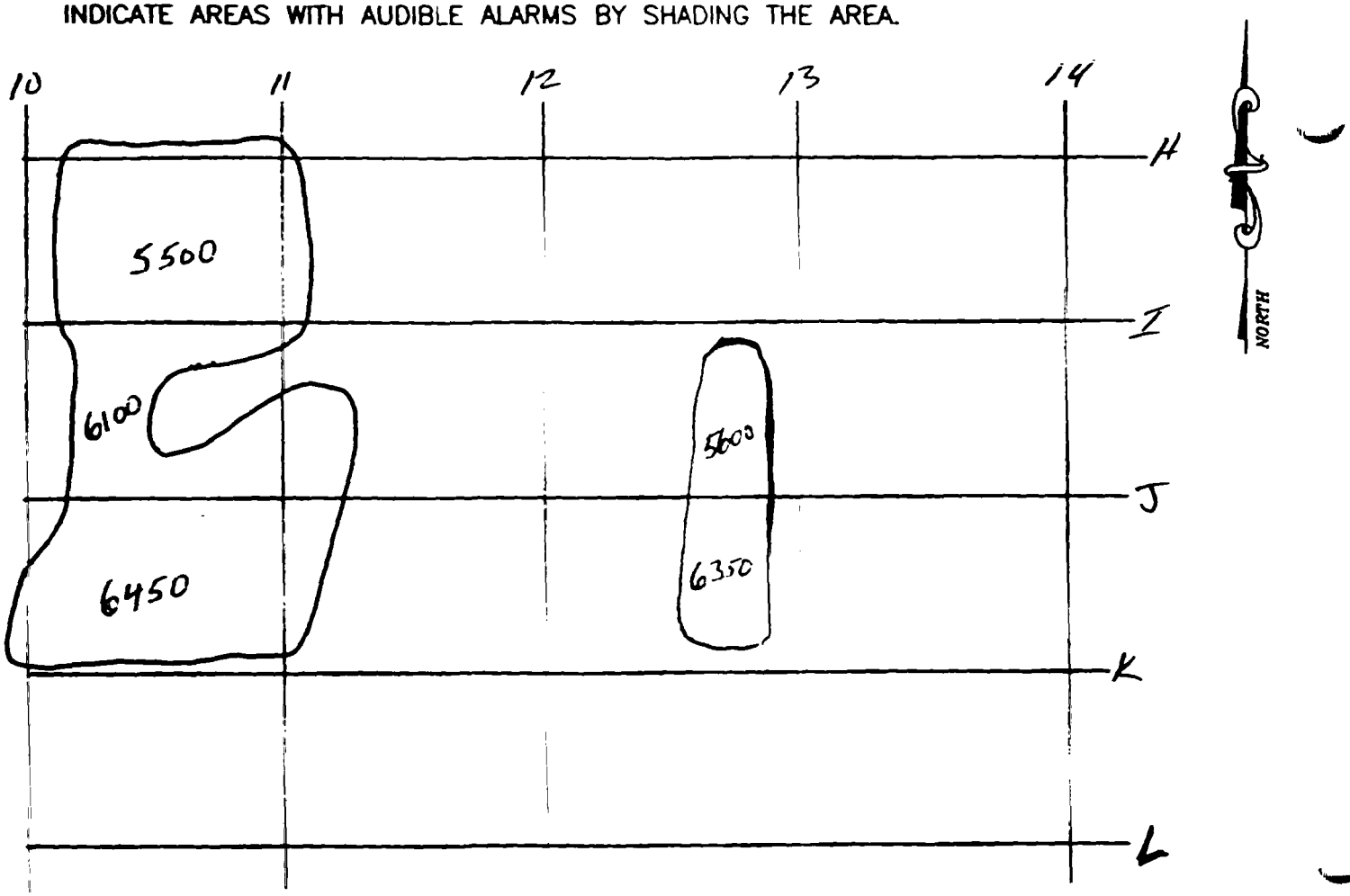
INST. MODEL: Ludlum 2221 shielded

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Exclusion Zone
After remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

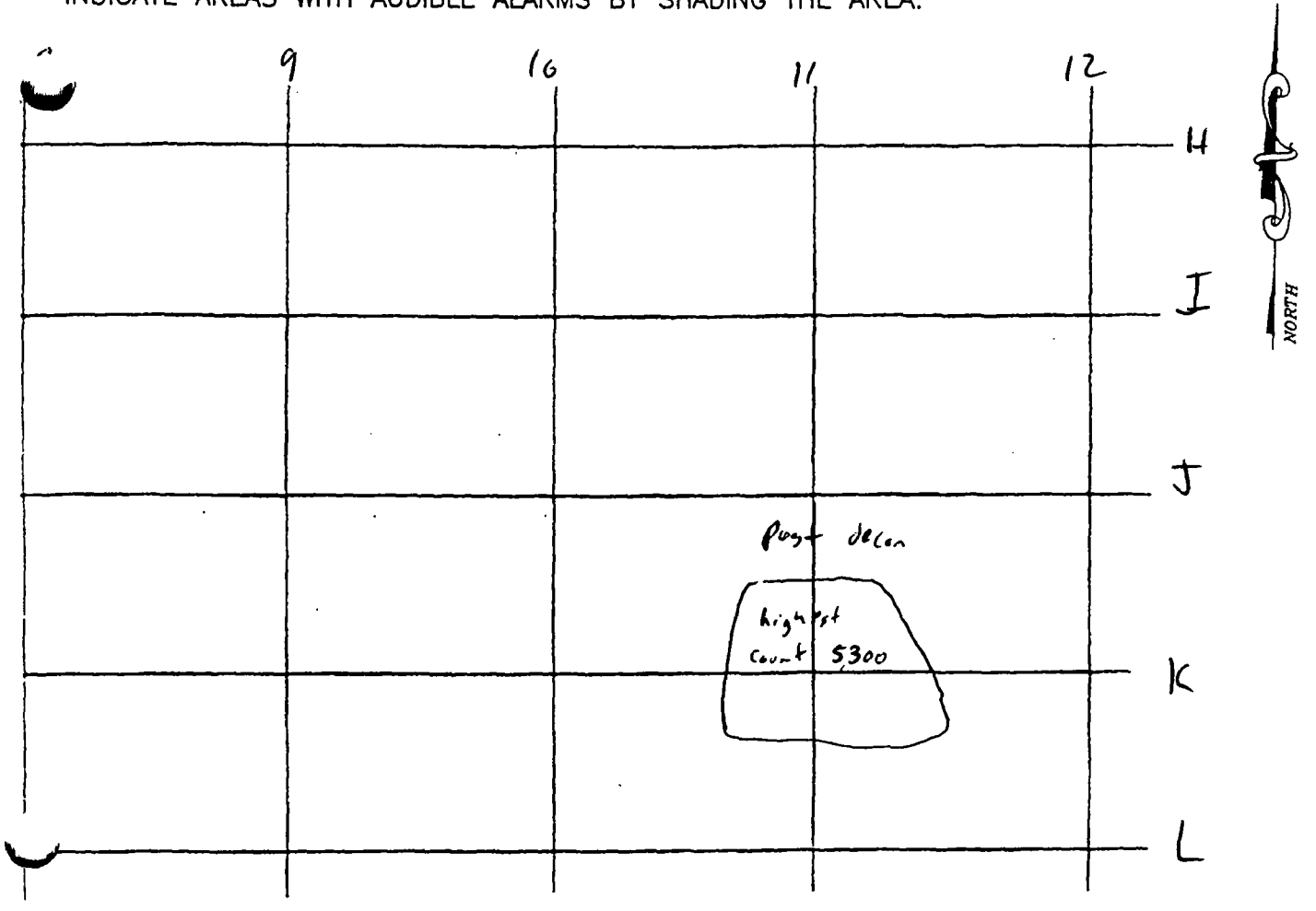
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/1/00 TECHNICIAN: Joel A.

INST. MODEL: 2221 (Shielded) SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/1/00

TECHNICIAN: Bei

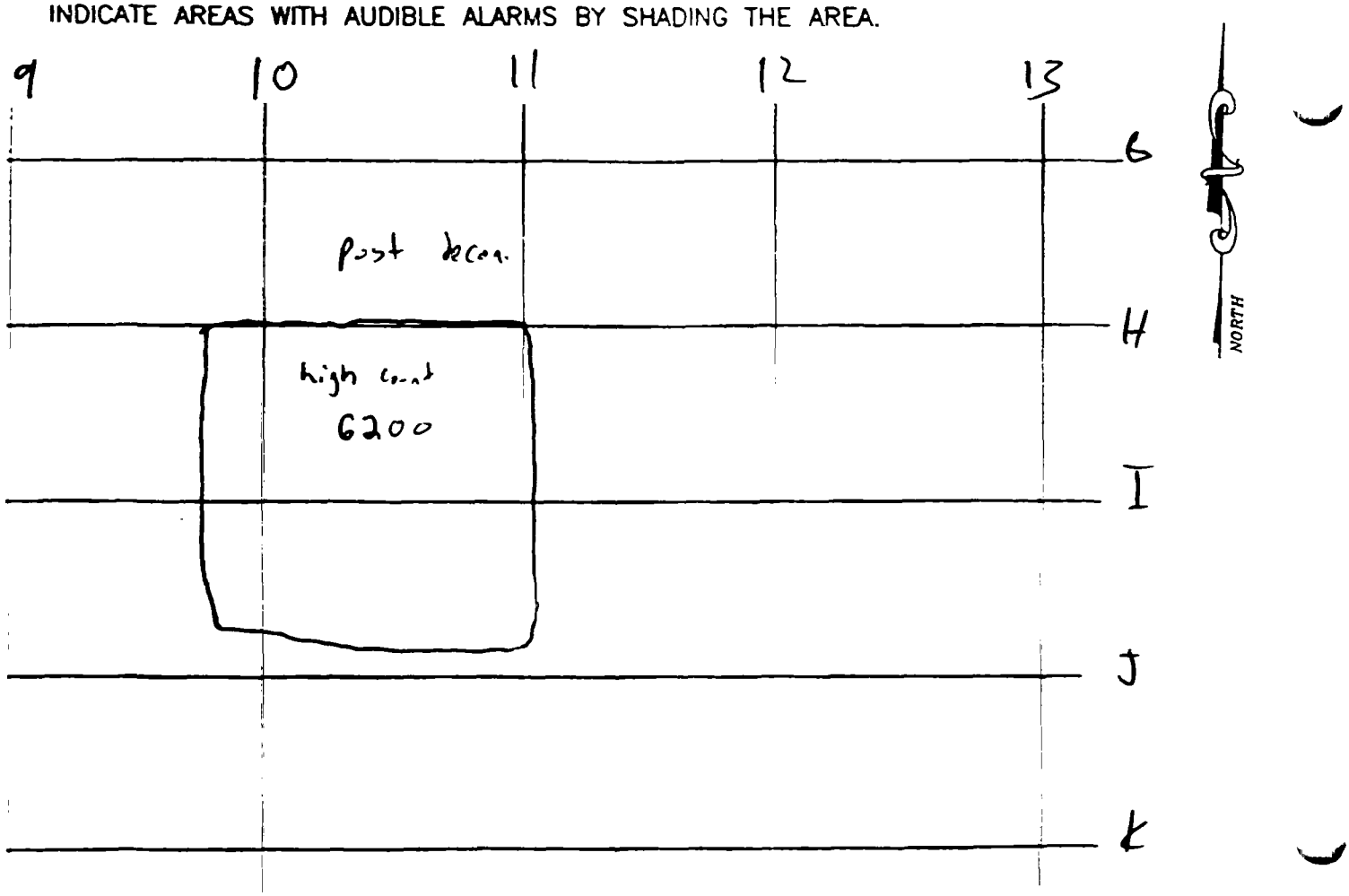
INST. MODEL: 2221 shielded

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

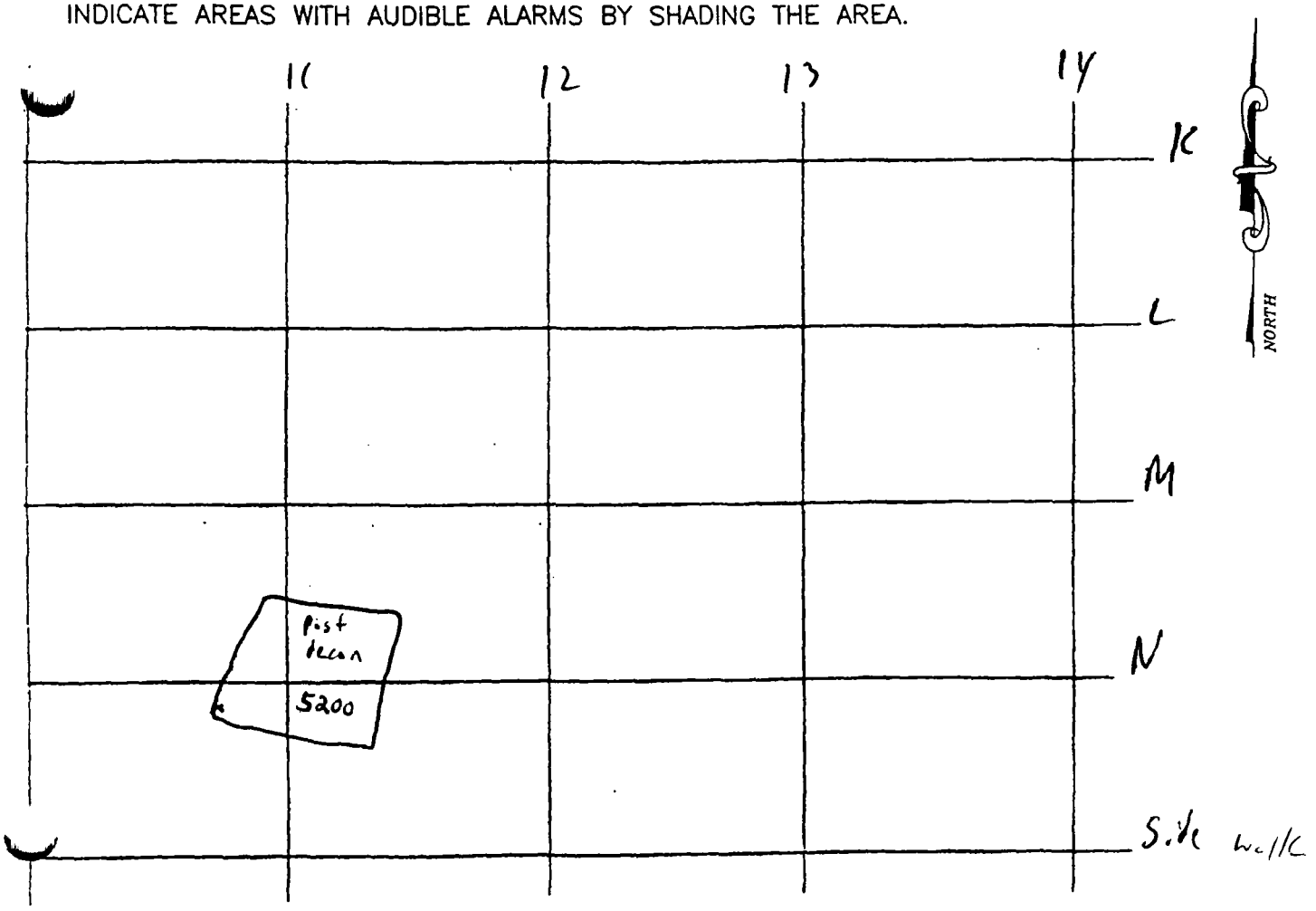
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/6/00 TECHNICIAN: Toby Sloman

INST. MODEL: 2221 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: exclusion zone / post de.

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION_INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/22/00

TECHNICIAN: Toby Sum

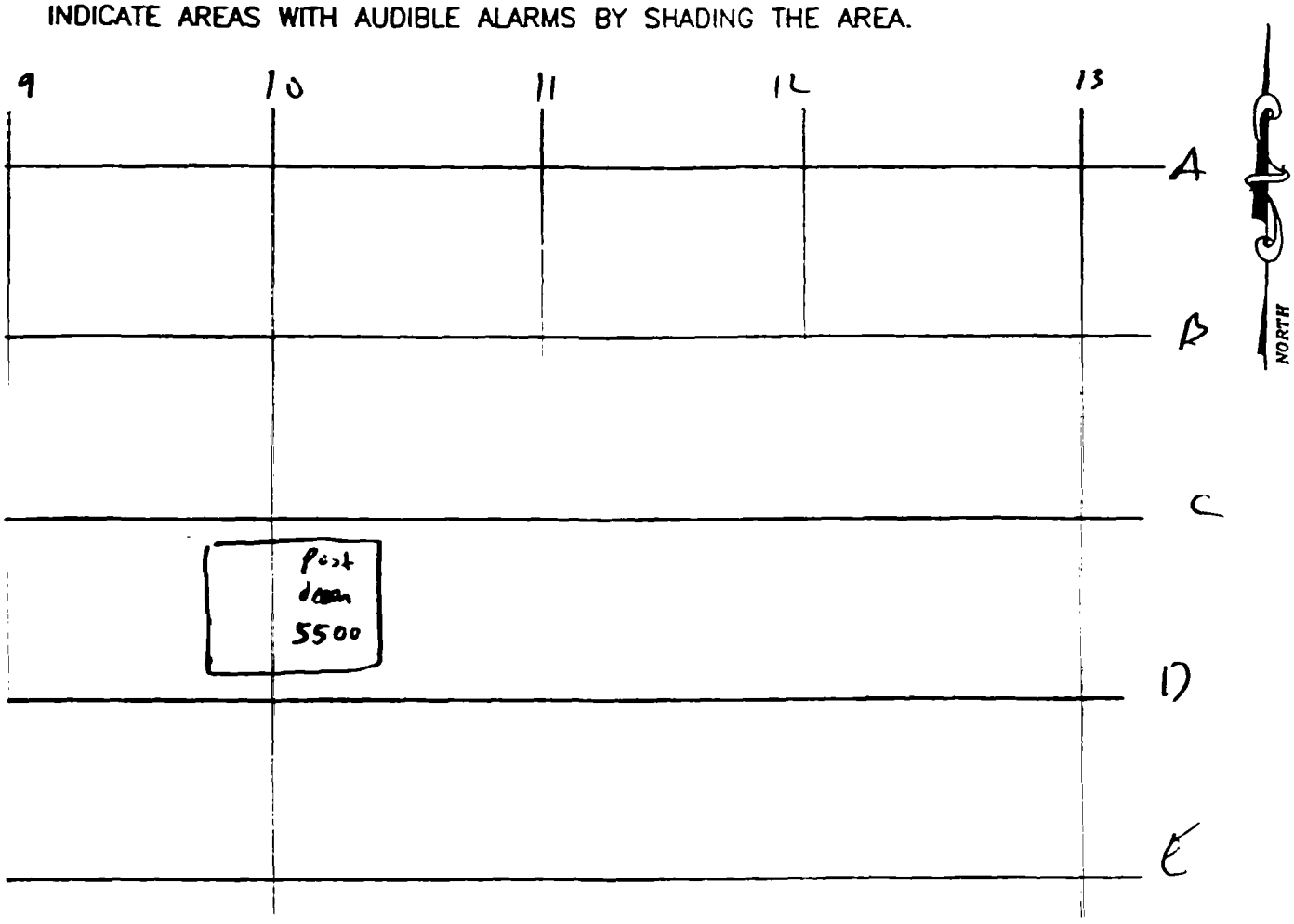
INST. MODEL: 2221 (shielded)

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

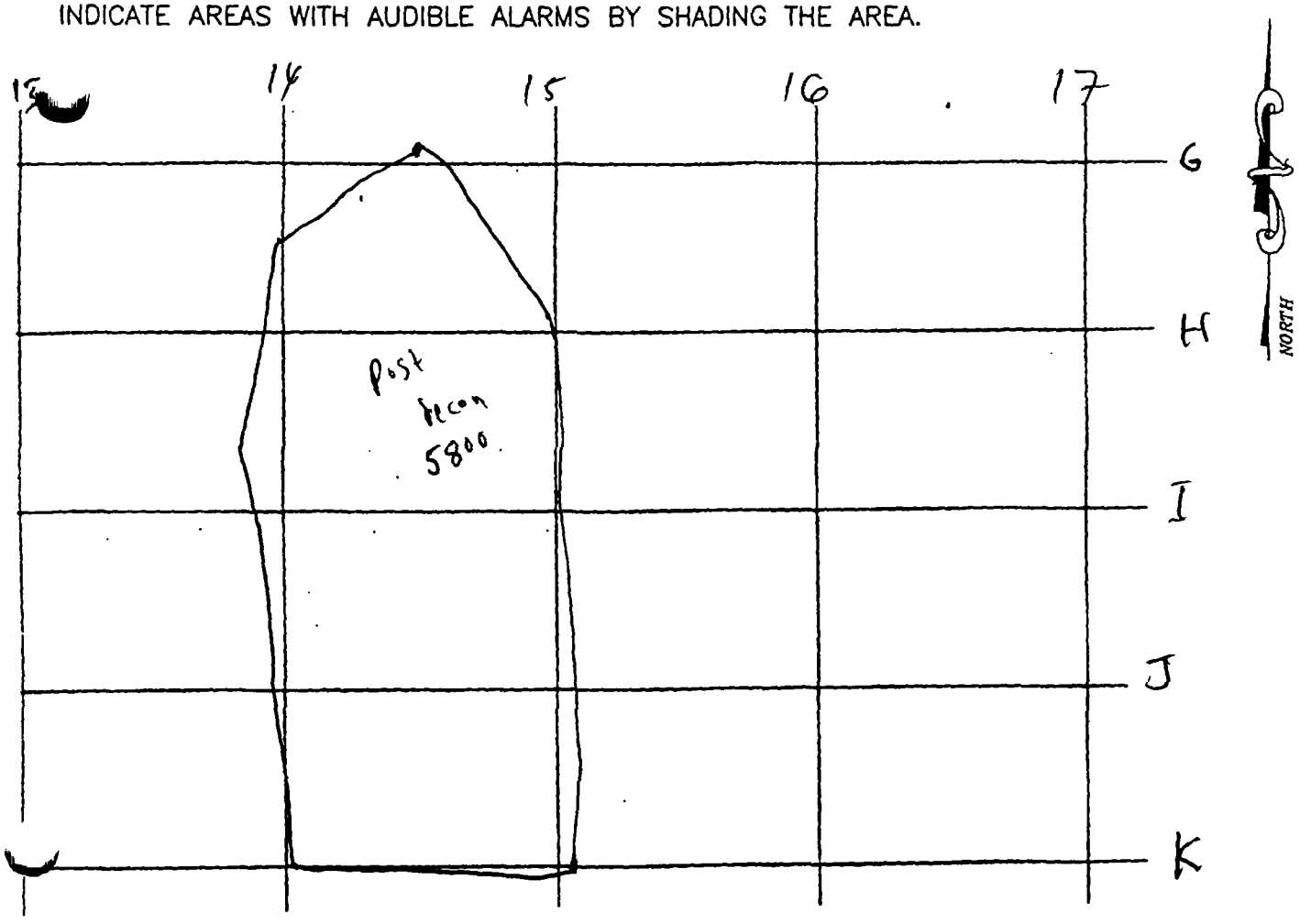
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/28/00 TECHNICIAN: Toby Stewart

INST. MODEL: 2221 (shielded) SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

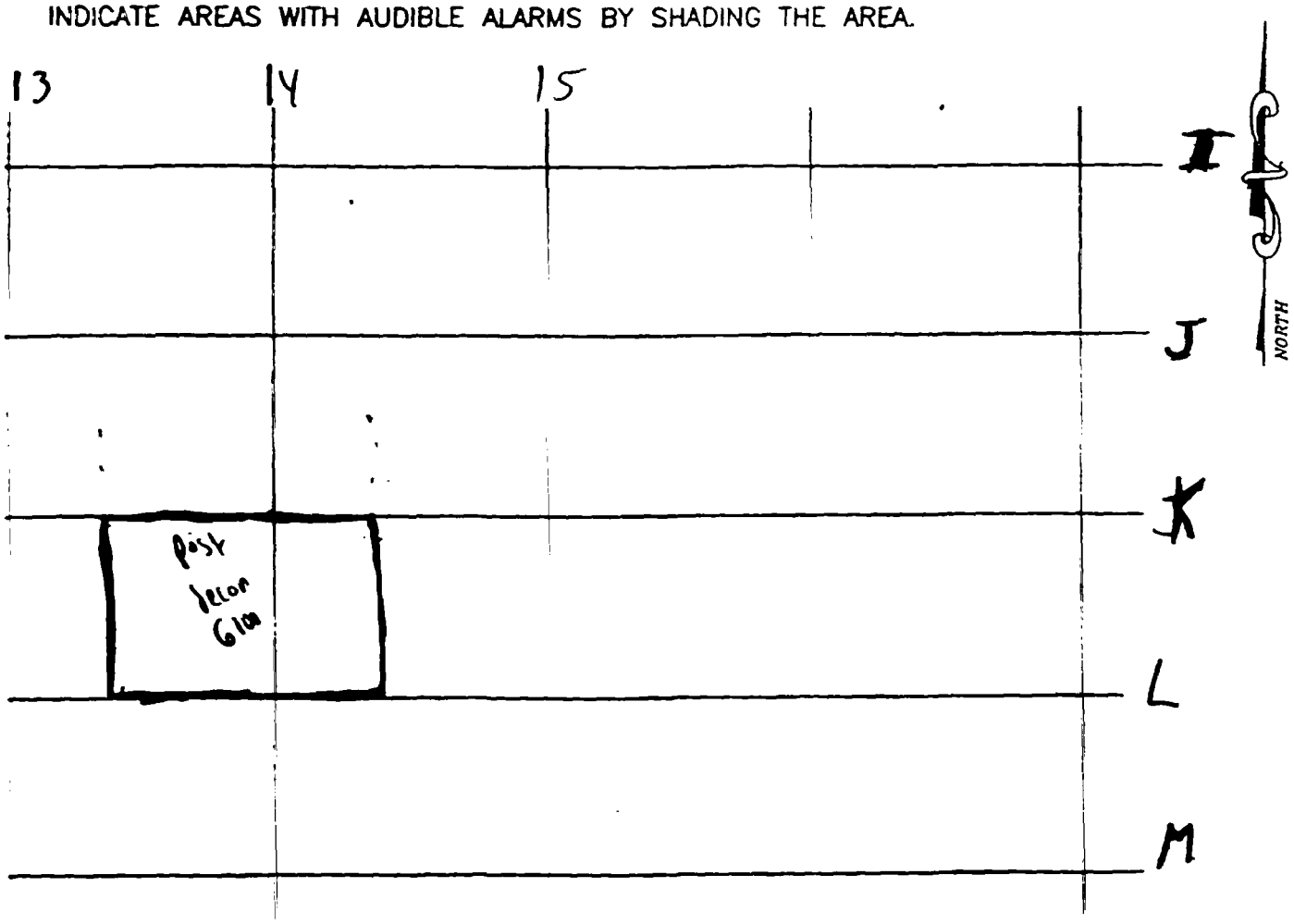
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/29/00 TECHNICIAN: Glen Huber

INST. MODEL: 2221 (SN elided) SERIAL NO.: 132544

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Excavation Zone (Post Jean)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

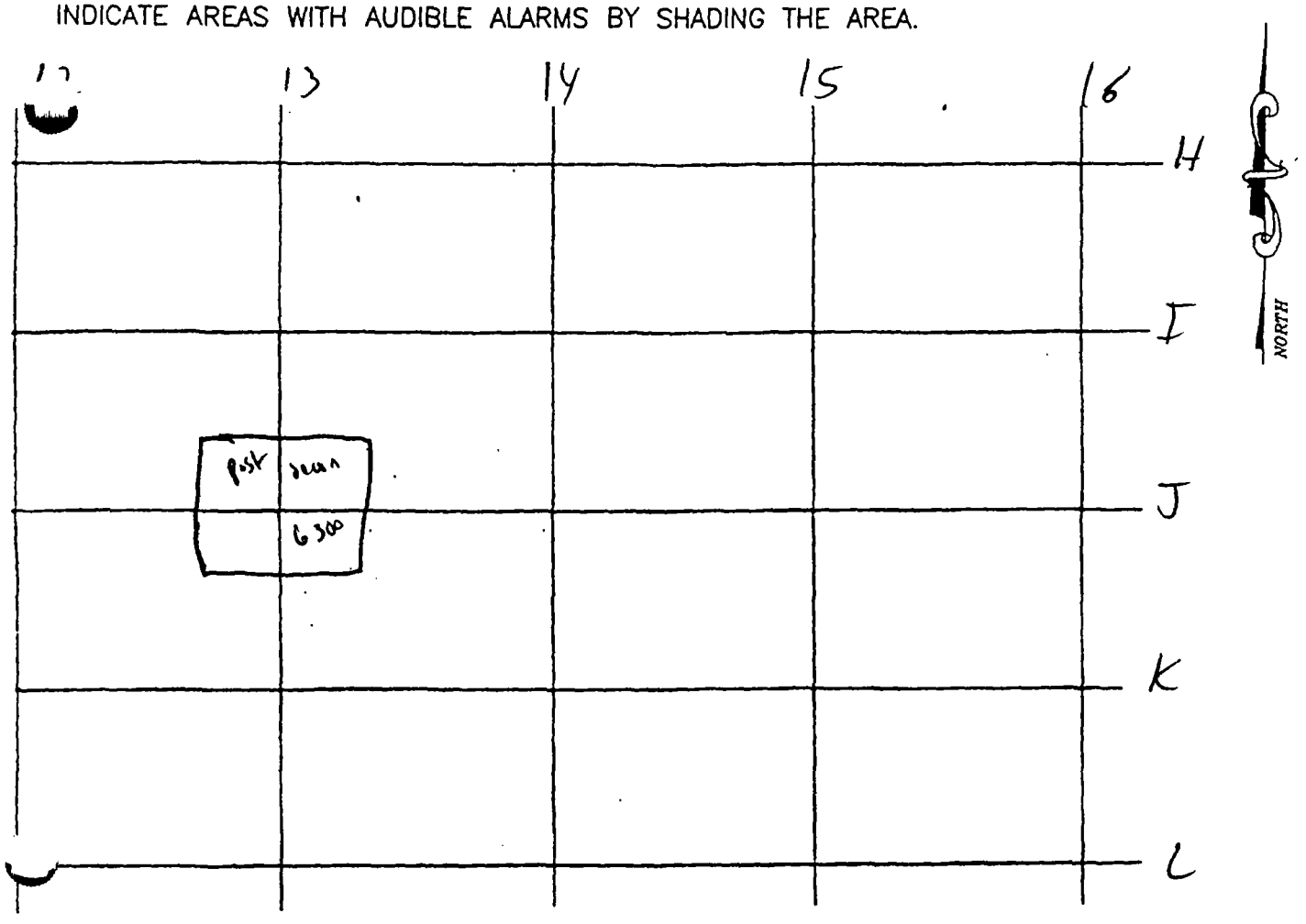
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/29/00 TECHNICIAN: Toby Staven

INST. MODEL: 2221 (Shielded) SERIAL NO.: 132844

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: exclusion zone (Post decon.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

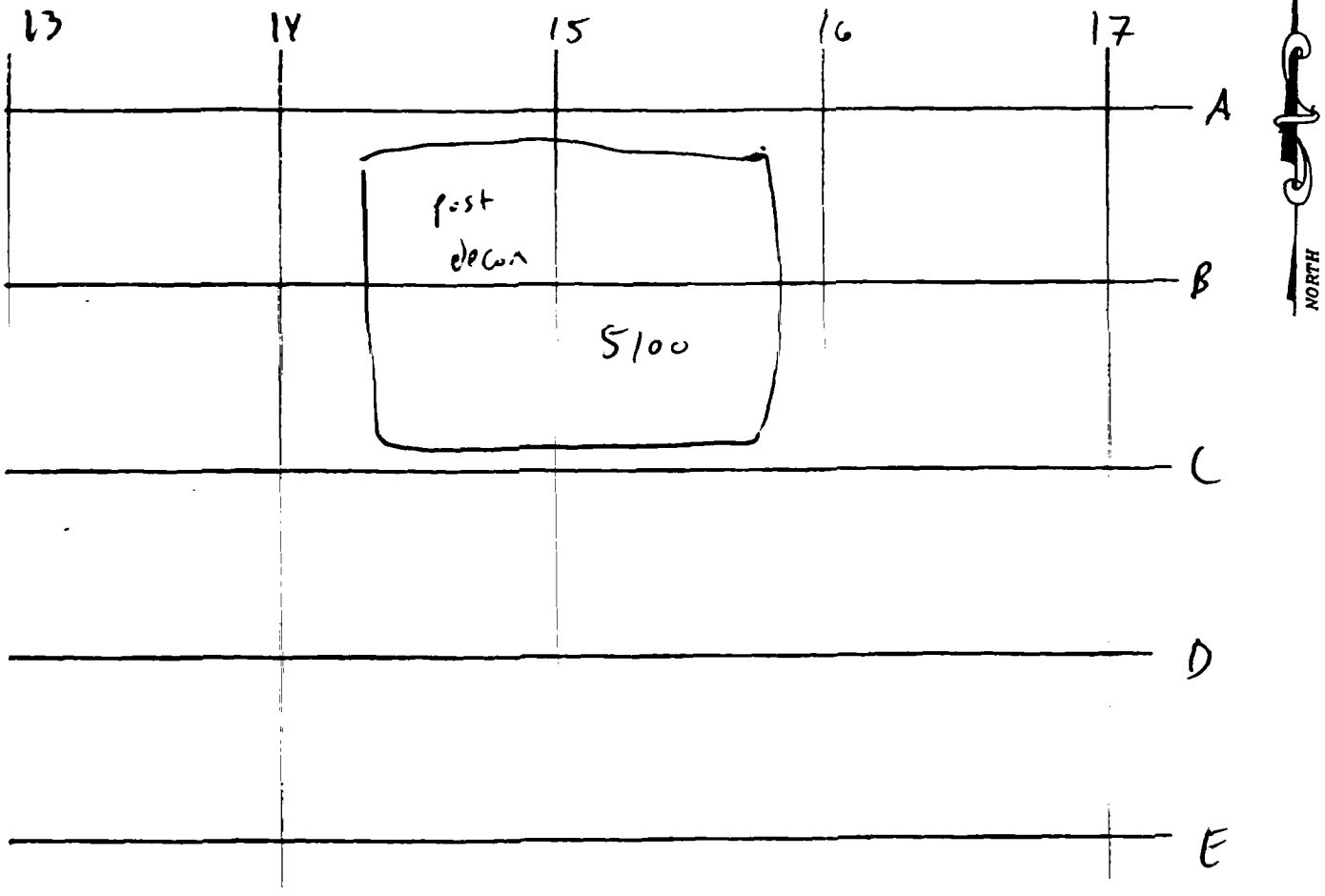
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/21/00 TECHNICIAN: Glen Huber

INST. MODEL: 2221 SN: elder SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

survey performed post-decon

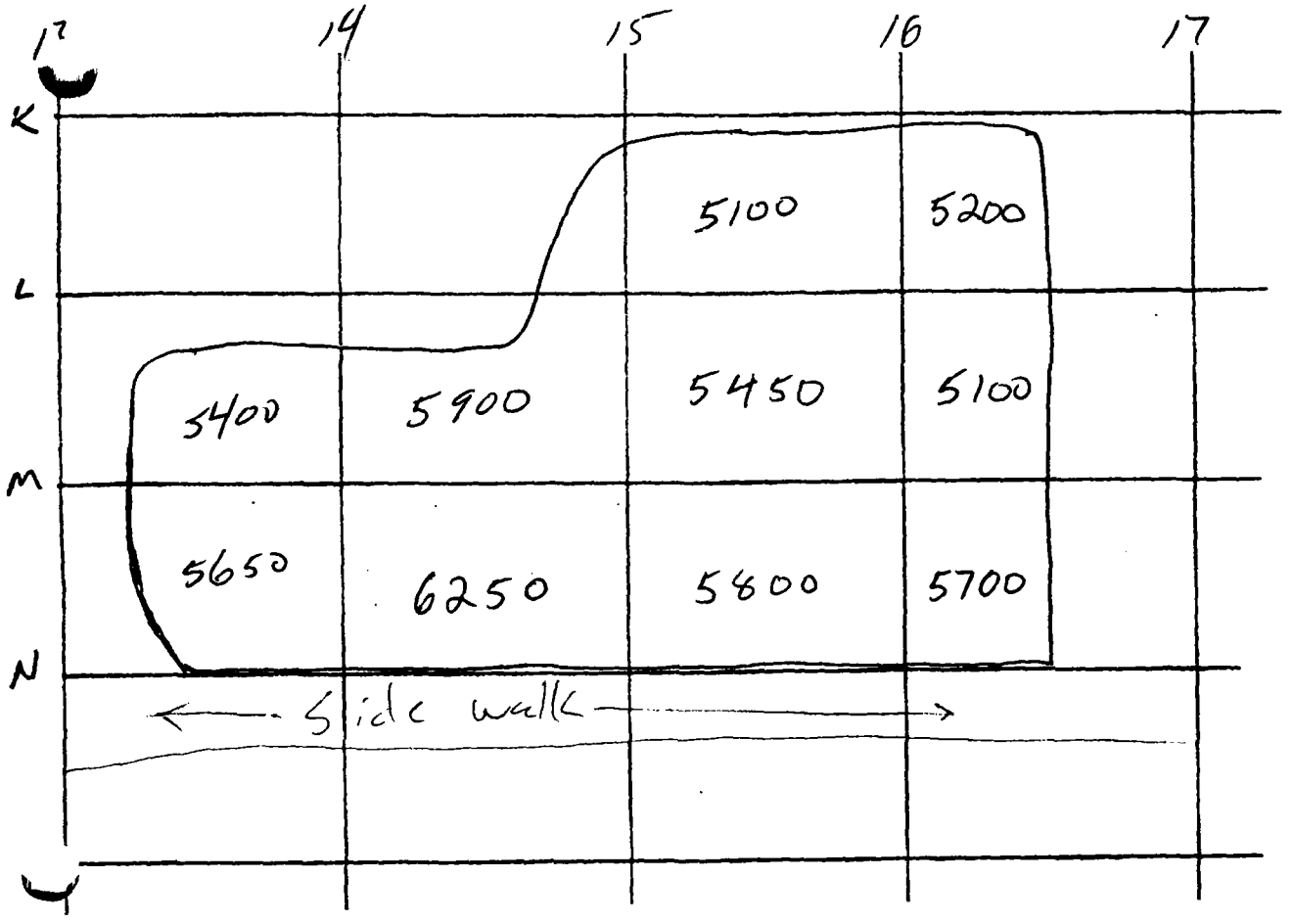
DATE: 5/23/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 (shielded) SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 5/5/00 LIFT ELEVATION: max depth ~10'

After remediation - exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

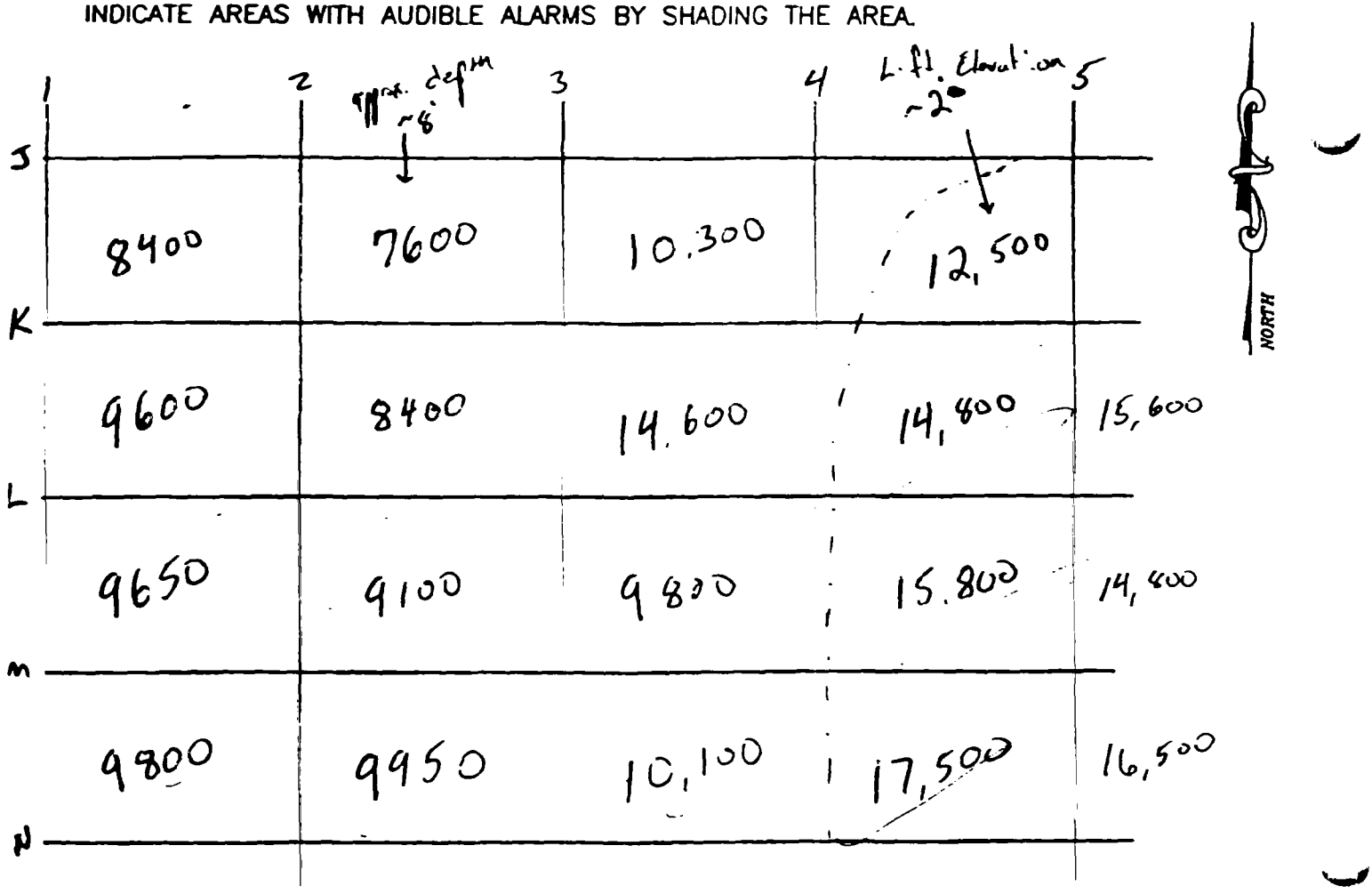
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 (w/ BA. cell) SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Exclusion zone Post-Decon

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Entire 80m² grid exclusion zone

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

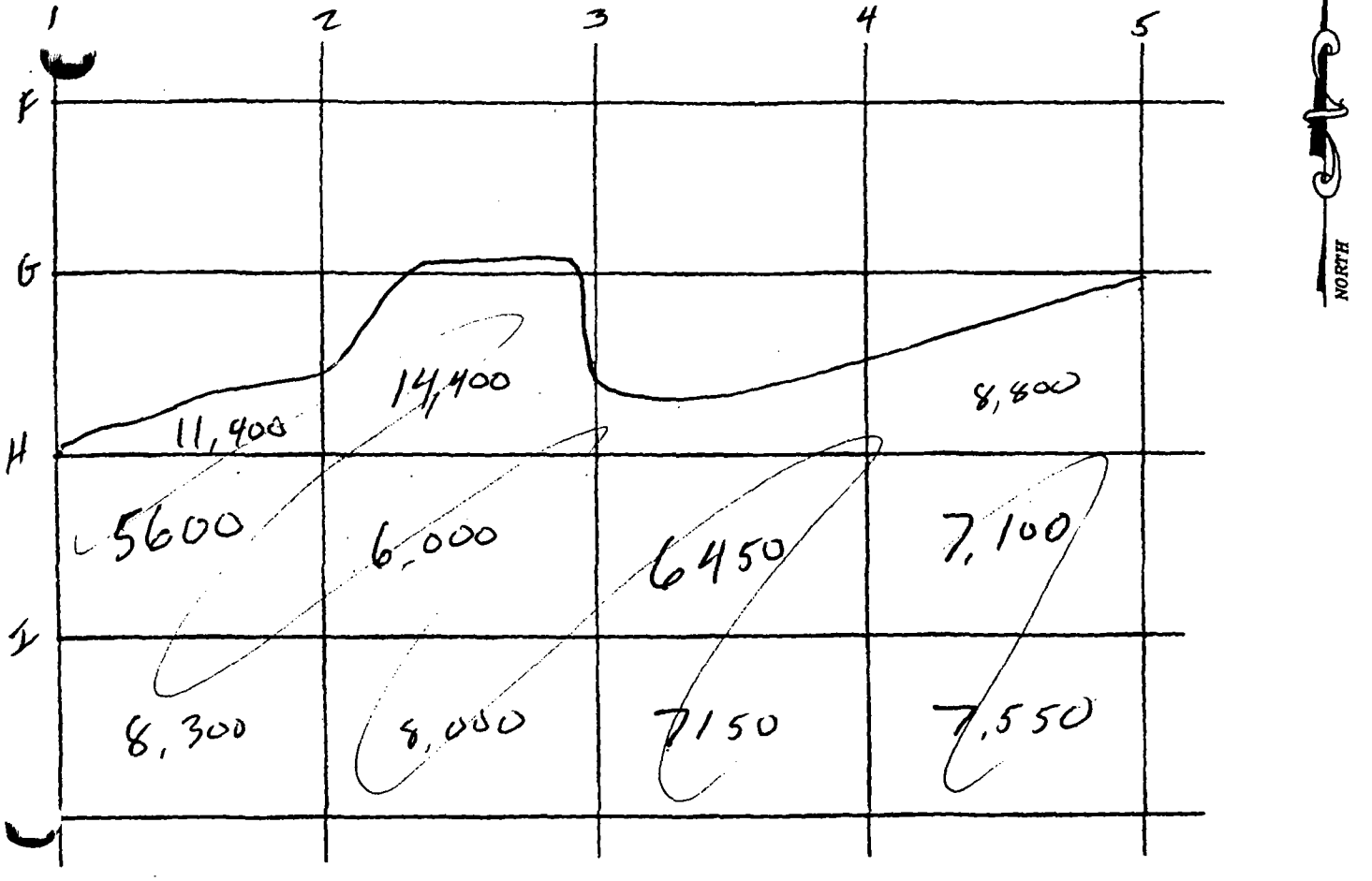
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00 TECHNICIAN: Brett Boyko

INST. MODEL: Ludlum 2221 (unshielded) SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Excavation 20-k Post Decon

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

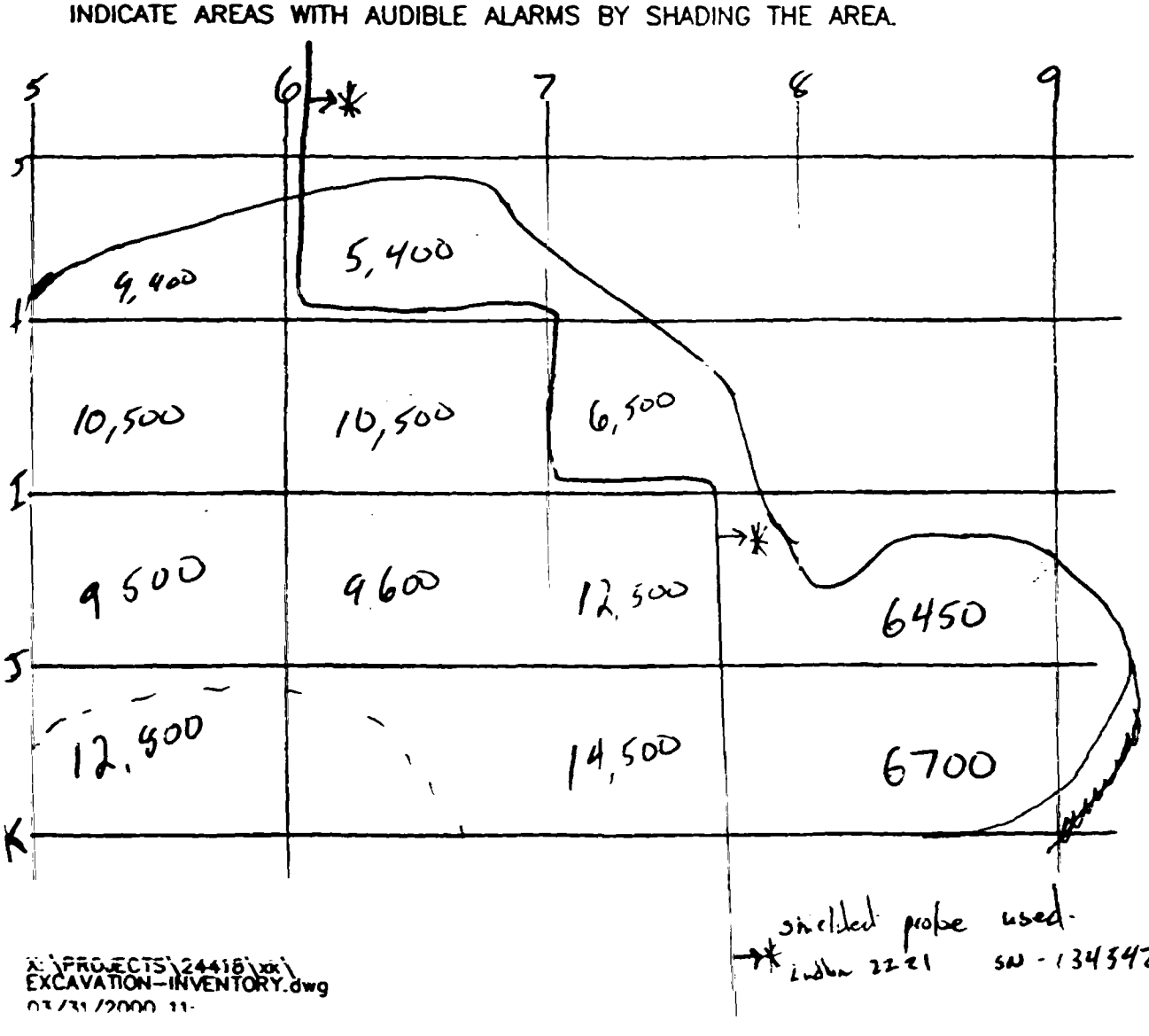
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00 TECHNICIAN: BRENT BARTON

INST. MODEL: Ludlum 2221 (with dlw) SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Excavation zone post decon

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xx\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

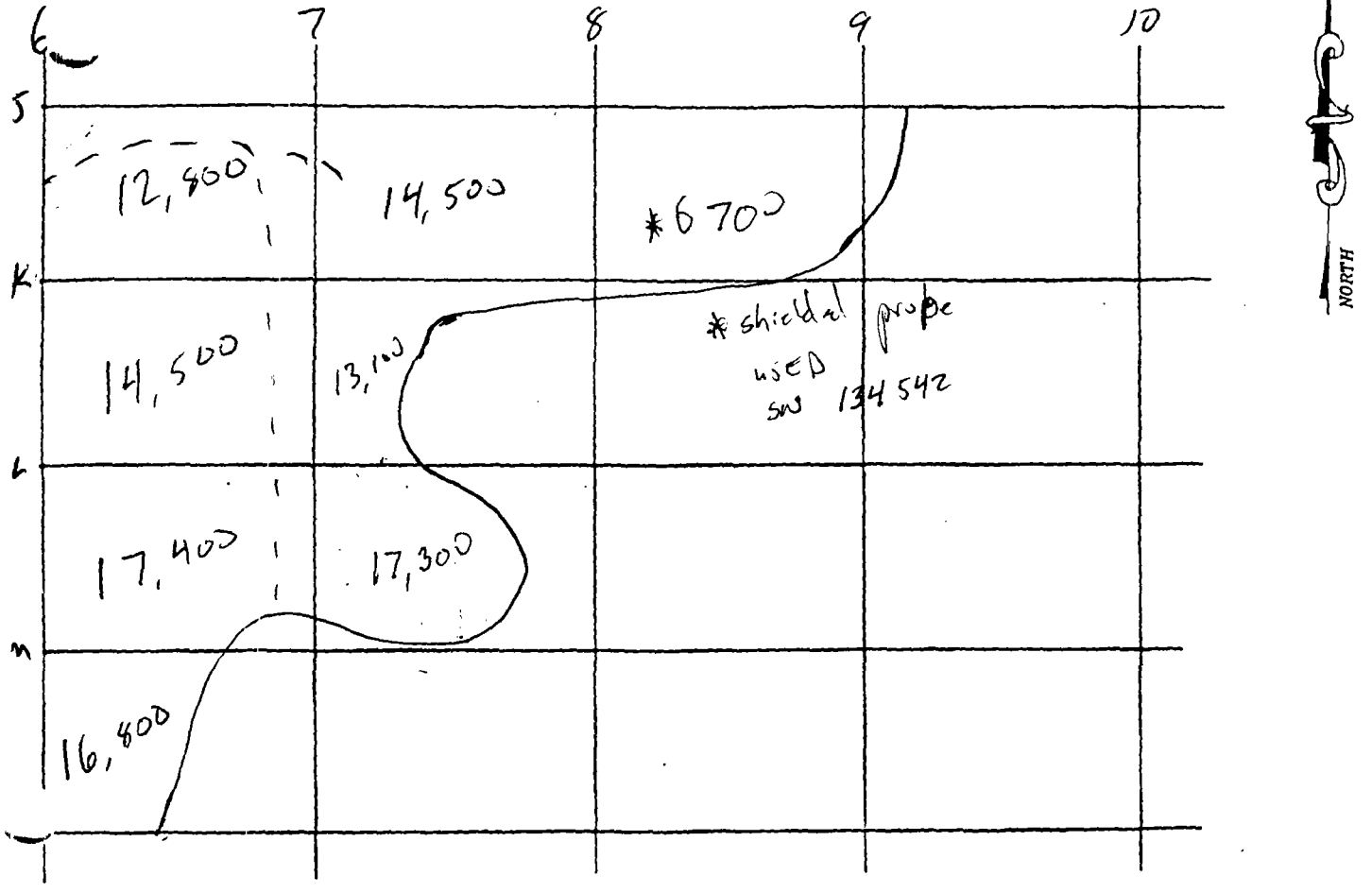
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/23/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 (GM Shielded) SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Exclusion Zone Post Decon

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

AREA B SURVEYS: POST-REMEDIATION

EXCLUSION ZONE SURVEYS AFTER CLEAN-UP

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/11/00 - 9/13/00 TECHNICIAN: Brett Barton / Toby Shaw

INST. MODEL: 2221 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

1	2	3	4	5	
					A
1) 4700 2) 5100 3) 5000 4) 4900	1) 4900 2) 5600 3) 4500 4) 5100	1) 5300 2) 5300 3) 5100 4 4900	1) 4800 2) 3800 3) 4300 4 4700		B
1) 4800 2) 5800 3) 5100 4 5500	1) 4200 2) 4350 3) 5100 4) 4000	1) 3900 2) 4000 3) 5400 4) 4000	1) 5800 2) 5200 3) 4900 4) 4500		C
1) 5650 2) 5000 3) 4900 4) 4400	1) 5500 2) 5700 3) 5600 4) 4200	1) 4750 2) 4100 3) 4000 4) 3950	1) 4800 2) 5600 3) 5300 4) 5300		D
1) 5000 2) 43.. 3) 4900 4) 3800	1) 5100 2) 4700 3) 4800 4) 4800	1) 5600 2) 5800 3) 520- 4) 5000			E

NORTH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

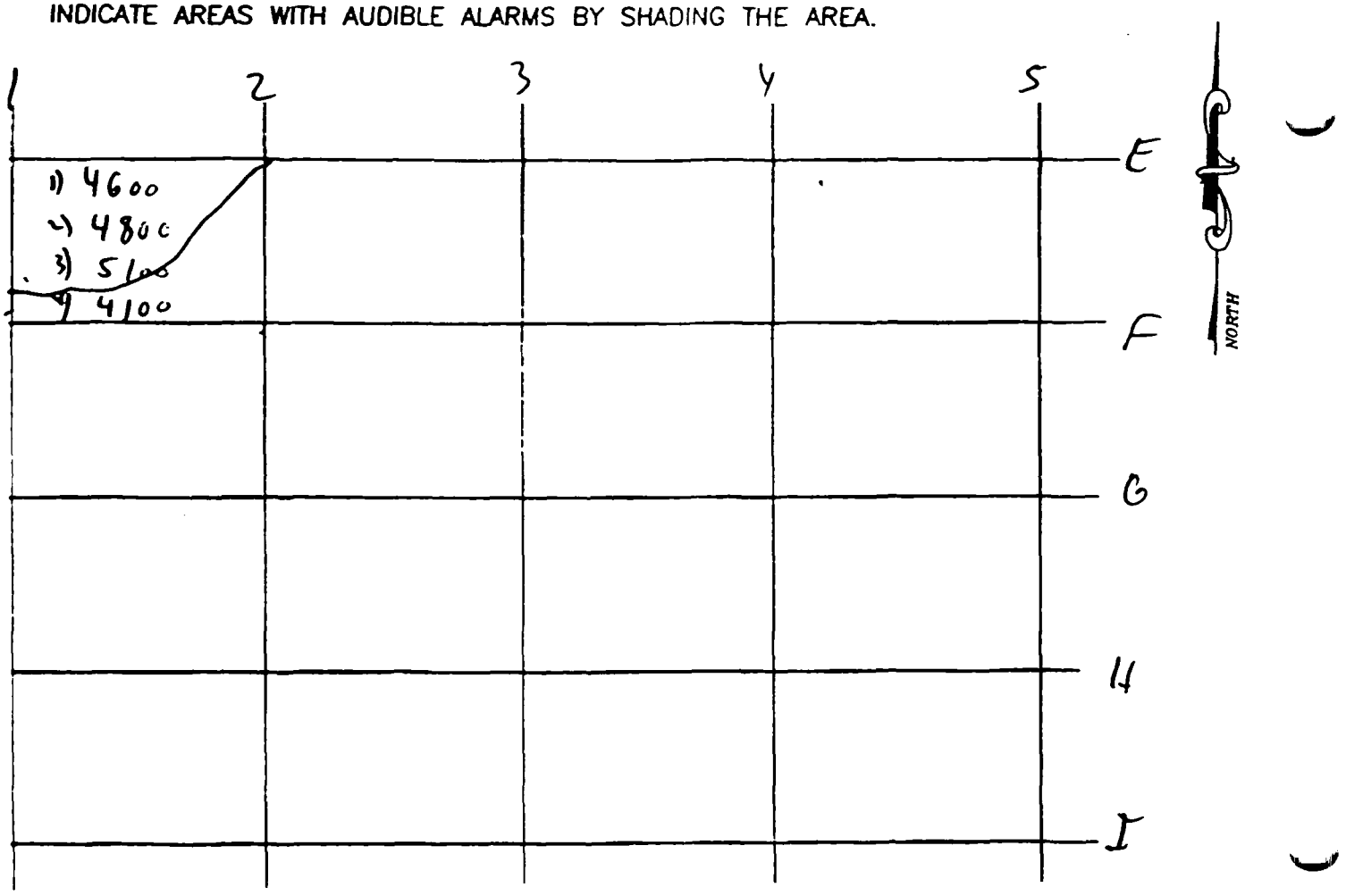
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/13/00 TECHNICIAN: Toby Sloan

INST. MODEL: 2221 shield SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/10/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221

SERIAL NO.: 127242

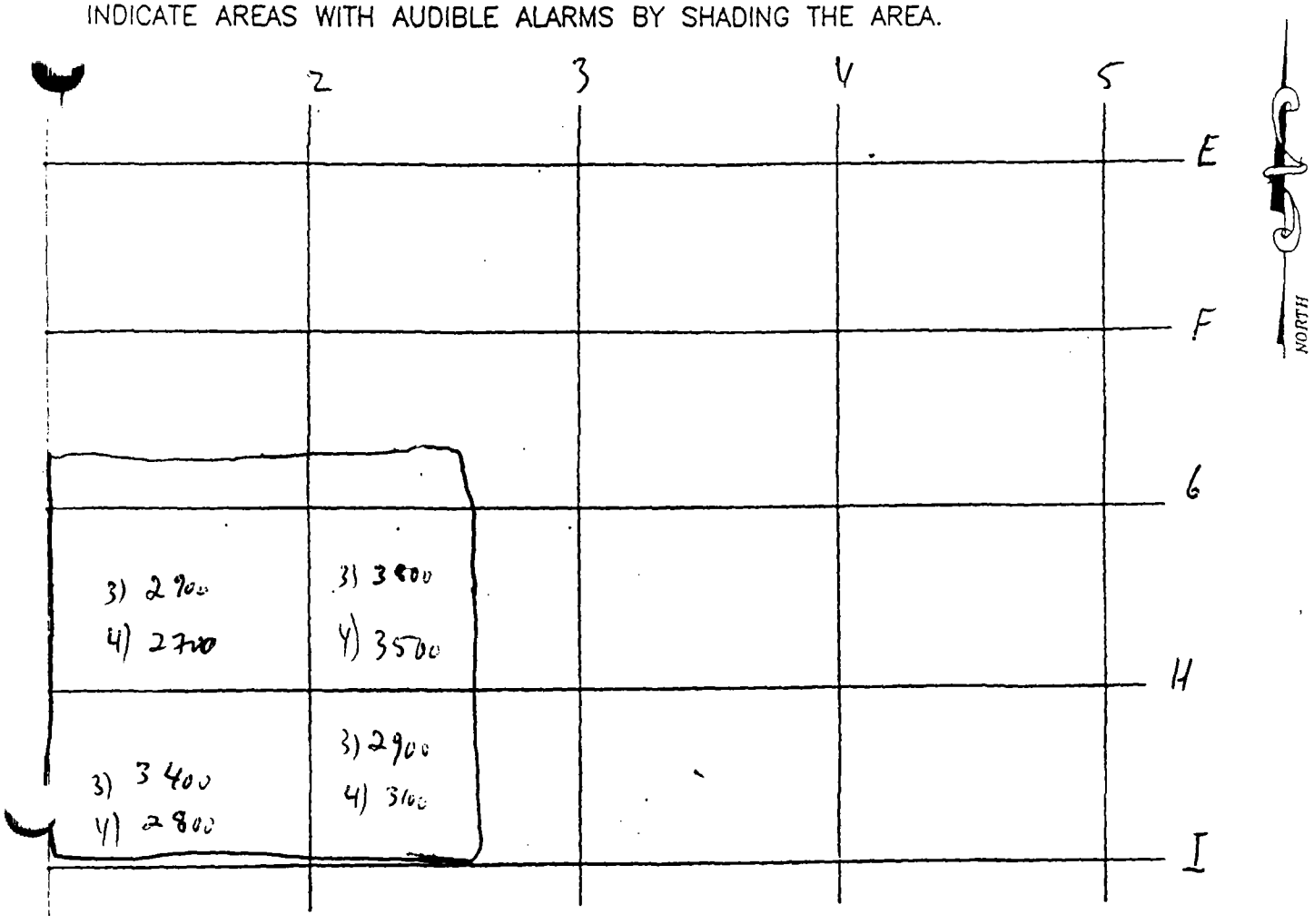
INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: ~~Grade beams~~ basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

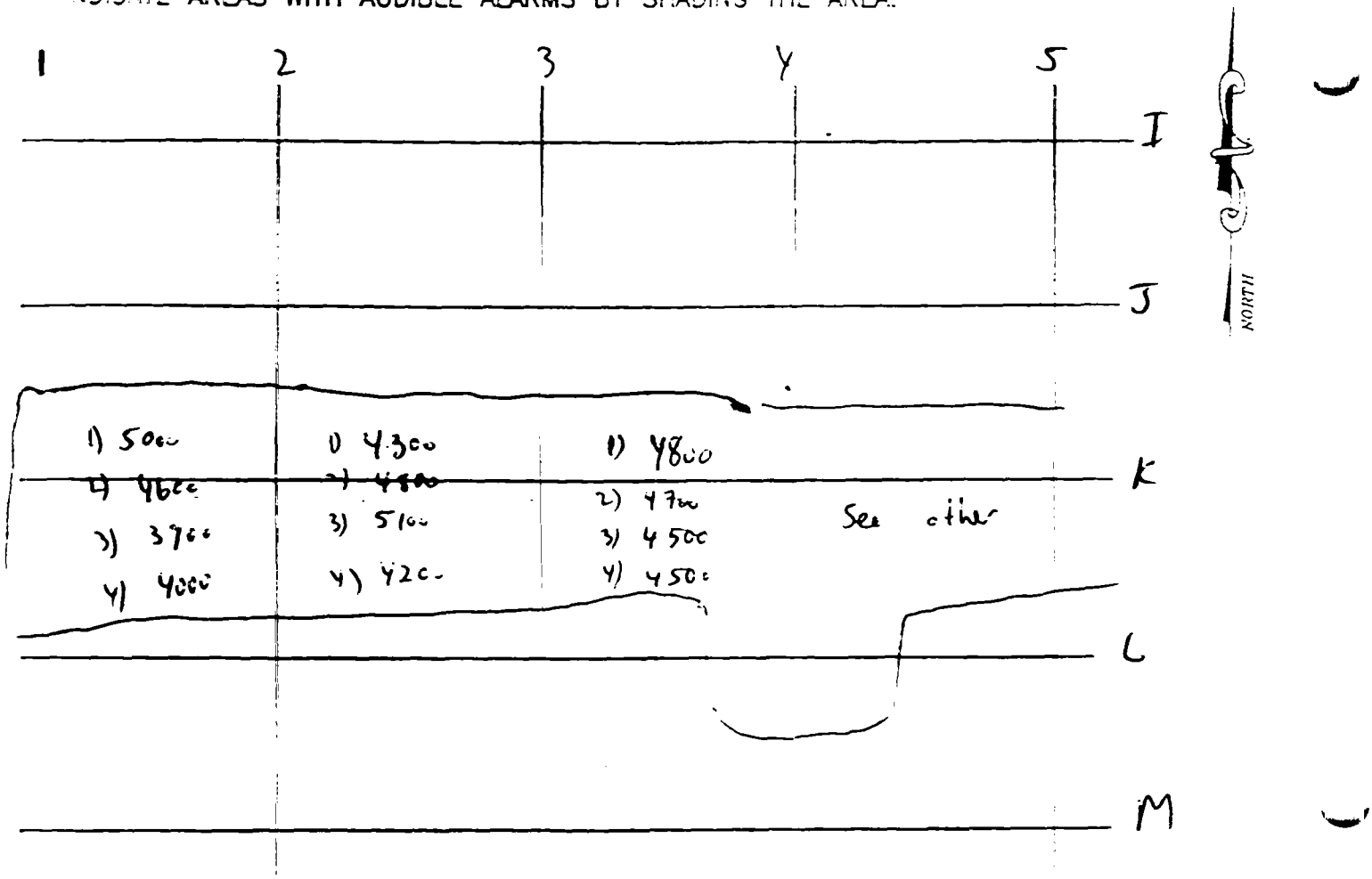
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/10/00 TECHNICIAN: Toby Skerm/Glen Hu

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y)/N)? Y LIFT ELEVATION: basement
(1.Ft 1 already done)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

(4th lift marked by * done on 10/25)

DATE: 9/13 and 9/22 and 9/26 TECHNICIAN: Toby Skewes

INST. MODEL: 2201 shielded SERIAL NO.: 12724

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

5	6	7	8	9	
1) 5100 2) 5900 3) 5500 4) 4200	1) 4000 2) 4600 3) 4900 4) 4200	1) 5000 2) 5300 3) 5100 4) 4900	1) 4900 2) 4200 3) 4400 4) 3900 *		A
1) 5000 2) 5200 3) 5600 4) 4900	1) 4900 2) 5100 3) 5500 4) 4800	1) 4900 2) 5800 3) 6200 4) 4900 10K	1) 4300 2) 4000 3) 3900 4) 4000 *		B
1) 5300 2) 5600 3) 5100 4) 5000	1) 5100 2) 5900 3) 6100 4) 5000	1) 4900 2) 5900 3) 5400 4) 3200 12K	1) 4600 2) 4700 3) 3900 4) 4100 *		C
1) 4900 2) 5100 3) 4600 4) 4000 *	1) 4600 2) 4300 3) 4400 4) 3700 *	1) 4200 2) 4700 3) 4600 4) 4100 13K	1) 4900 2) 4800 3) 4700 4) 3600 *		D E

NORTH

X:\PROJECTS\24418\xk\EXCAVATION_INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/17/00

TECHNICIAN: Glenn Huber

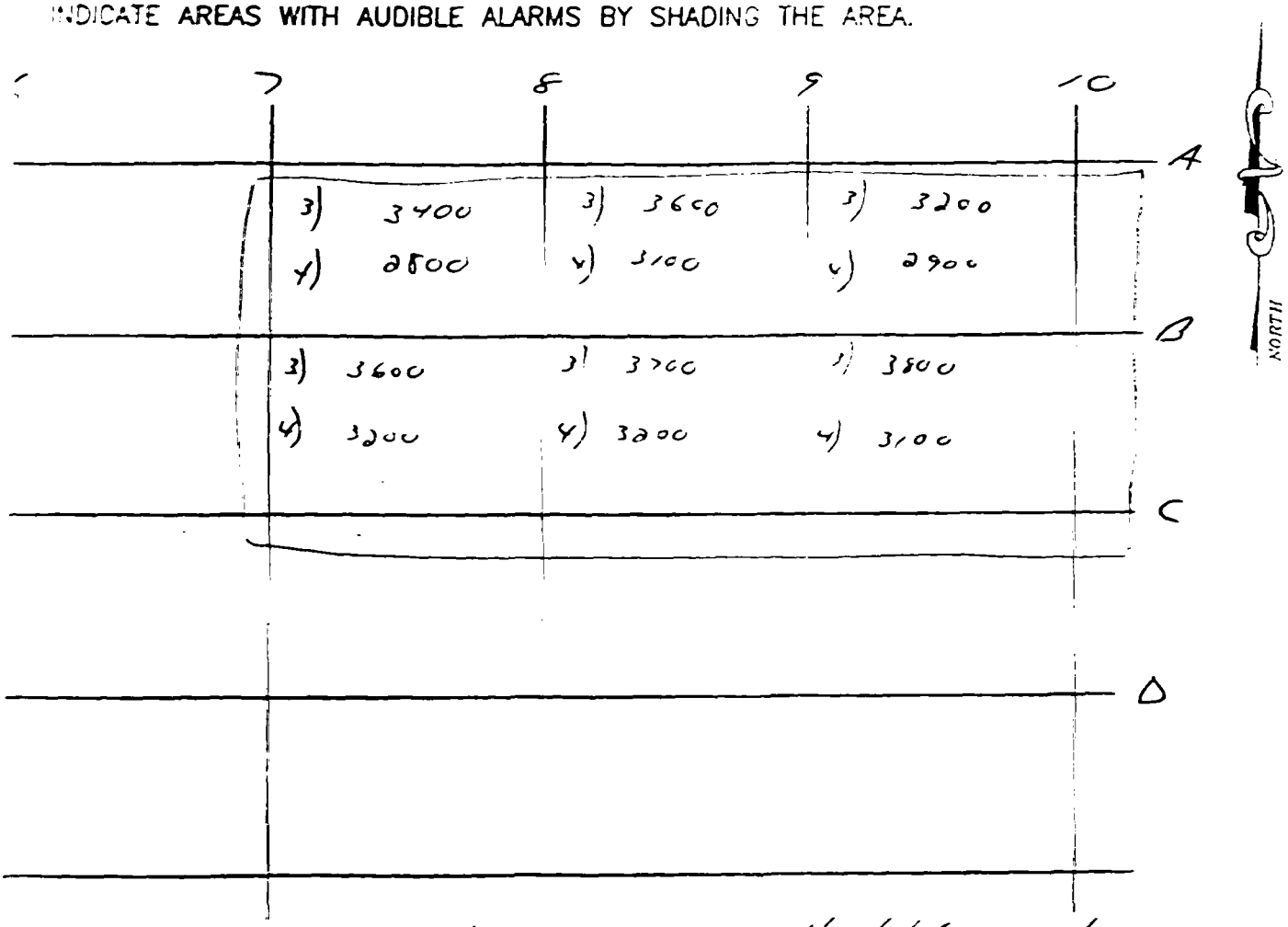
INST. MODEL: 2221 (shielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Cofferdam Excavation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



	7	8	9	10
A	3) 3400 4) 2800	3) 3600 4) 3100	3) 3200 4) 2900	
B	3) 3600 4) 3200	3) 3700 4) 3200	3) 3800 4) 3100	
C				
D				

NORTH

Note: parts of third lift may be backfilled material already surveyed. Area L ft 4 is newly dug

PROJECTS\24418\xk\

STS Consultants Ltd.

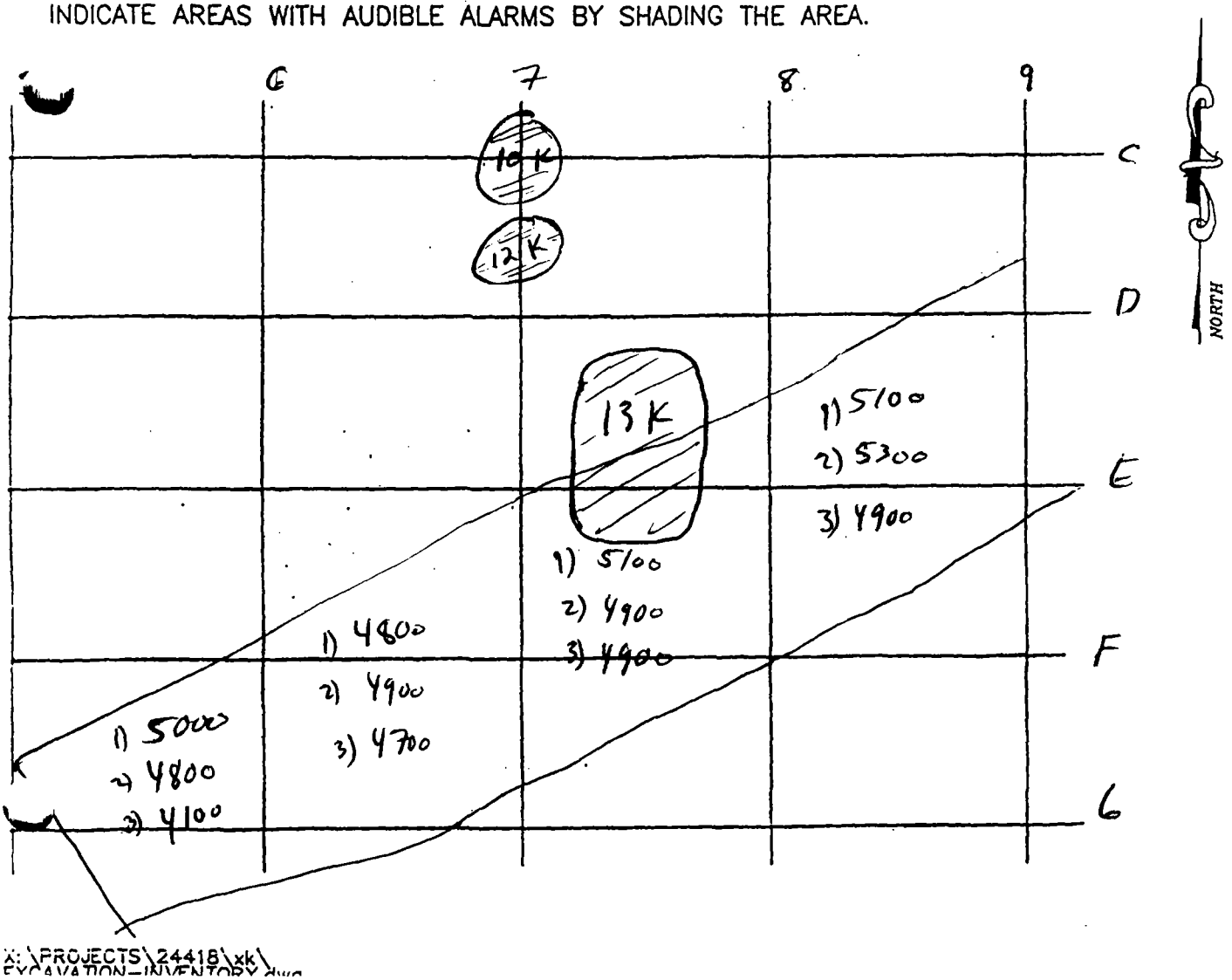
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/22/00 TECHNICIAN: Toby Shewan + Joel Ableidinger

INST. MODEL: 2221 Shielded SERIAL NO.: 12722

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement / ramp

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

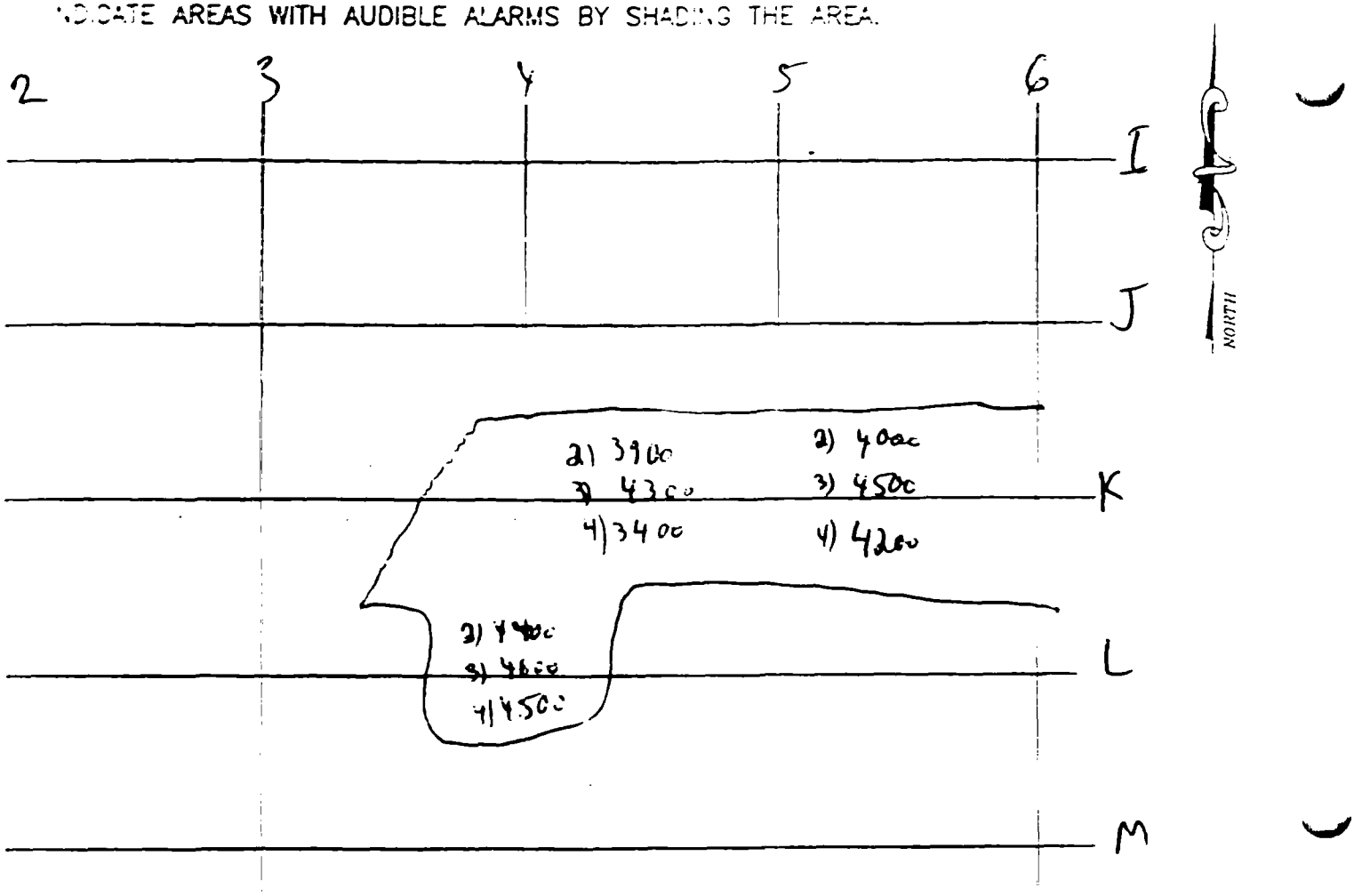
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/8/00 TECHNICIAN: Toby Steen

GST MODEL: 2221 SERIAL NO.: 13284

GST CALIBRATED (Y/N)? Y LIFT ELEVATION: basement
(lift 1 already complete)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

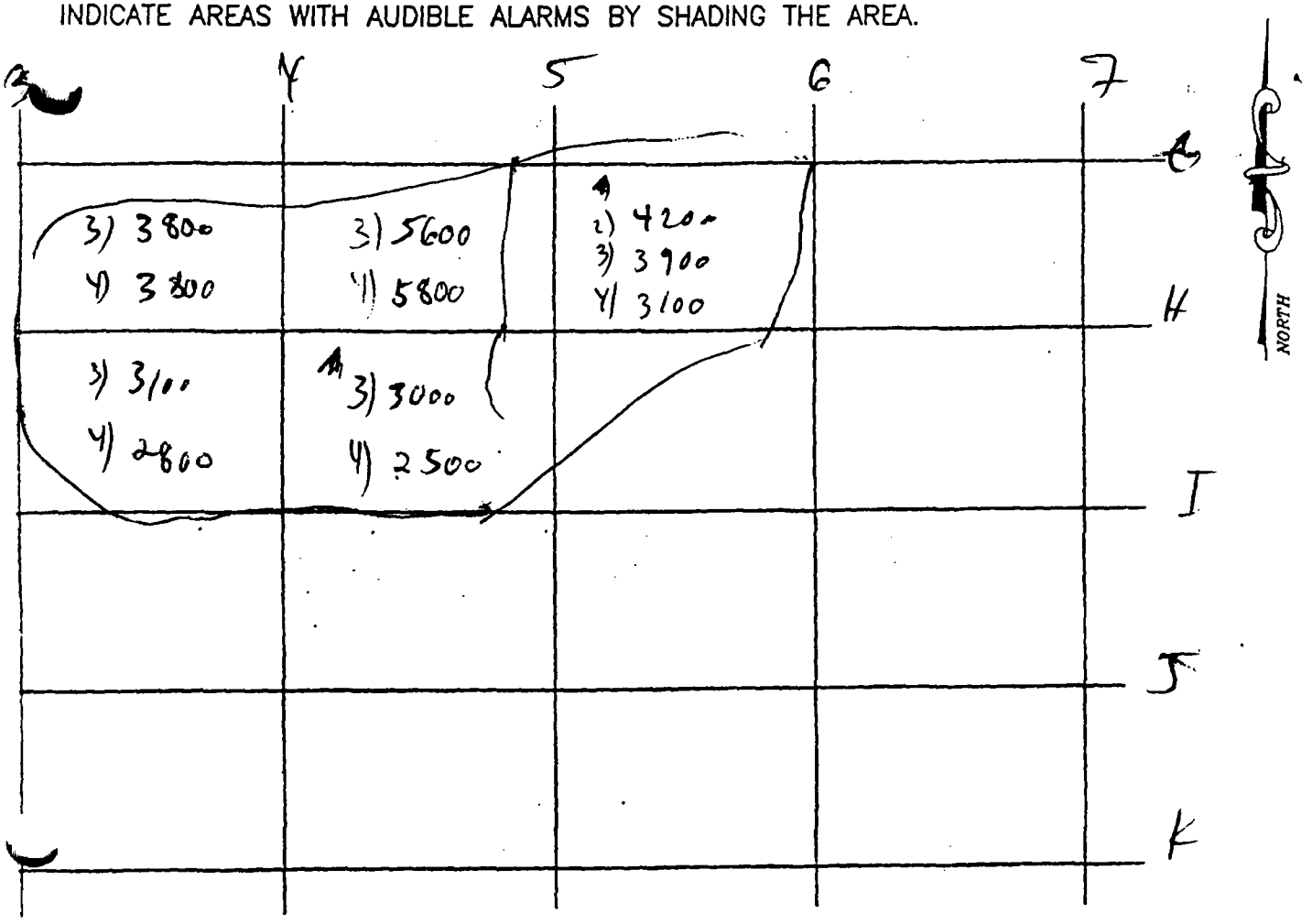
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/20/00 TECHNICIAN: Toby Slevan

INST. MODEL: 2221 shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

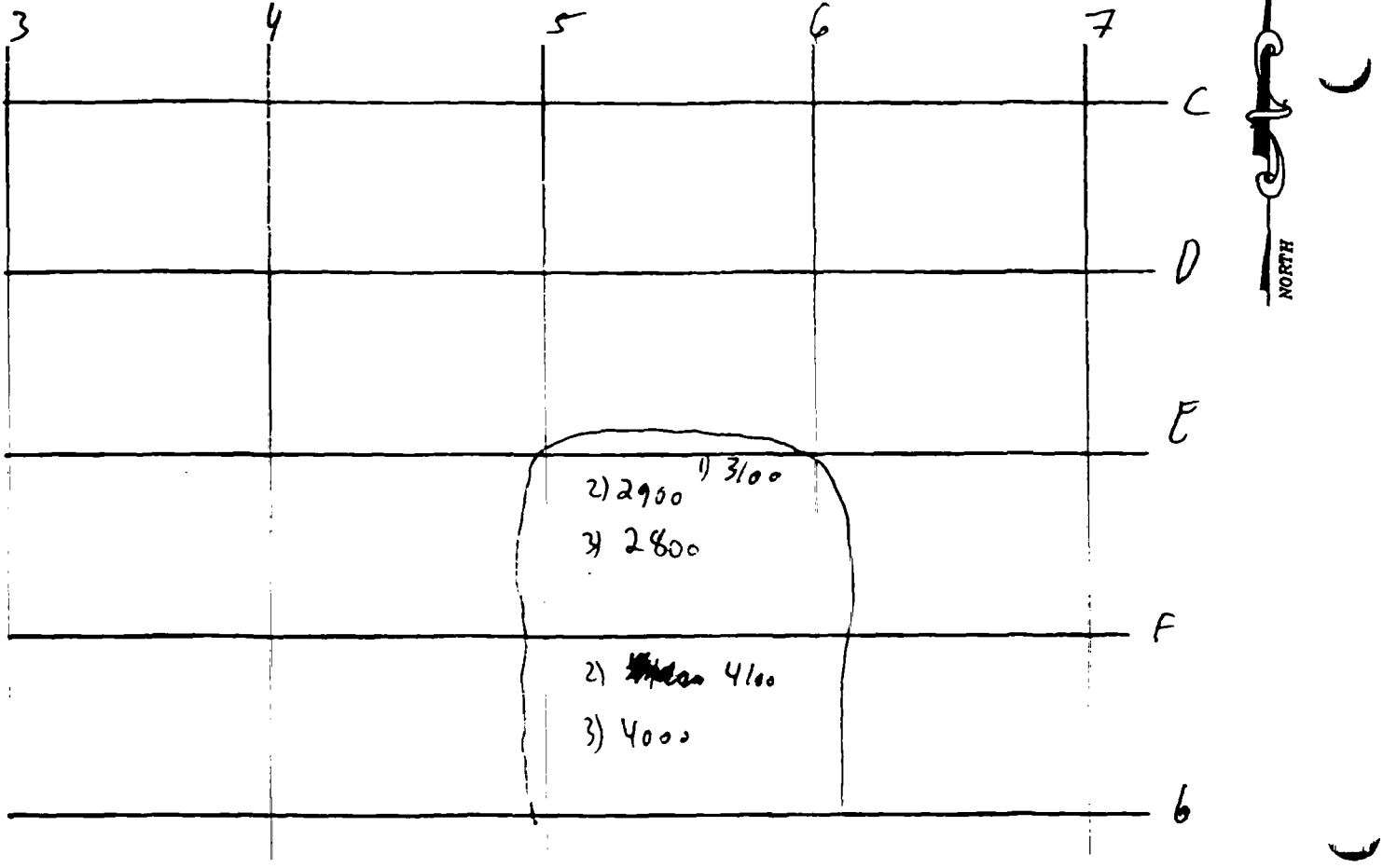
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/20/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 Shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: bottom

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

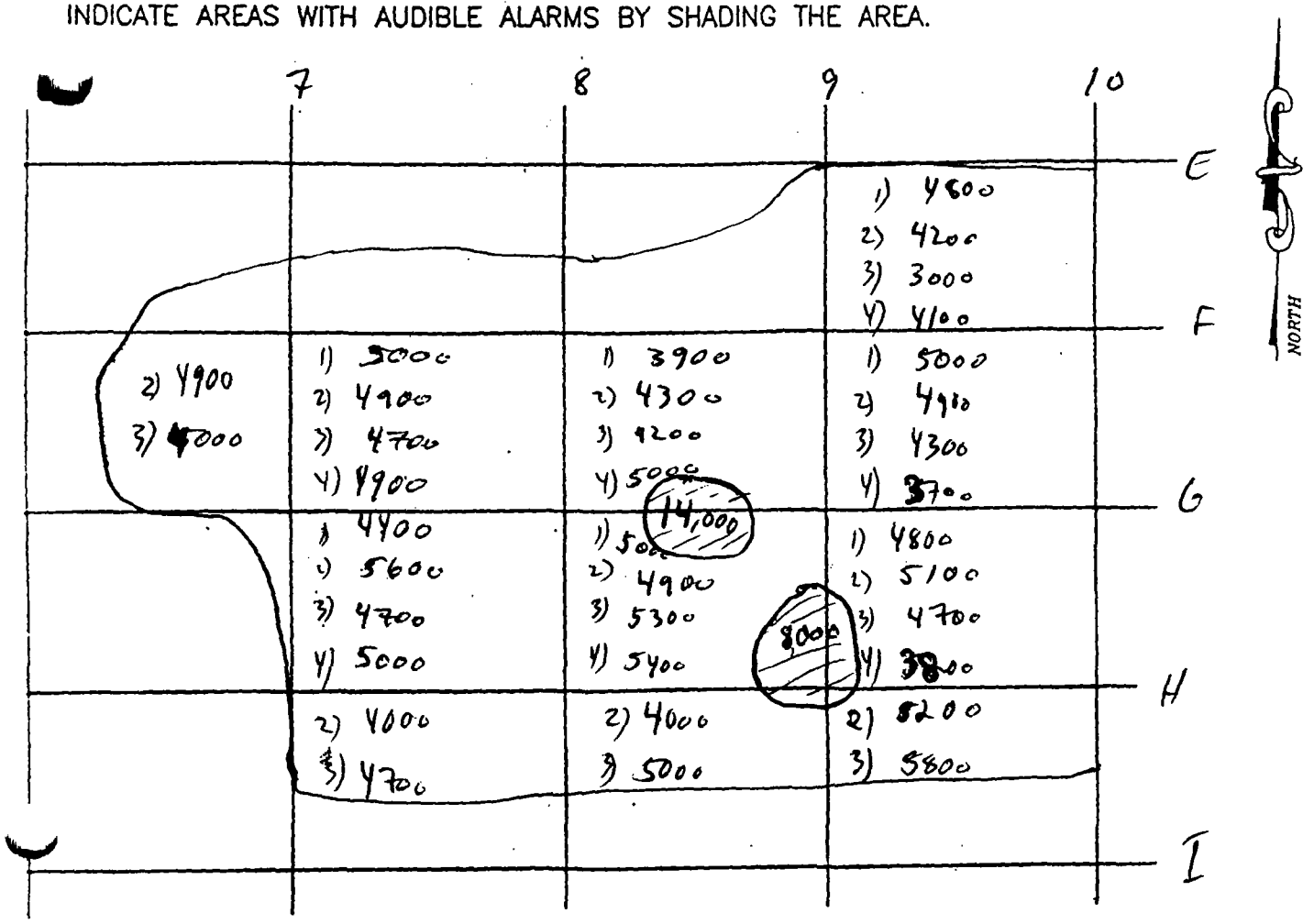
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/5/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 Shielded SERIAL NO.: 12742

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

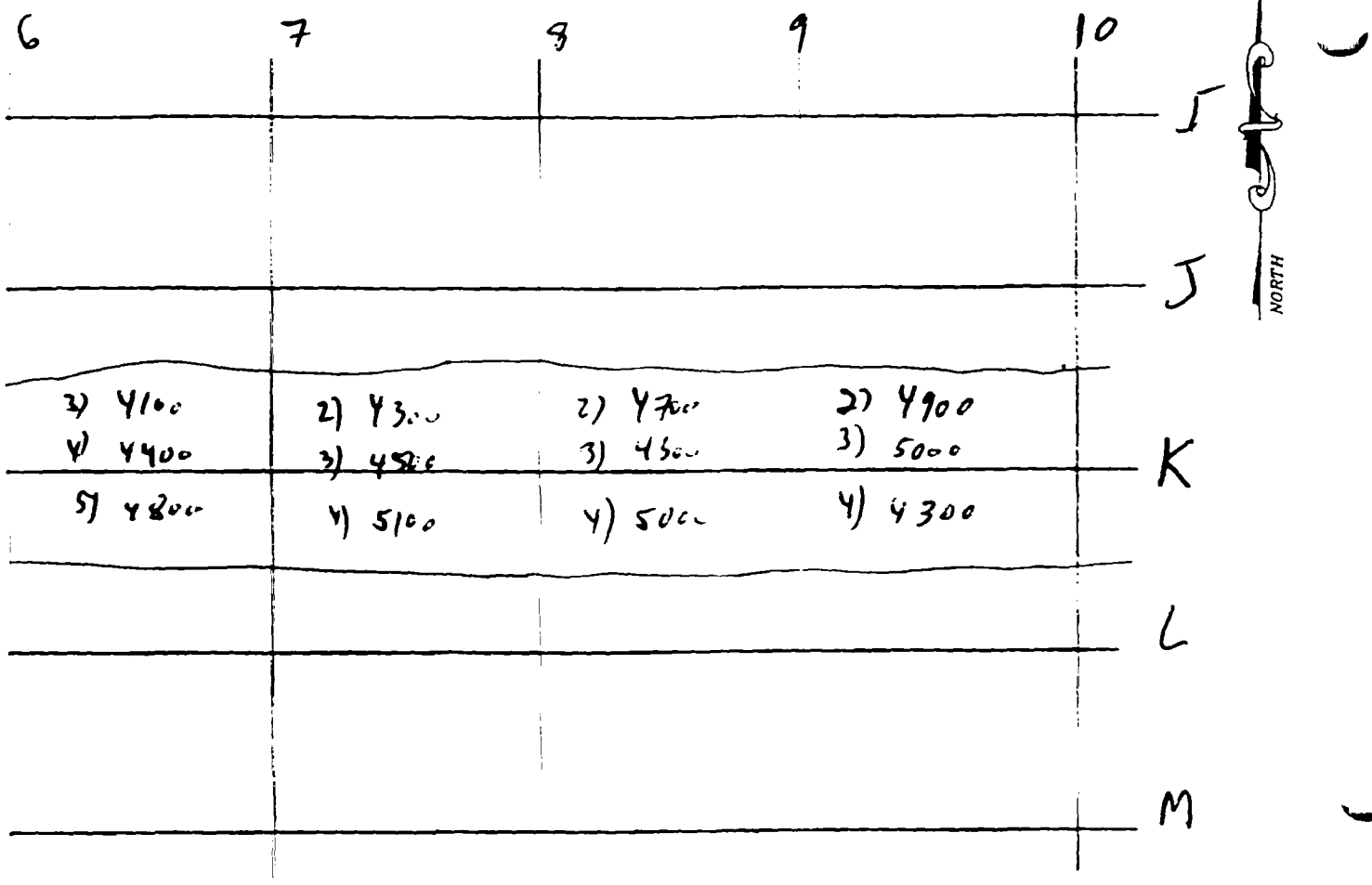
2 of 4

DATE: 9/8/00 TECHNICIAN: Toby Slevin

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: basement
(1.ft 1 already done)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



P:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
31/2000 11:

STS Consultants Ltd.

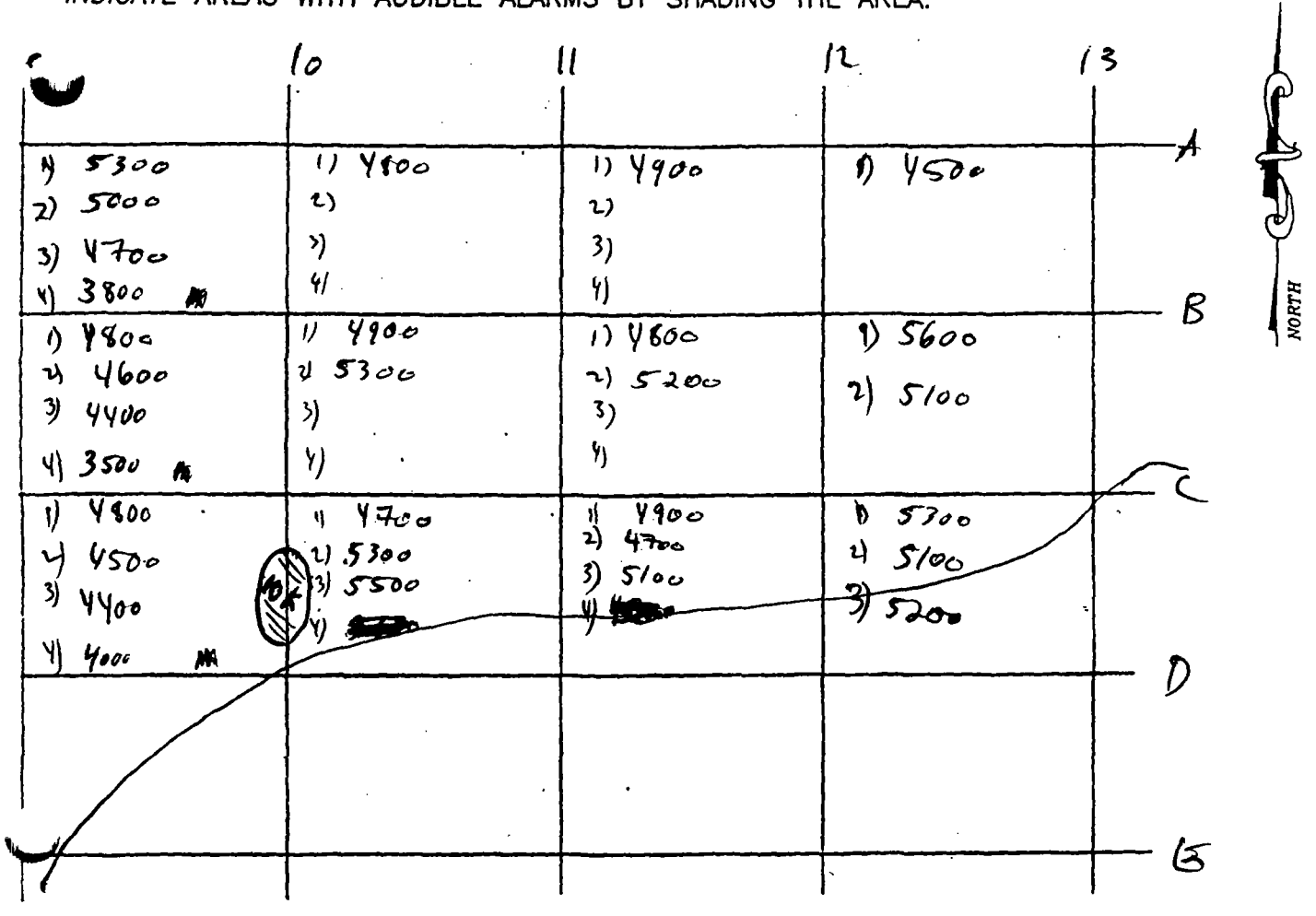
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/24 - 9/25 (lift marked with * done 10/24 10/25) TECHNICIAN: Toby Sherman

INST. MODEL: 2221 shielded SERIAL NO.: 12724z

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

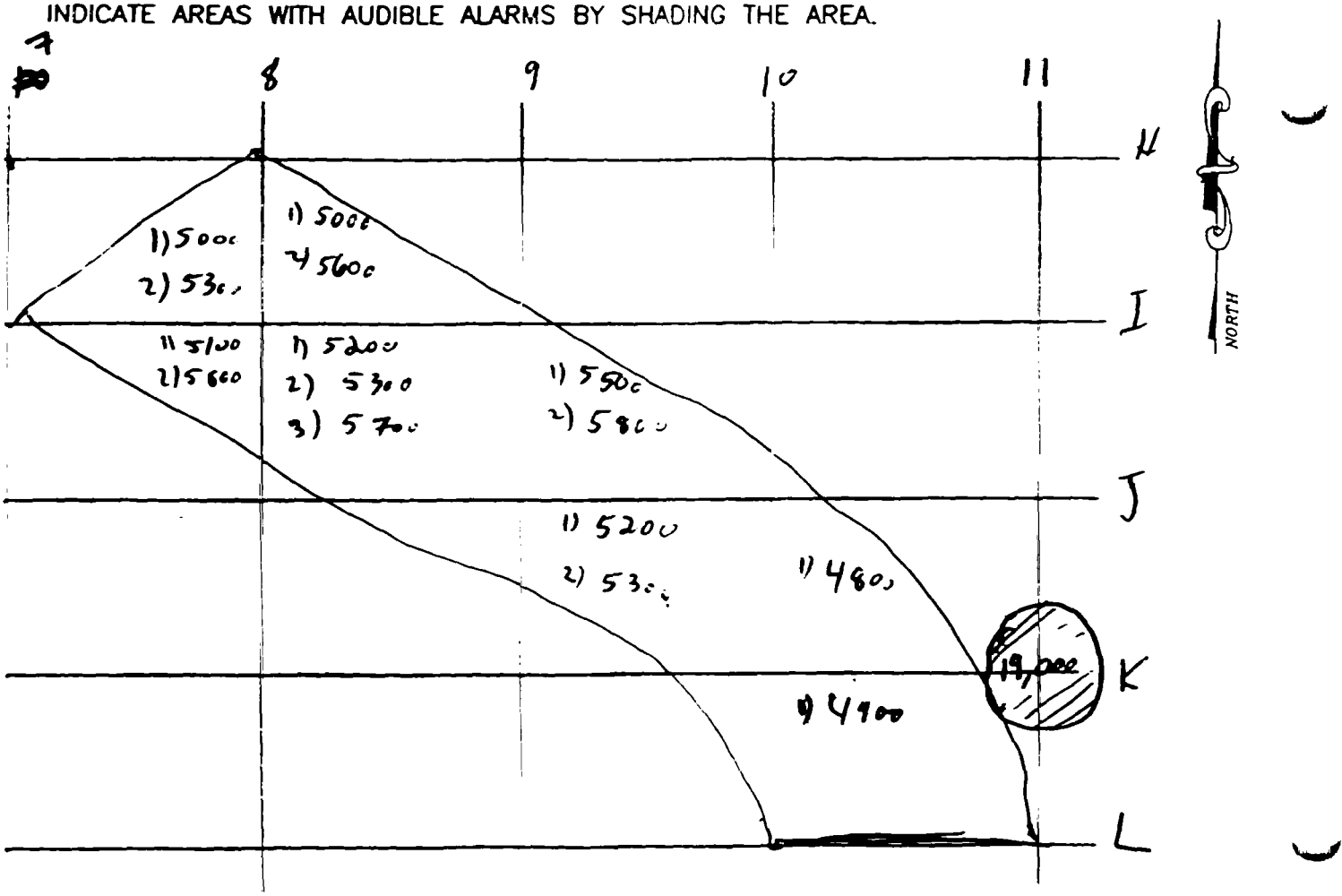
1 of 1

DATE: 9/01/00 TECHNICIAN: Toby / Joel

INST. MODEL: 2221 shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement (ramp)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

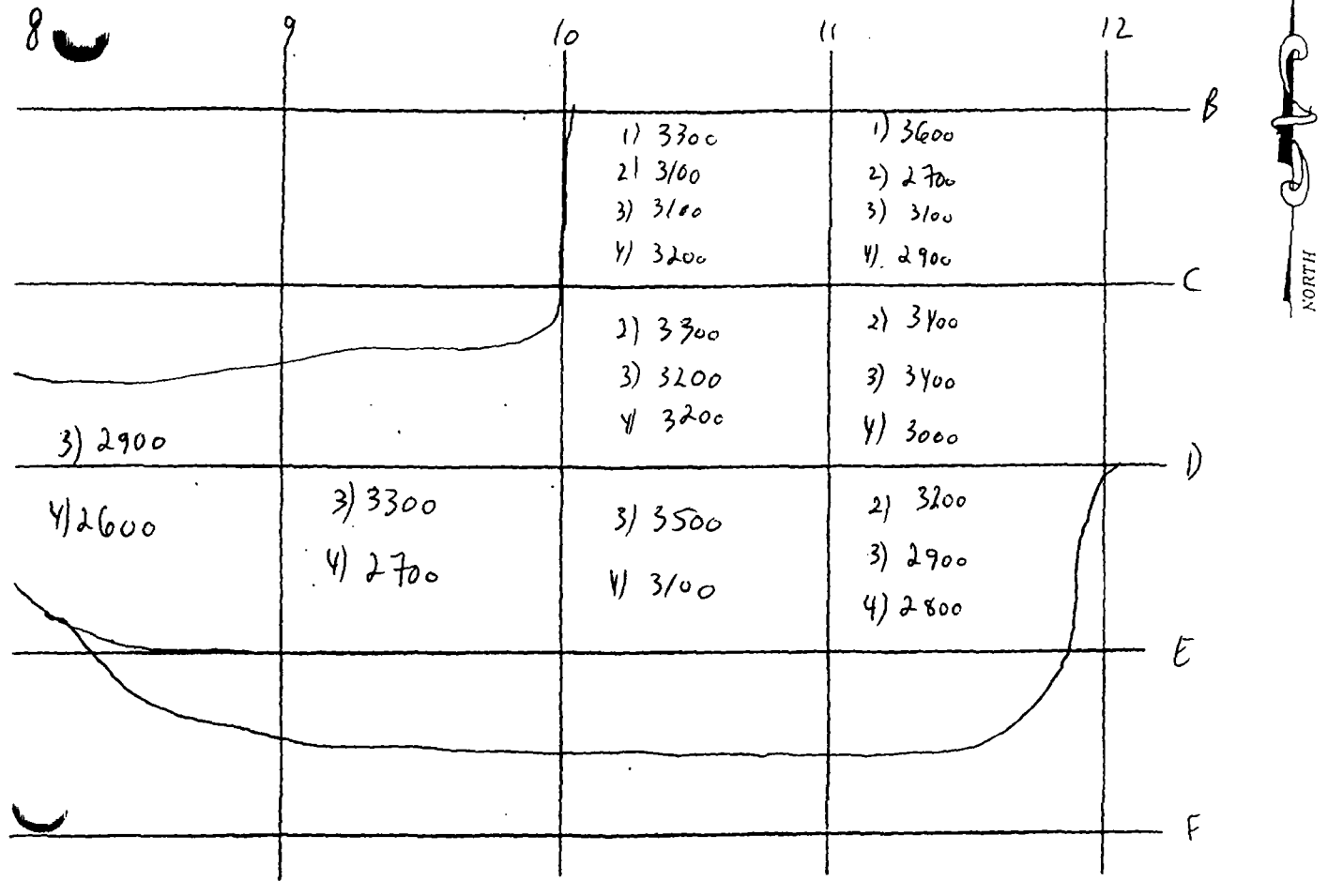
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/25/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement (top lifts mostly backfill)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

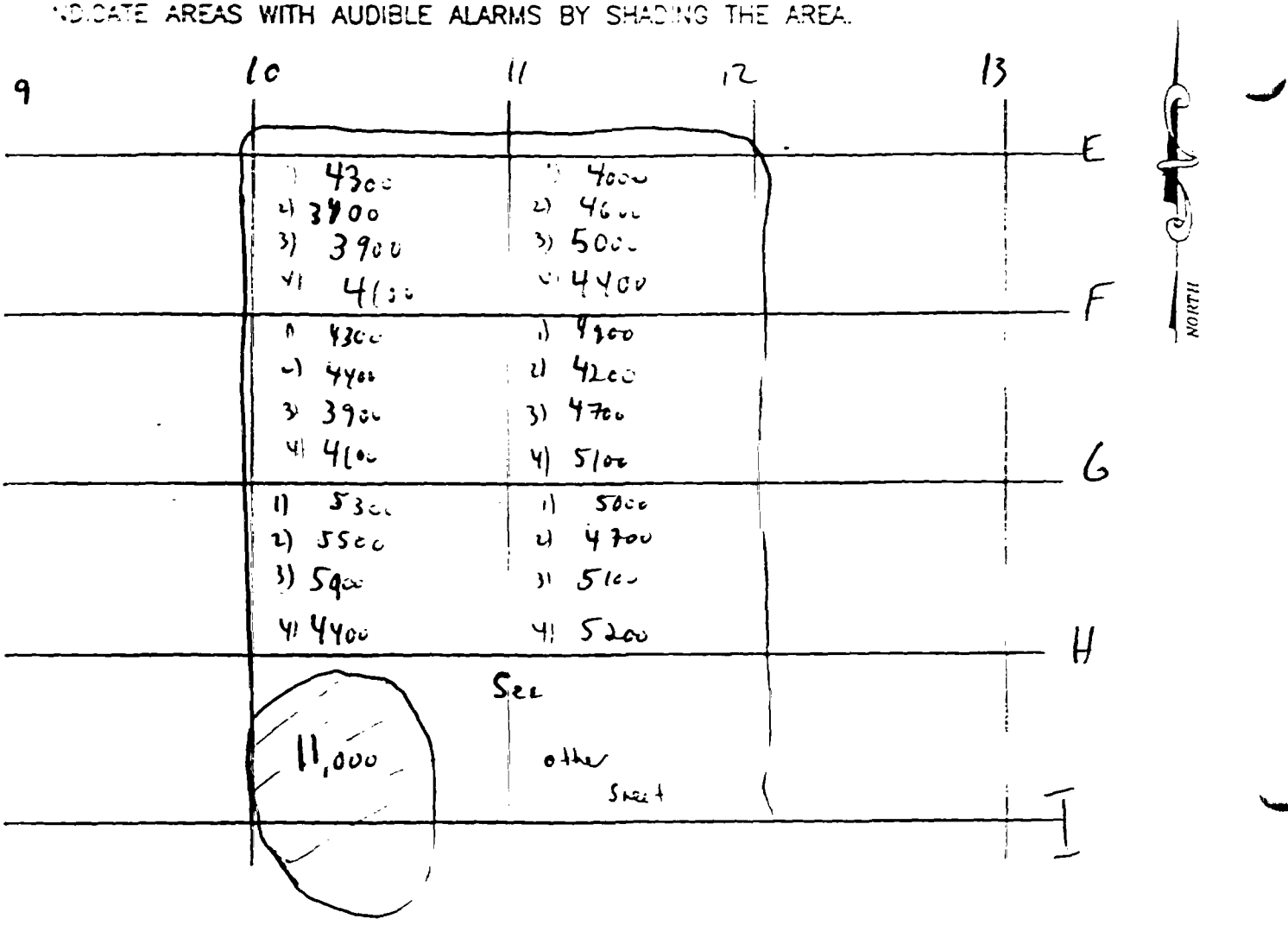
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/31/00 TECHNICIAN: Toby Slevan / Joel

INST. MODEL: 2221 SERIAL NO.: 13284

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

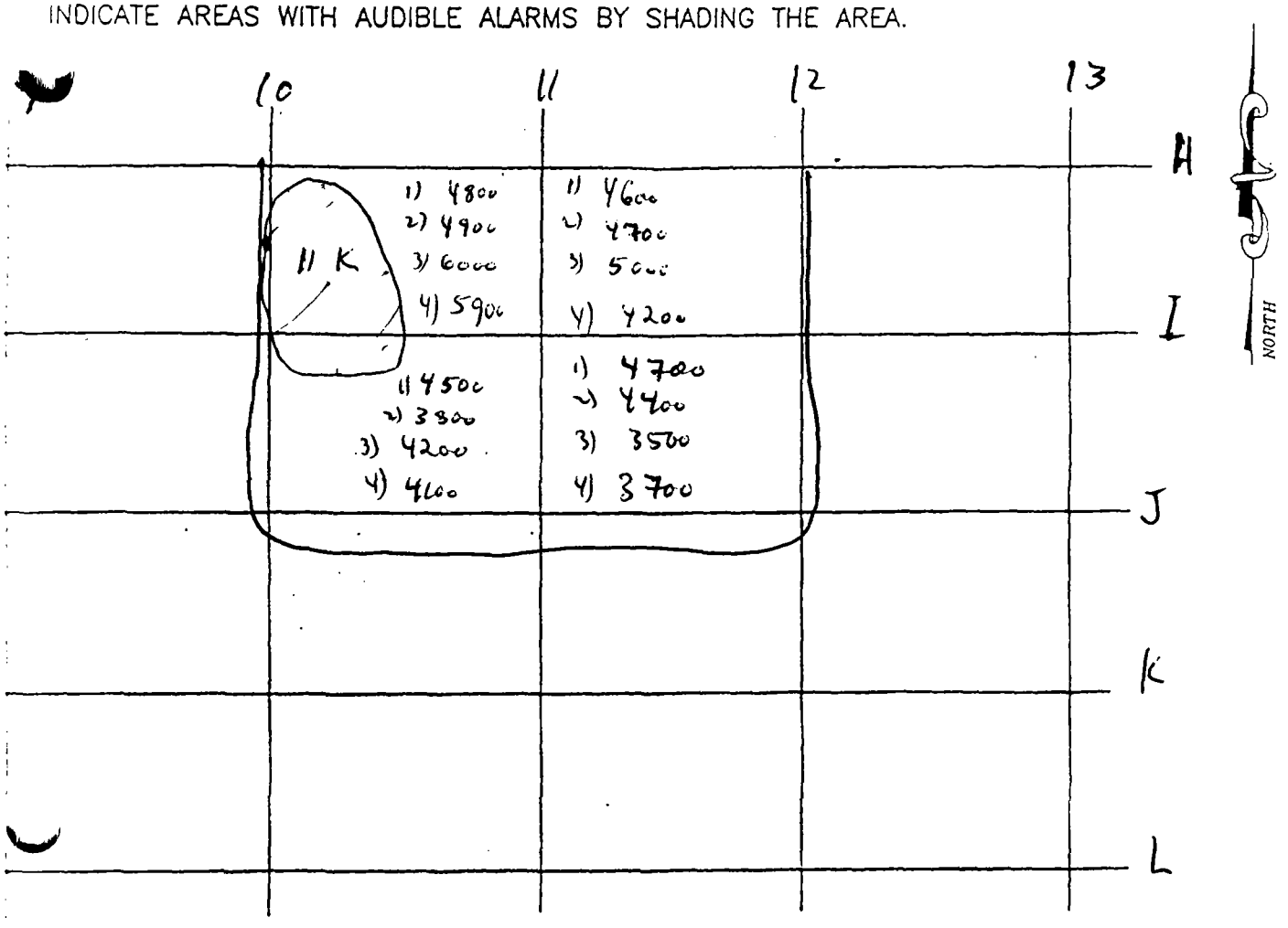
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/30/00 TECHNICIAN: Joel Alrweiler

INST. MODEL: 2221 SERIAL NO.: 12742

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Grade Beam / Basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

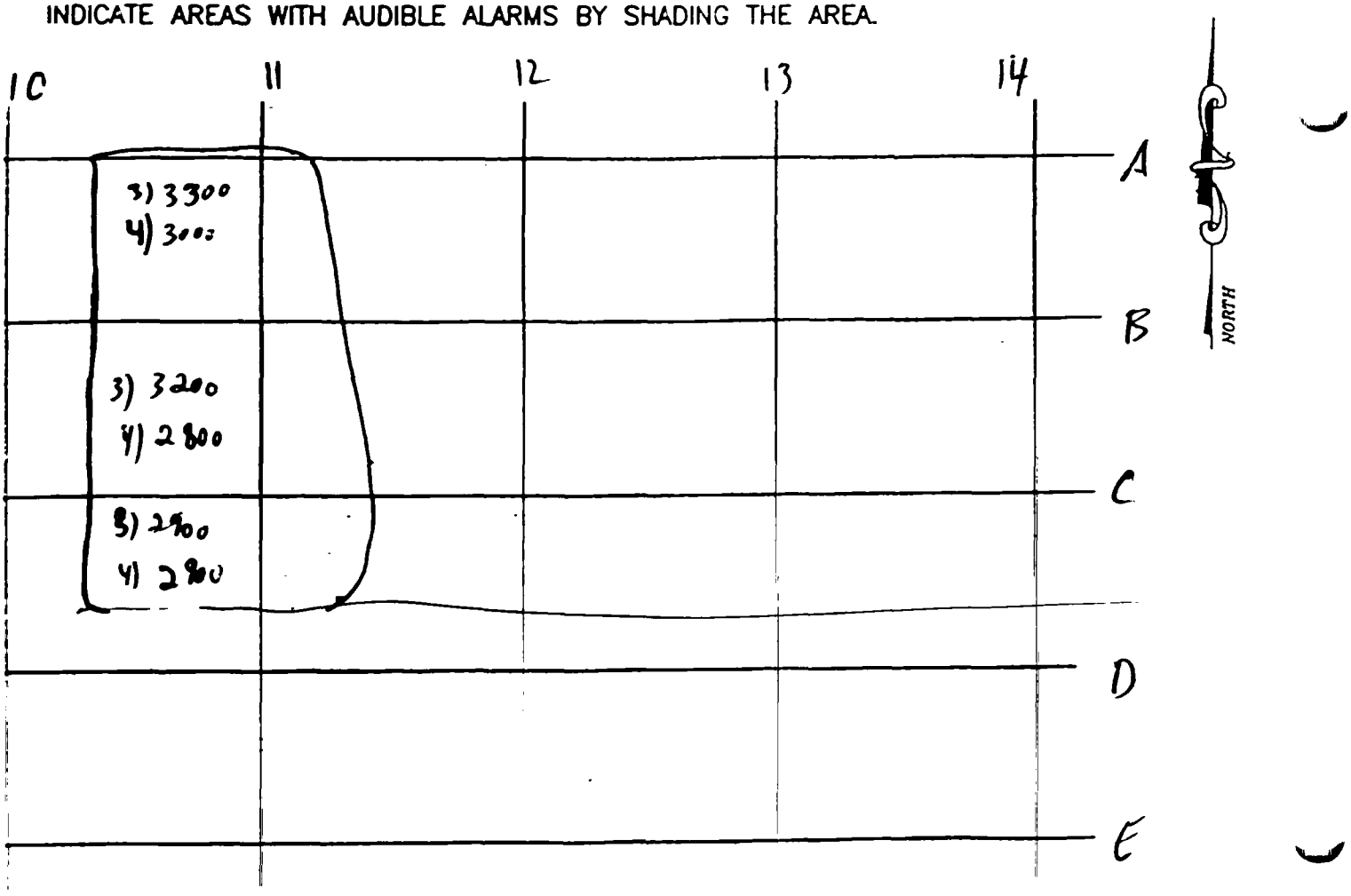
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/24/00 TECHNICIAN: Toby Shevon

INST. MODEL: 2221 shielded SERIAL NO.: P7242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Ground

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/25/00

TECHNICIAN: Toby Slewan

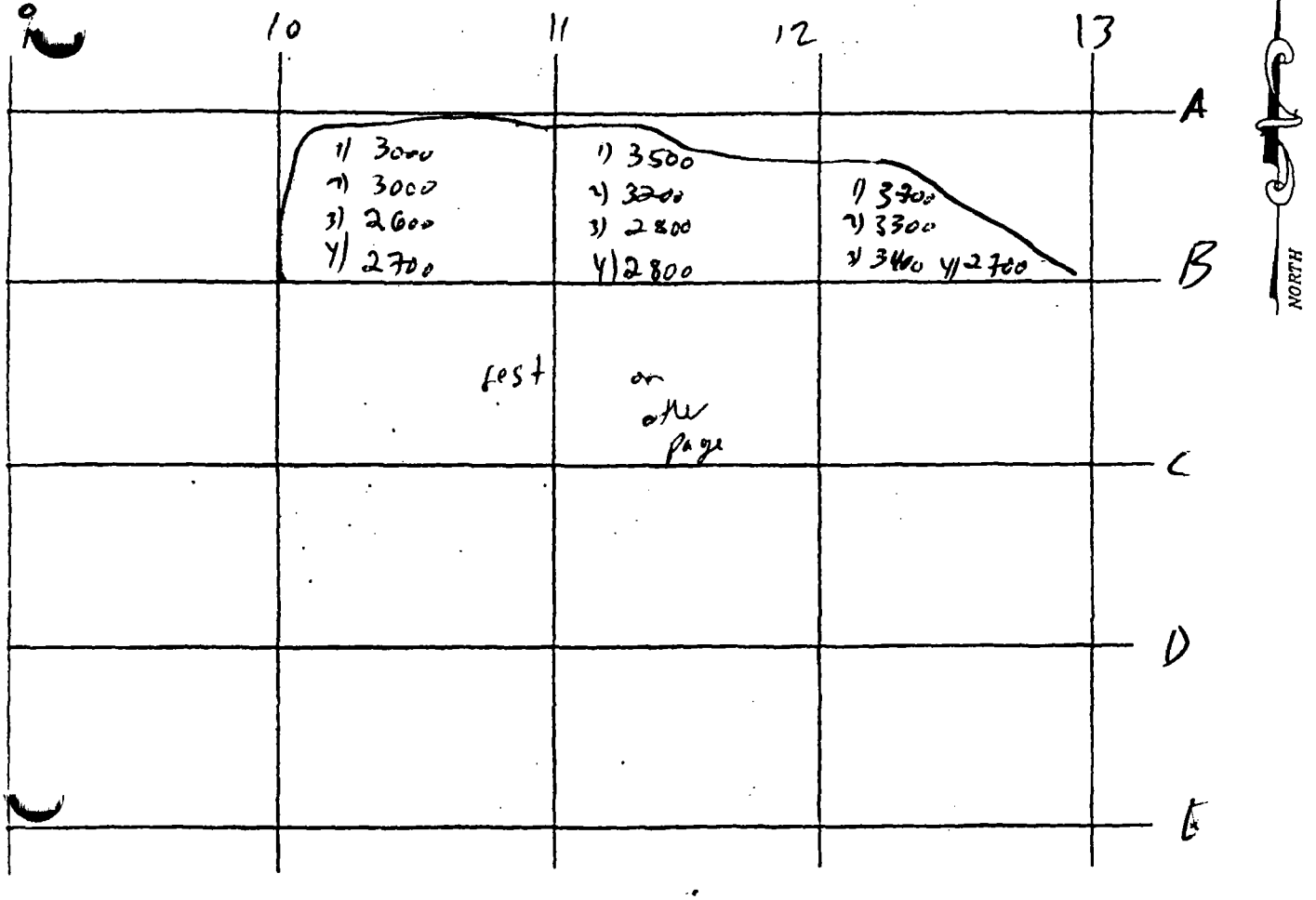
INST. MODEL: 7221 shielded

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: basement (top lifts mostly backfill)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

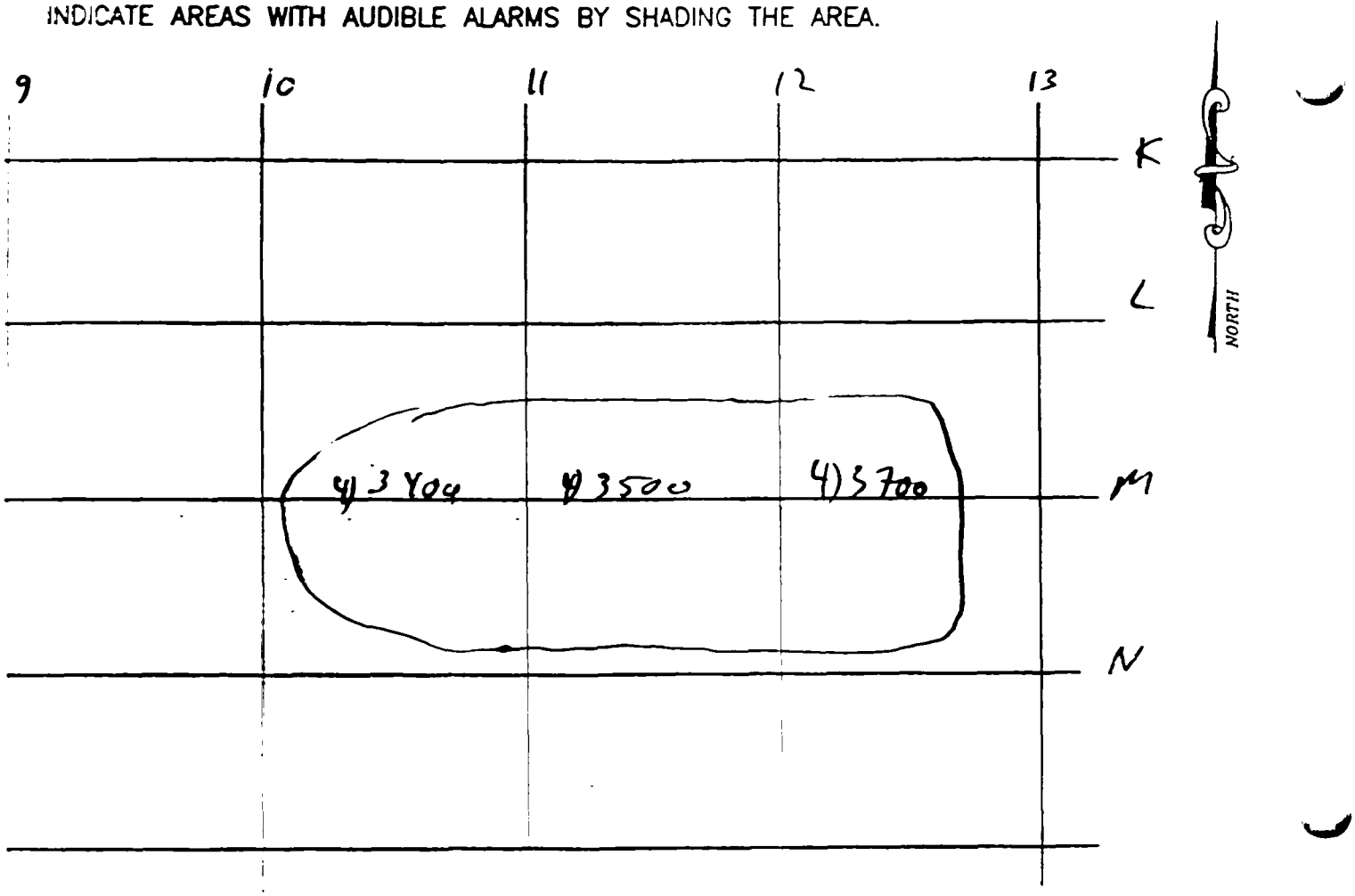
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/2/00 TECHNICIAN: Tod Skewes

INST. MODEL: 2221 SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



P:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
3/31/2000 11:

STS Consultants Ltd.

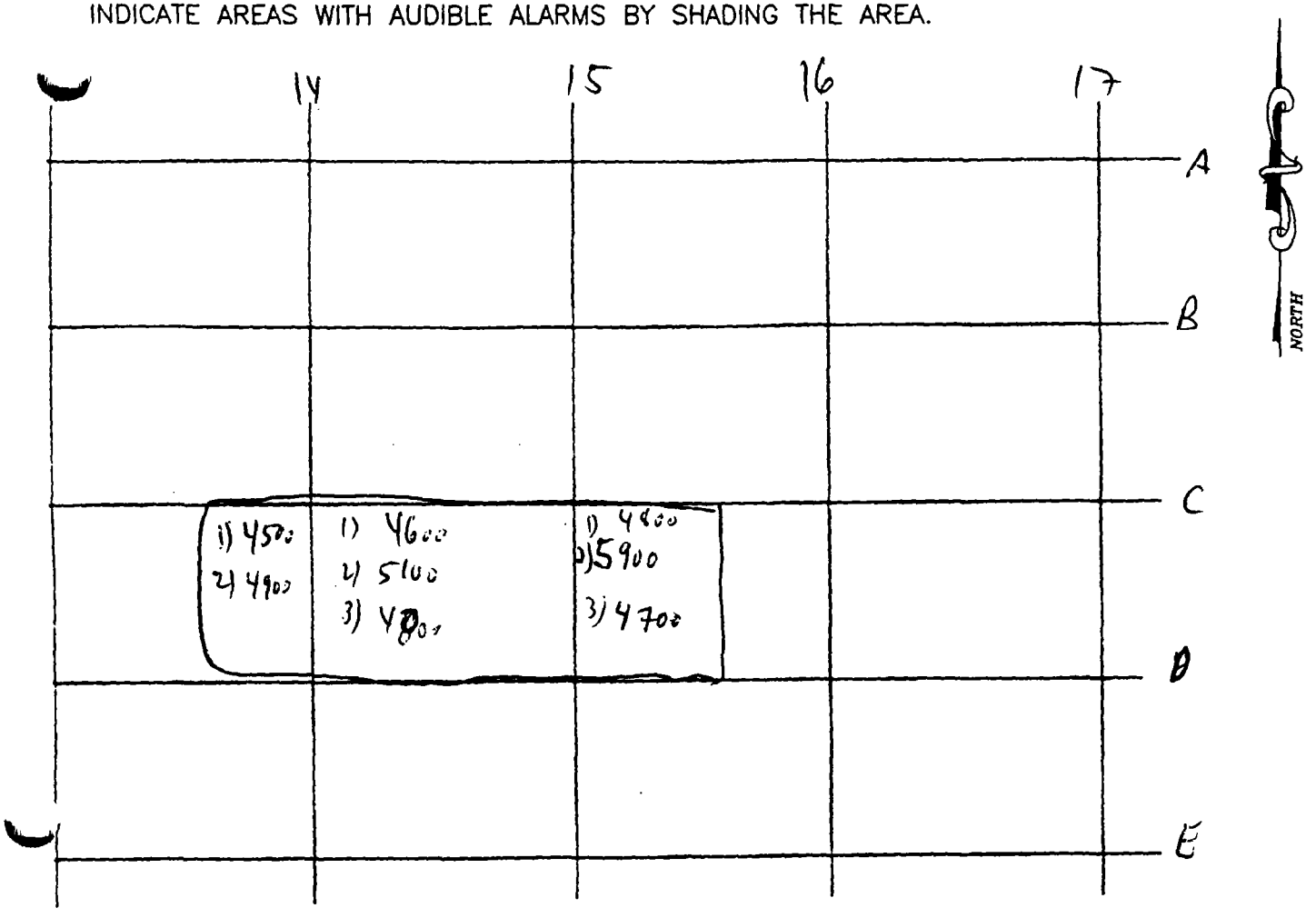
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/21/00 TECHNICIAN: Toby Slowan

INST. MODEL: 2221 SERIAL NO.: 13284Y

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

1 of 2

DATE: 8/29/00

TECHNICIAN: Glen Huber

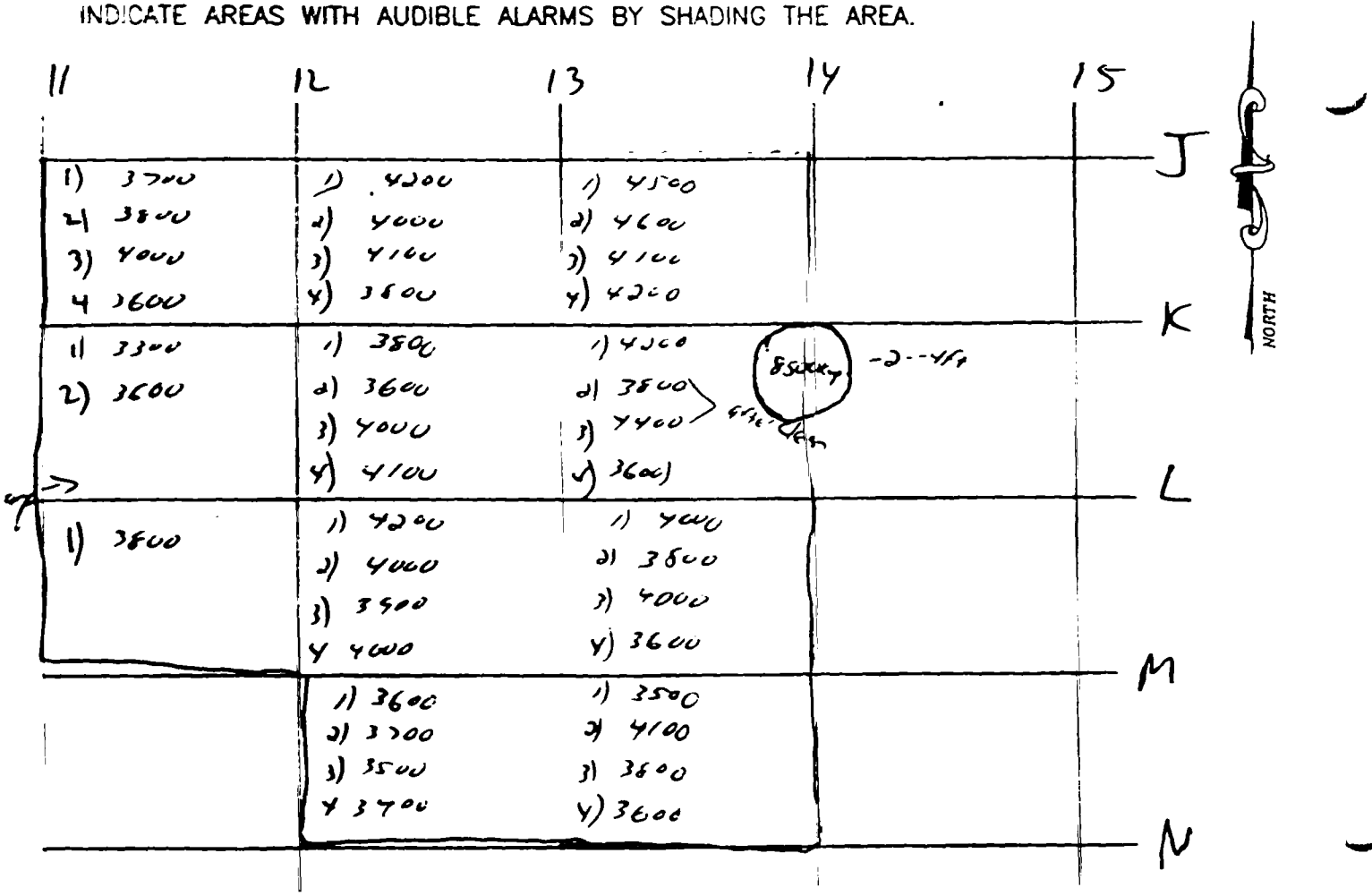
INST. MODEL: 2221

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? [illegible]

LIFT ELEVATION: grade beam / basement Excavation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



	11	12	13	14	15
J	1) 3700 2) 3800 3) 4000 4 3600	1) 4200 2) 4000 3) 4100 4) 3800	1) 4500 2) 4600 3) 4100 4) 4200		
K	1) 3300 2) 3600	1) 3800 2) 3600 3) 4000 4) 4100	1) 4200 2) 3800 3) 4400 4) 3600	8 sucky -2--4ft after clean	
L	1) 3800	1) 4200 2) 4000 3) 3900 4 4000	1) 4000 2) 3800 3) 4000 4) 3600		
M		1) 3600 2) 3700 3) 3500 4 3700	1) 3500 2) 4100 3) 3800 4) 3600		
N					

NORTH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/28 - 8/29

TECHNICIAN: Toby Shewan

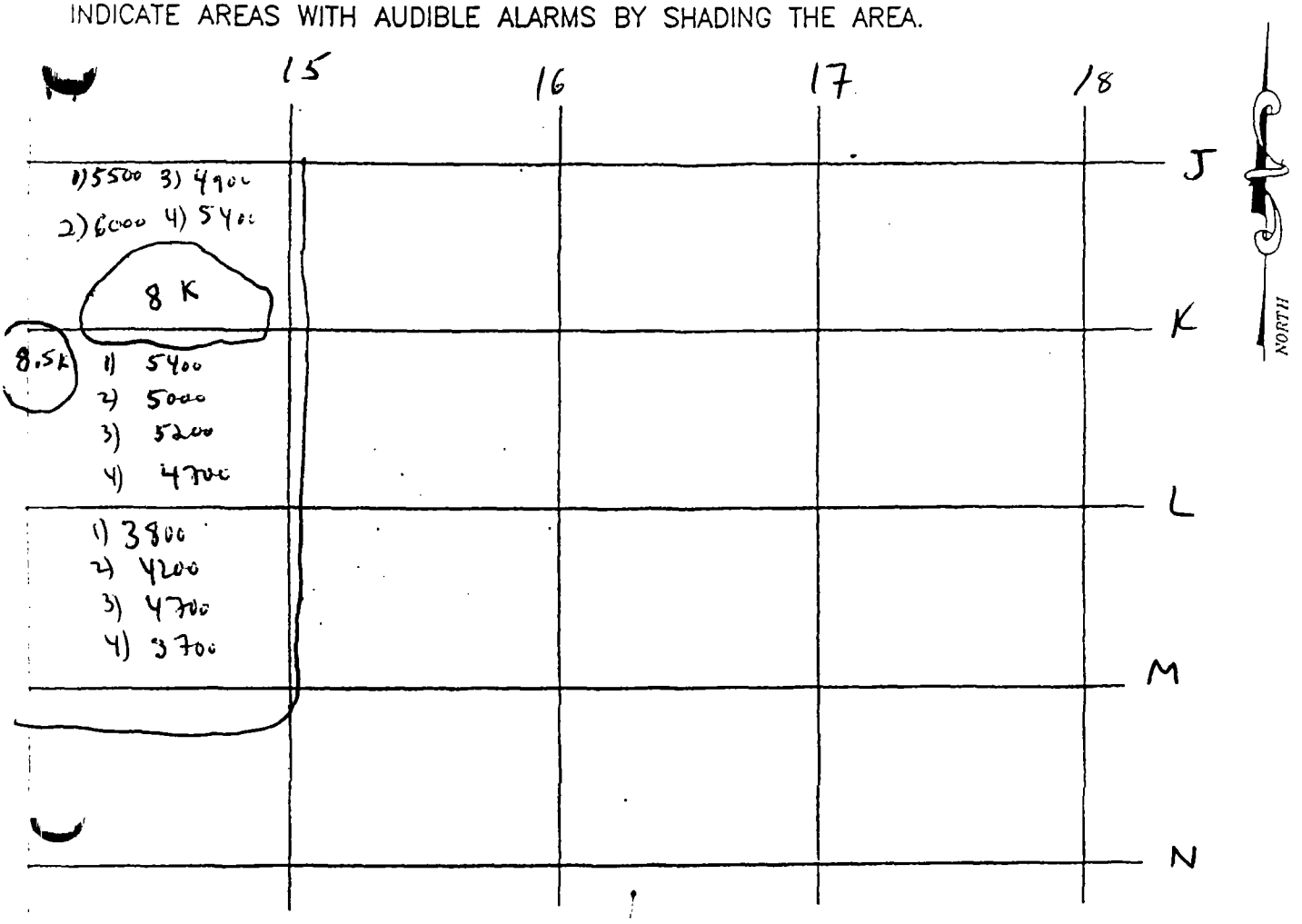
INST. MODEL: 2221

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? (shielded)

LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/28/00

TECHNICIAN: Toby Shewa

INST. MODEL: 2221

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? [illegible]

LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

13	14	15	16	17	
1) 5000 2) 4800 3) 4700 4) 4900	1) 5000 2) 5600 3) 4900 4) 5300	10,000 7300			F
1) 5000 2) 4200 3) 4700 4) 4500	1) 5000 2) 4900 3) 5300 4) 5100				G
1) 4800 2) 4100 3) 4000 4) 4900	1) 5000 2) 5400 3) 4700 4) 5300	8.500			H
1) 5200 2) 5500 3) 4900 4) 5000	1) 5200 2) 4900 3) 5100 4) 5000				I
7.3 K	[illegible]				J

PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

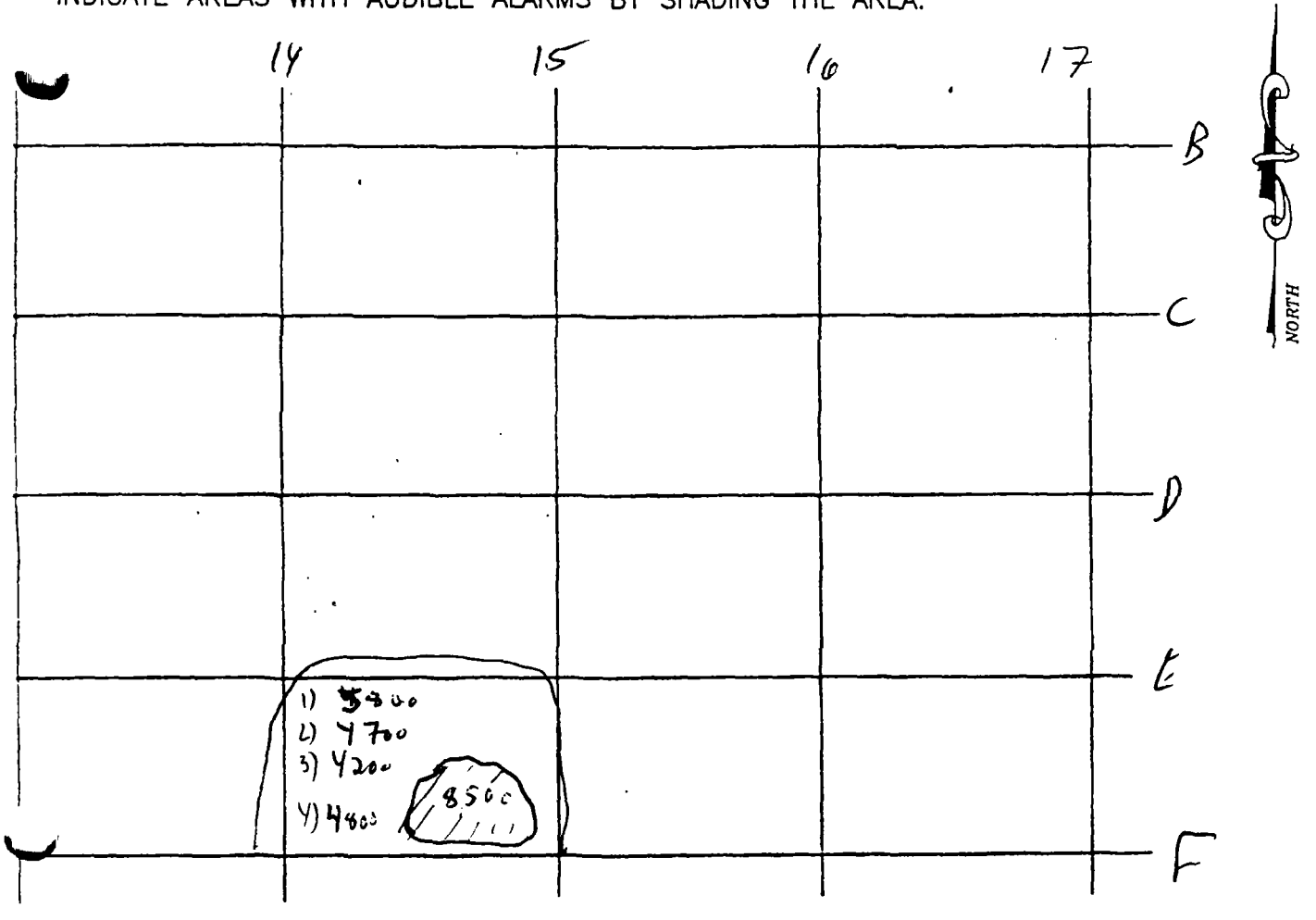
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/28/00 TECHNICIAN: Tob Steen

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Shielded LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

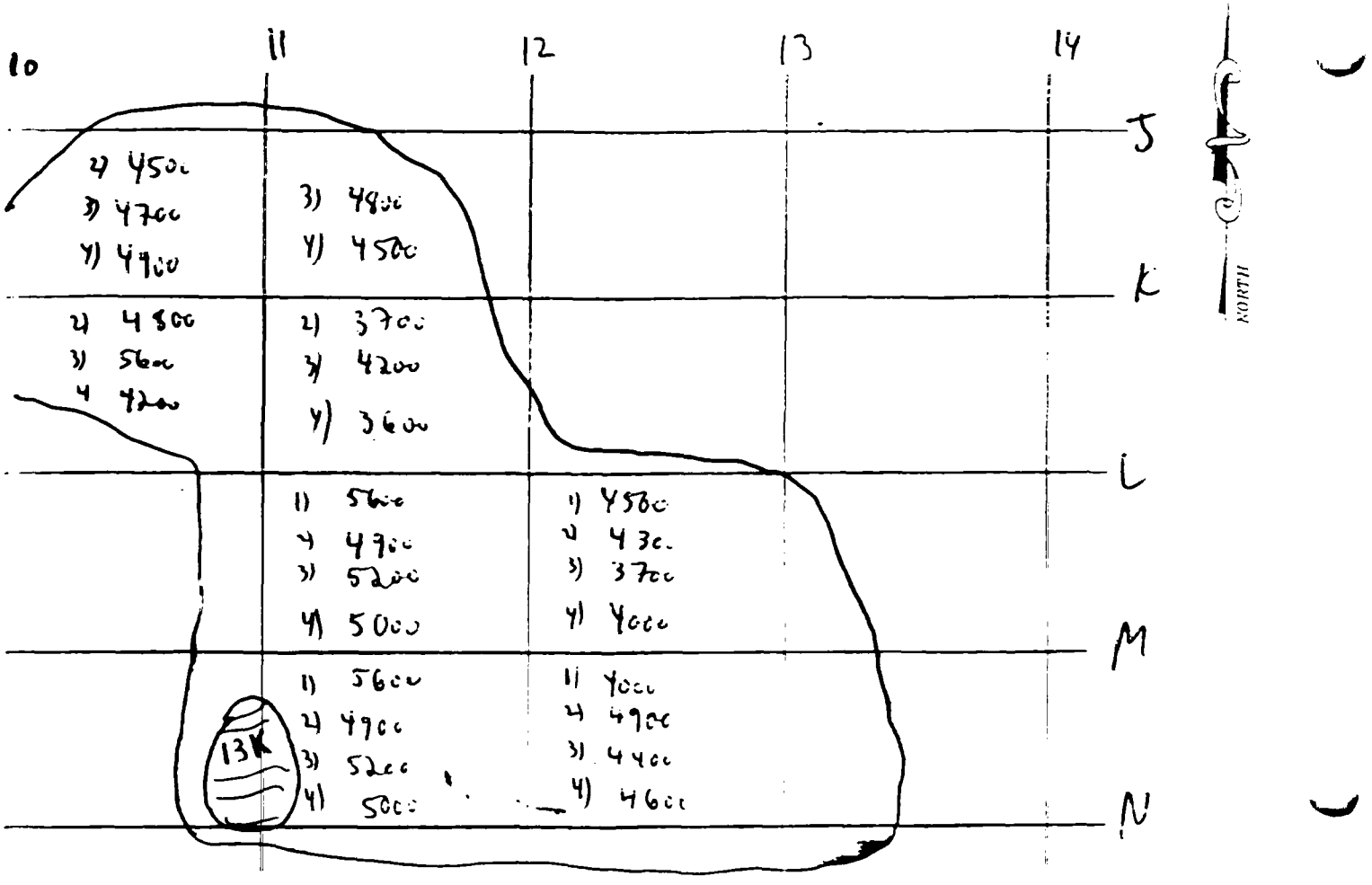
[redacted] 1 of 4

DATE: 9/6/06 TECHNICIAN: Toby Steen

TEST MODEL: 2221 SERIAL NO.: 13284

TEST CALIBRATED (Y/N)? Y LIFT ELEVATION: basement
(1 ft 1 already done for some)

PLOT COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



PROJECTS\24418\xk\
CALCULATION-INVENTORY.dwg

STS Consultants Ltd.

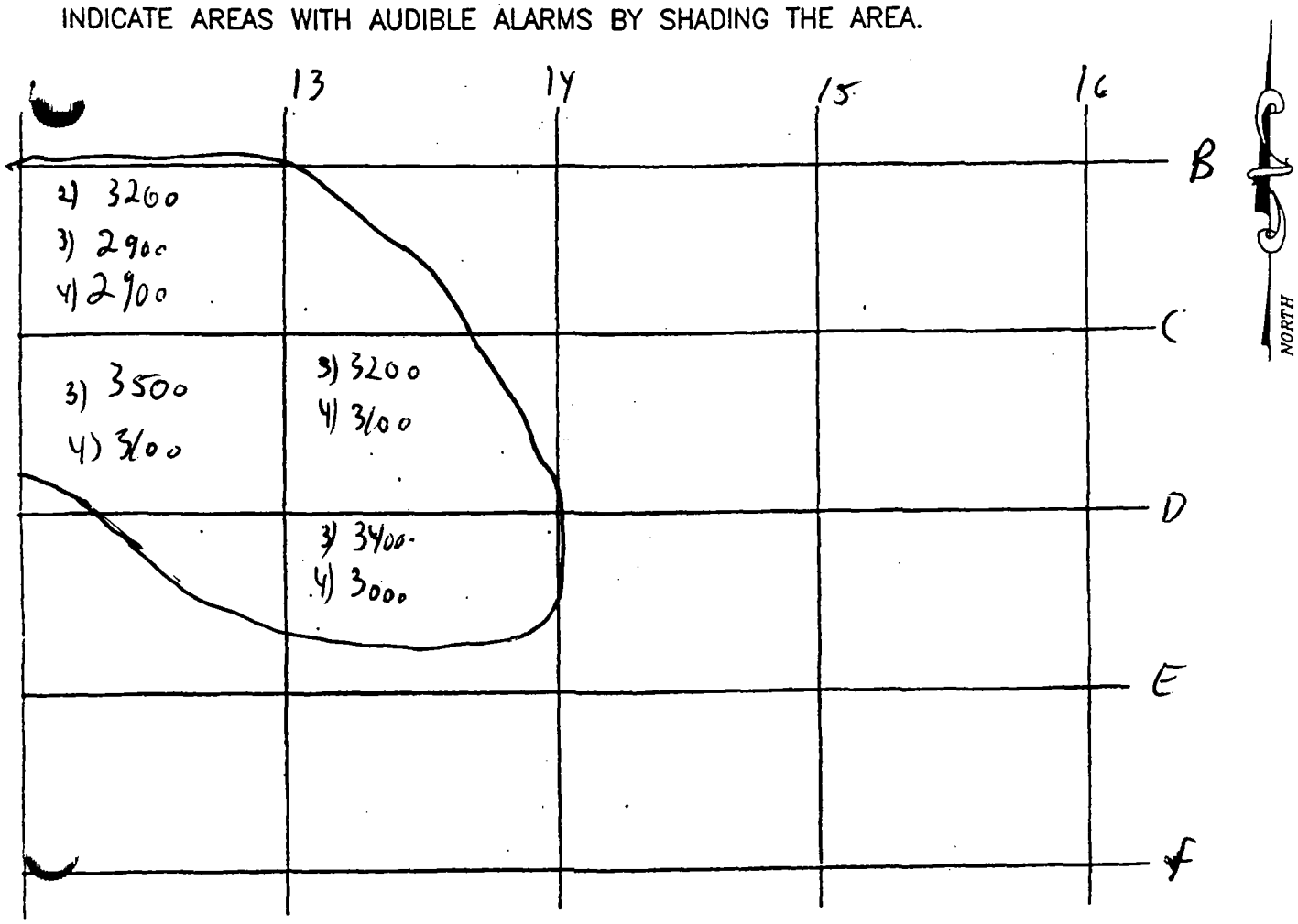
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/25/00 TECHNICIAN: Toby Slemon

INST. MODEL: 2221 shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

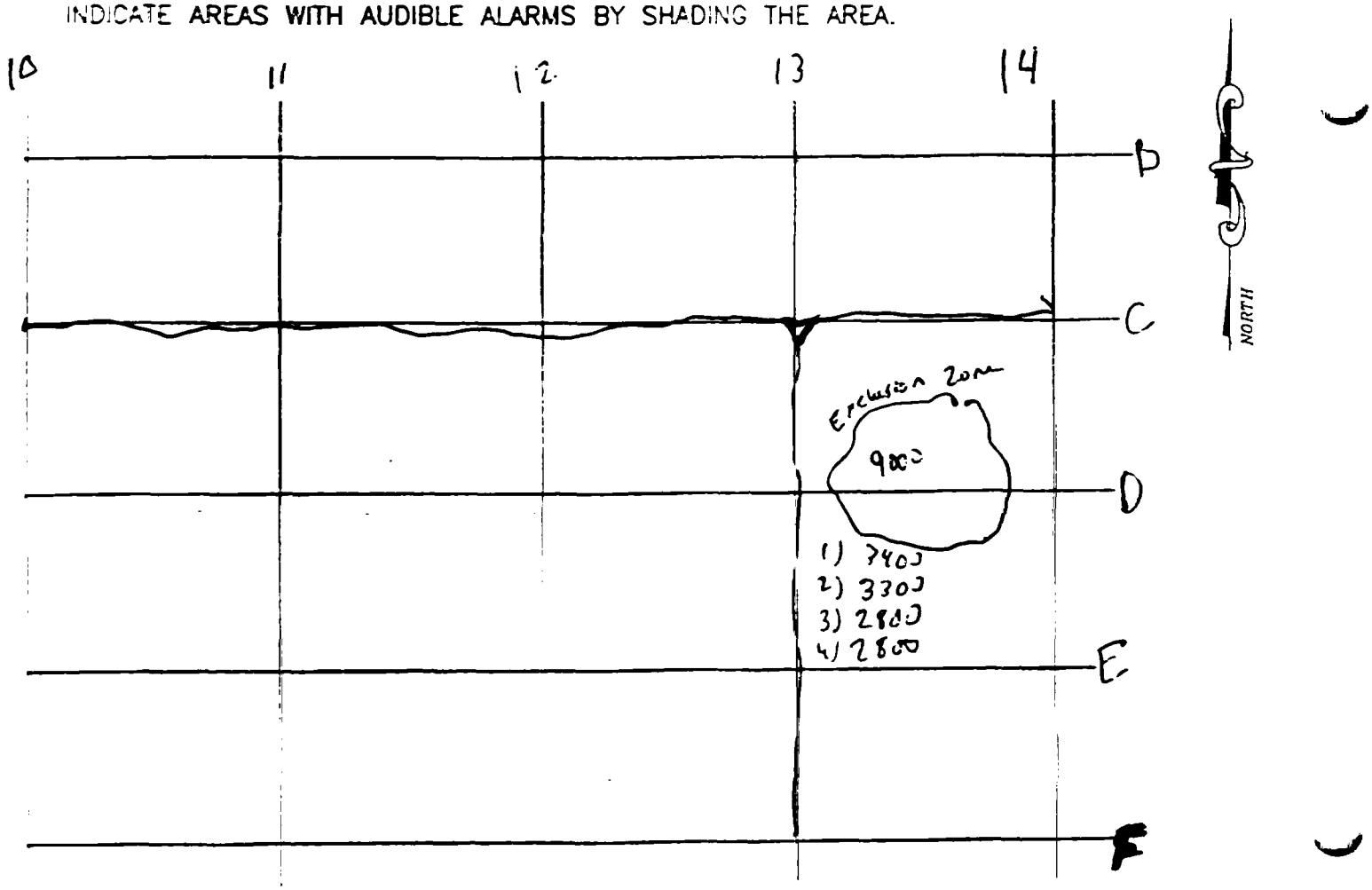
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/30/2000 TECHNICIAN: Joel

INST. MODEL: 2221 SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? yes LIFT ELEVATION: Grade Beam Basement Excavation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

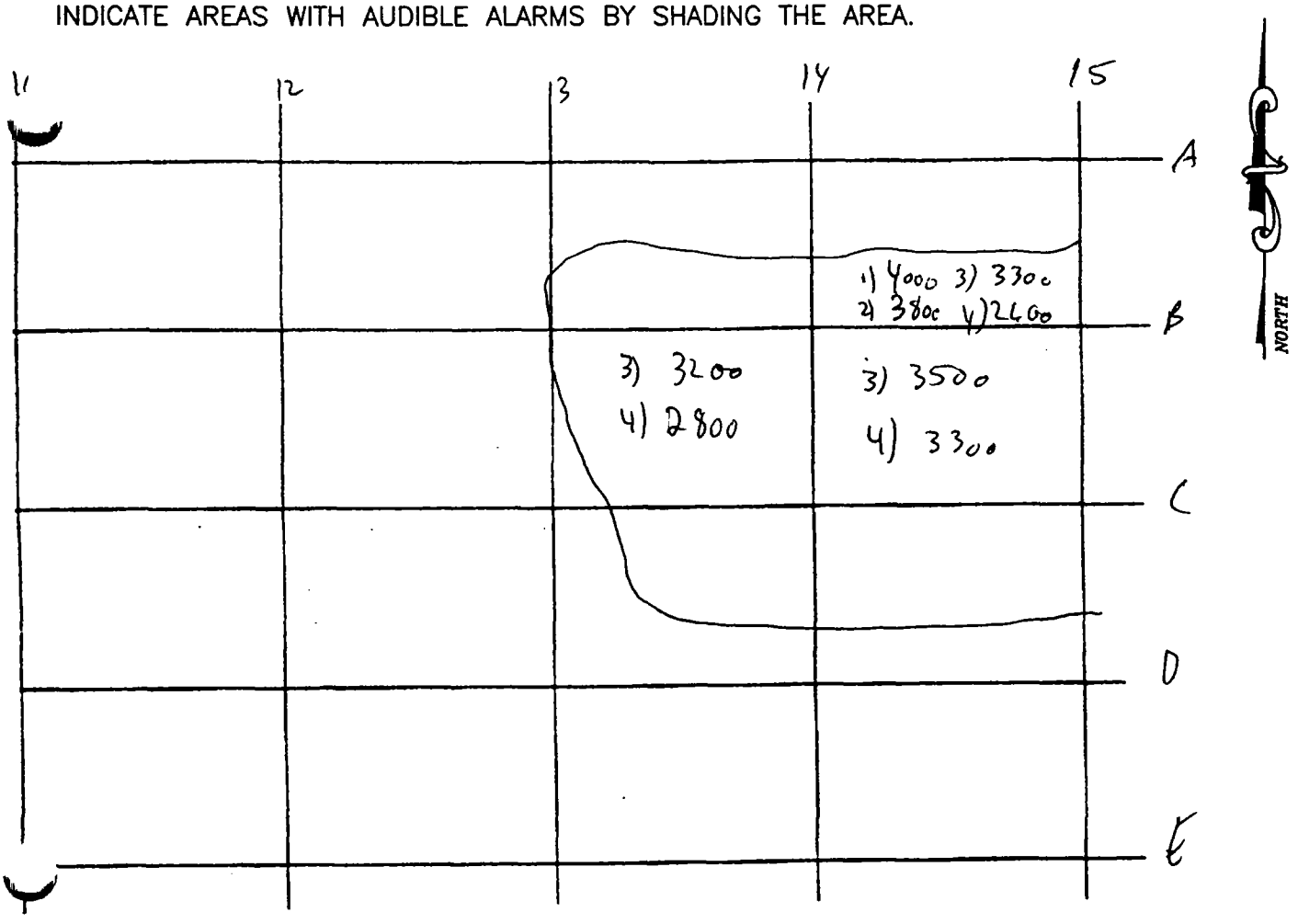
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/24/00 - 10/26/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 Shielded SERIAL NO.: 12724

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

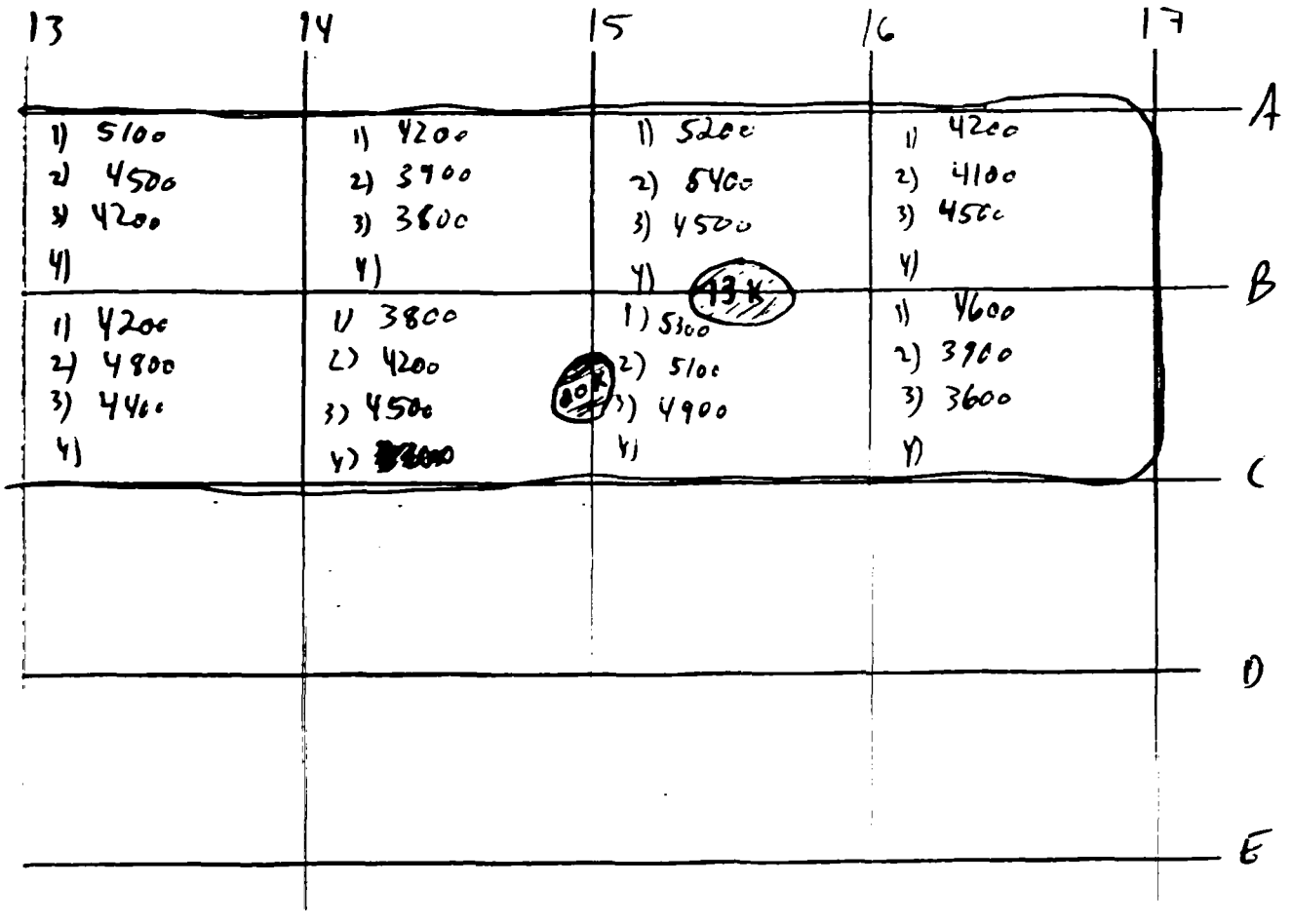
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/21/00 and 9/22/00 TECHNICIAN: Toby Sloan

INST. MODEL: 2221 shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24416\xk\EXCAVATION_INVENTORY.DOC

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/24/00 10/26/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded

SERIAL NO.: 127242

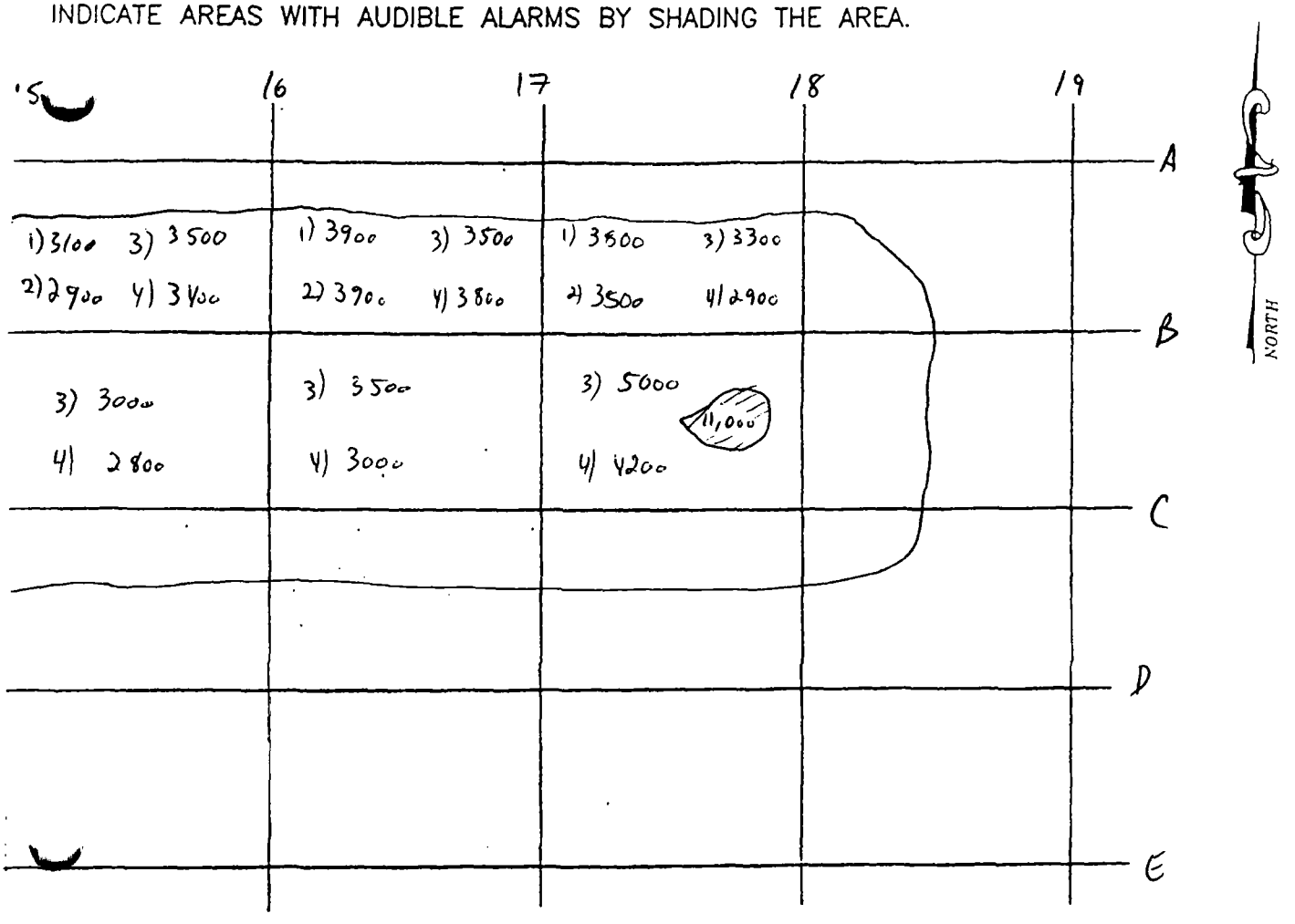
INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: road way removal (lifts 1 and 2 backfill in some spots)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

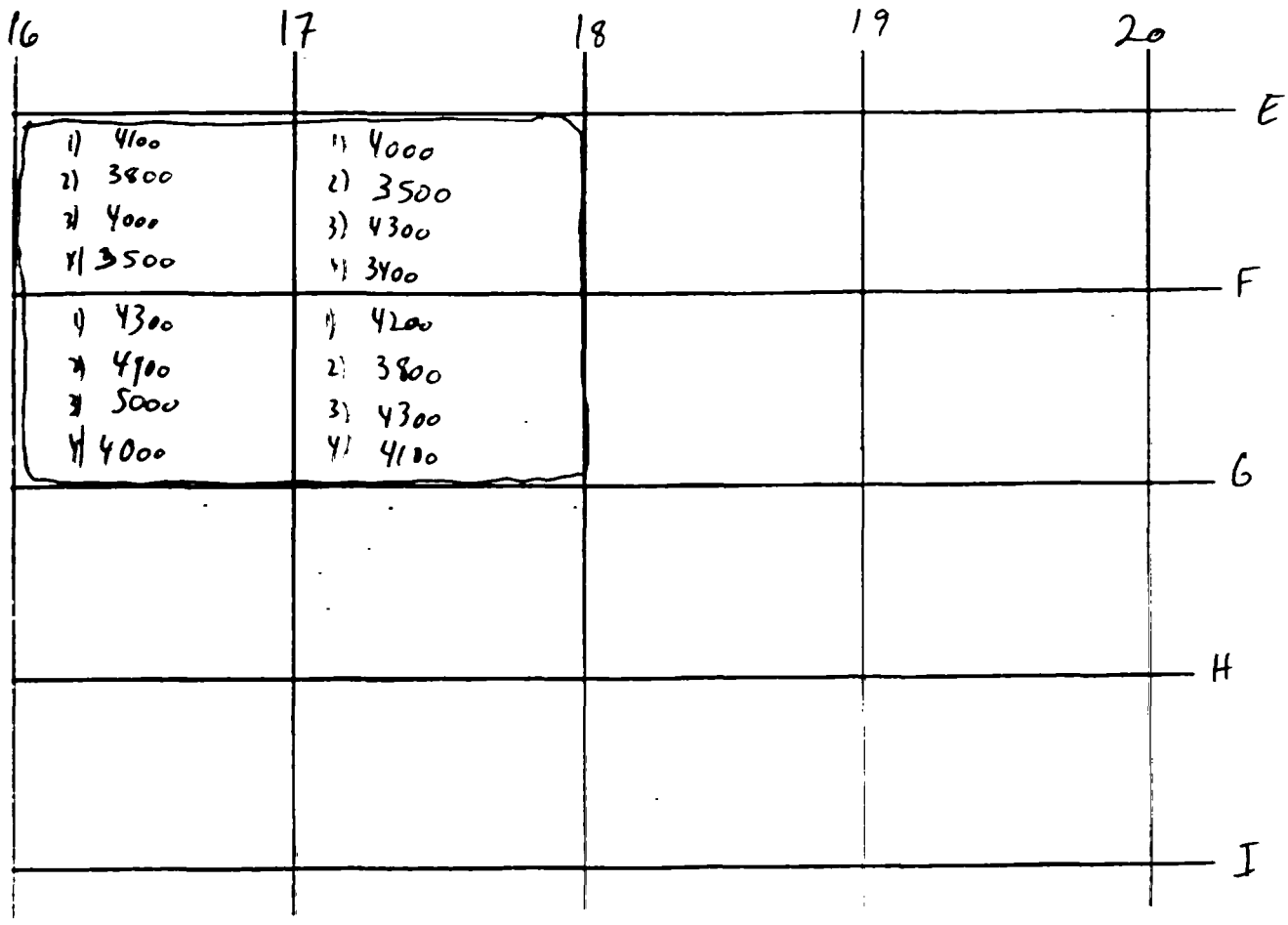
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/24/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded SERIAL NO.: 127212

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: removal of old cement wall (under grate)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

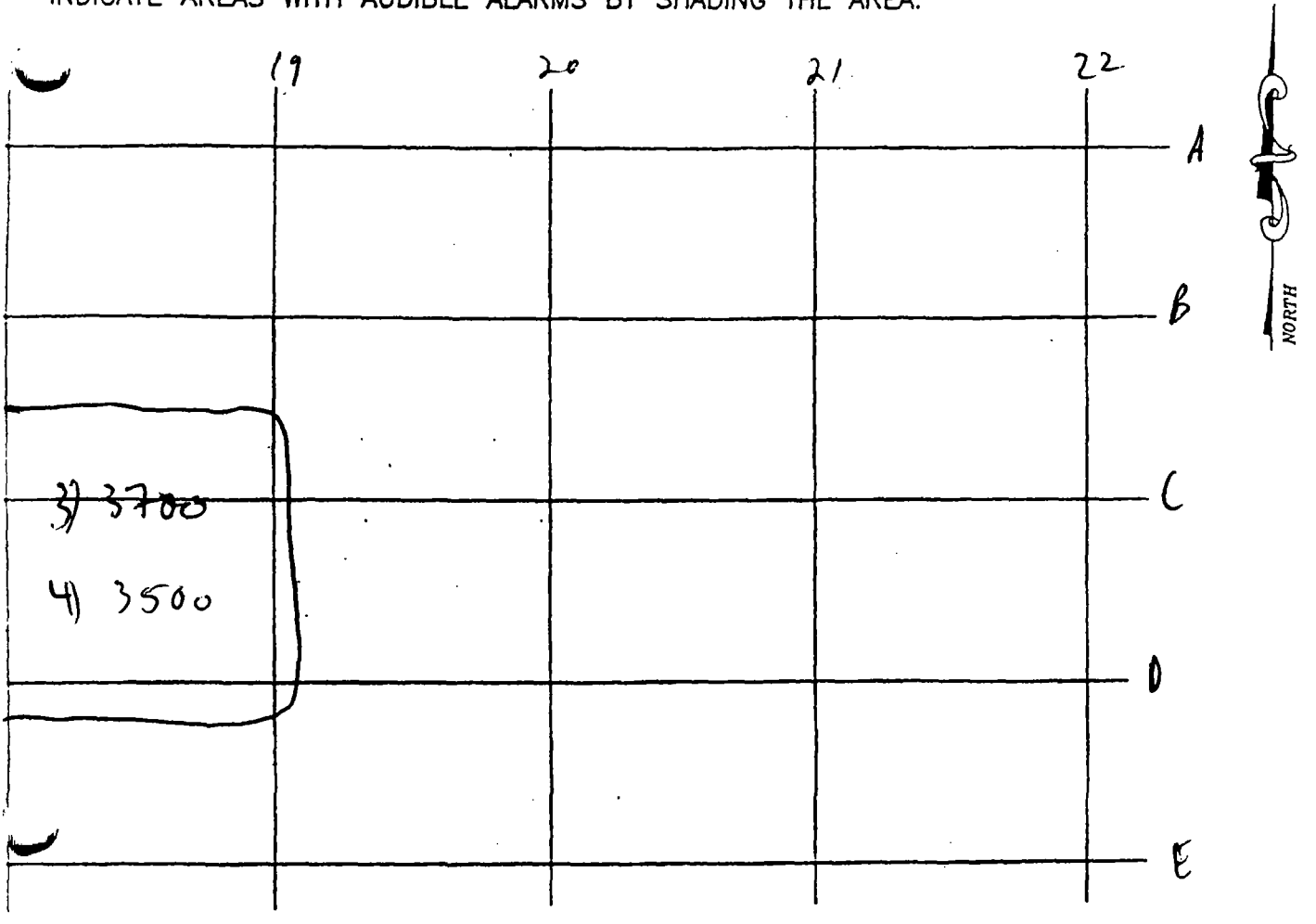
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/5/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 12722

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

2 of 3

DATE: 10/5/00

TECHNICIAN: Toby Shewan

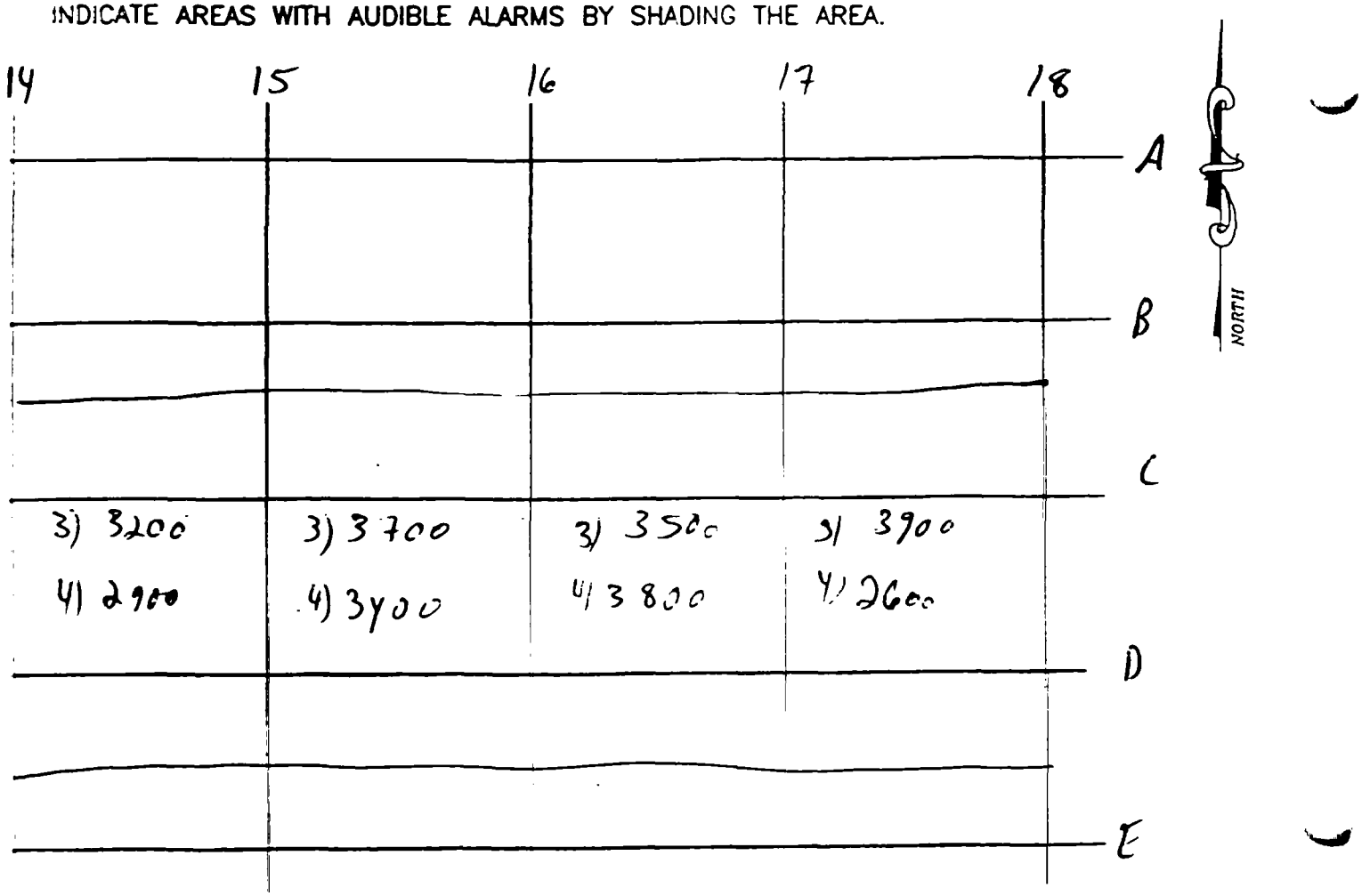
INST. MODEL: 2221

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



	14	15	16	17	18
A					
B					
C					
D	3) 3200 4) 2900	3) 3700 4) 3400	3) 3500 4) 3800	3) 3900 4) 2600	
E					

NORTH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

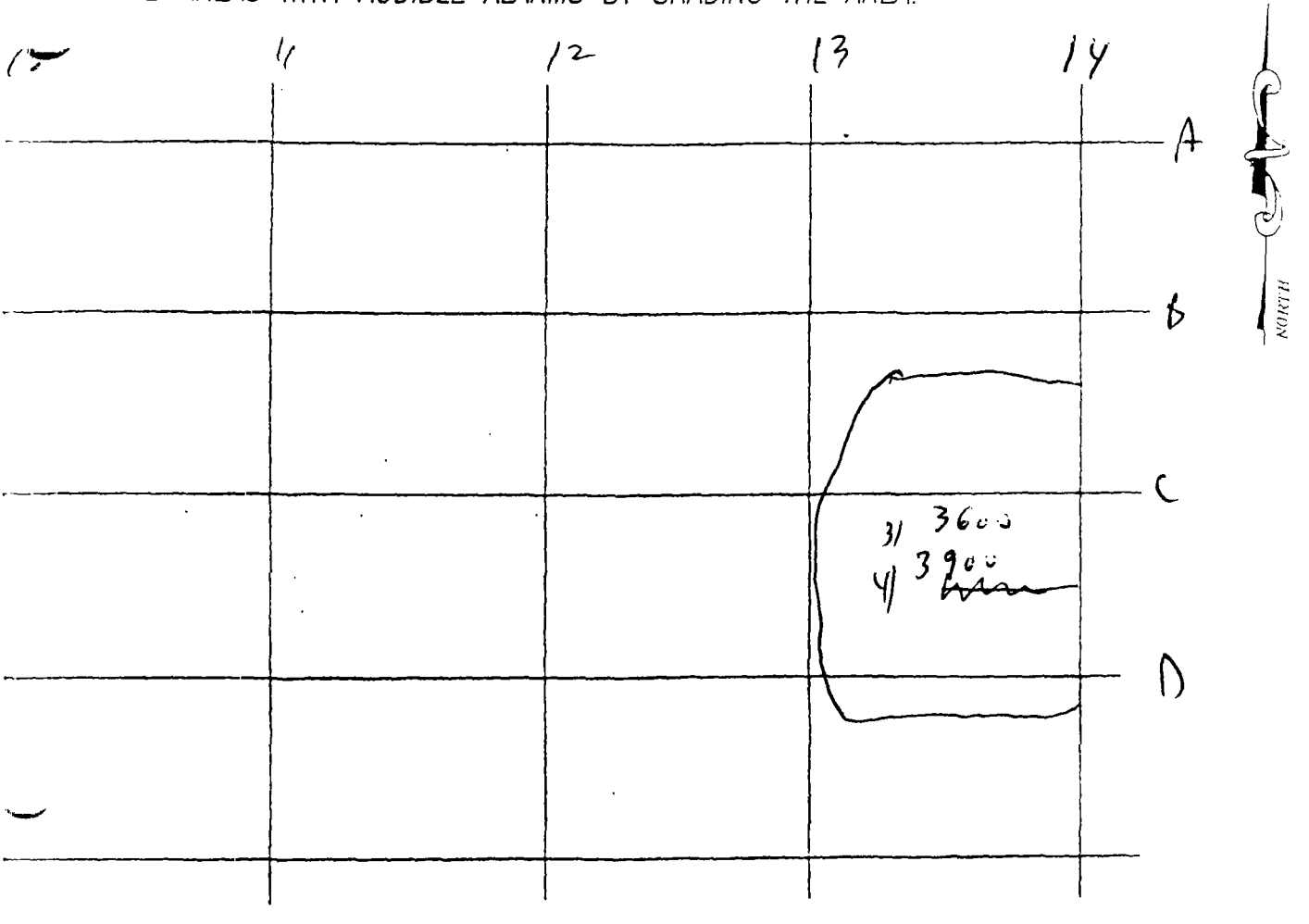
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/5/00 TECHNICIAN: Tob, Steve

INST. MODEL: 2221 SERIAL NO.: 12742

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: basement

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



AREA B SURVEYS: PRE-REMEDIATION

SURFACE SCANS OF PREVIOUSLY OBSTRUCTED AREAS
SURVEYS OF ROADS CONSTRUCTED THROUGH AREA

STS Consultants Ltd.

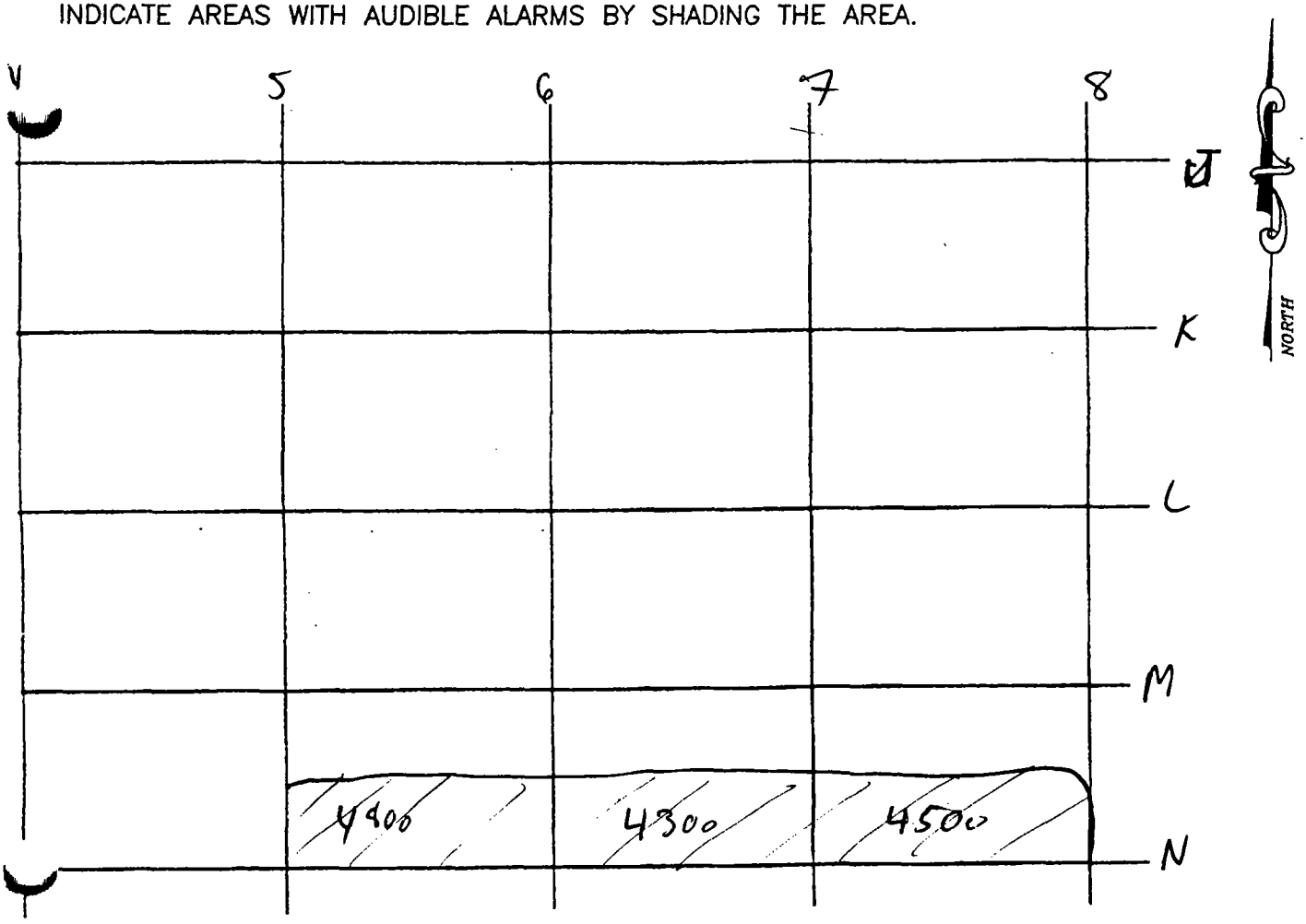
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/18/00 TECHNICIAN: Toby Slewan

INST. MODEL: 2221 SERIAL NO.: 132944

INST. CALIBRATED (Y/N)? Shielded LIFT ELEVATION: Sheet piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/6/00

TECHNICIAN: Brett Barton

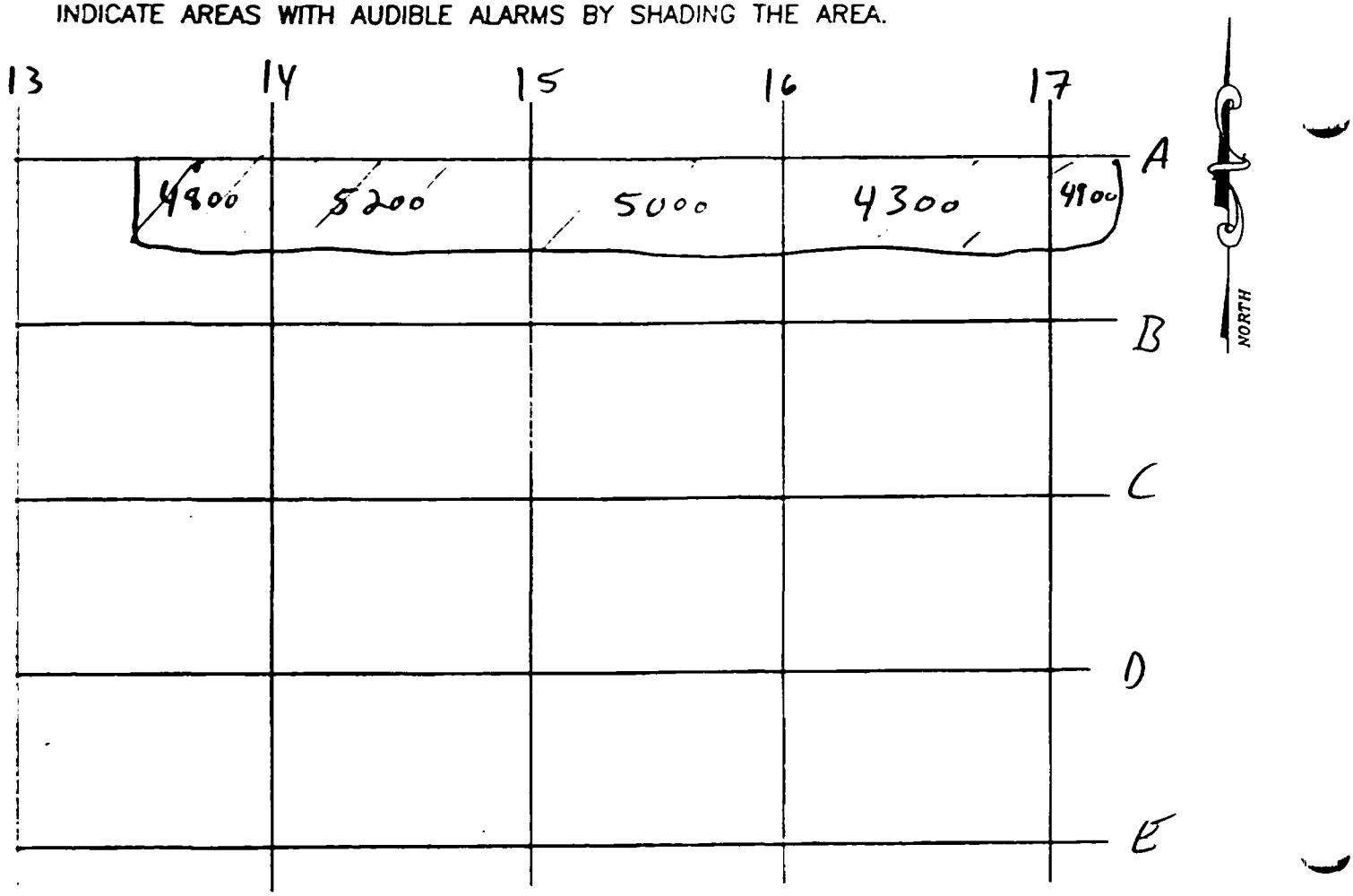
INST. MODEL: 2221 shielded

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: sheet piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

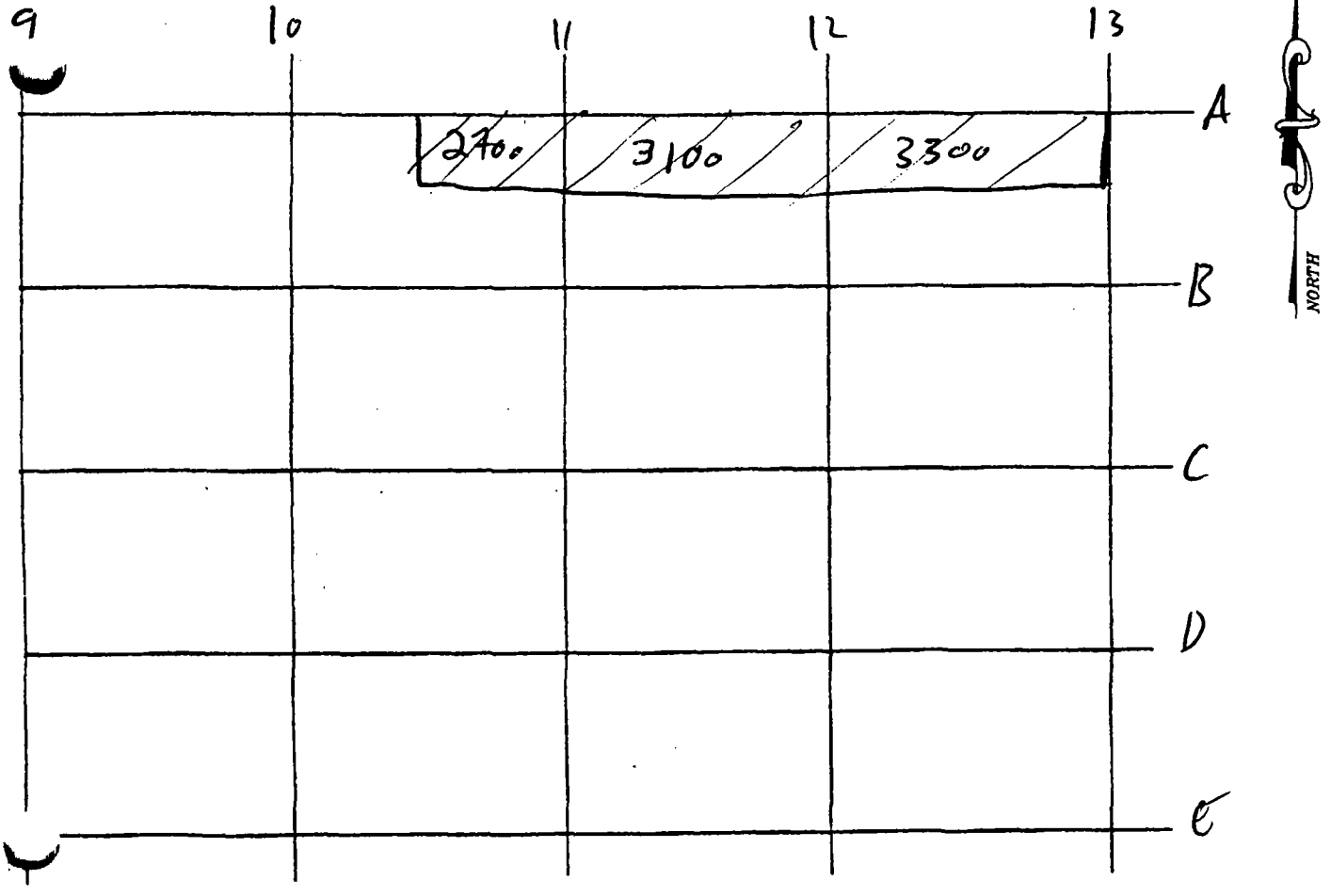
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/11/00 TECHNICIAN: Toby Shewa

INST. MODEL: 2221 SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Shielded LIFT ELEVATION: sheet piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

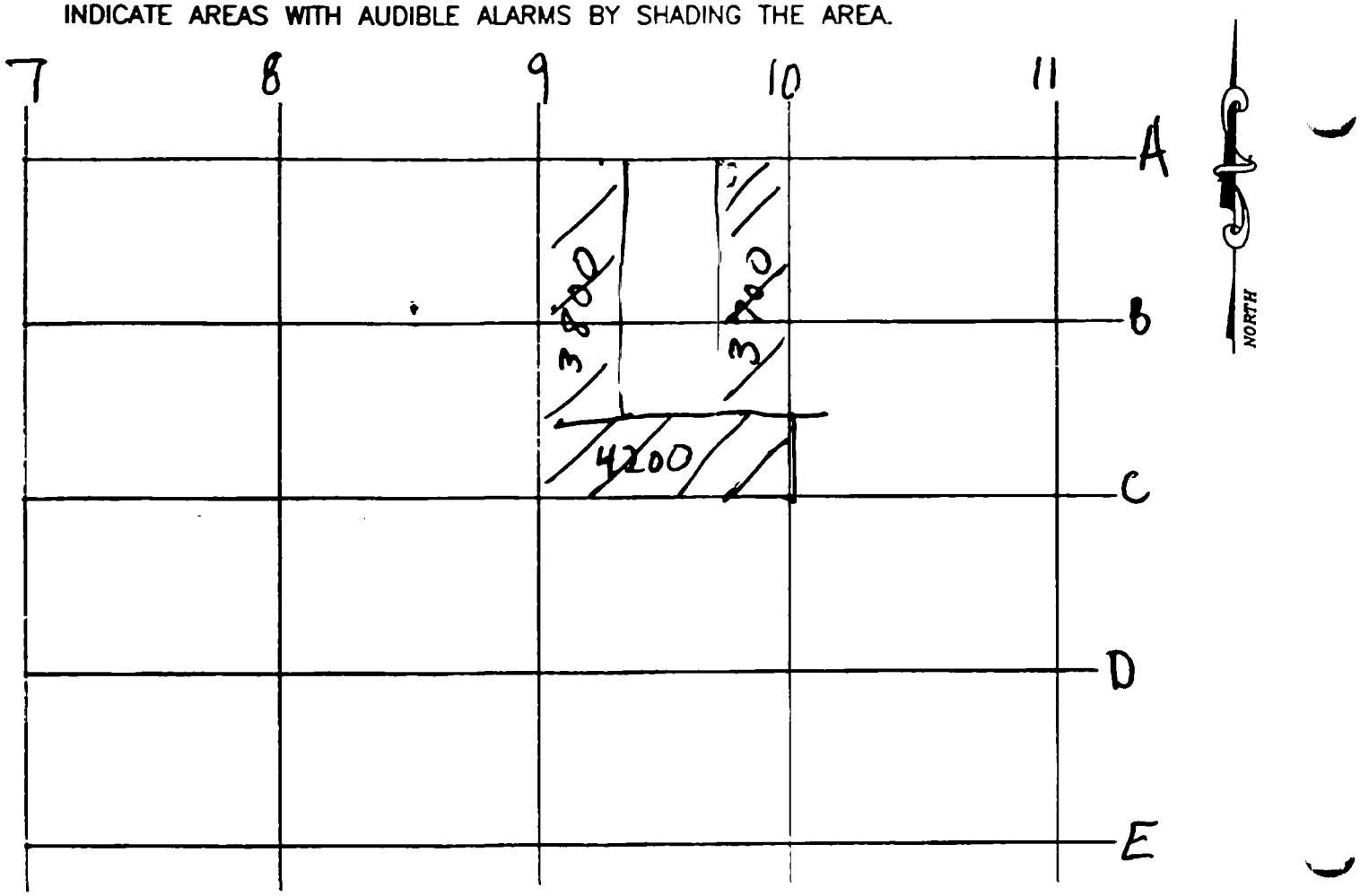
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9-8-00 TECHNICIAN: Jack Alvarez

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Scheduled LIFT ELEVATION: Sheet Piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

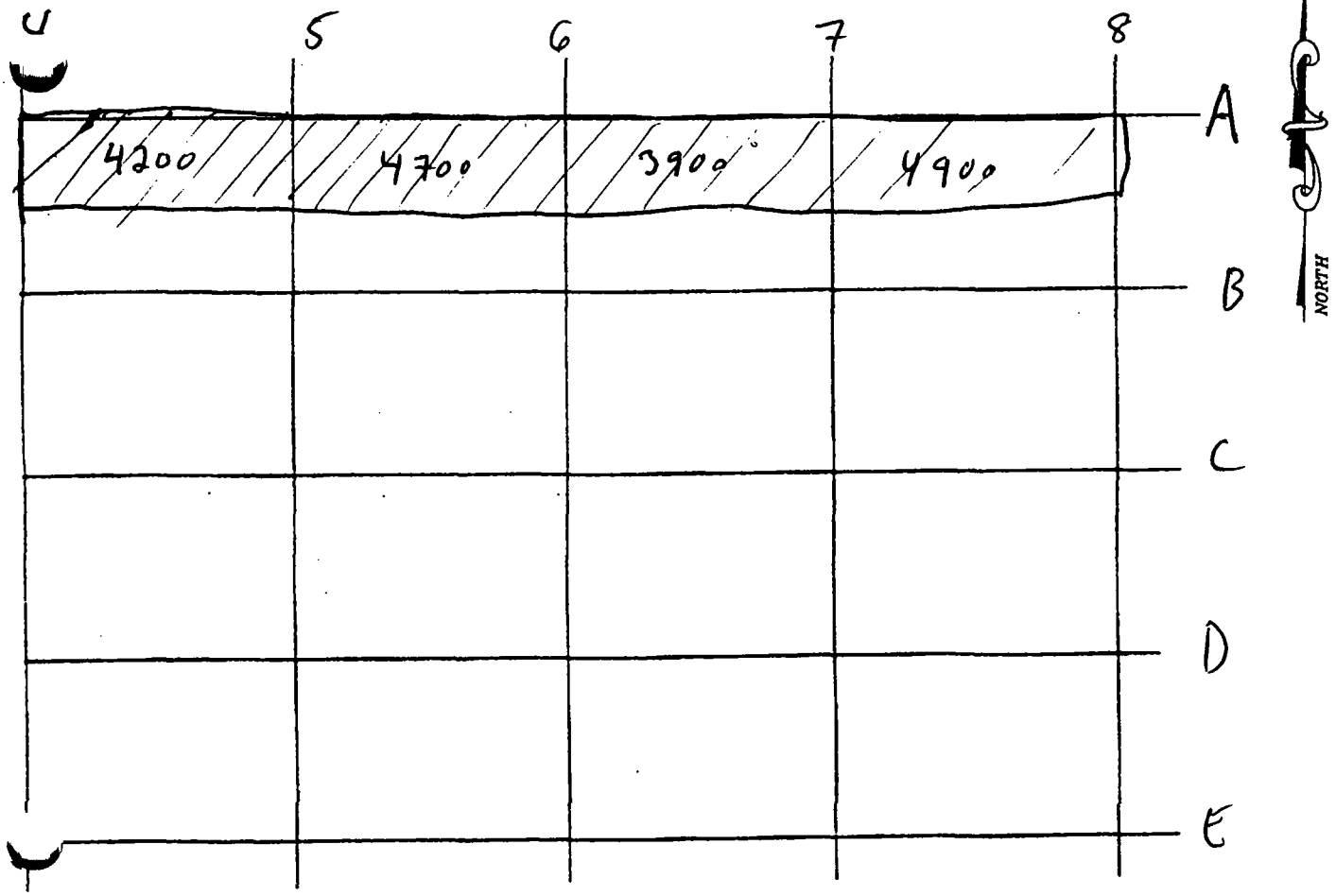
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/7/00 TECHNICIAN: Glen Huber / Toby Shearer

INST. MODEL: 2227 SERIAL NO.: 127142 / 1932844

INST. CALIBRATED (Y/N)? shielded LIFT ELEVATION: sheet piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9-8-00

TECHNICIAN: Joel Dlrwelle

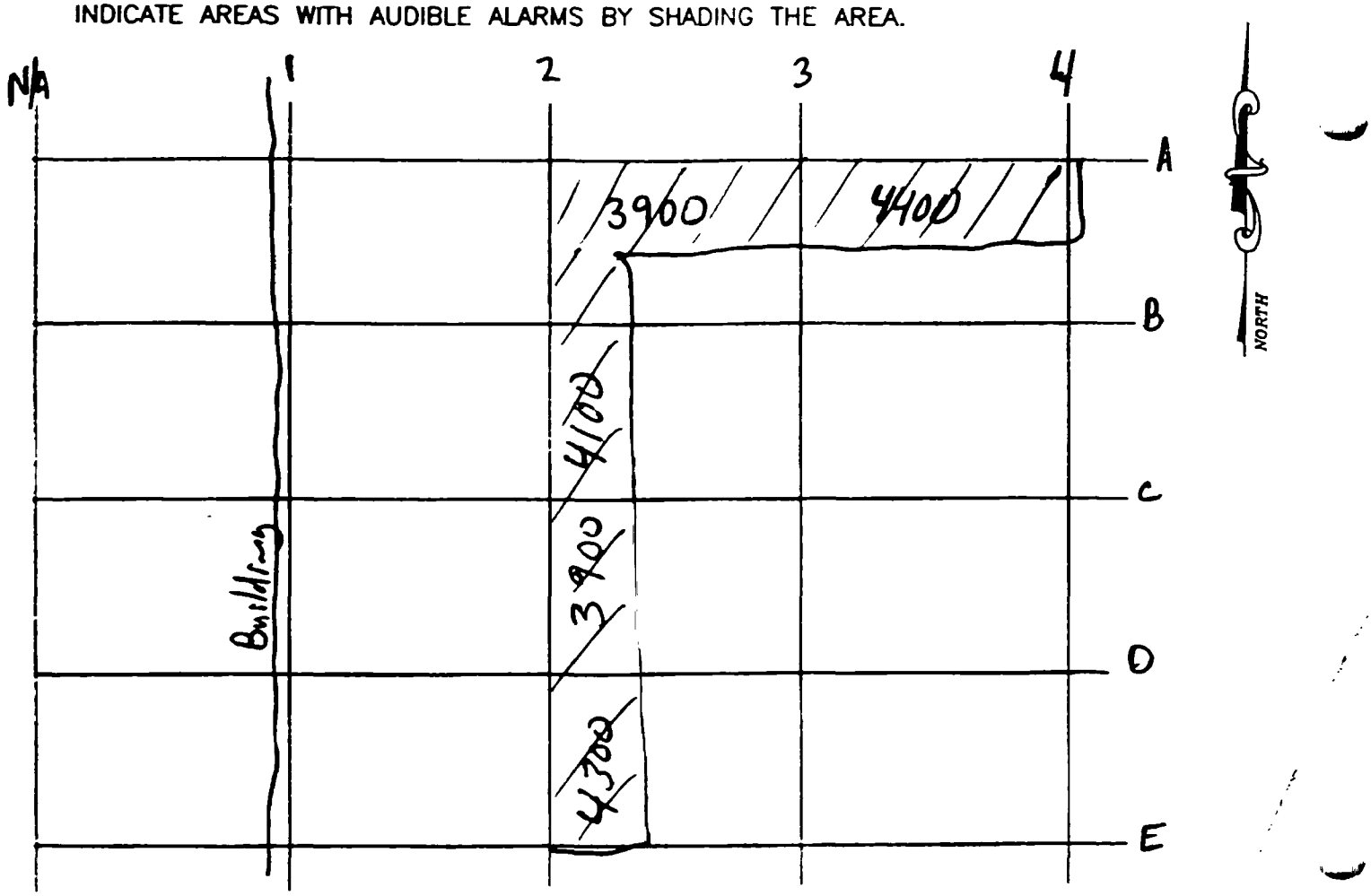
INST. MODEL: 2221

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? shielded

LIFT ELEVATION: Sheet Piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

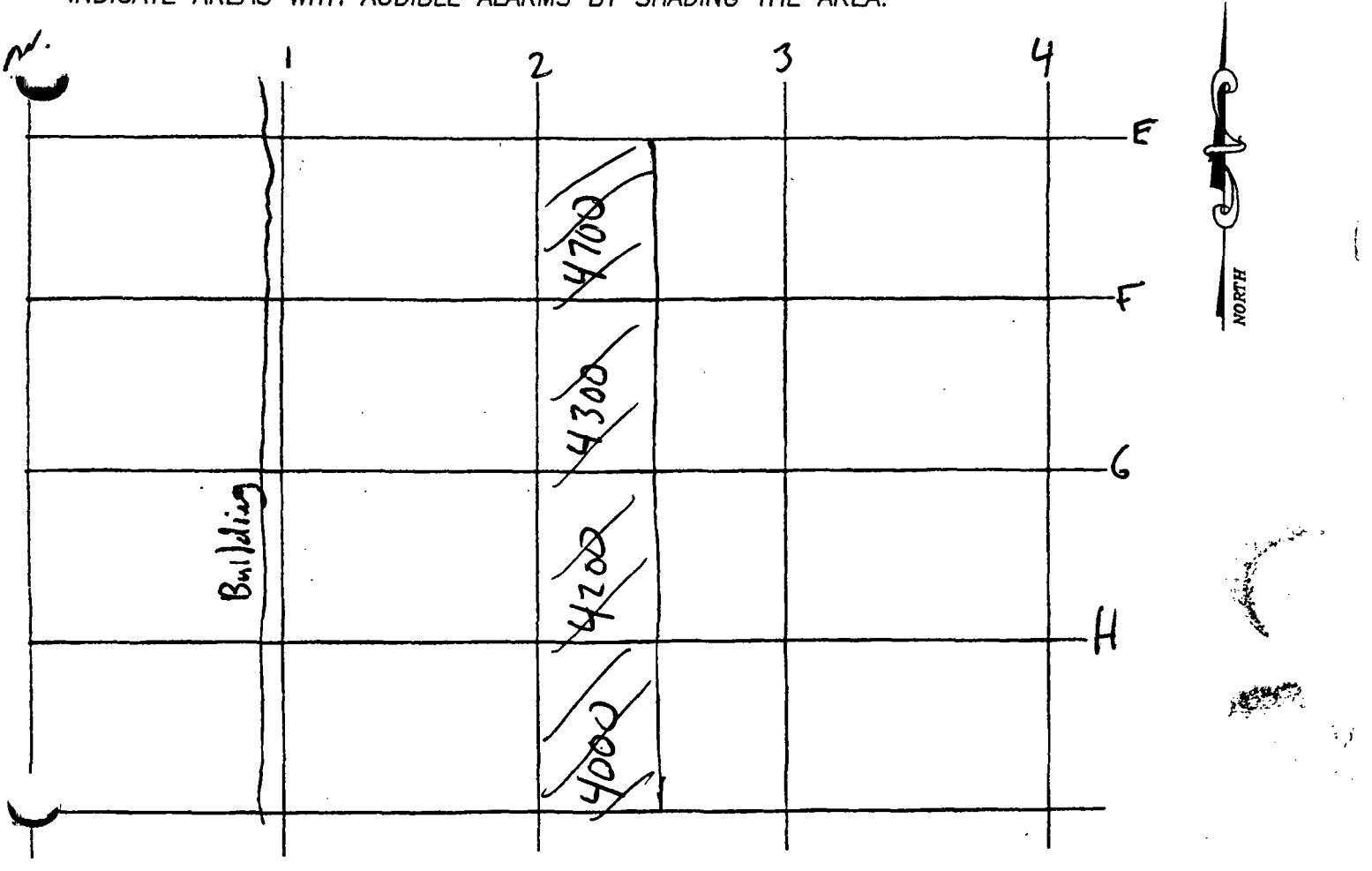
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9-8-00 TECHNICIAN: Jon Brewer

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? shielded LIFT ELEVATION: Sheet Piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

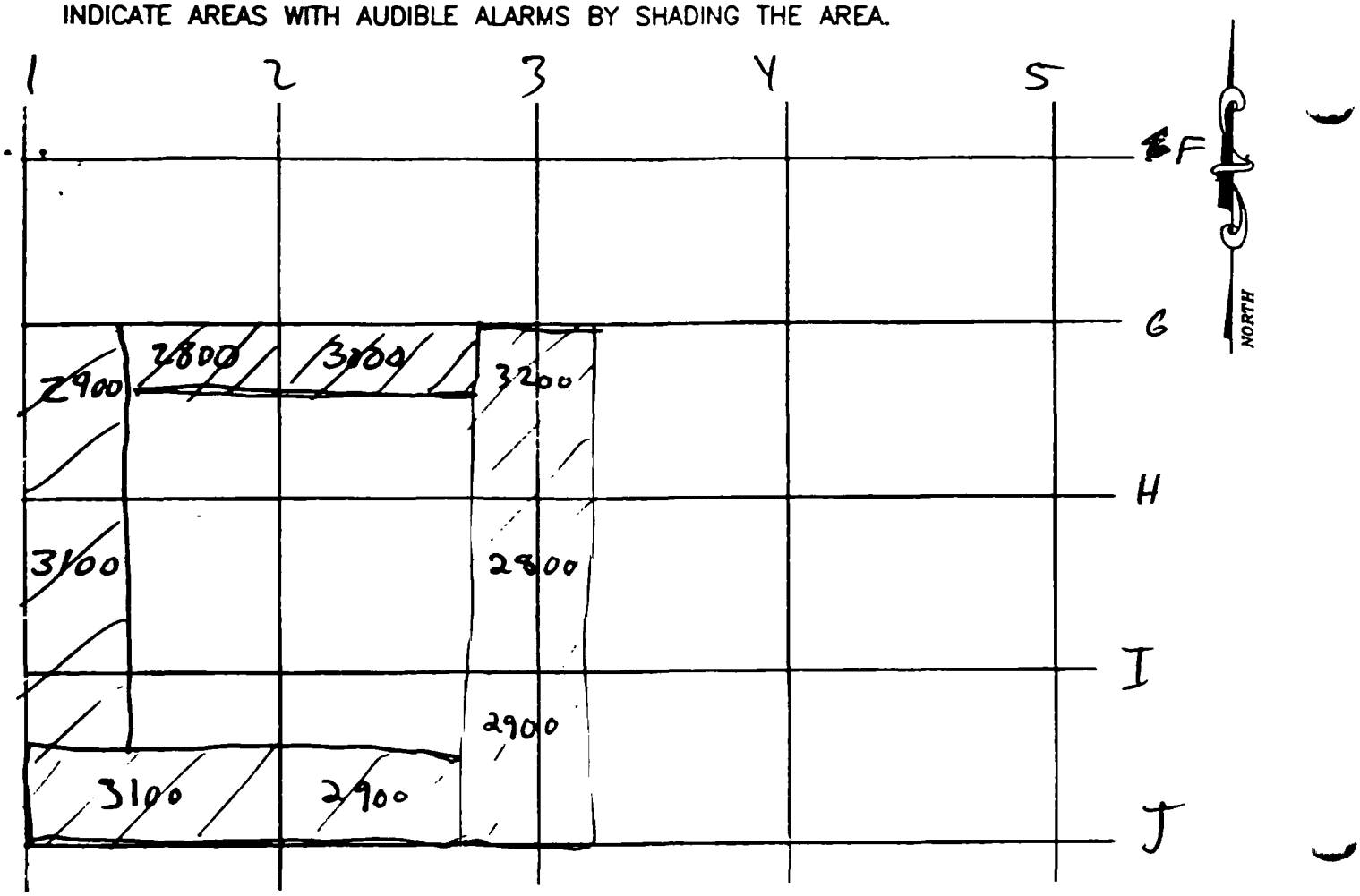
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/8/00 TECHNICIAN: Joel Alexander

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Sheet Piling

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

CAISSON SURVEYS

AREA B

done prior? — does this mean red check before 3/00?

Grand Pier Caisson Surveys - Summary

Caisson Number	Survey
1	x
2	x
3	x
4	hot
5	hot
6	done prior
7	x
8	x
9	x
10	x
11	x
12	x
13	x
14	done prior
15	x
16	x
17	x
18	x
19	hot
20	x
21	x
22	x
23	x
24	x
25	x
26	x
27	x
28	x
29	x
30	x

Caisson Number	Survey
31	x
32	x
33	x
34	x
35	x
36	done prior
37	x
38	x
39	xx
40	hot
41	x
42	x
43	x
44	x
45	x
46	x
47	x
48	x
49	x
50	x
51	x
52	x
53	x
54	done prior
55	done prior
56	x
57	done prior
58	x
59	x
60	done prior

Caisson Number	Survey
61	x
62	x
63	x
64	x
65	x
66	done prior
67	x
68	x
69	x
70	x
71	x
72	x
73	x
74	x
75	x
76	x
77	x
78	x
79	x
80	x
81	x
82	x
83	x
84	x
85	x
86	x
87	x
88	x
89	x
90	x

Caisson Number	Survey
91	x
92	x
93	x
94	x
95	x
96	x
97	x
98	hot
99	x
100	x
101	x
102	x
103	x
104	x
105	x
106	x
107	x
108	x
109	x
110	x
111	x
112	x

* 13 additional caissons on Illinois Street

hot = exclusion zone (greater than 7.1pCi/g)

done prior = done before 3/00

STS Consultants Ltd.

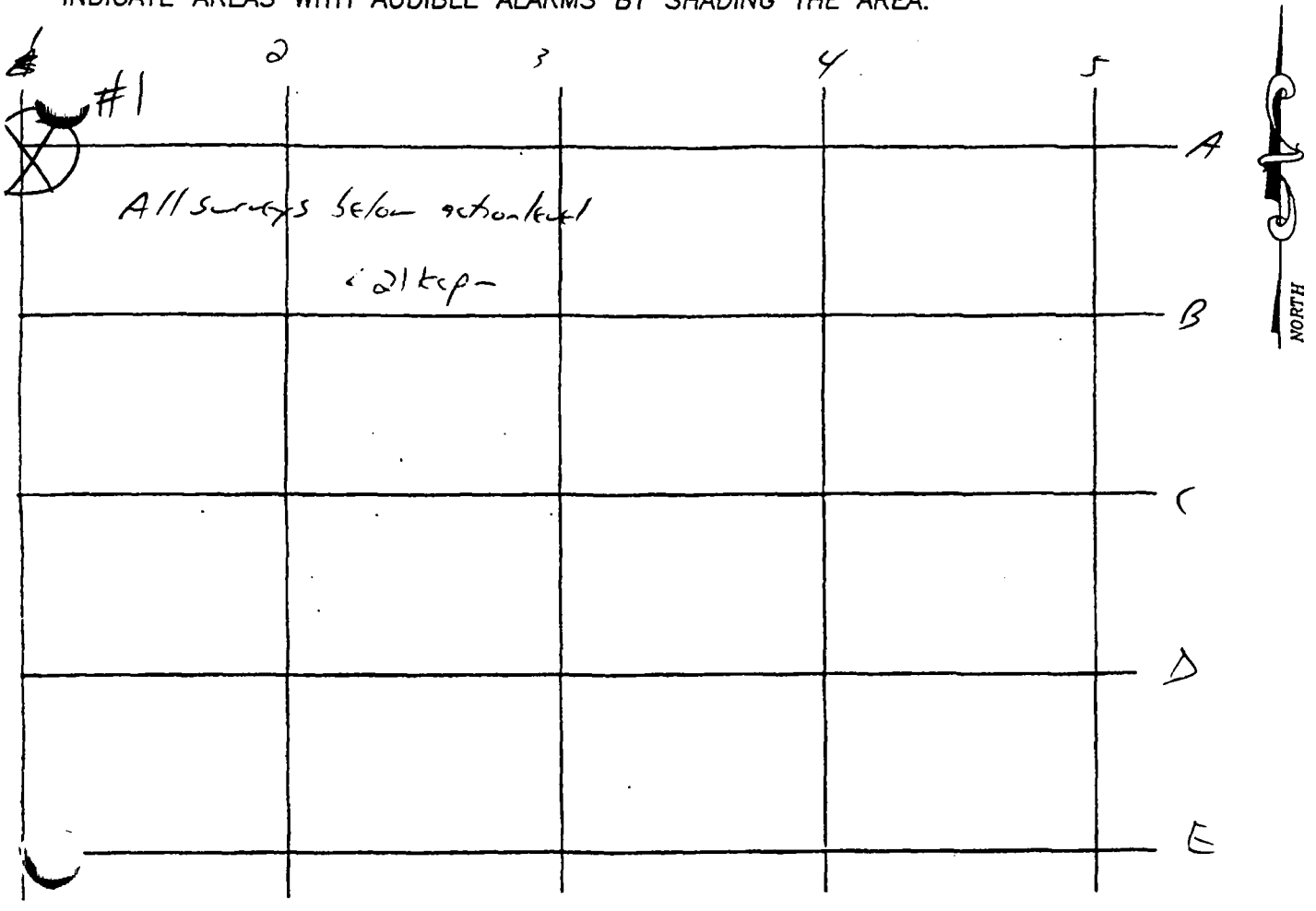
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/12/00 TECHNICIAN: Glenn Hysell

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson pothole #1

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/13/00

TECHNICIAN: Glenn Huber

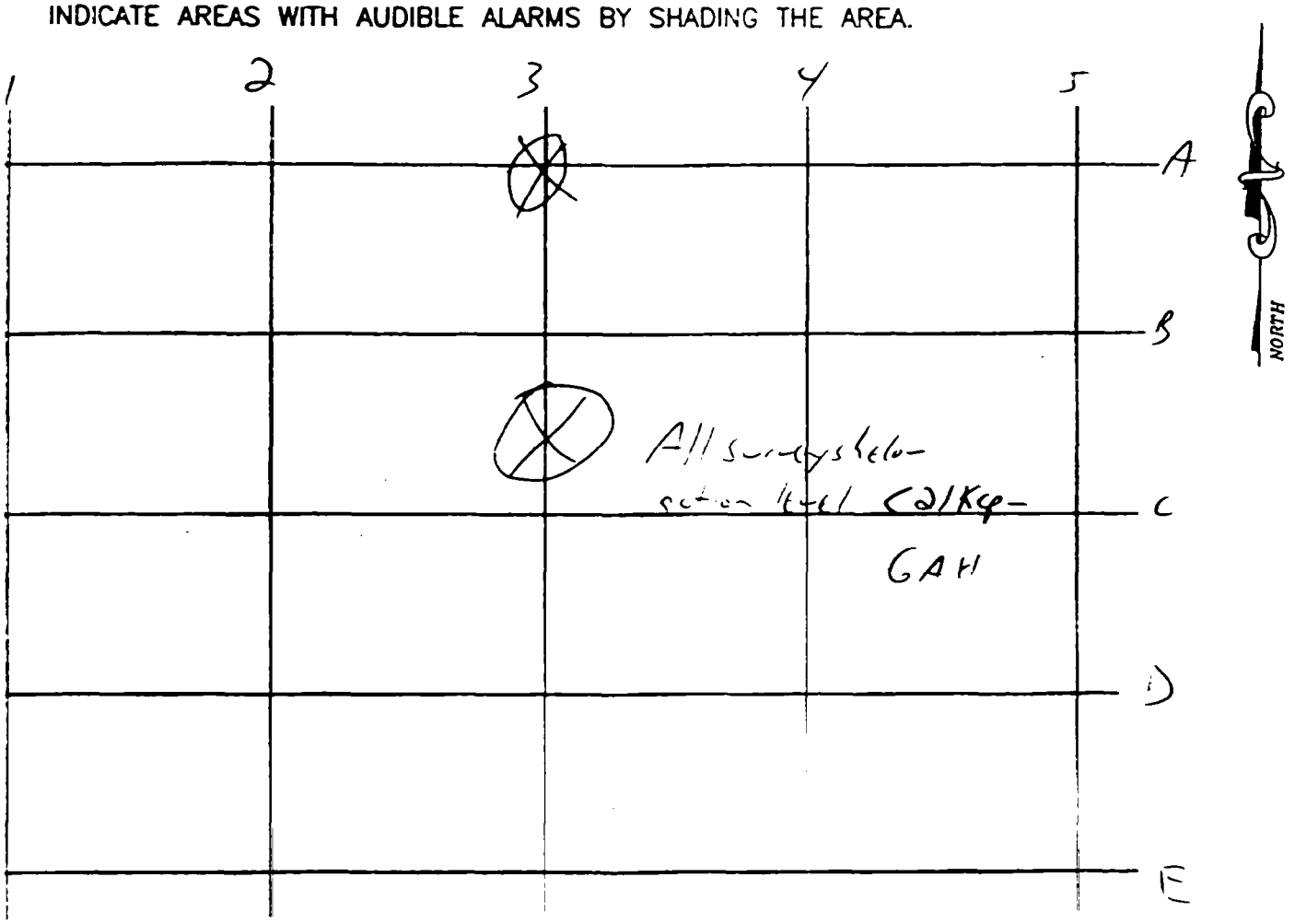
INST. MODEL: 2221 unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Caisson pothole # 2 & pothole # 3

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

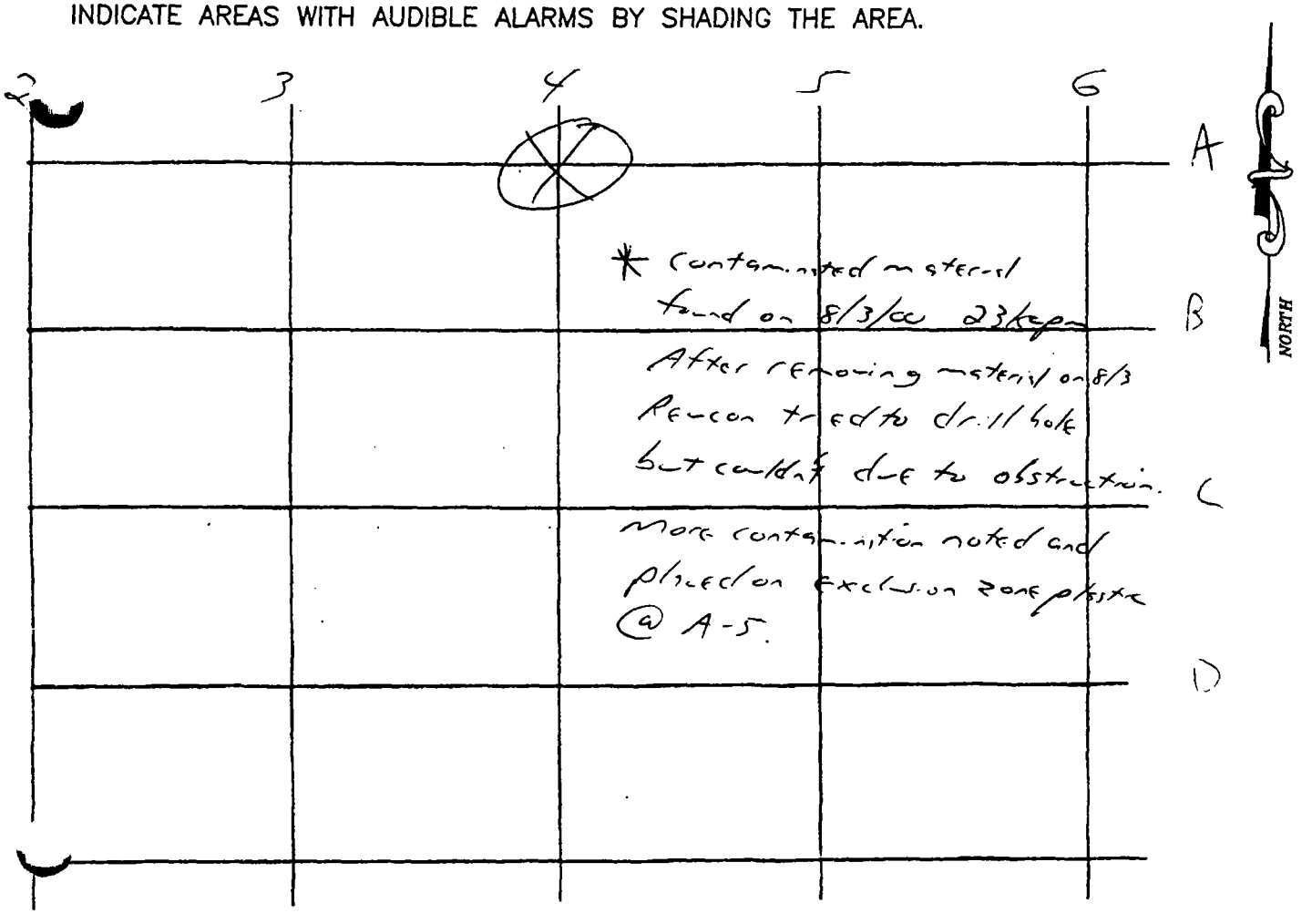
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00 TECHNICIAN: Glenn Hubic

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Grasson #4

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

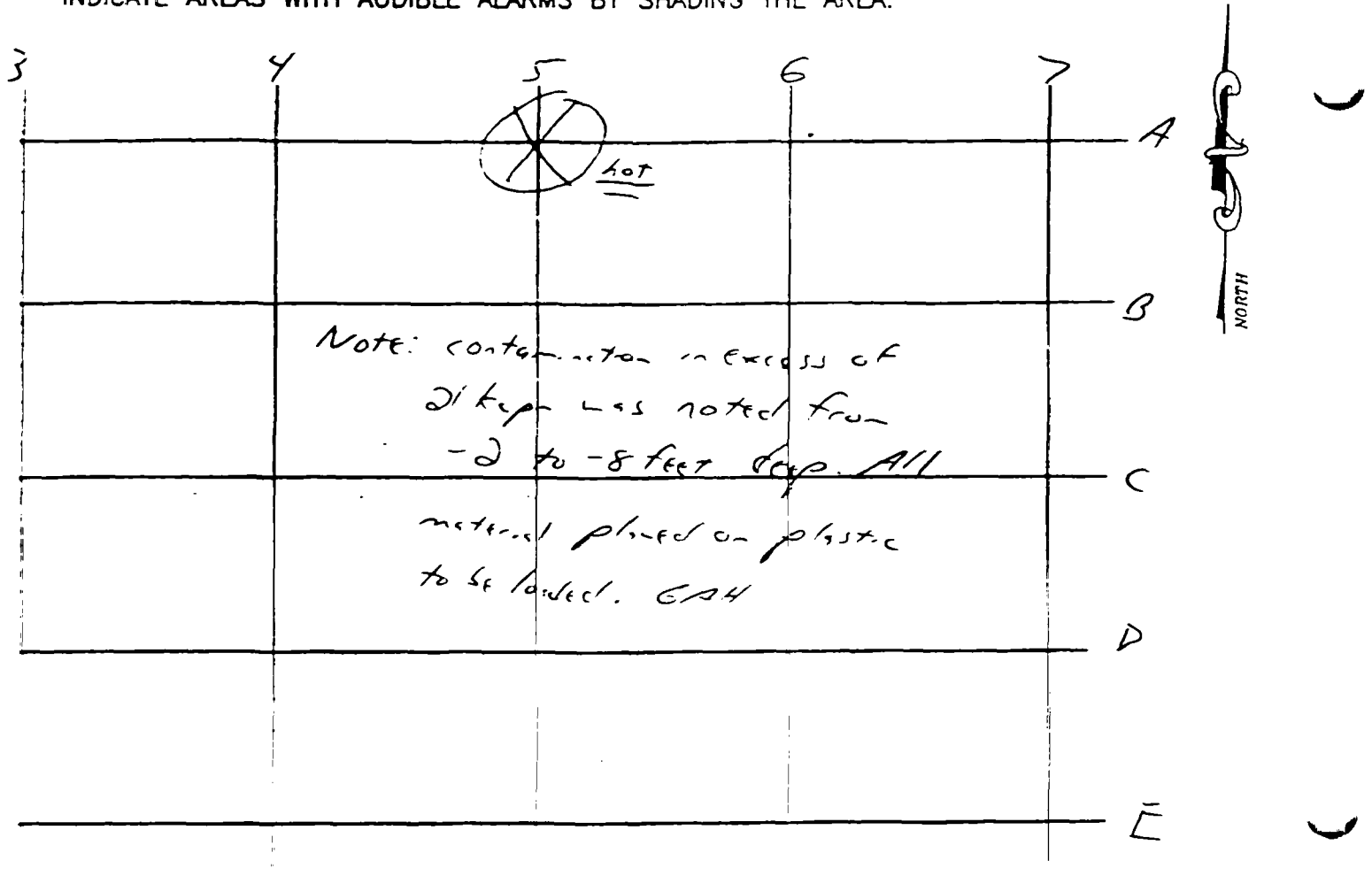
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/19/00 TECHNICIAN: Glen Huber

INST. MODEL: 2221 Unshielded SERIAL NO.: 26496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #5

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

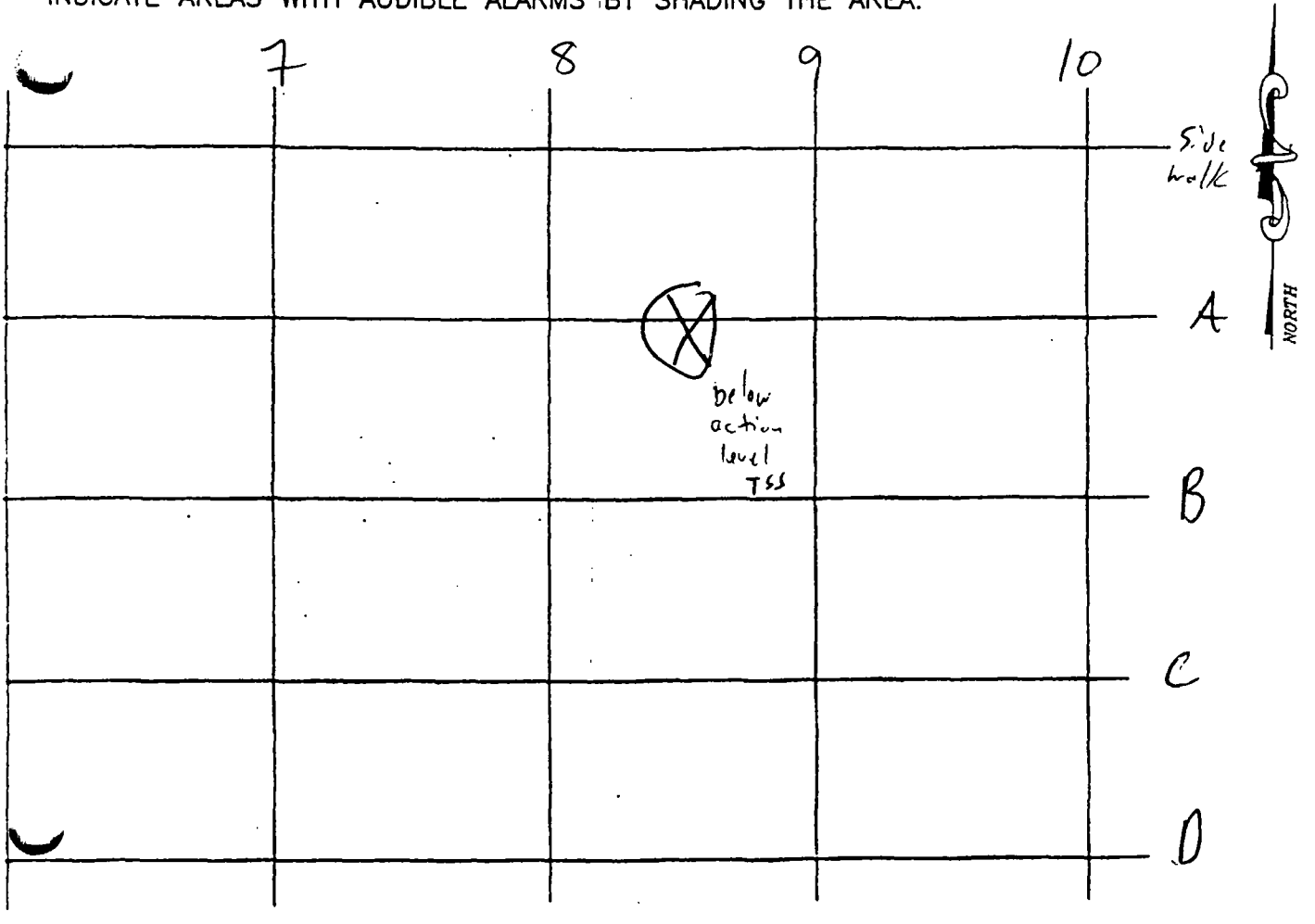
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/25/00 TECHNICIAN: Toby Sheman

INST. MODEL: 2221 unshielded SERIAL NO.: 186496

INST. CALIBRATED (Y/N)? 3/00 ~~LIFT ELEVATION~~ Caisson #: 7

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

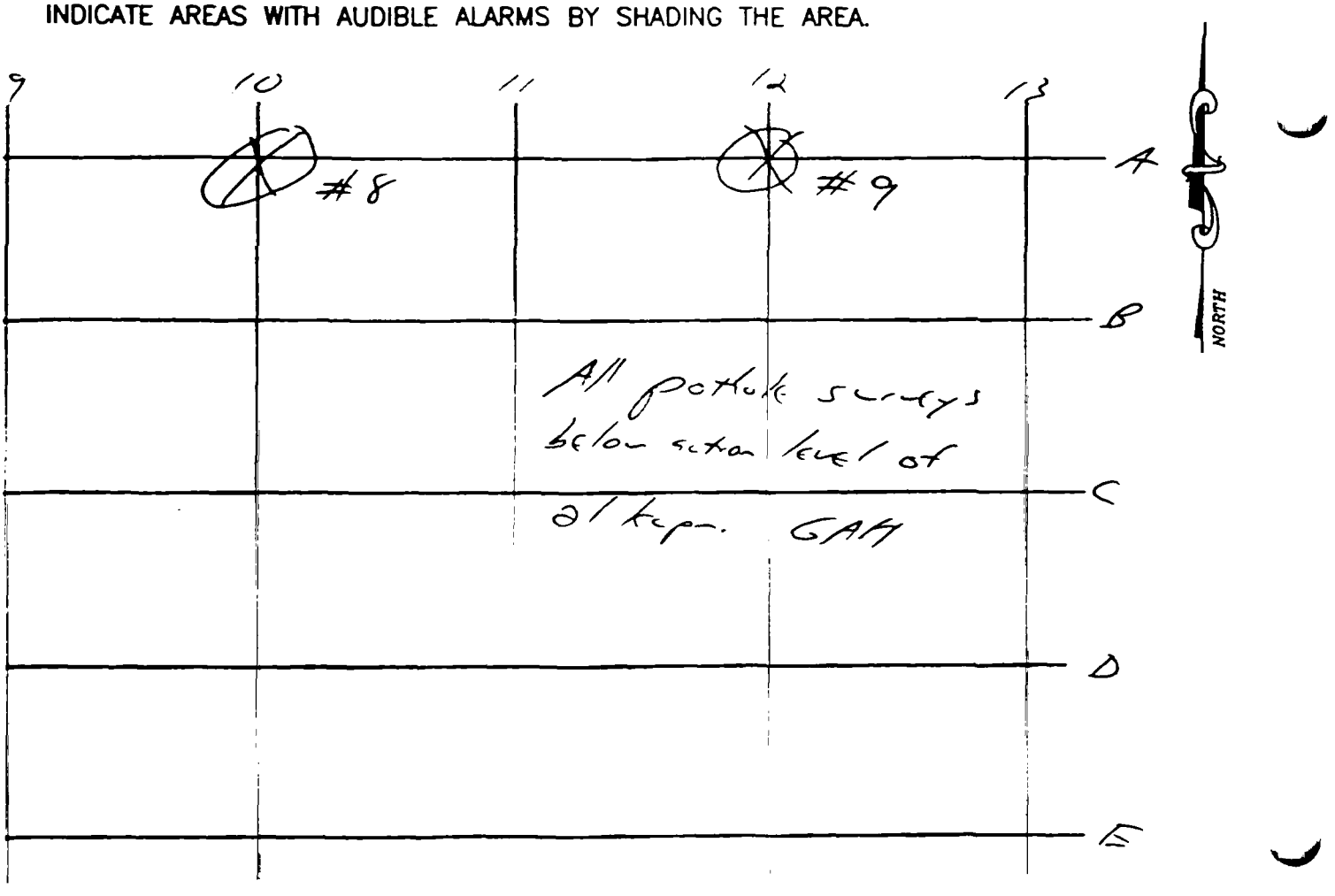
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/8/00 TECHNICIAN: Glen Hyde

INST. MODEL: 222 unshielded SERIAL NO.: 26456

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #8 & 9 potholes

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/7/00

TECHNICIAN: Brett Barton

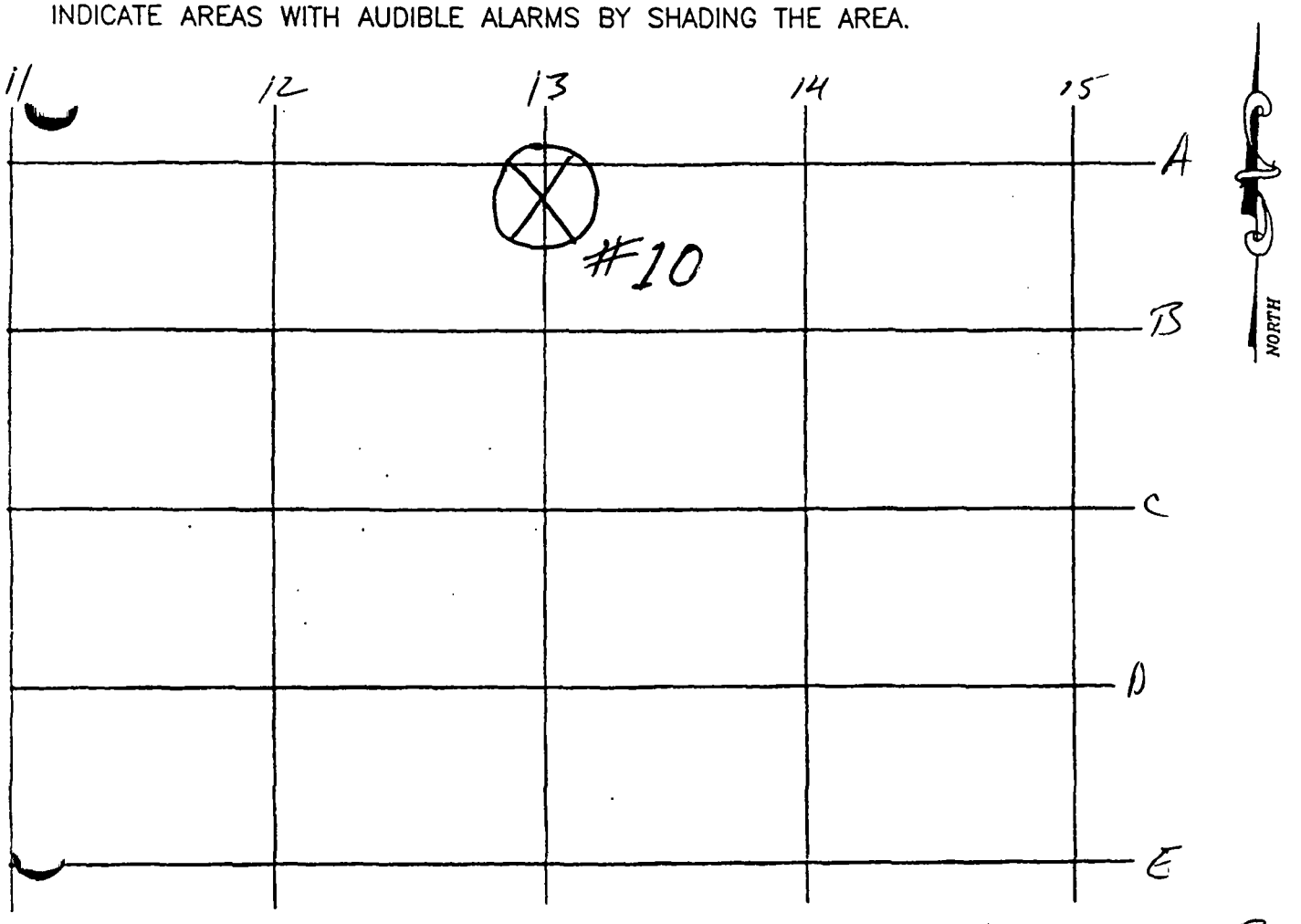
INST. MODEL: Ludlum 2221 (included)

SERIAL NO.: 126496

INST. CALIBRATED (Y)N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL SURVEYS BELOW ACTION LEVELS -BAB

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

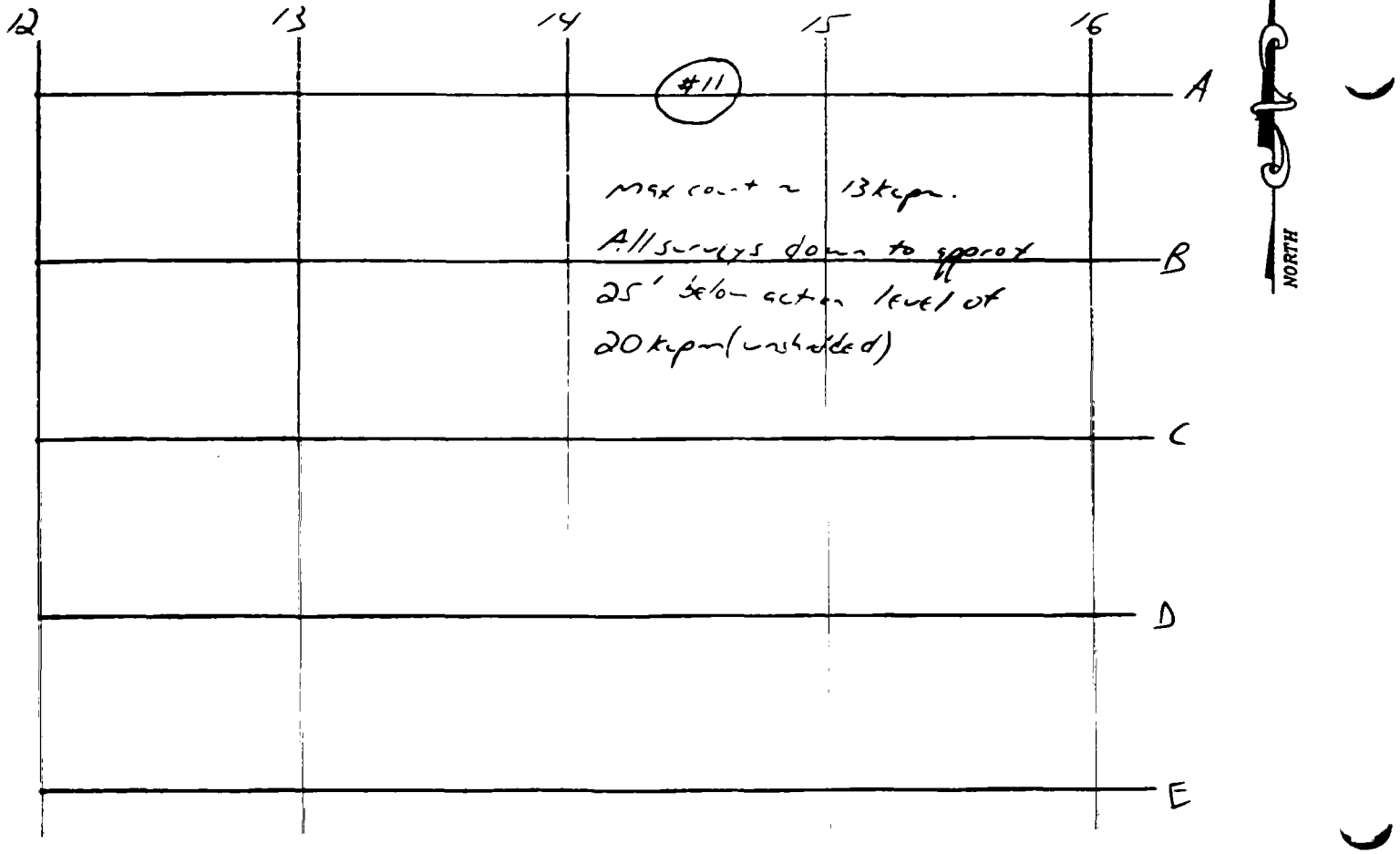
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/4/00 TECHNICIAN: Glenn Huber

INST. MODEL: Ludlum 2221 (unshielded) SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Grade

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xx\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

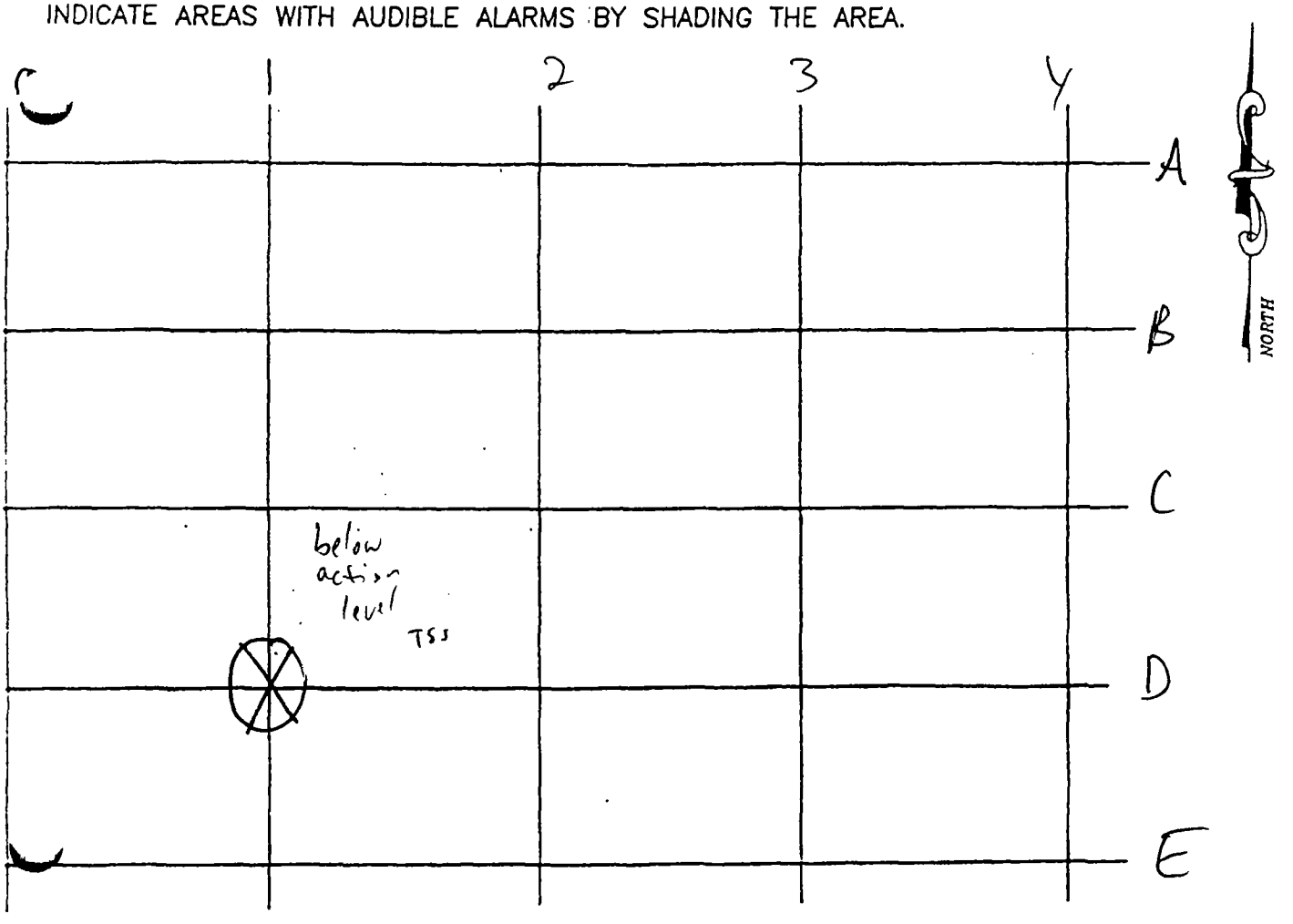
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/13/00 TECHNICIAN: Toby Sloan

INST. MODEL: 2221 unshielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 5/5/00 LIFT ELEVATION: 22
Pot hole H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

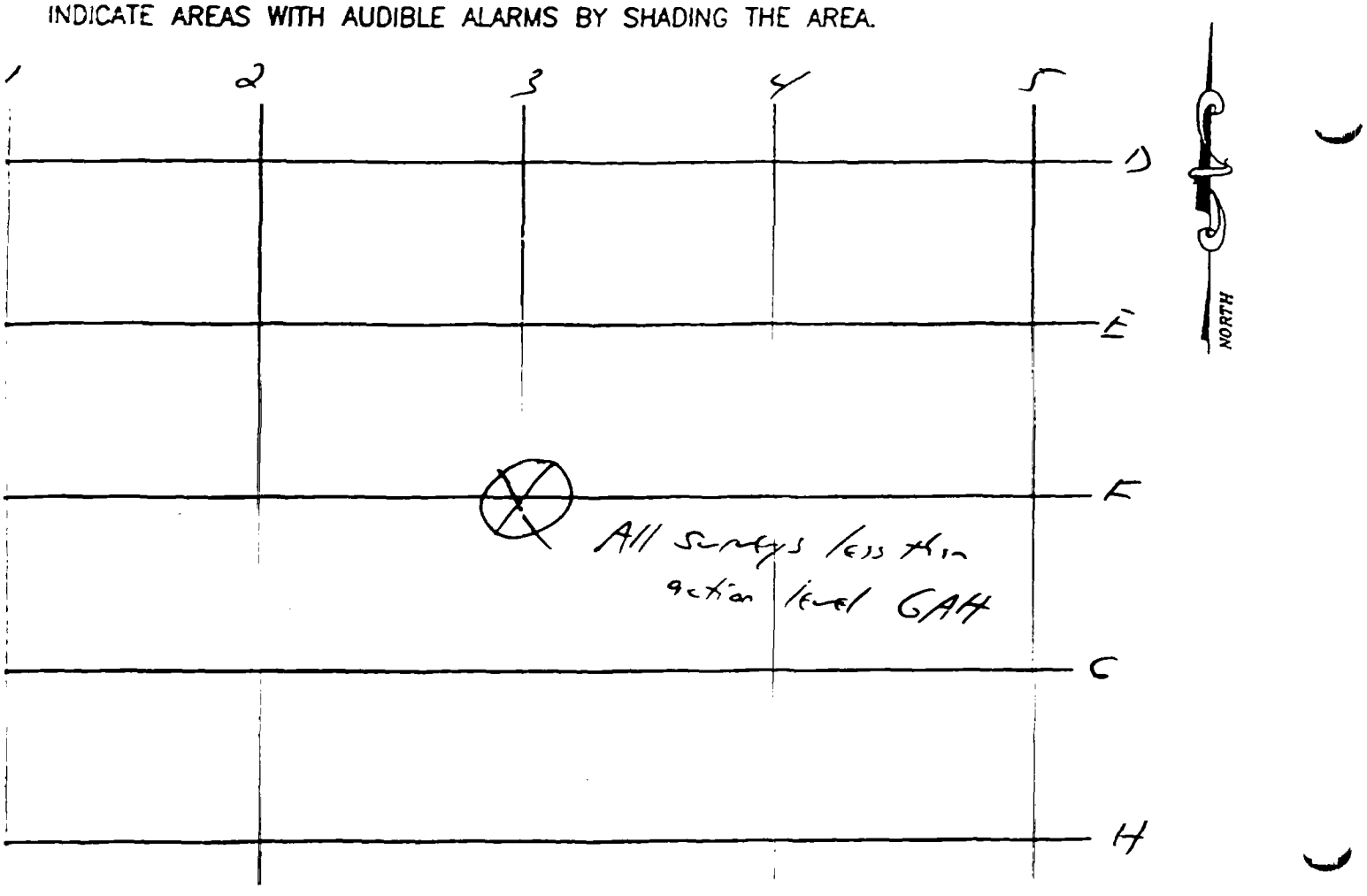
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/1/00 TECHNICIAN: G Huser

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Session # 23

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

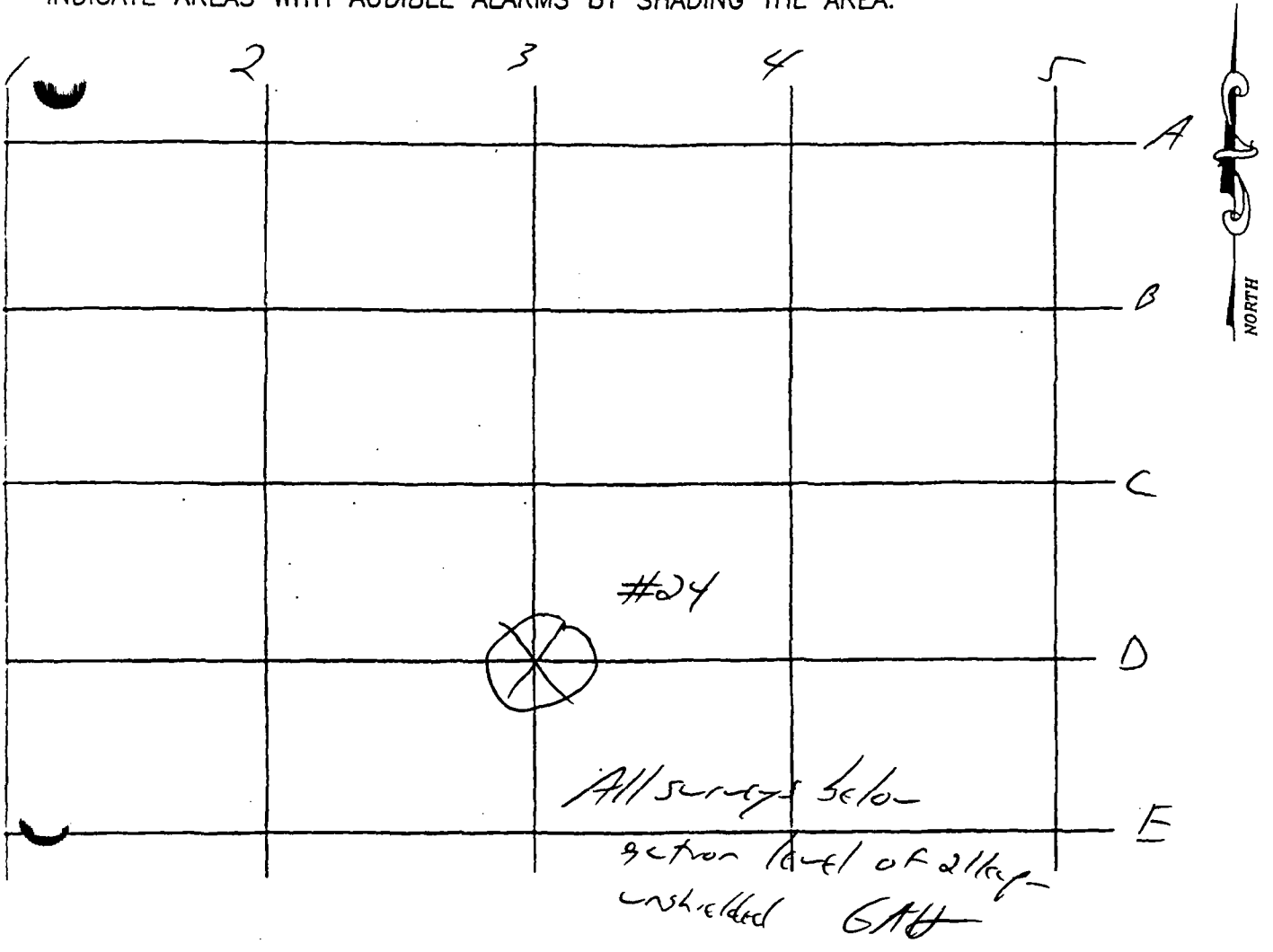
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/3/00 TECHNICIAN: G. Hyer

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Grisson #24

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/28/00

TECHNICIAN: Glenn Huber

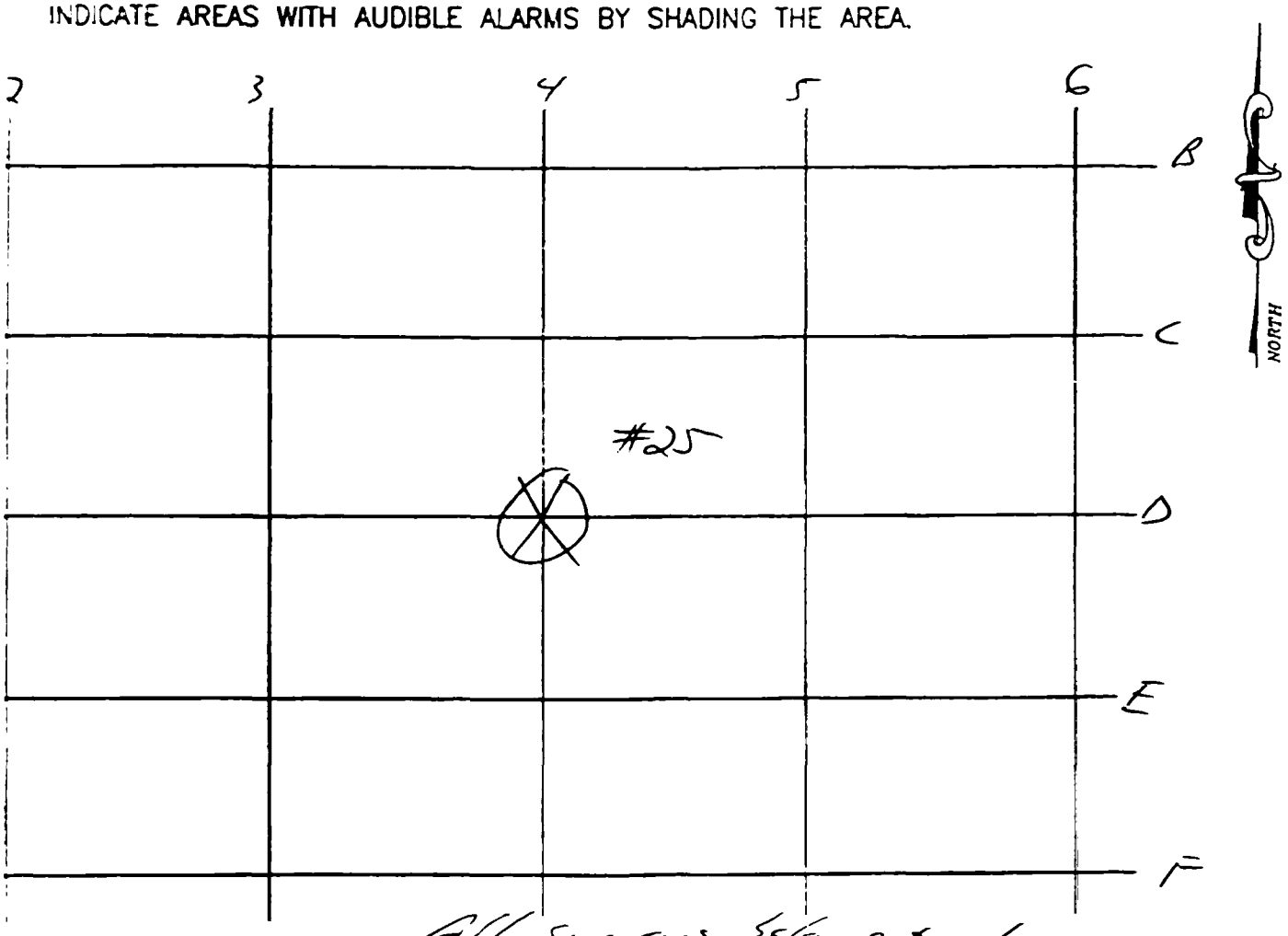
INST. MODEL: 2221 unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Caisson #25

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level of 21 kcpm GAH

STS Consultants Ltd.

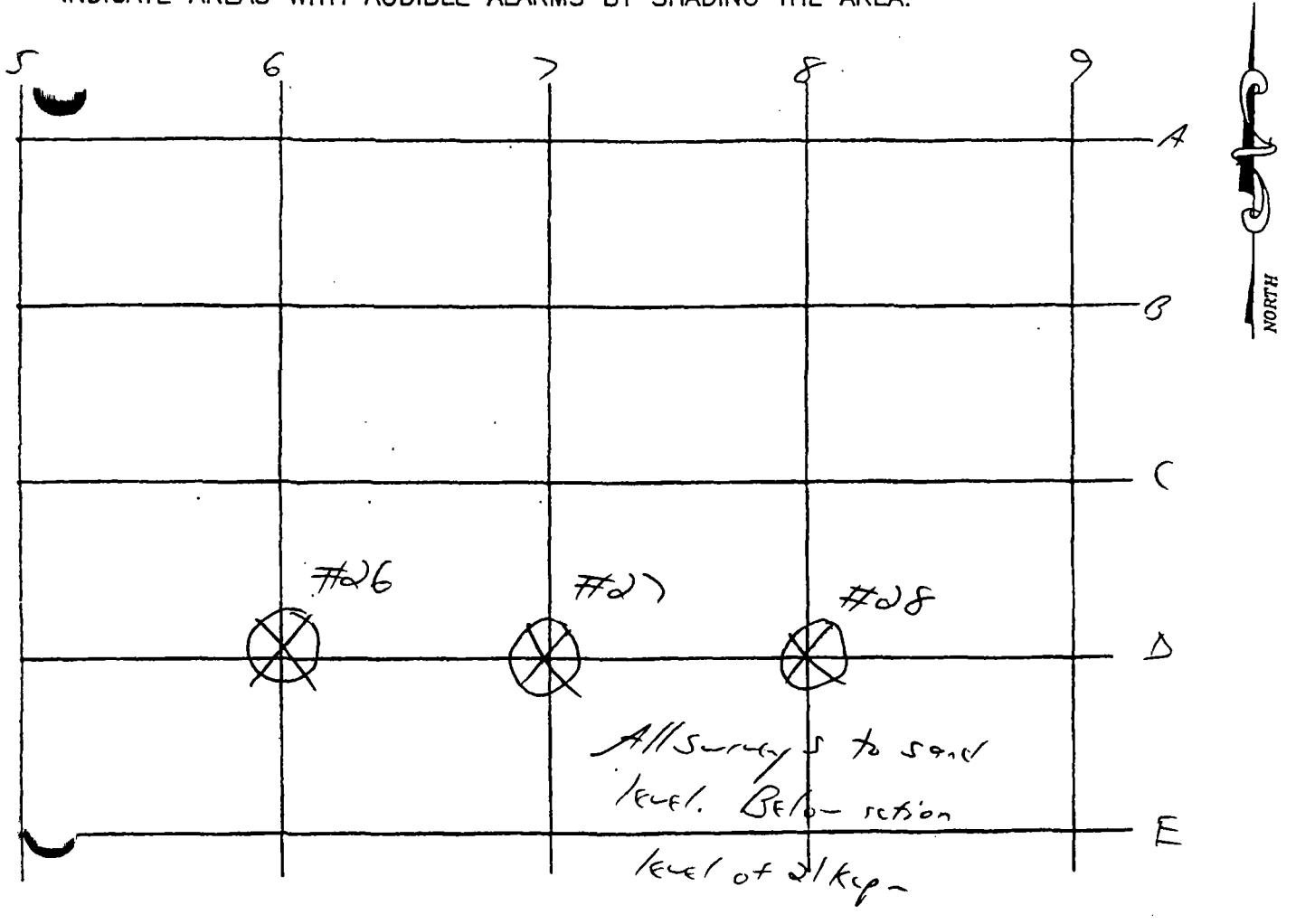
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/12/00 TECHNICIAN: Glen Huber

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? YES LIFT ELEVATION: Caisson pockets #26, 27, 28

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

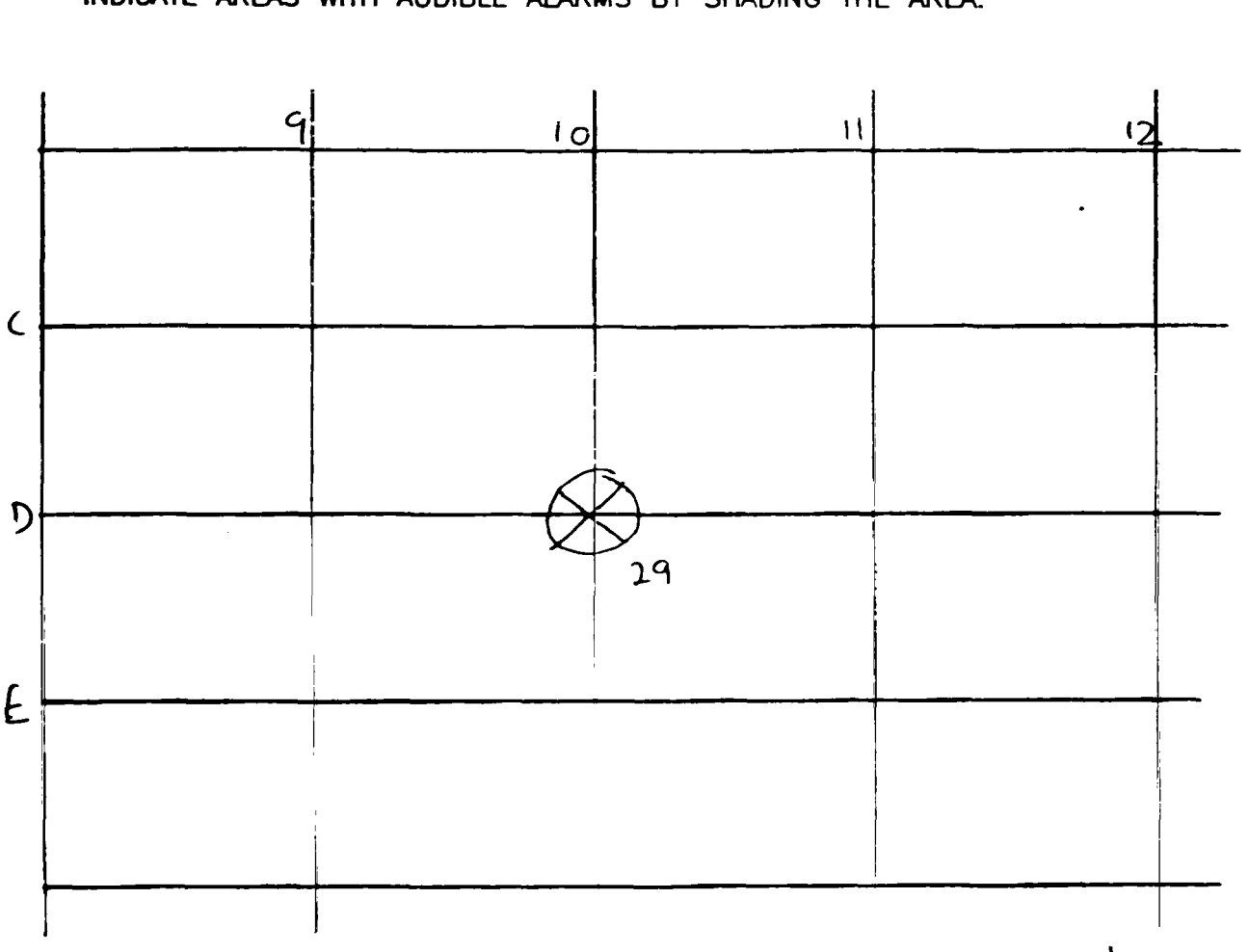
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 06/02/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlm 2221 w.shielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

S. George

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
07/31/2000

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/15/00

TECHNICIAN: S GEORGE

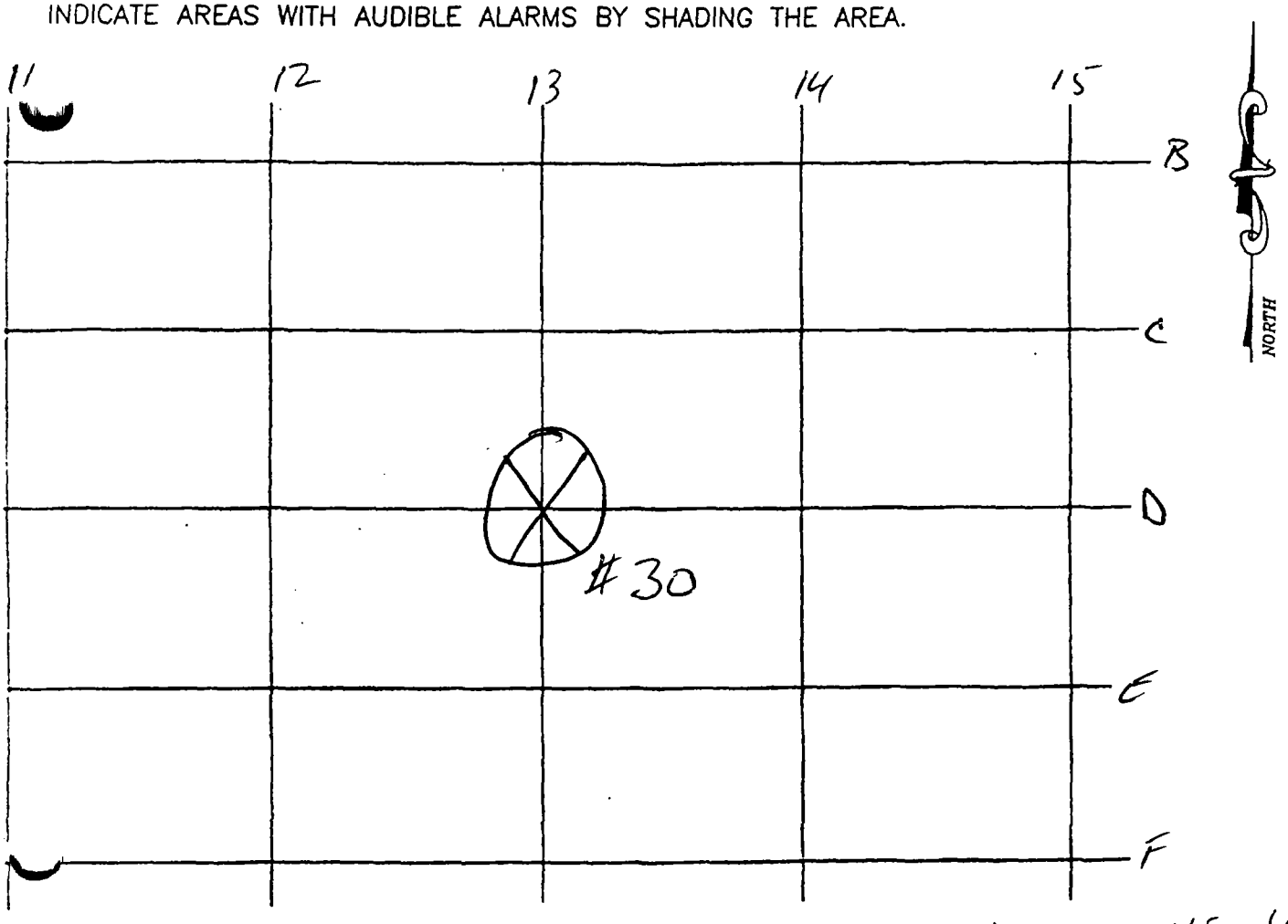
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

Sirri

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/9/00

TECHNICIAN: Glenn Huber

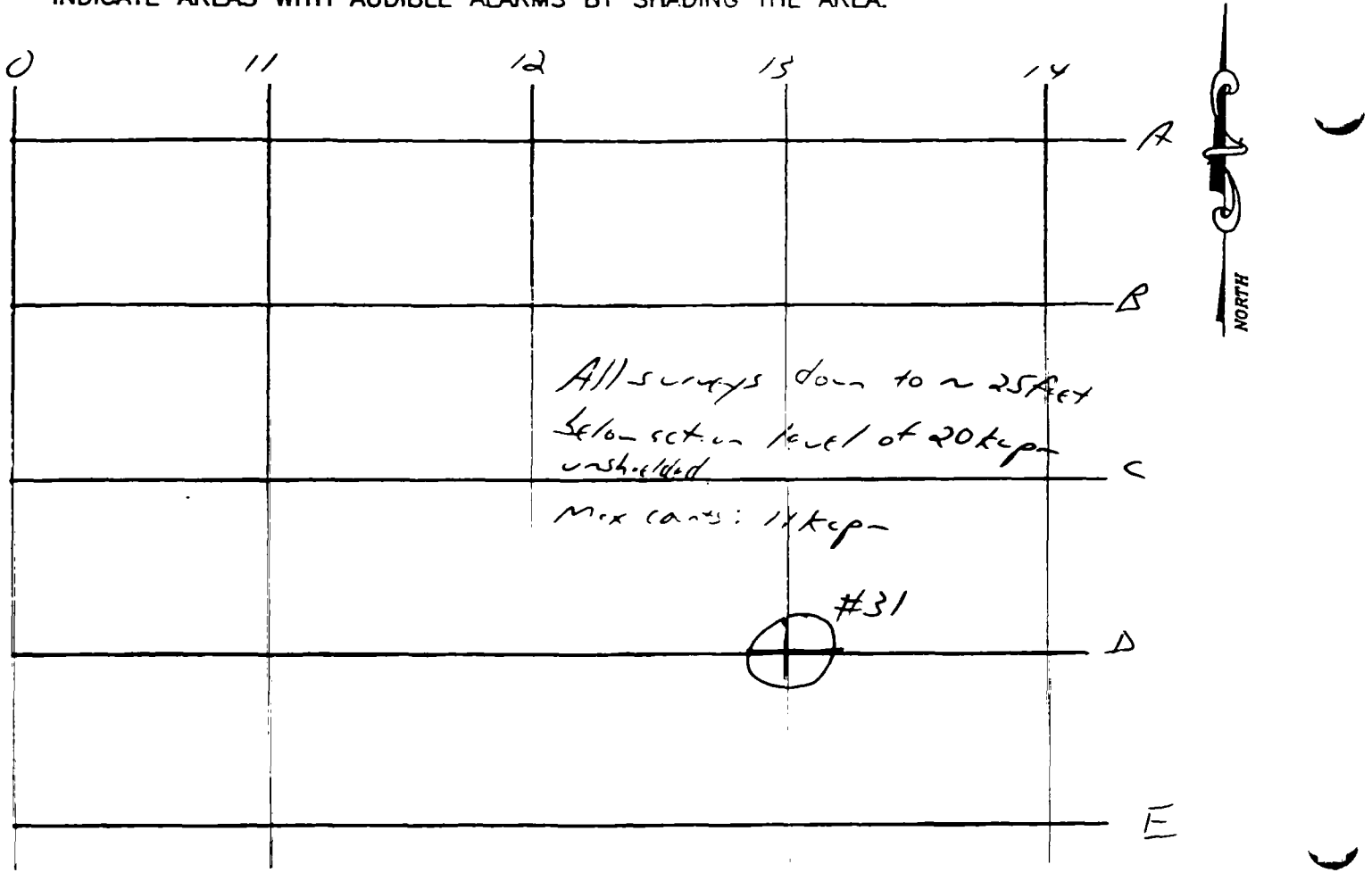
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

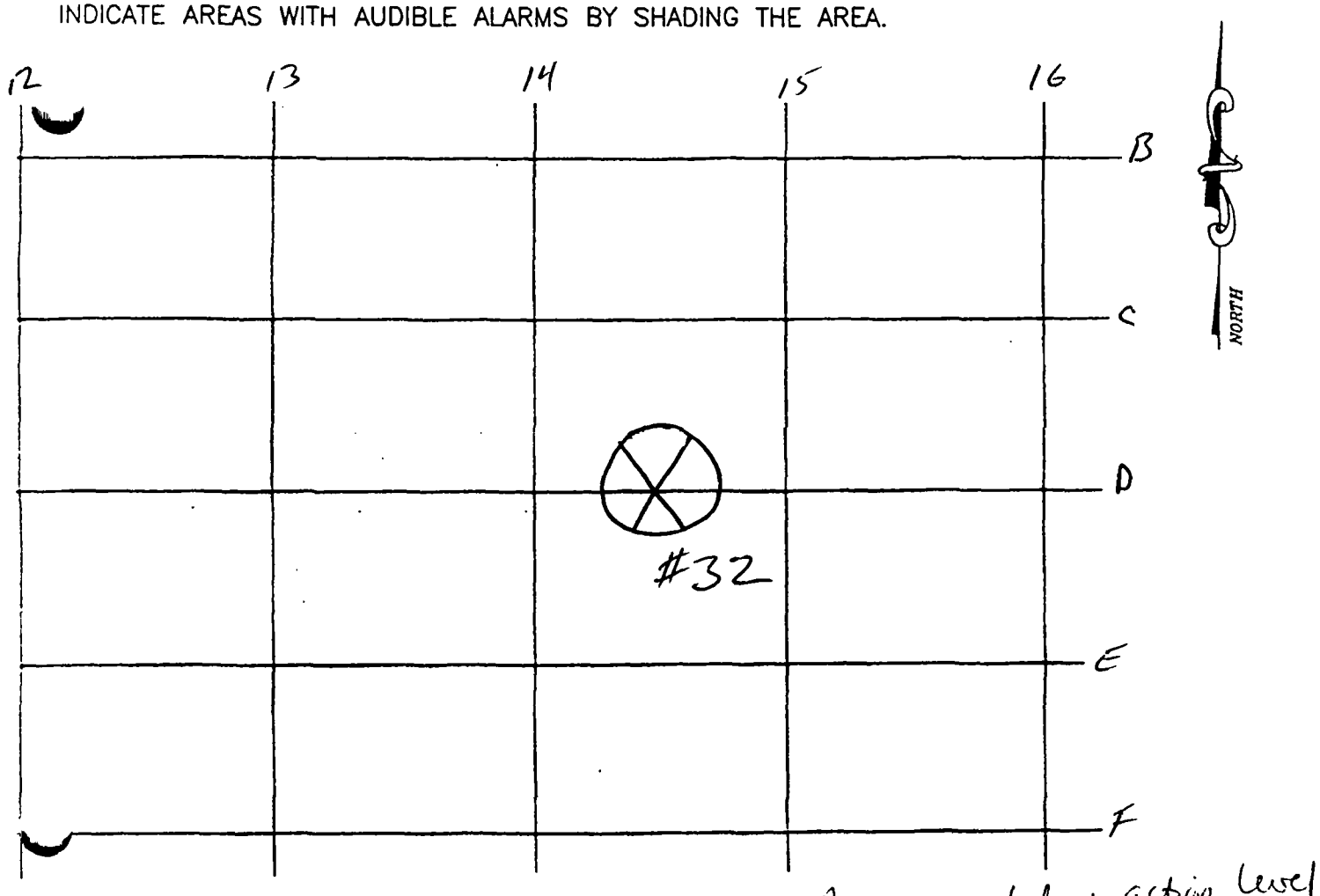
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/12/00 TECHNICIAN: GEORGE

INST. MODEL: Ludlum 7221 (unshielded) SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/00 LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

hm

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

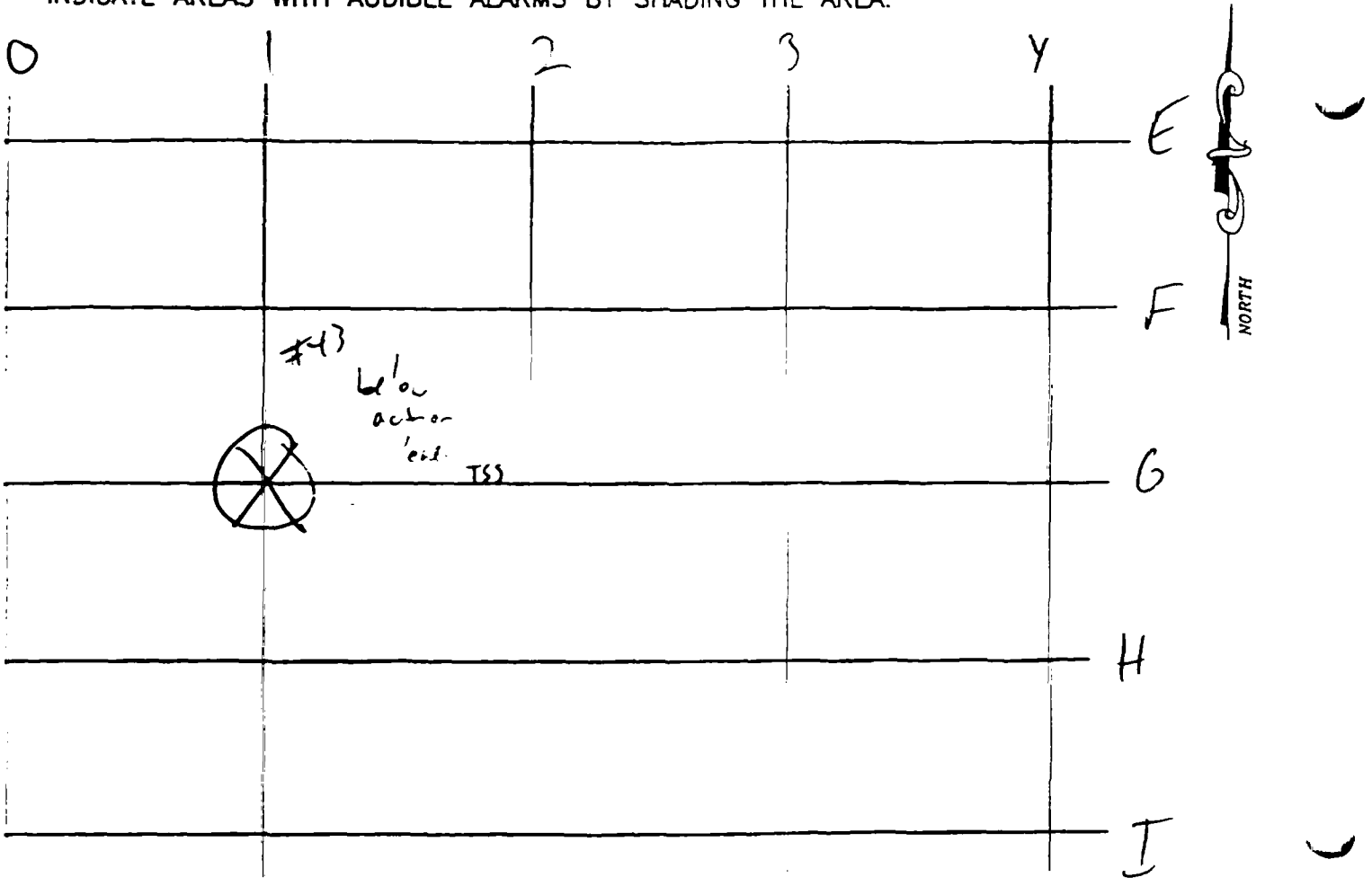
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/13/00 TECHNICIAN: Toby Skevan

INST. MODEL: 2221 unshielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 5/5/00 LIFT ELEVATION: Caisson pot hole 4 4:

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

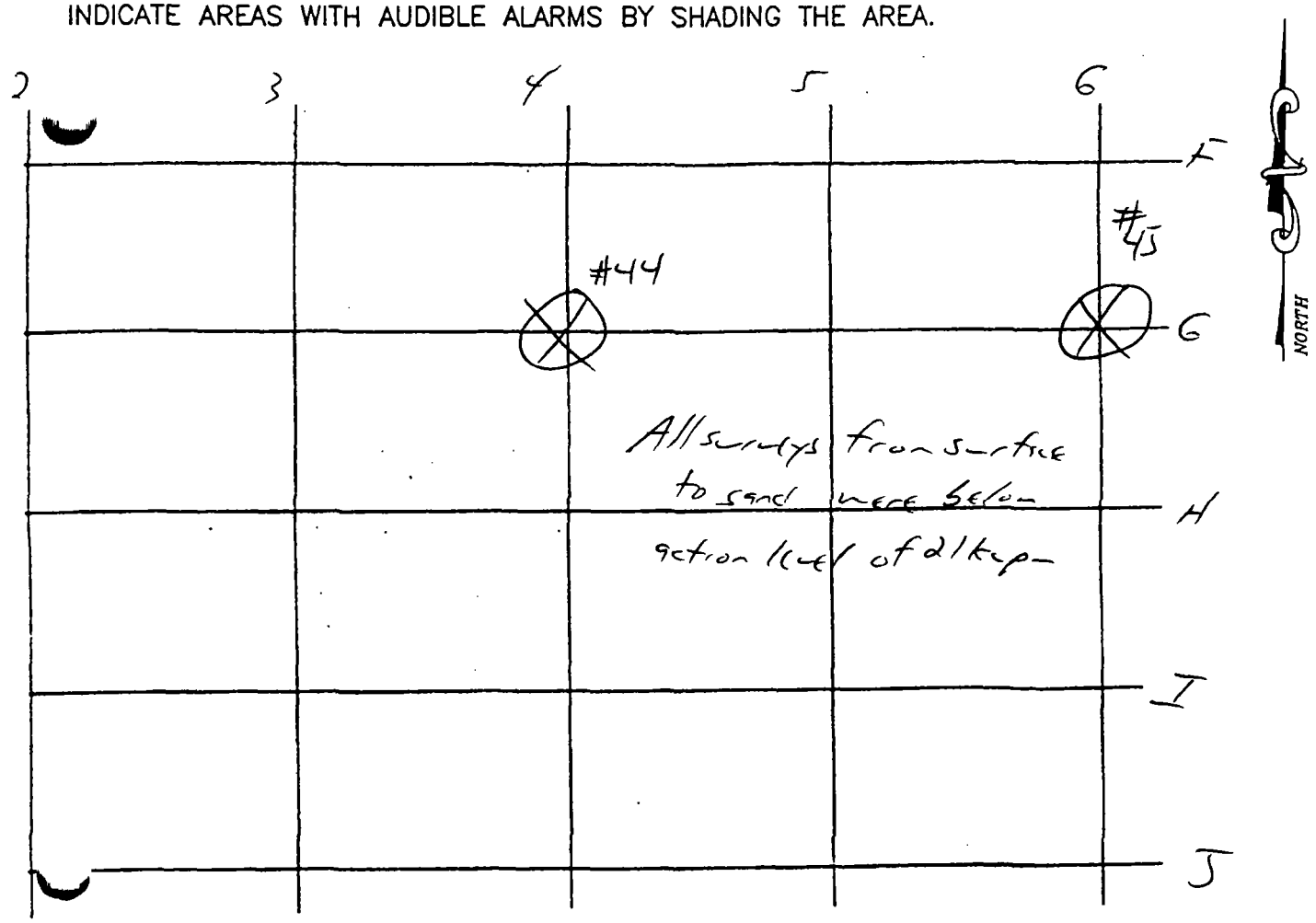
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 2/12/00 TECHNICIAN: Glen Haber

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson pothole # 44 & 45

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
07/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/18/00

TECHNICIAN: Toby Sherman

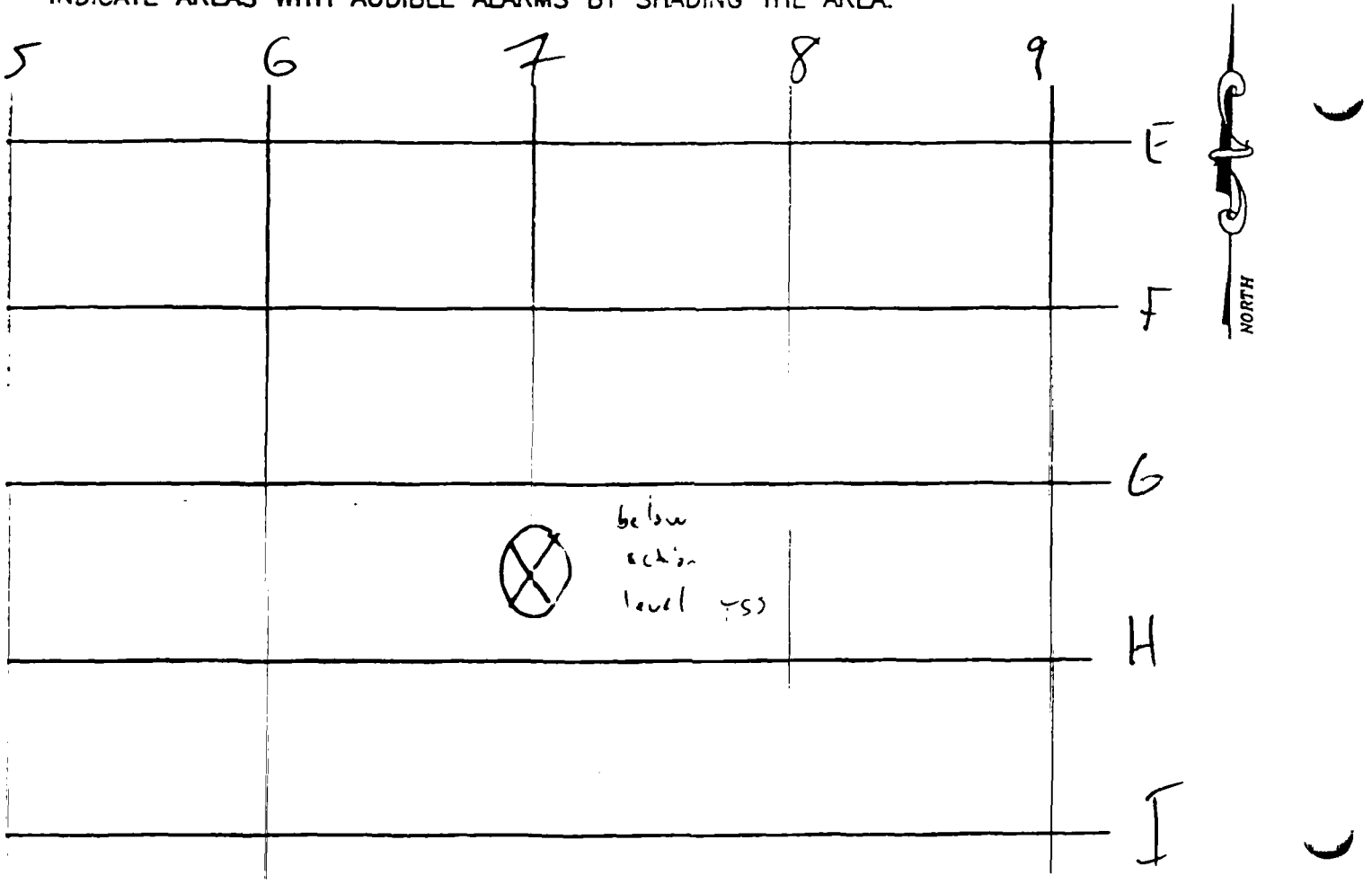
INST. MODEL: 2221 unshielded

SERIAL NO.: 12696

INST. CALIBRATED (Y/N)? Y

~~LIFT ELEVATION~~: 46
Caisson H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/13/00

TECHNICIAN: Toby Shevan

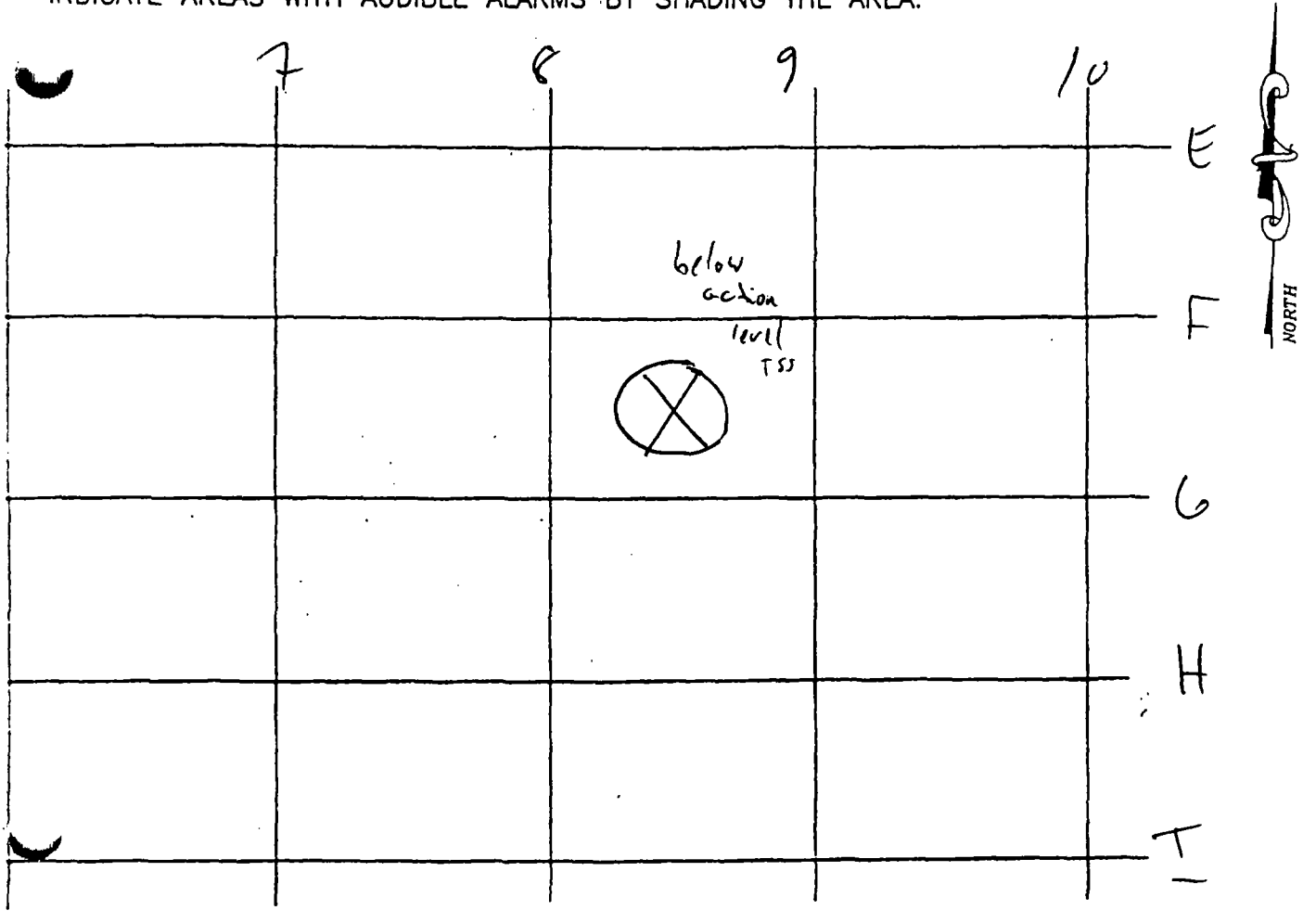
INST. MODEL: 2221 unshielded

SERIAL NO.: 166496

INST. CALIBRATED (Y/N)? 3/7/01

~~LIFT ELEVATION~~: 47
Caisson H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

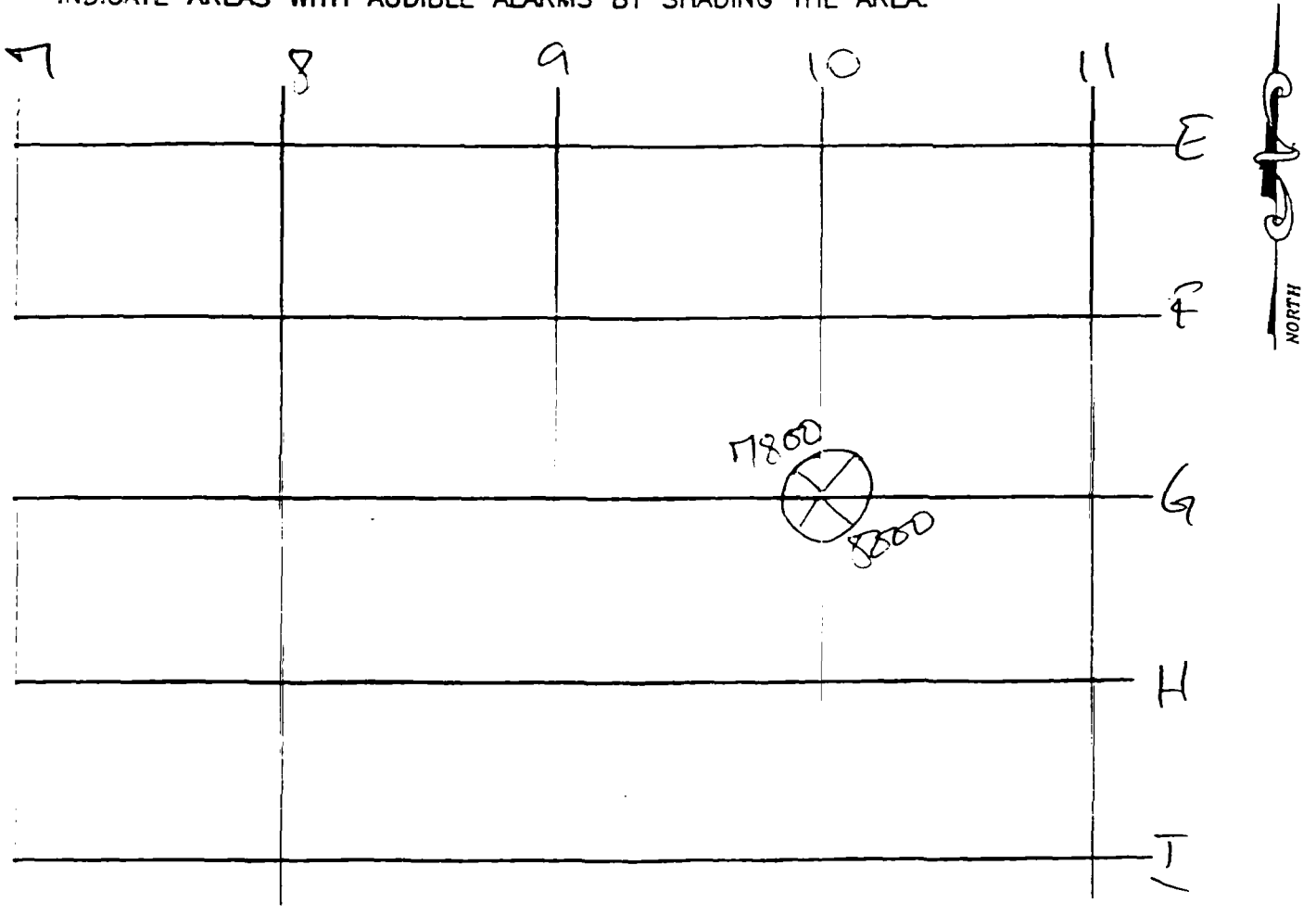
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7-12-00 TECHNICIAN: Dumas

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Caisson # 48 AREA "B"

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

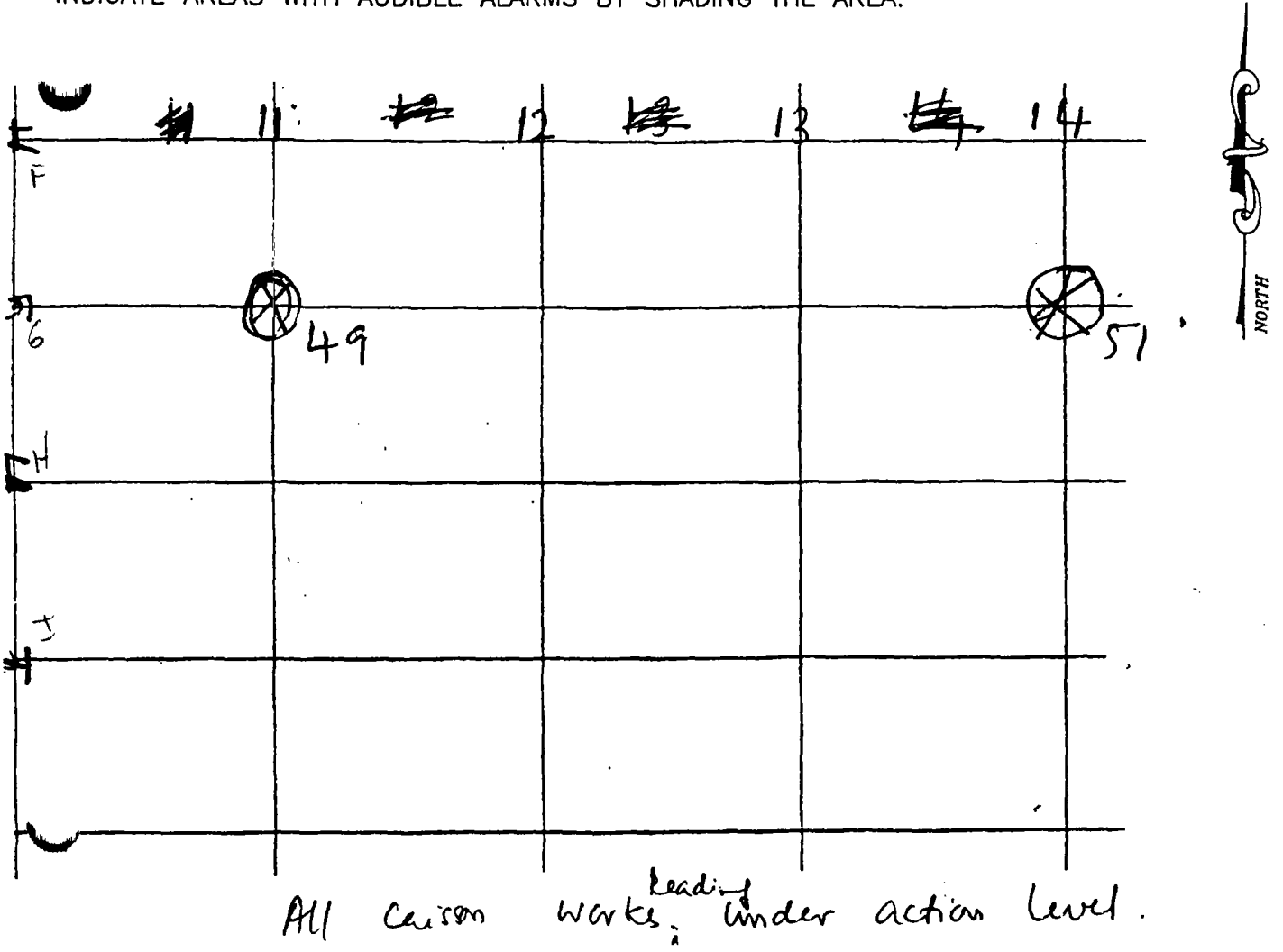
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/16/00 TECHNICIAN: S George

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All caisson work leading under action level.

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

KYT

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

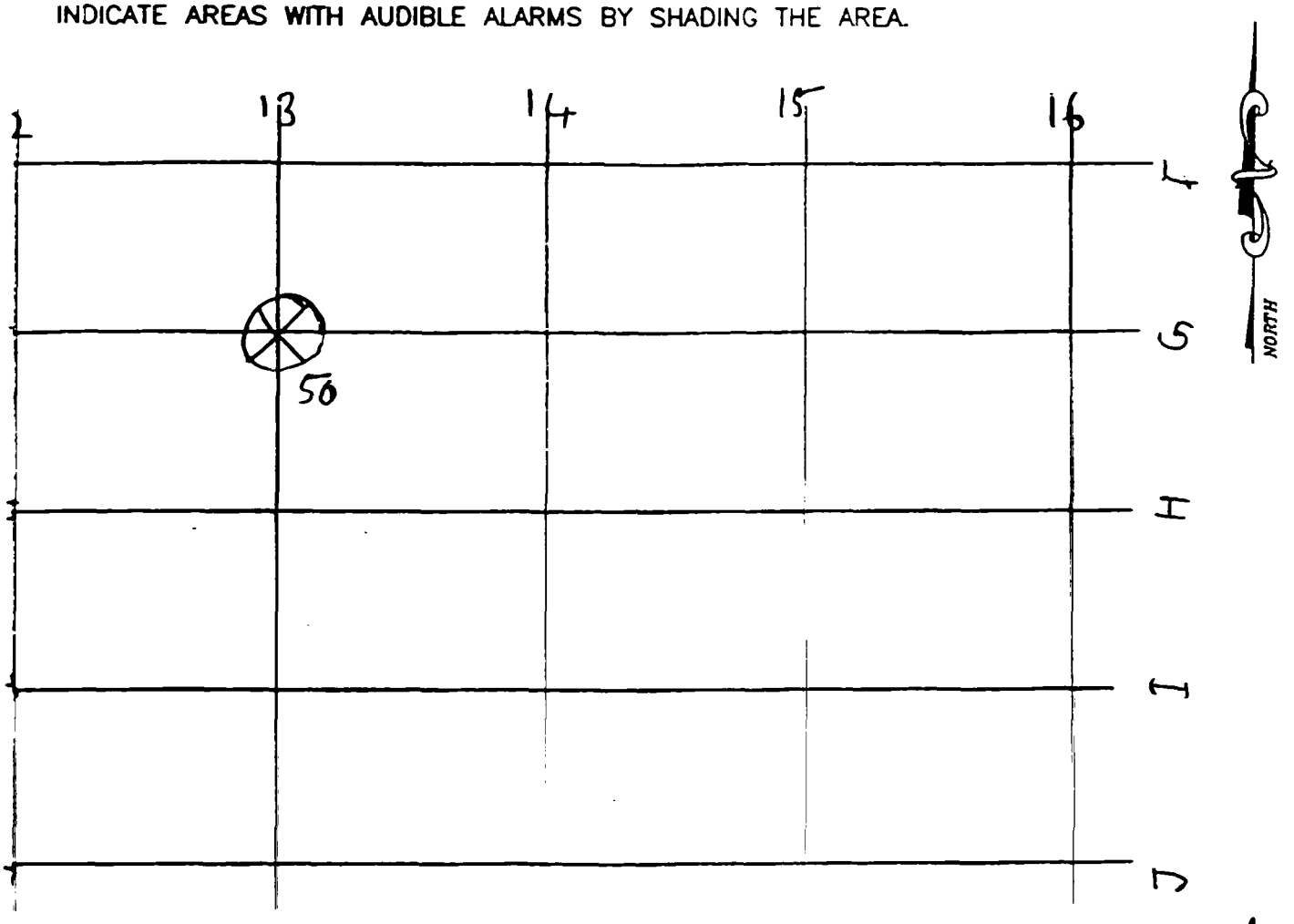
194

DATE: 05/17/00 TECHNICIAN: S. GEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under action level

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

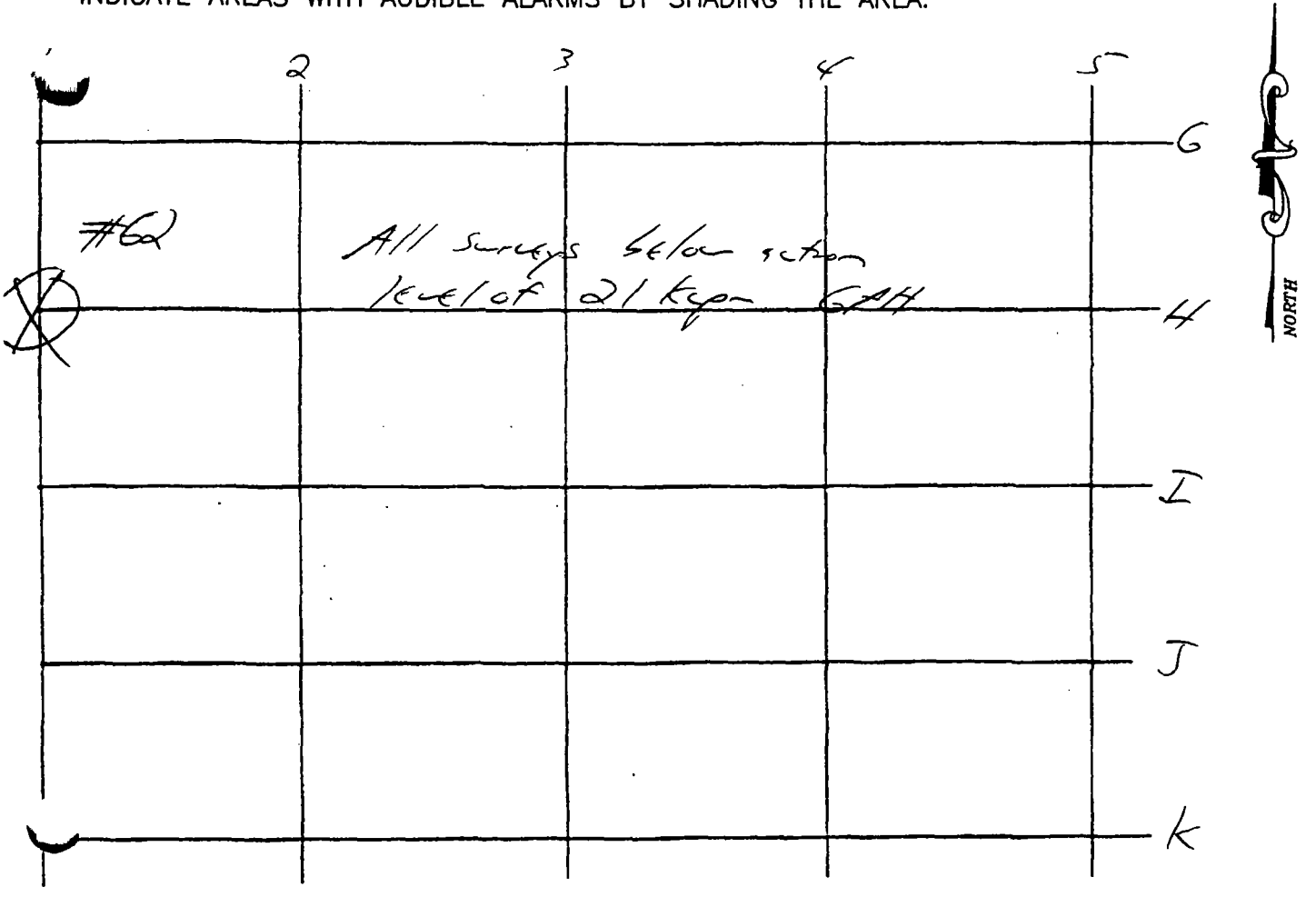
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00 TECHNICIAN: Glen Hunter

INST. MODEL: 2201 shielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #62

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

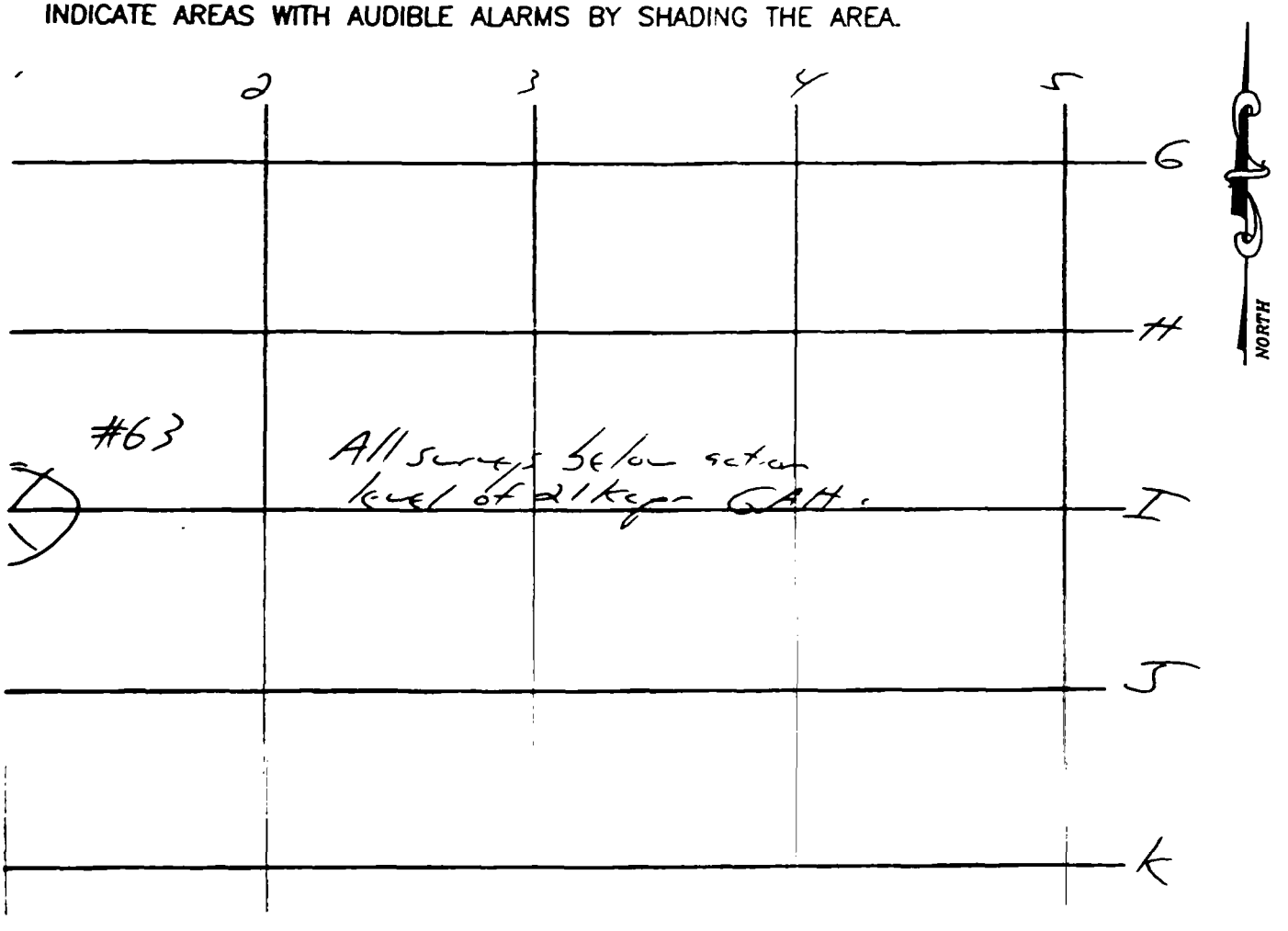
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/9/00 TECHNICIAN: Glen Huber

INST. MODEL: 2221 vash.elect SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #63

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

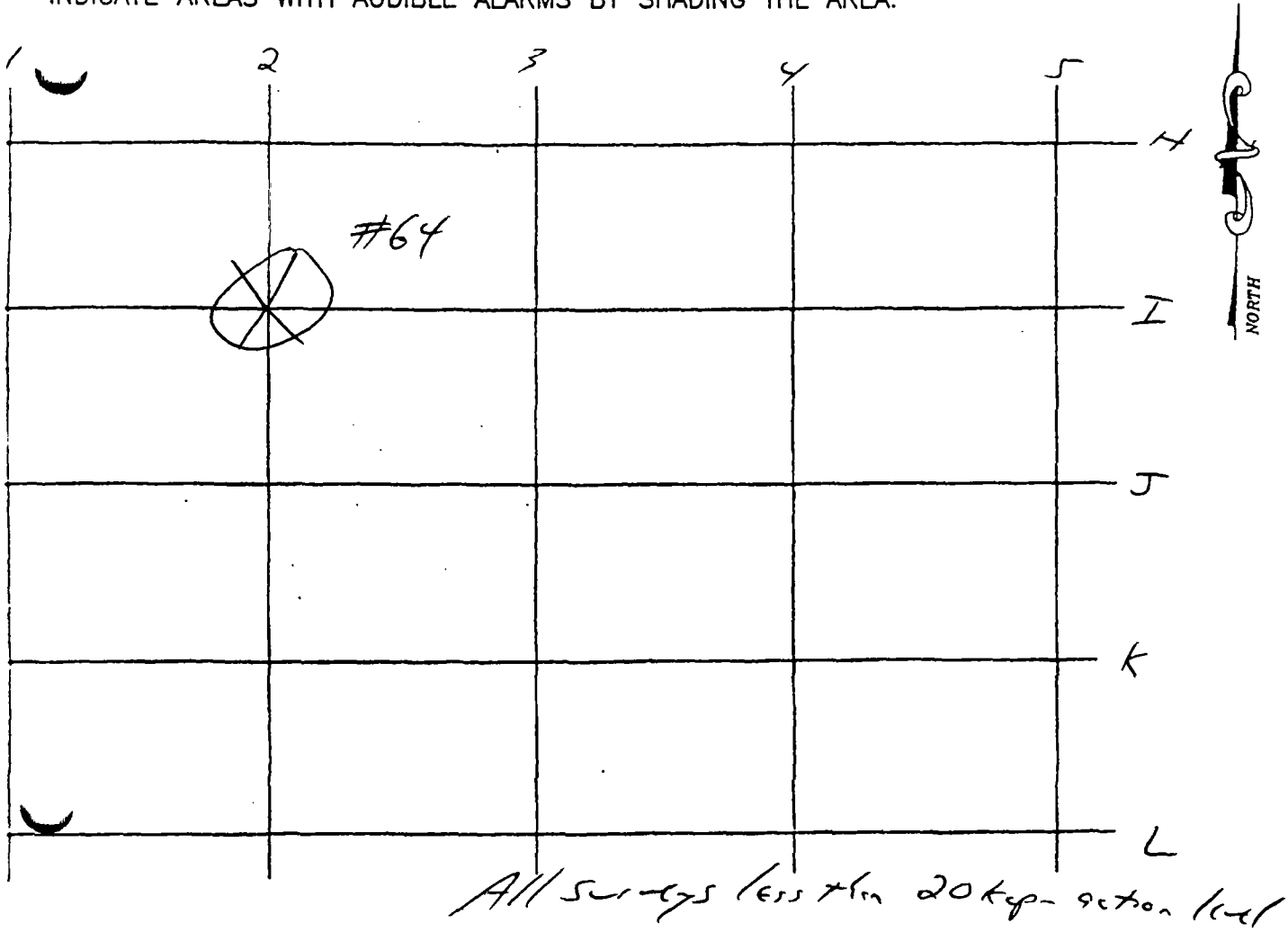
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/28/00 TECHNICIAN: G. Huser

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson # 64

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys less than 20 kpa - section left GAH

A:\PROJECTS\24418\xk\EXCAVATION_INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/4/00 TECHNICIAN: Glenn Huber

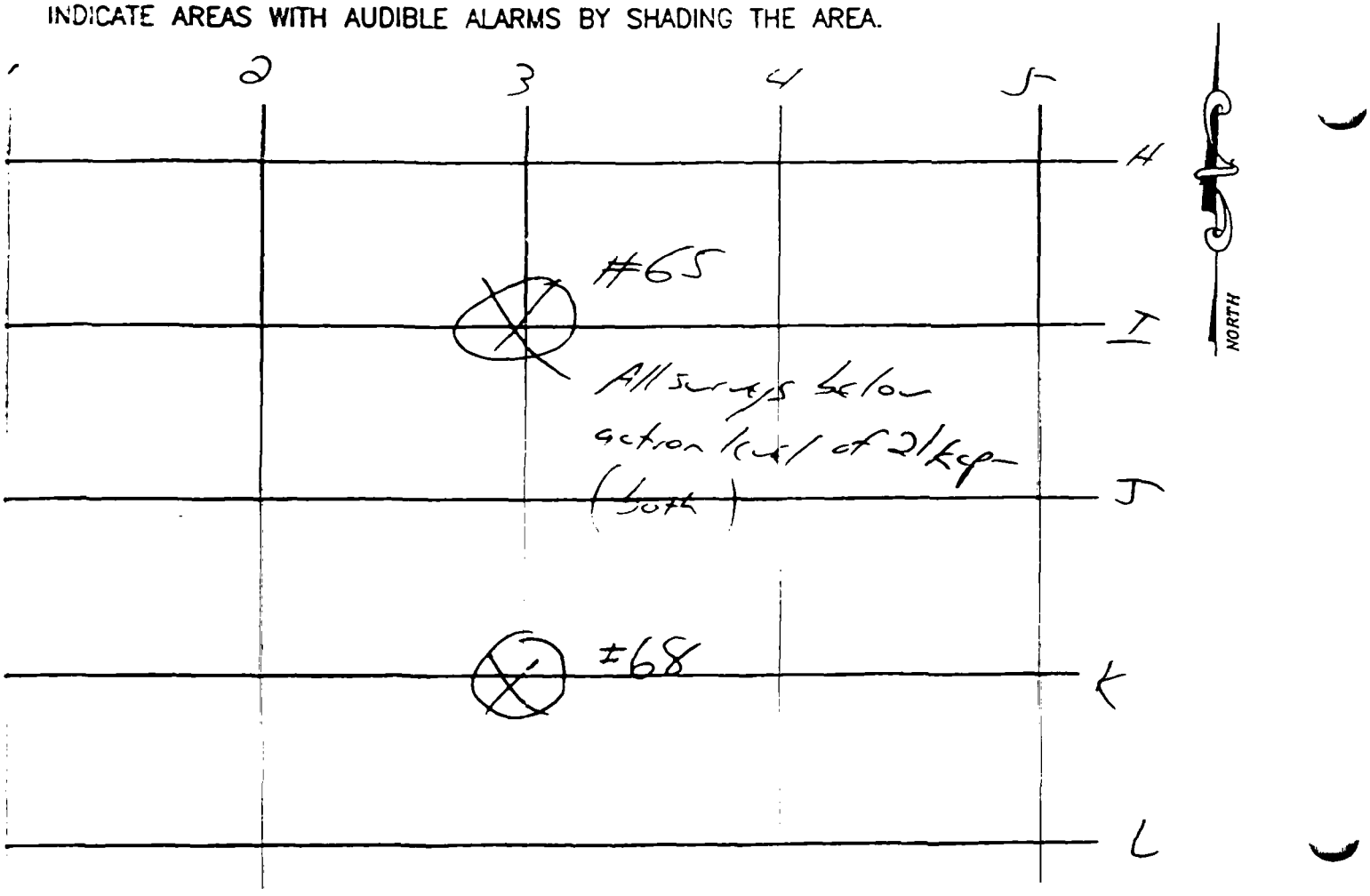
INST. MODEL: 2201 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #65 & Caisson #68

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

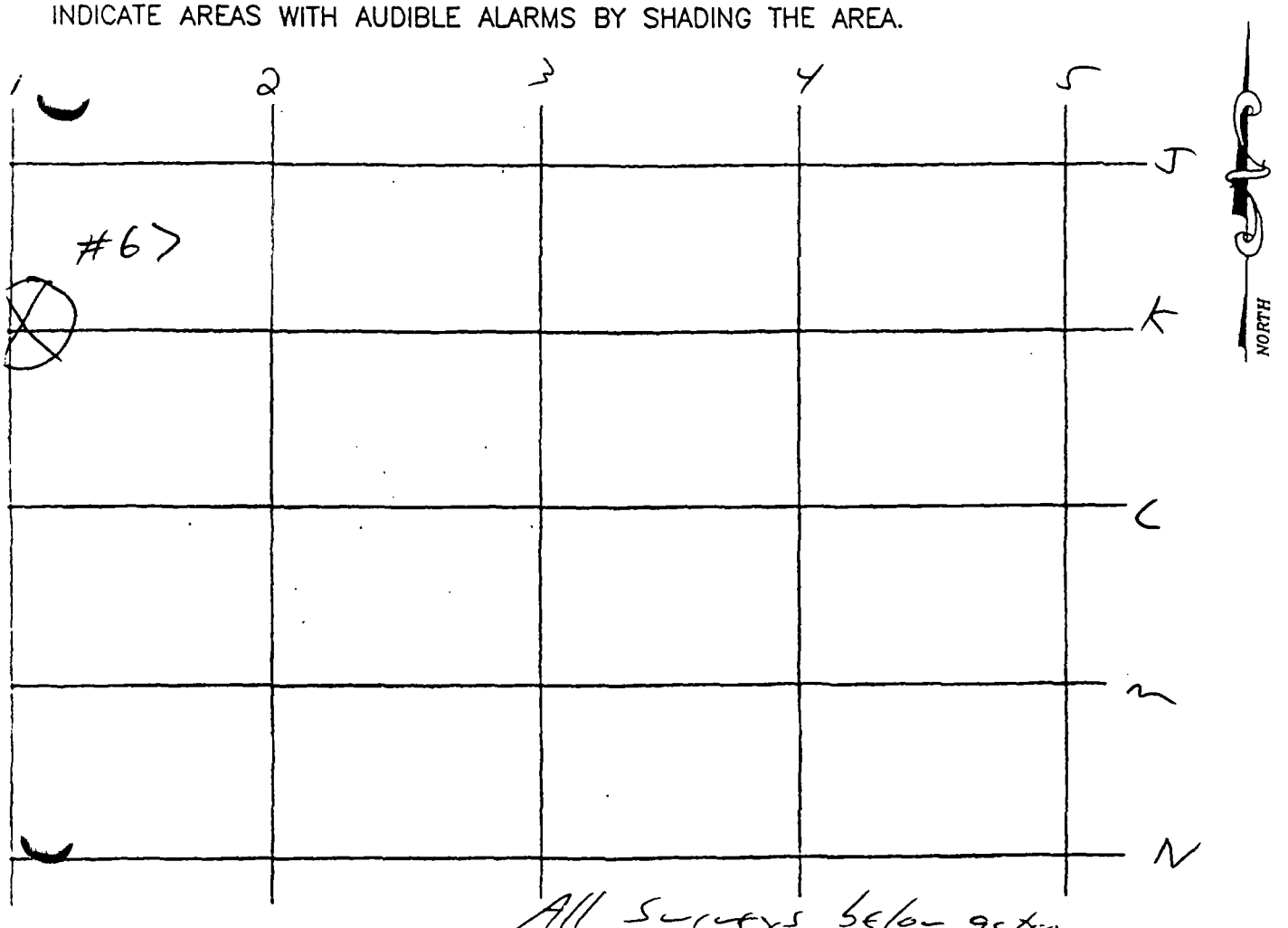
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/27/00 TECHNICIAN: Glen Huber

INST. MODEL: 2201 Vashielbw SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Carsson #6 >

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level of 21 kcpm. GAH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

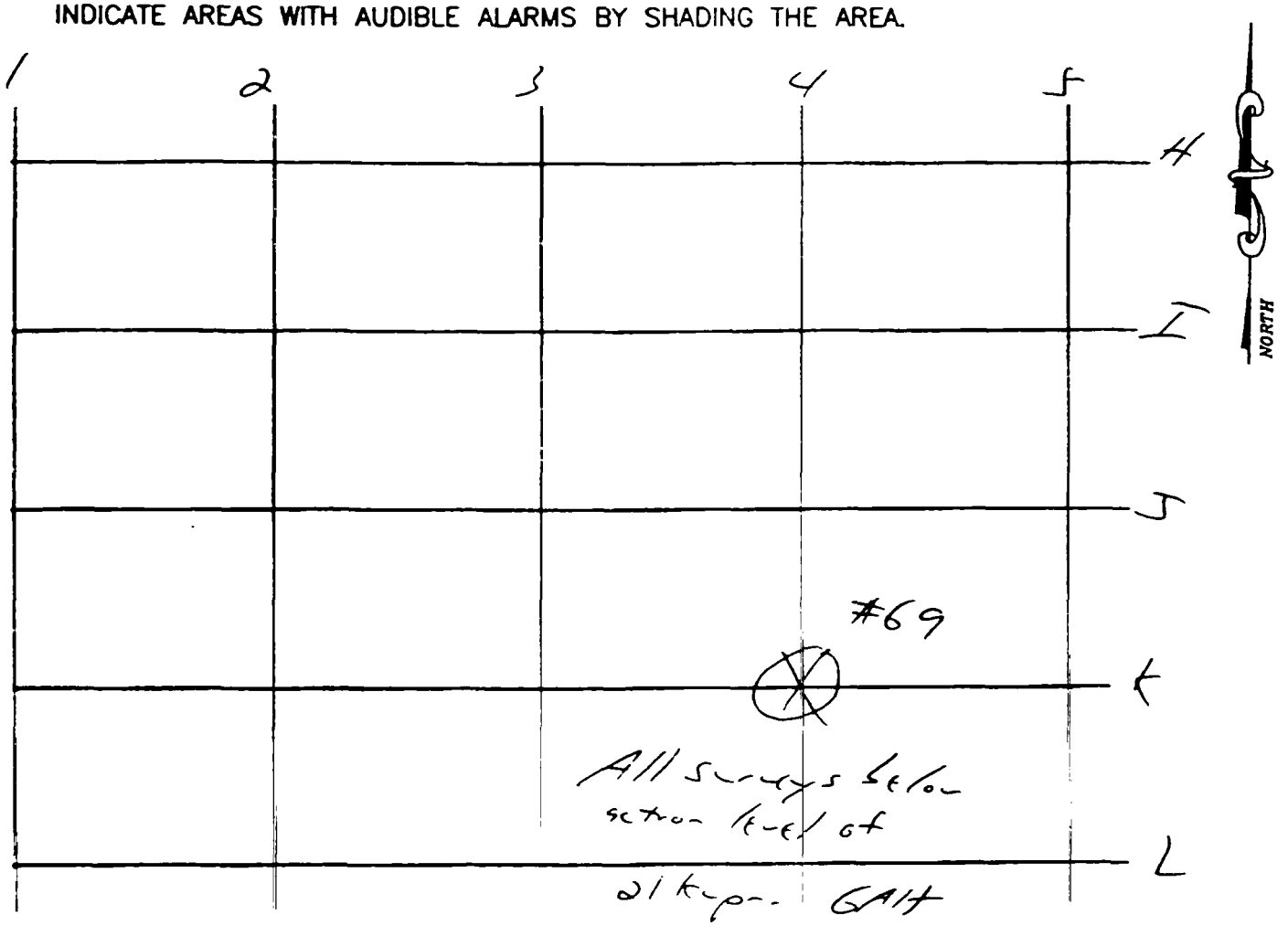
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/8/00 TECHNICIAN: Glen Hyde

INST. MODEL: 2221 w/shielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #69

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

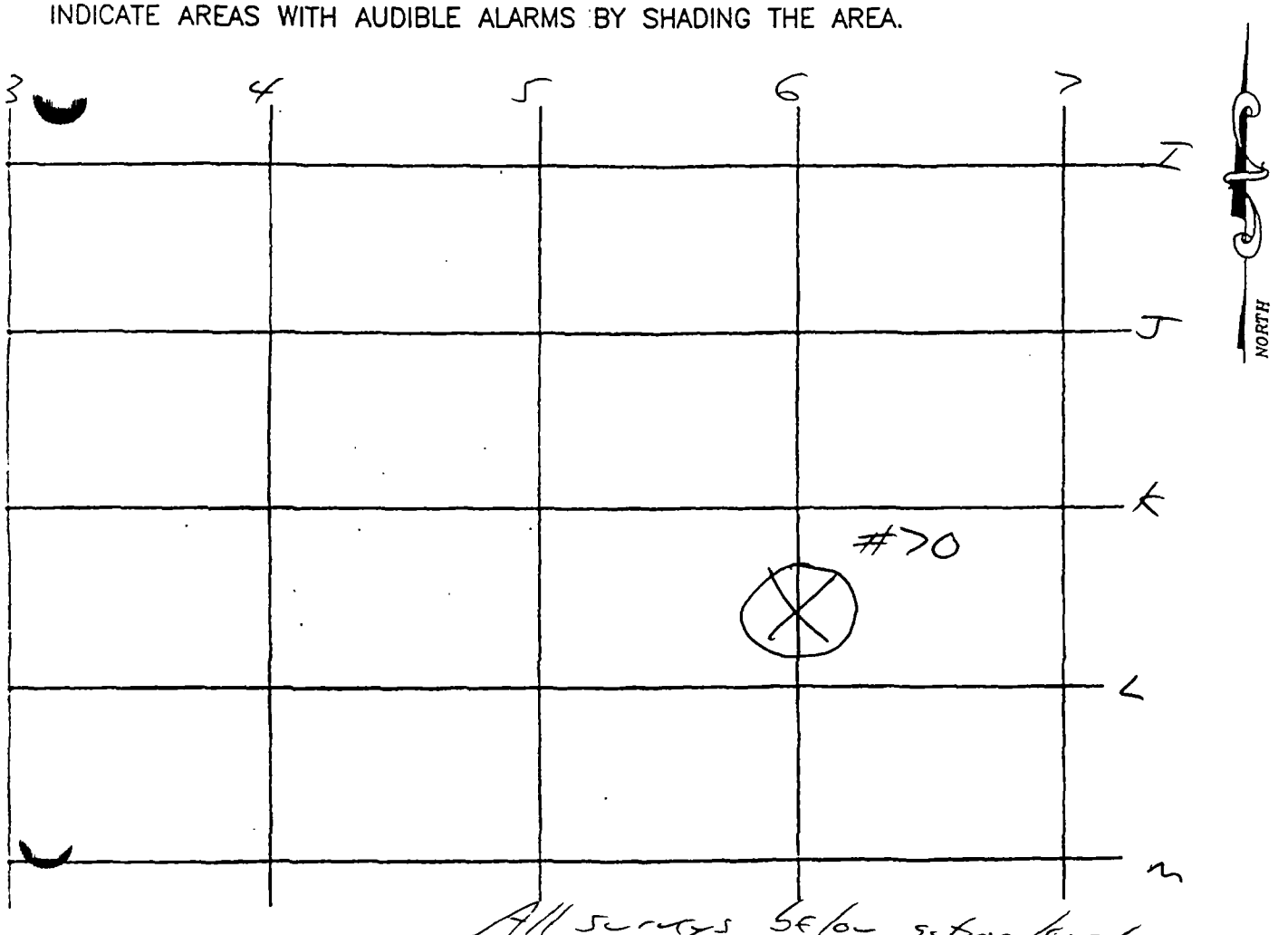
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/26/00 TECHNICIAN: Glenn Huber

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #70

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below footing level

<21 kcpm CPM

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

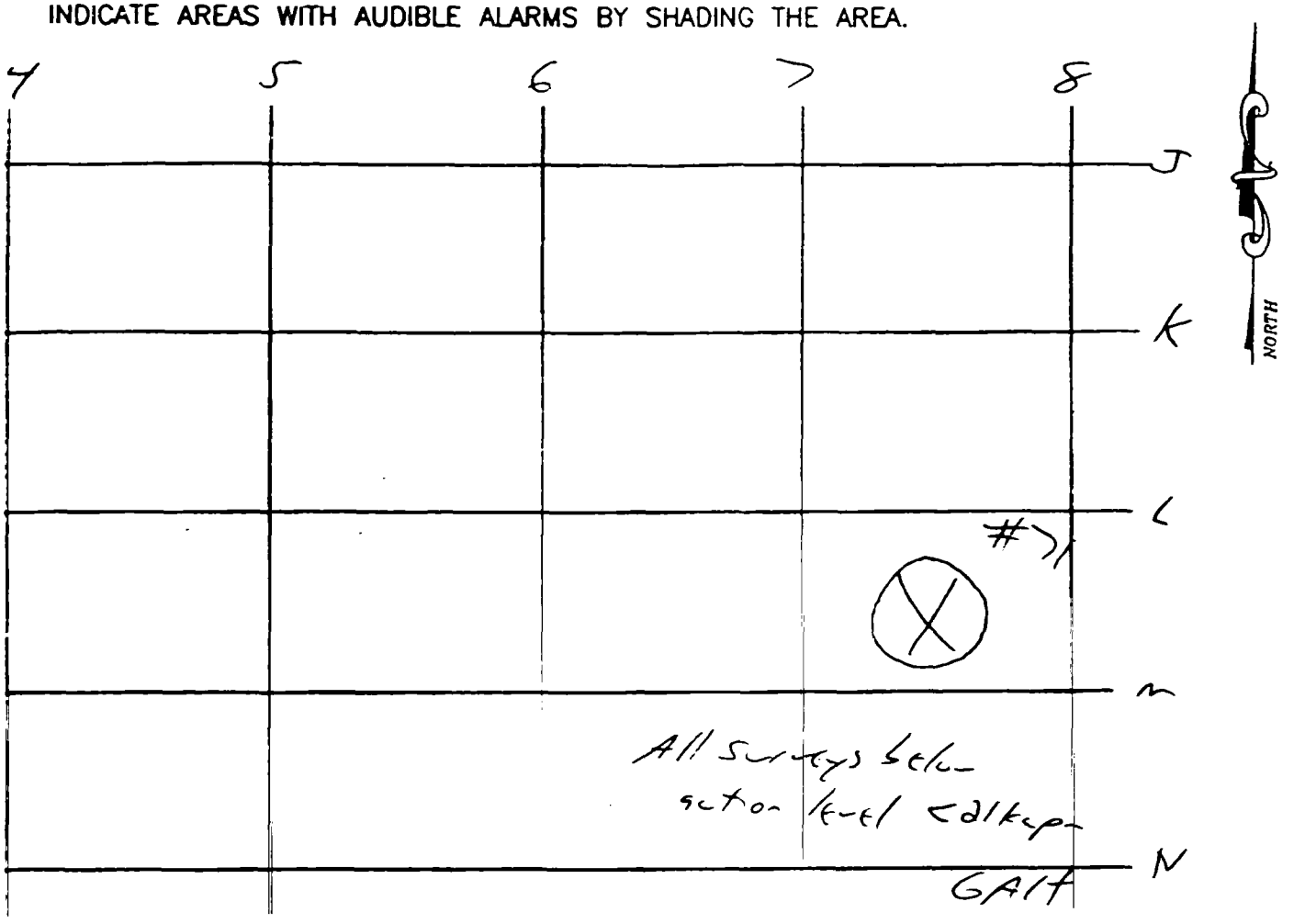
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/17/00 TECHNICIAN: Glen Hoke

INST. MODEL: 2221 unshielded SERIAL NO.: 126456

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Casson # 71

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

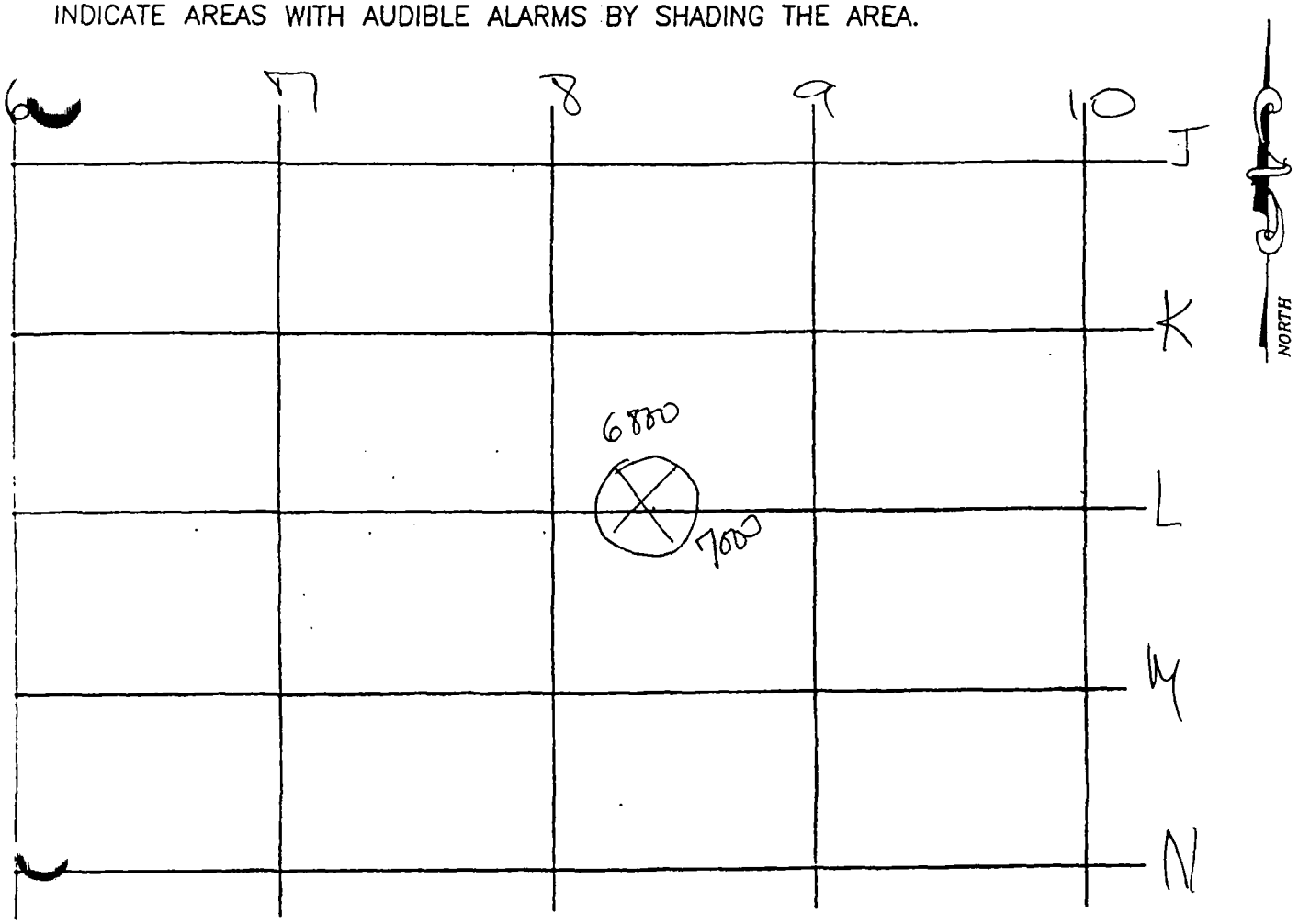
DATE: 7-12-00 TECHNICIAN: Duncan

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Caisson @ 72

AREA "B"

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

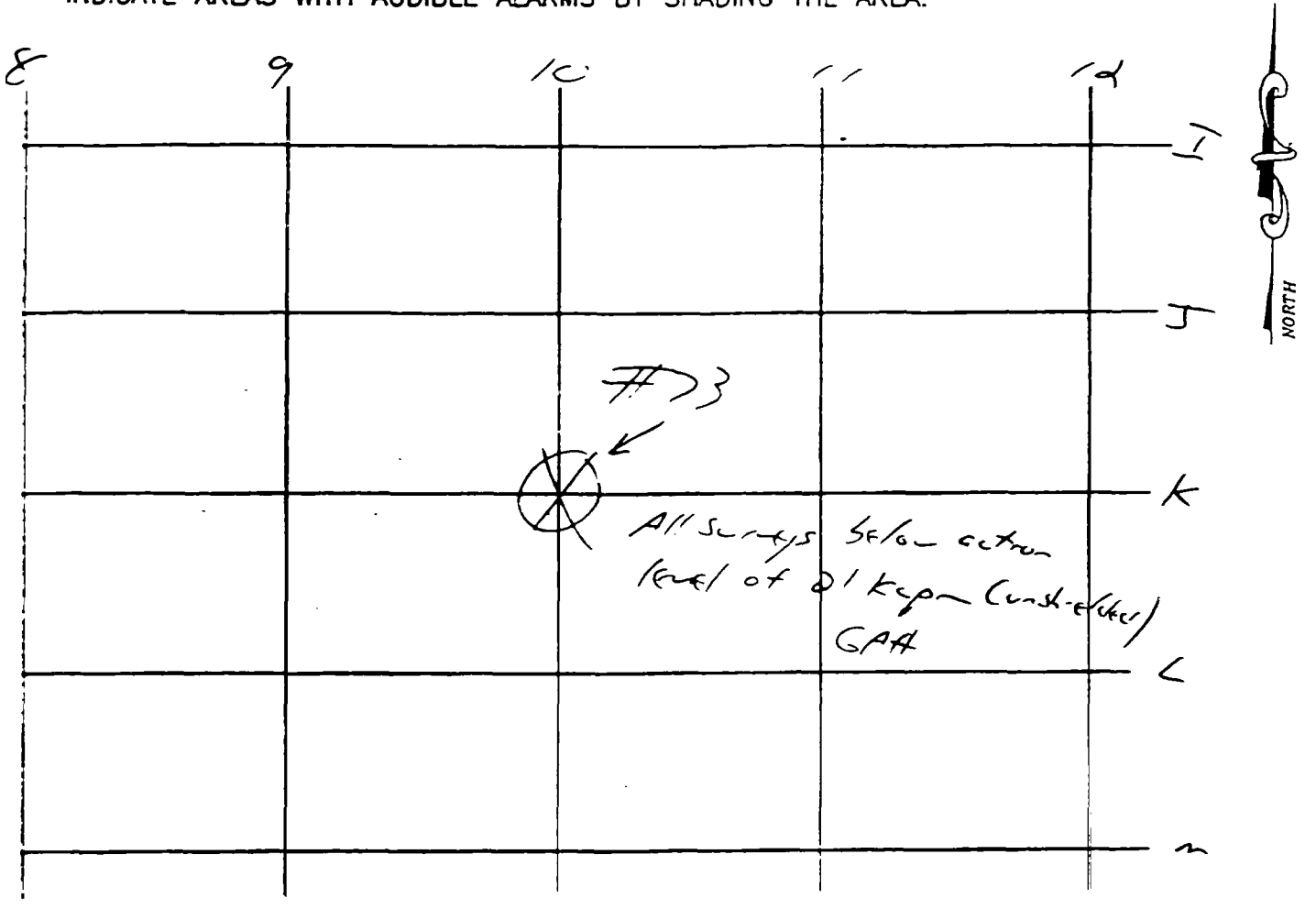
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/18/00 TECHNICIAN: Glenn Hudson

INST. MODEL: 2021 (unshielded) SERIAL NO.: 26496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson # 73

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

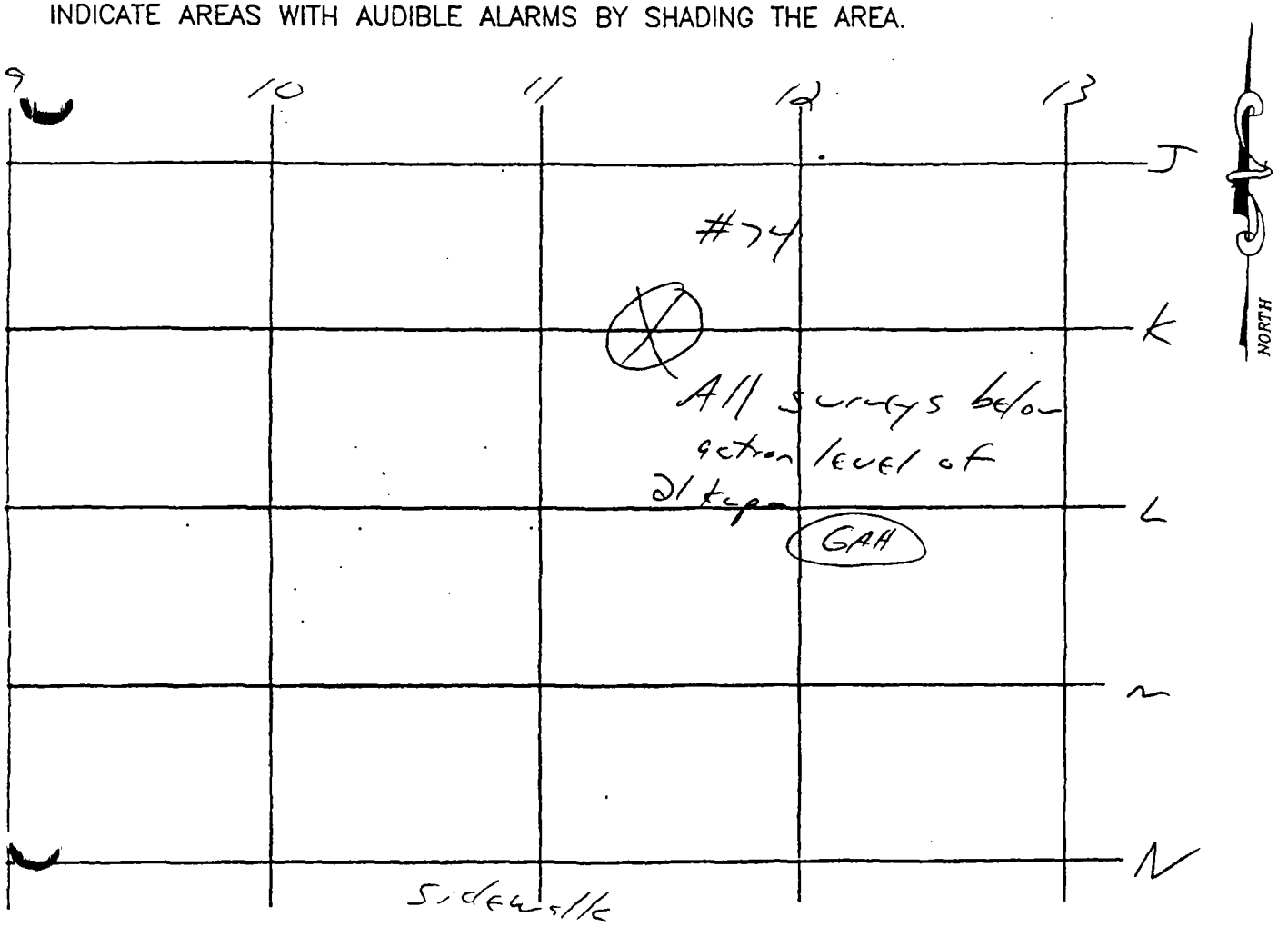
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/20/00 TECHNICIAN: Glen Hyde

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Casson #74

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

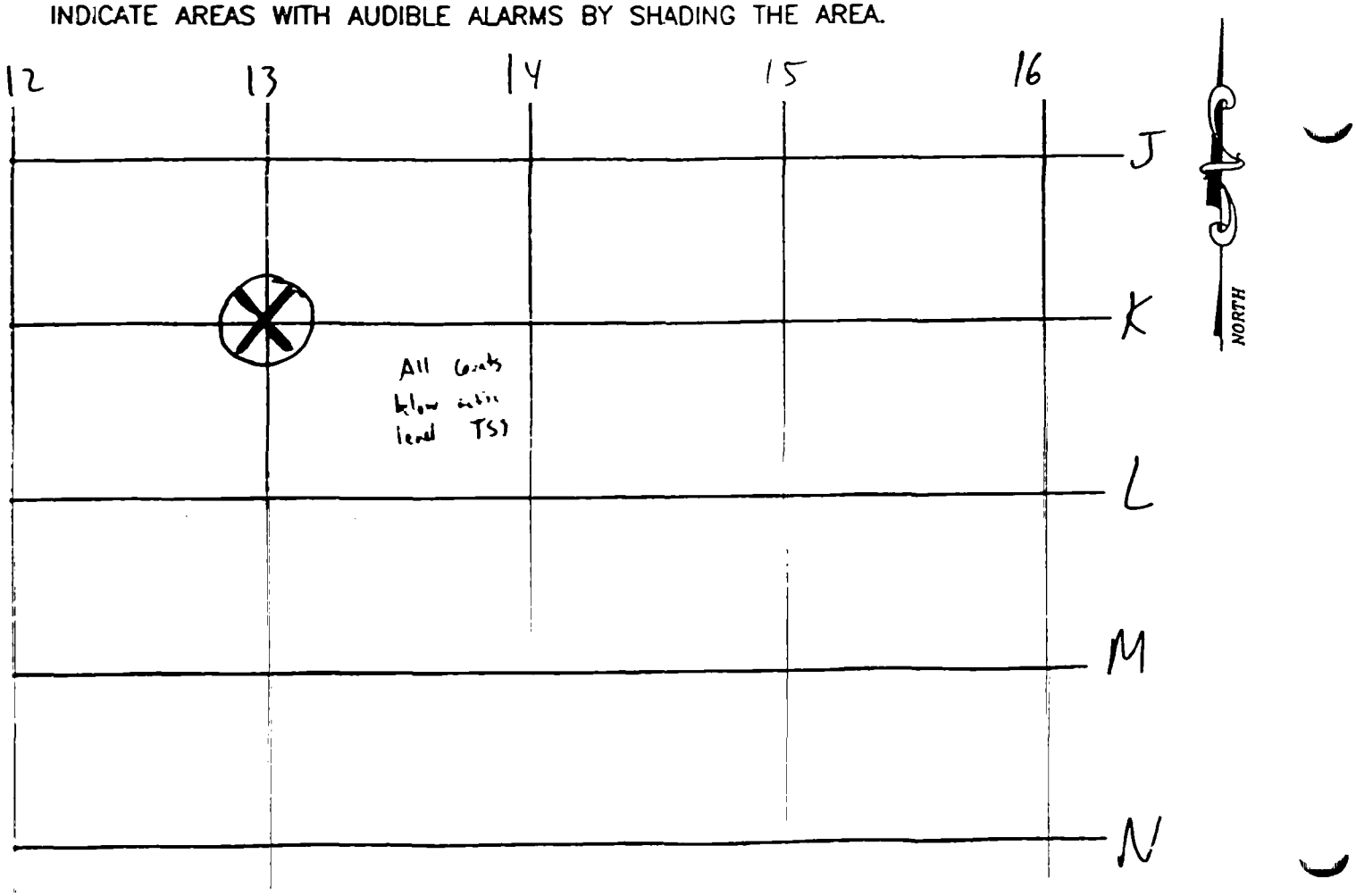
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/06/00 TECHNICIAN: Toby Snowdon

INST. MODEL: 2221 Unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 03/07/00 ~~LIFT ELEVATION~~: 75 Caisson H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

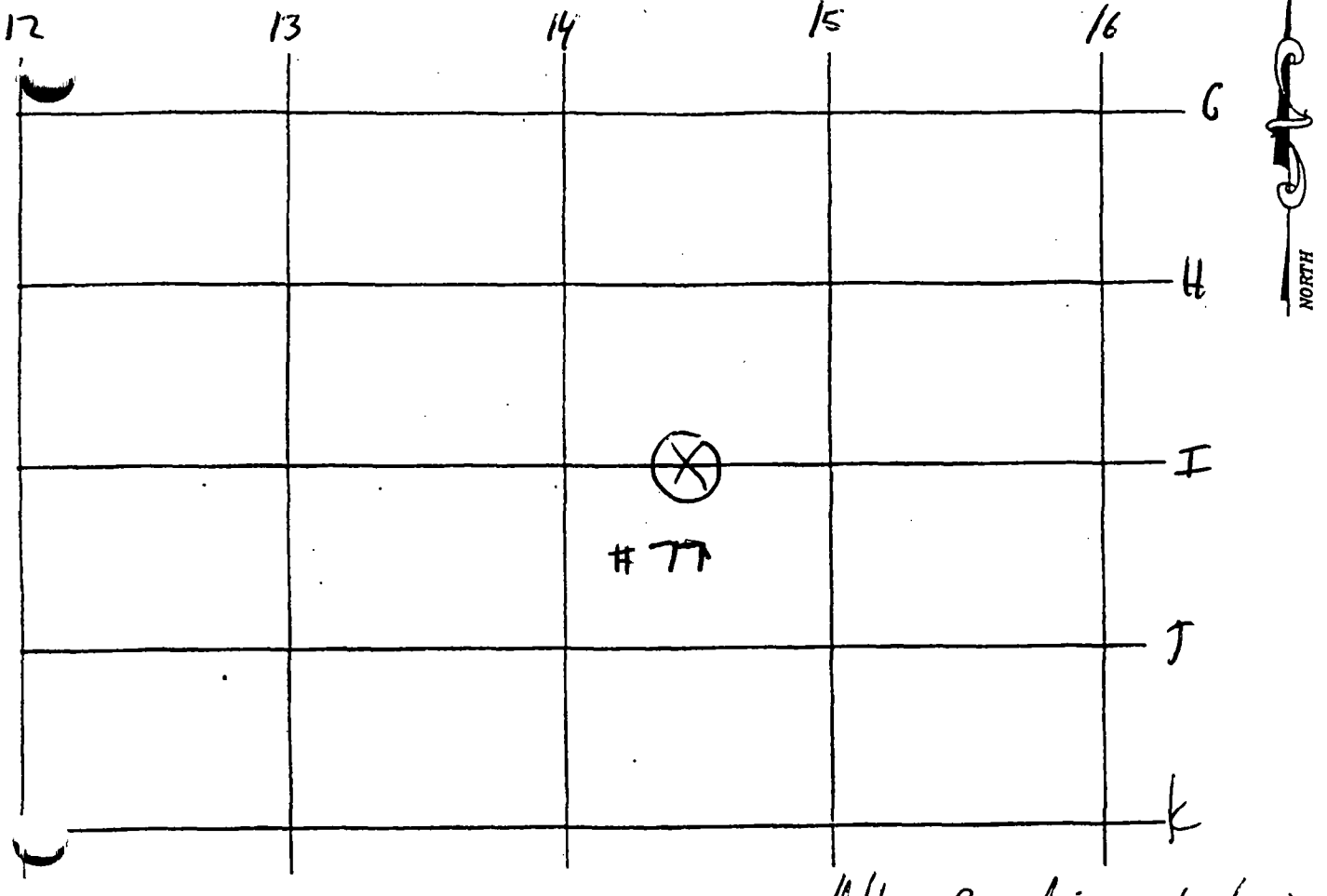
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/19/2000 TECHNICIAN: Joel Blaseile

INST. MODEL: 2221 unshielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? 3/2001 LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below action level. JMS

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

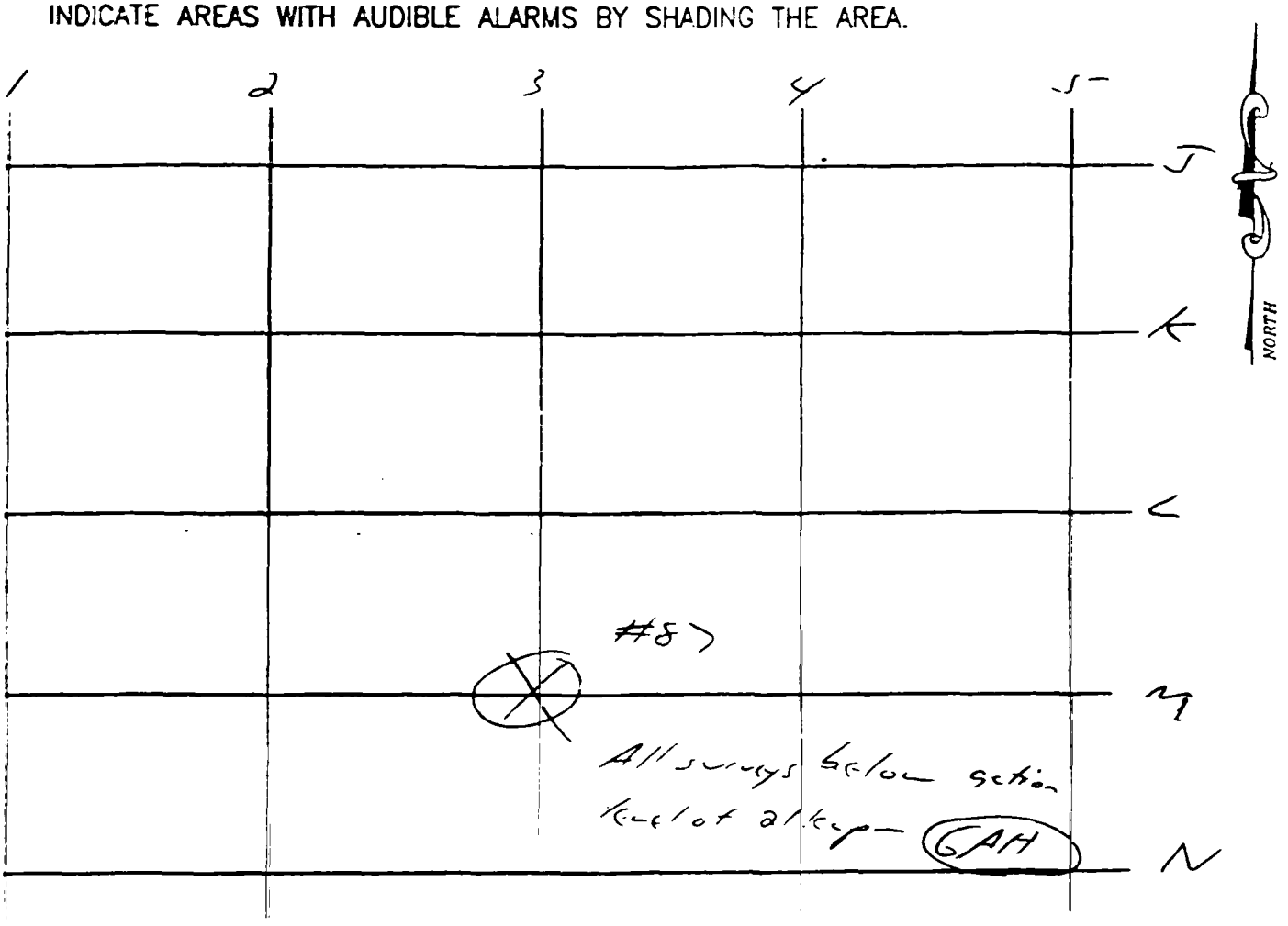
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/24/00 TECHNICIAN: Glenn Huber

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson # ~~88~~ 87

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

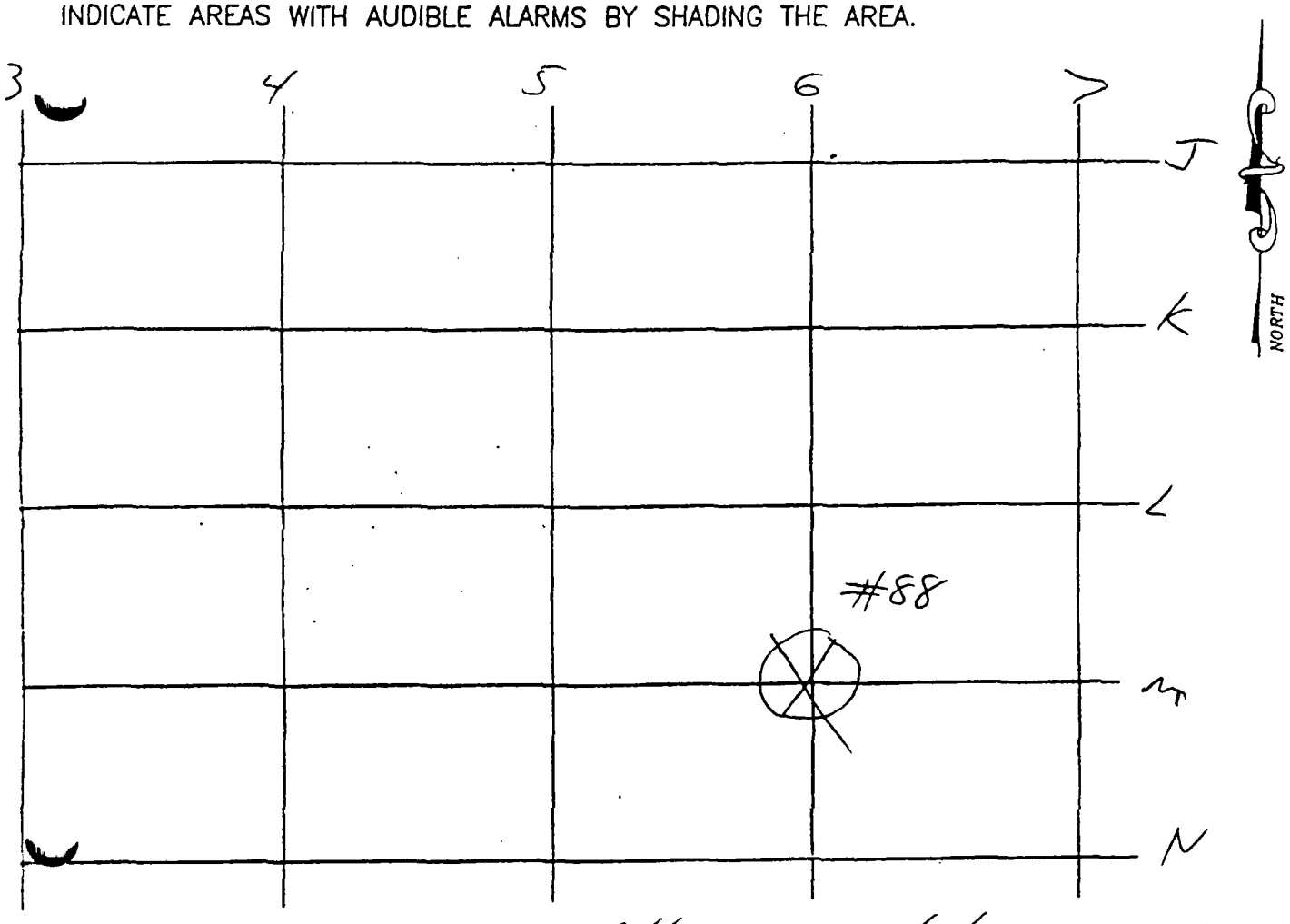
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 2/17/00 TECHNICIAN: Glen Huber

INST. MODEL: 222 / unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #88

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below section level of 21 kept (GAH)

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

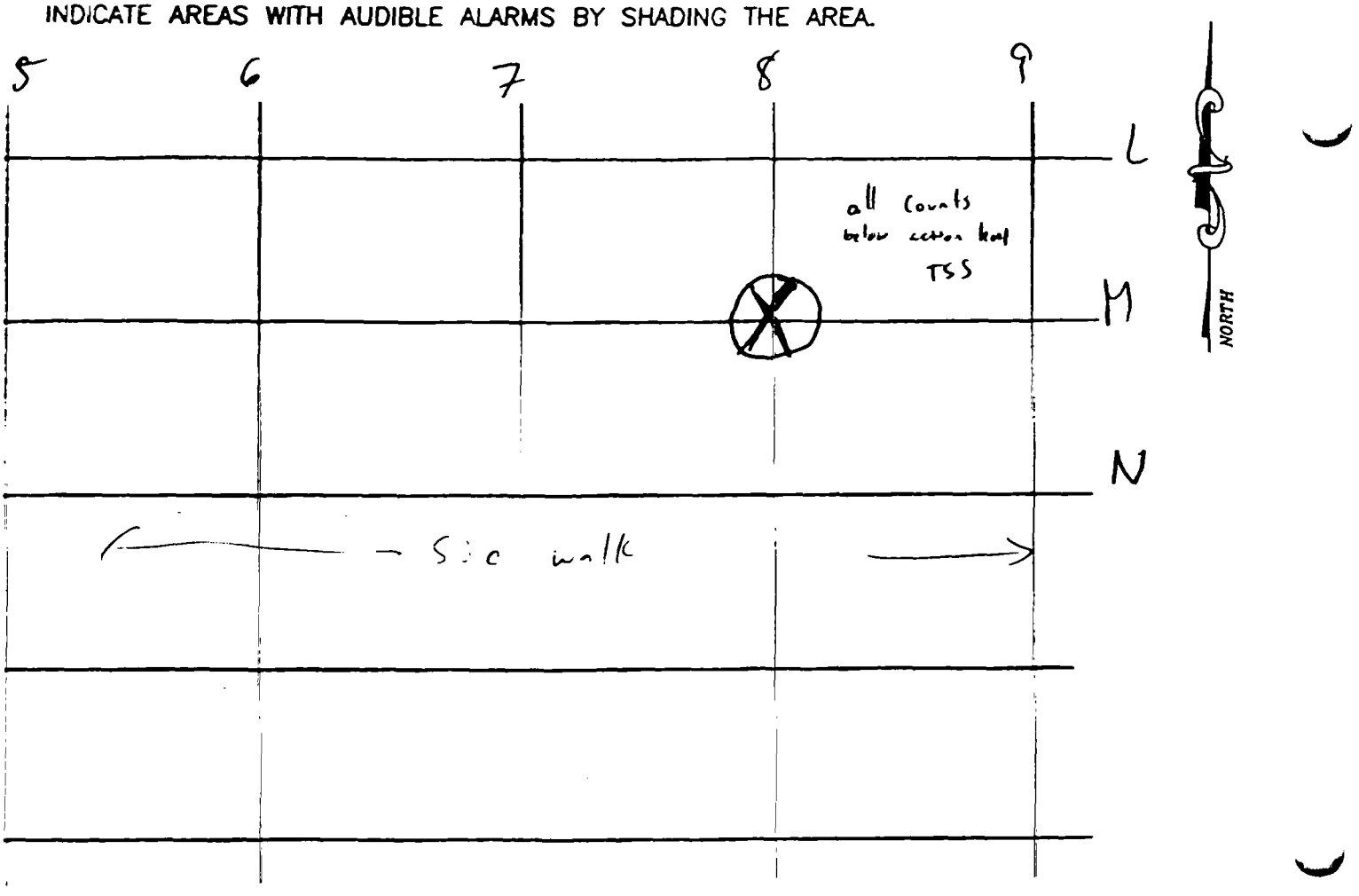
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/12/00 TECHNICIAN: Tody Sawyer

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 ~~LIFT ELEVATION~~: 89 Carisson W

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

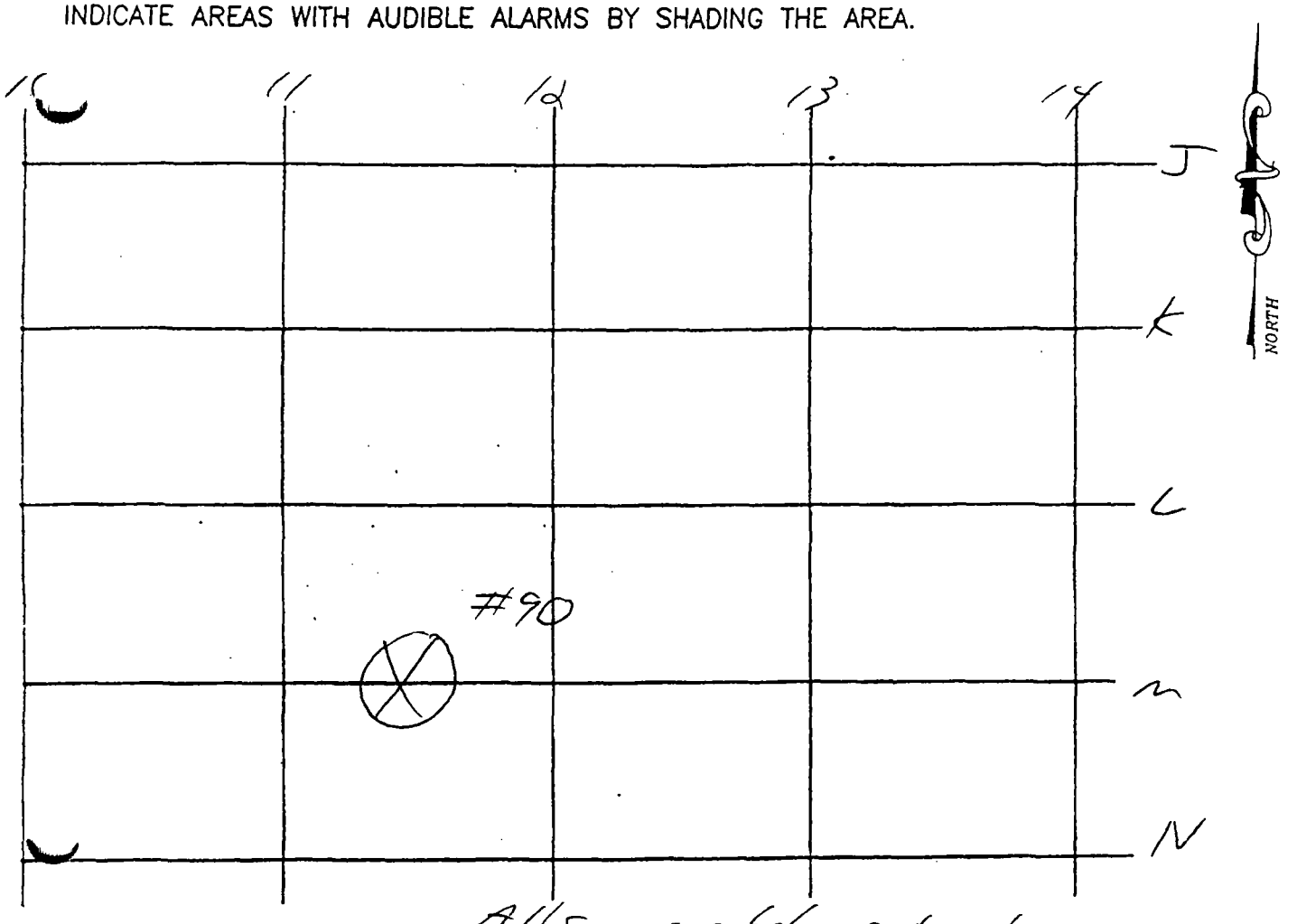
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/20/00 TECHNICIAN: Glenn Huber

INST. MODEL: 2221 washielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #90

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below bottom level of all caps washielded GAH

STS Consultants Ltd.

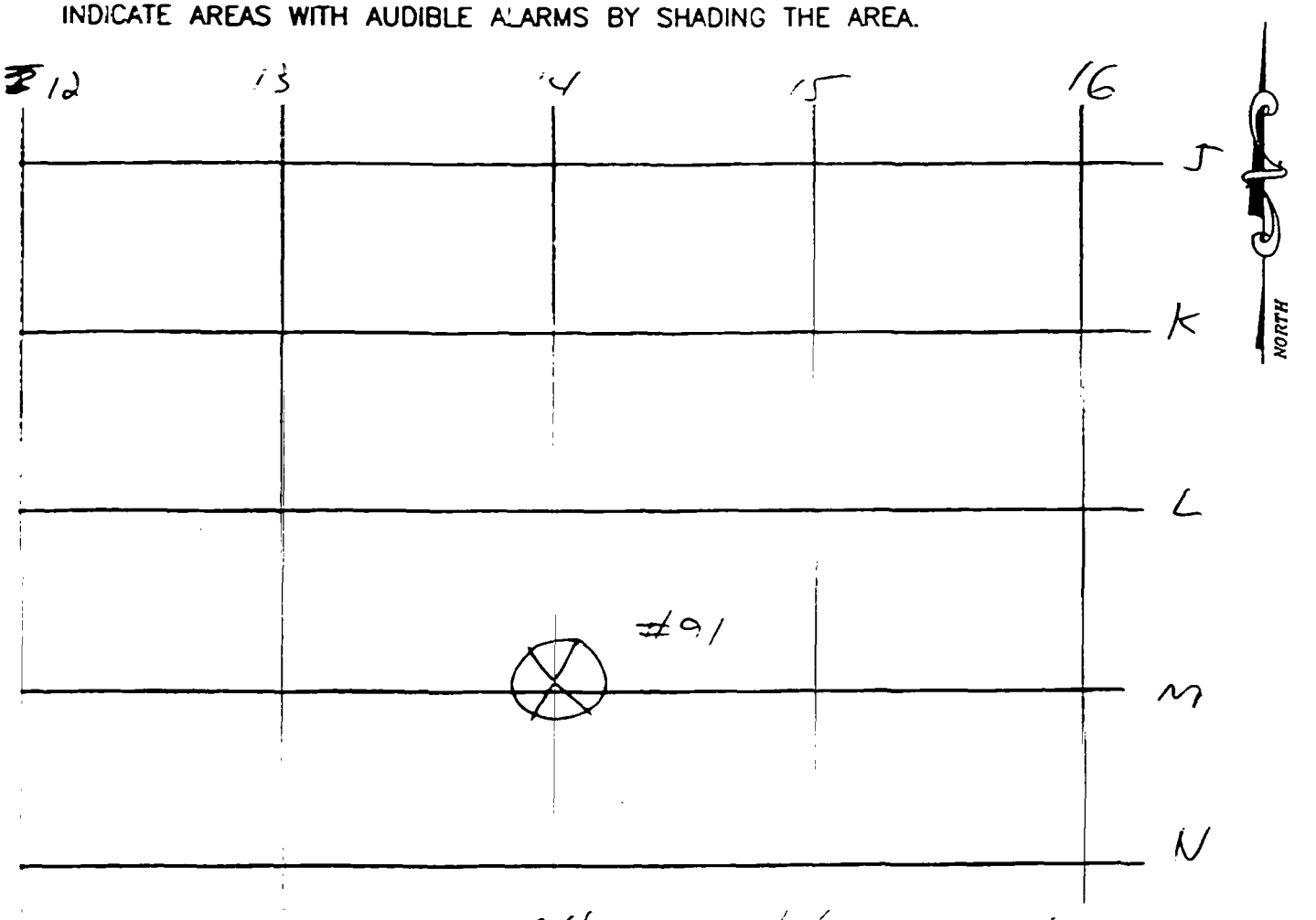
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/30/00 TECHNICIAN: Glenn Huber

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level <21kcpm

GAH

A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

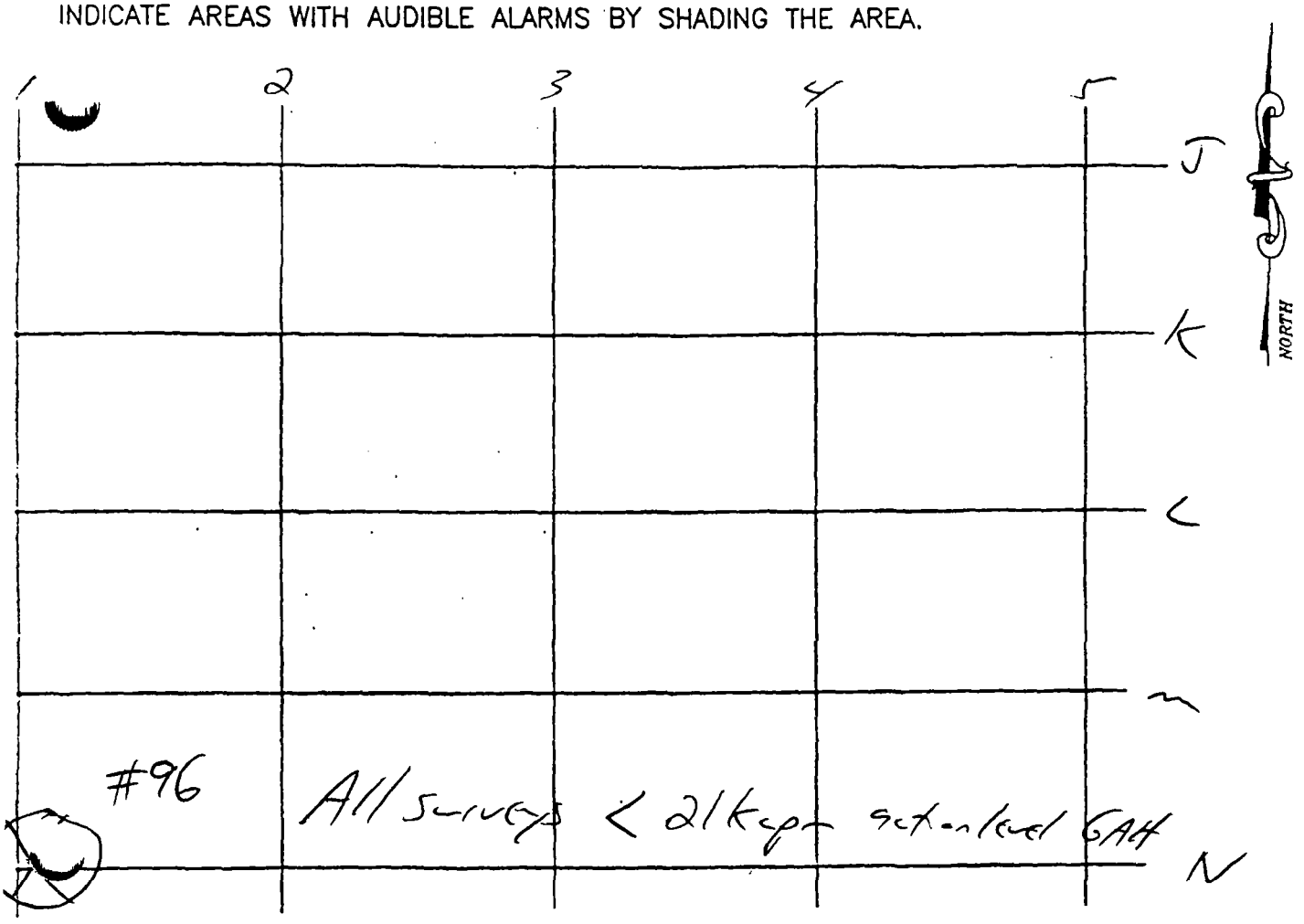
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/3/00 TECHNICIAN: G. Hsieh

INST. MODEL: 2221 unshielded SERIAL NO.: 16496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson # 96

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/25/00

TECHNICIAN: Glenn Huber

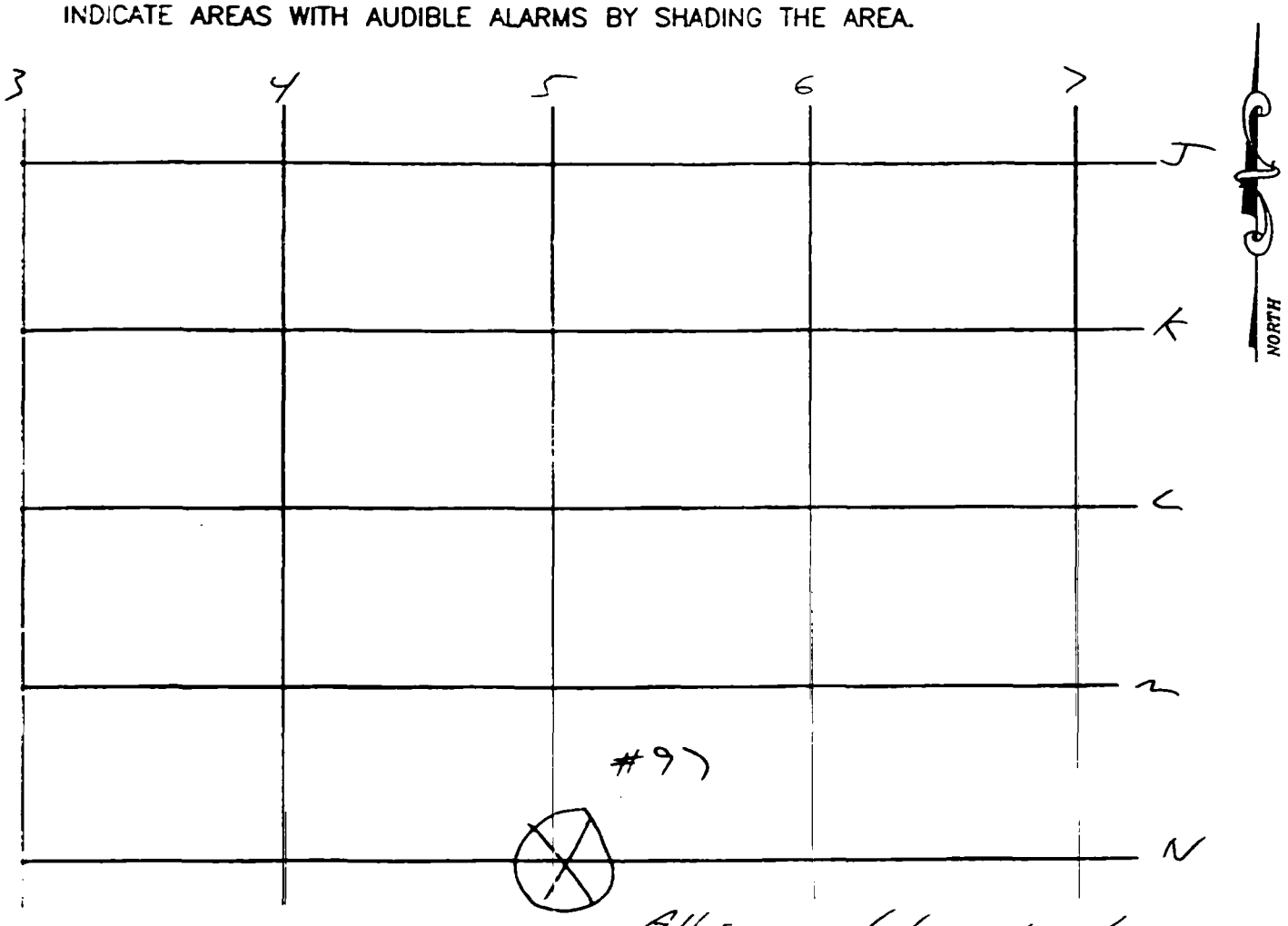
INST. MODEL: 2221 unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Carsson #97

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level
<21 kcpm GAH

A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/8/00

TECHNICIAN: Glenn Huber

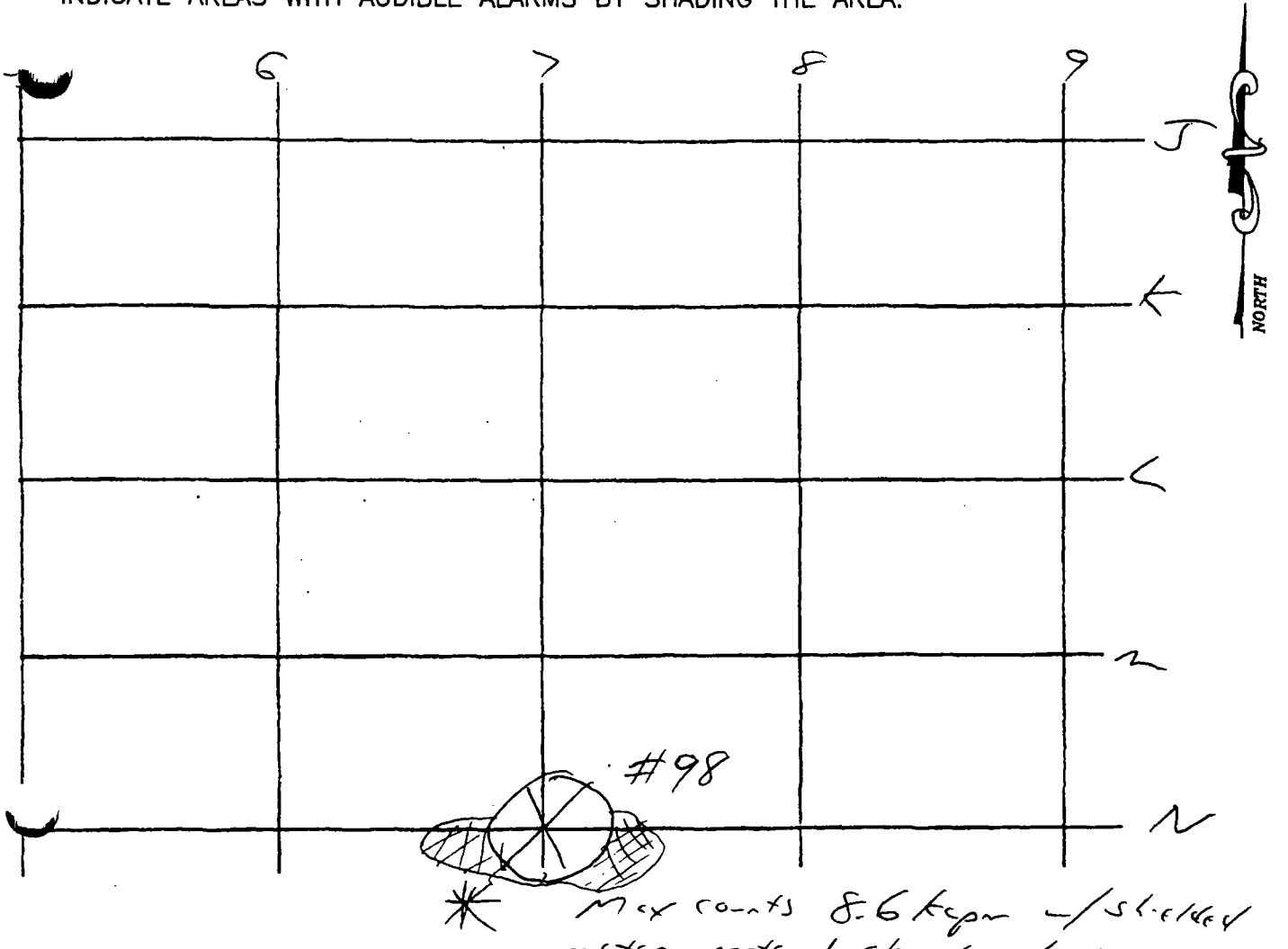
INST. MODEL: 2221 unshielded

SERIAL NO.: 126496 (locate) / 134542 (concentr.)

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Carson pothole #98

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



* Max counts 8.6 kcpm w/ shielded meter. material cleaned & loaded on [illegible]

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

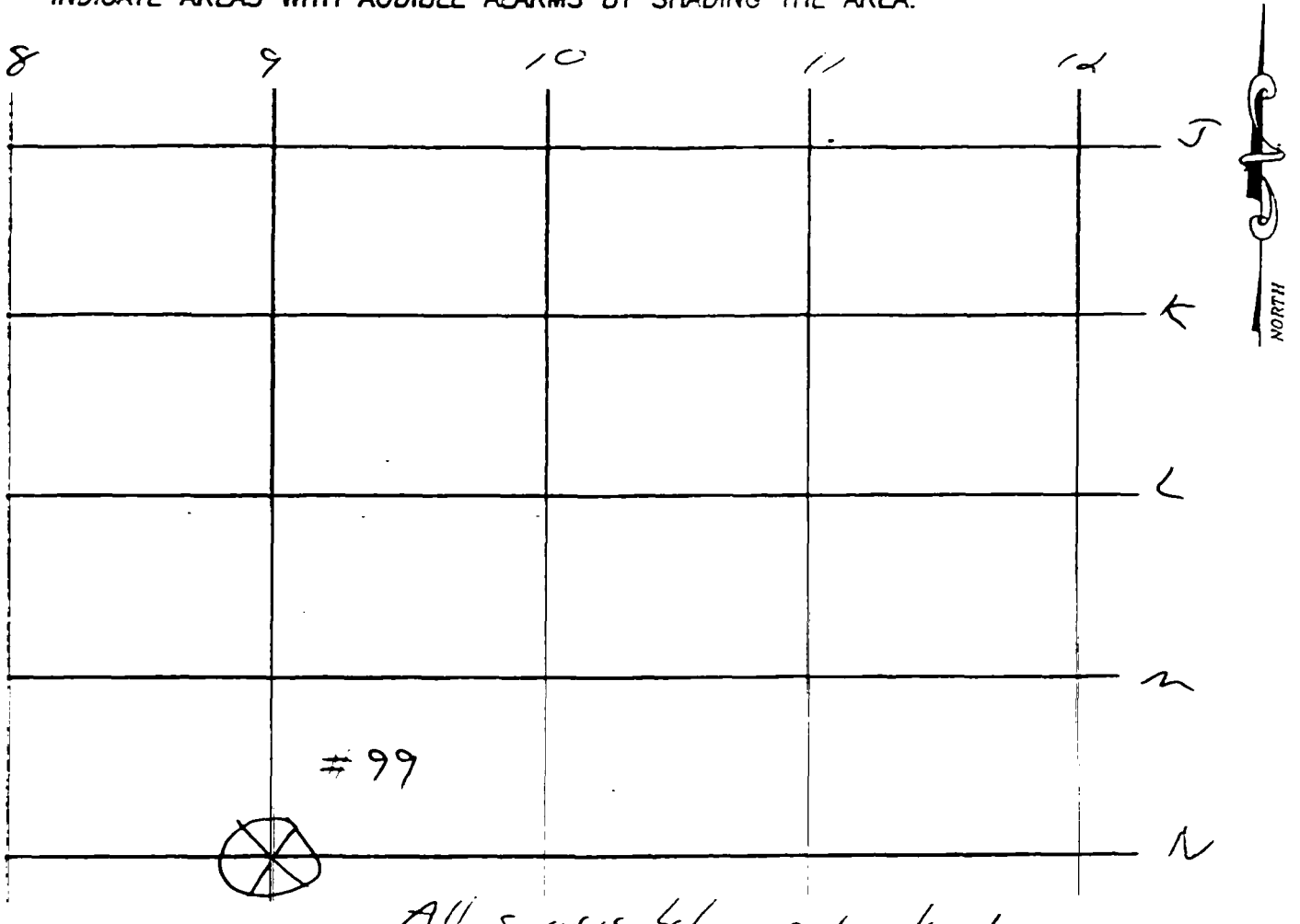
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/18/00 TECHNICIAN: Glen Hasse

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 106496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #99

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level
< 2 kcpm GAH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

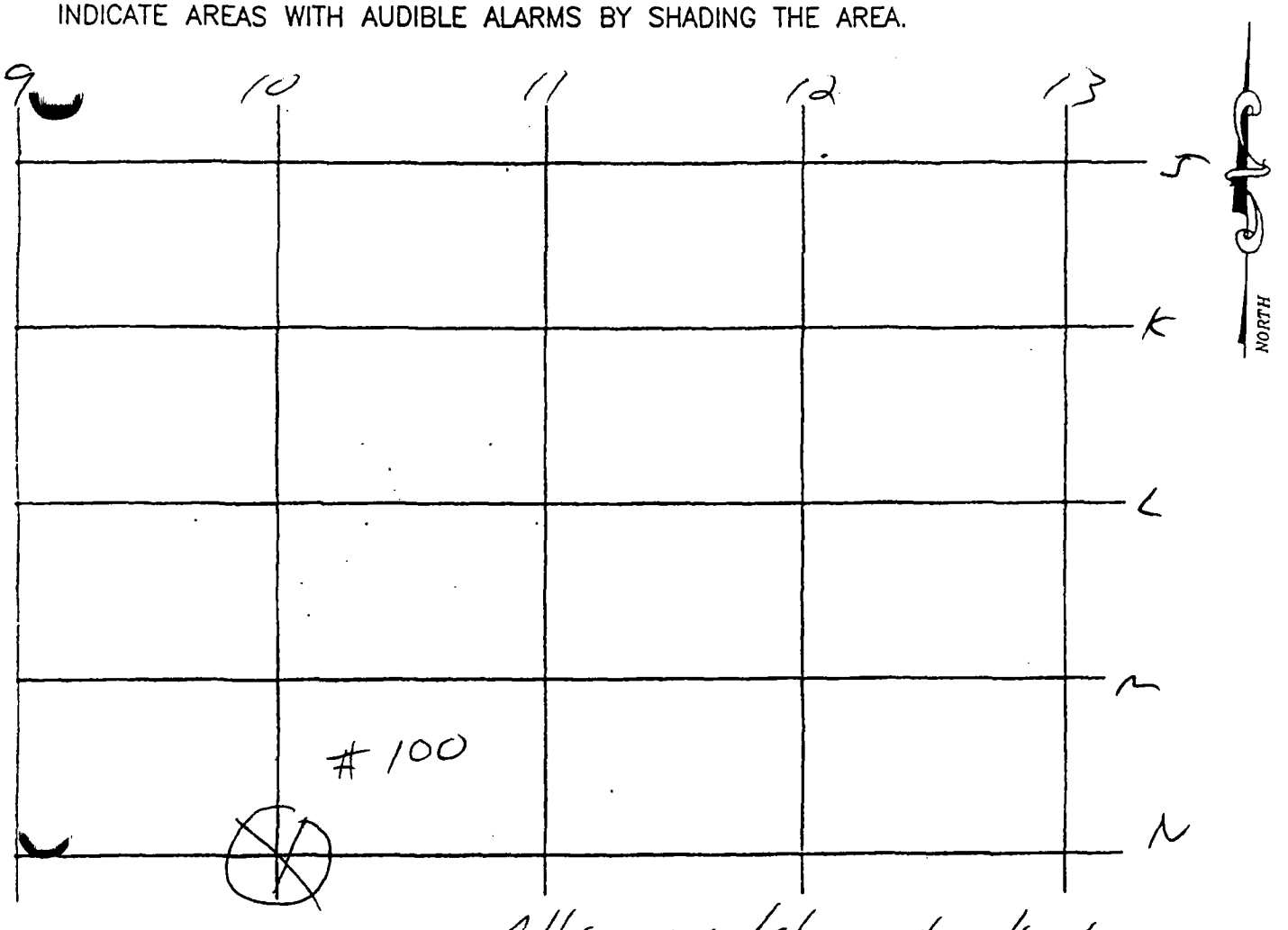
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/17/00 TECHNICIAN: Glenn A. Huber

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson # 100

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below ground level
< 2 kcpm (GAH)

STS Consultants Ltd.

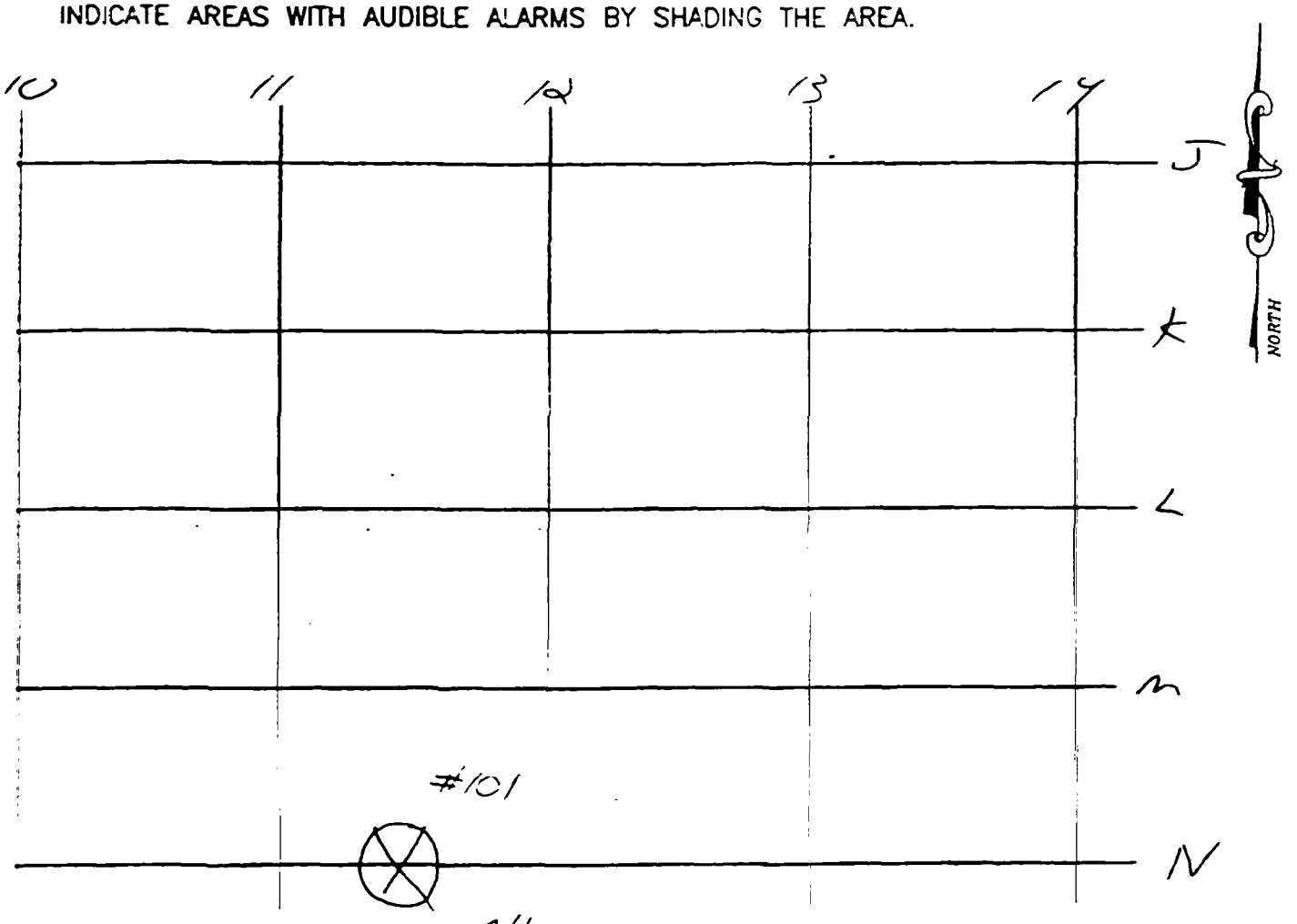
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/20/00 TECHNICIAN: Glenn Huber

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #101

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level of 21 kcpm. GAH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

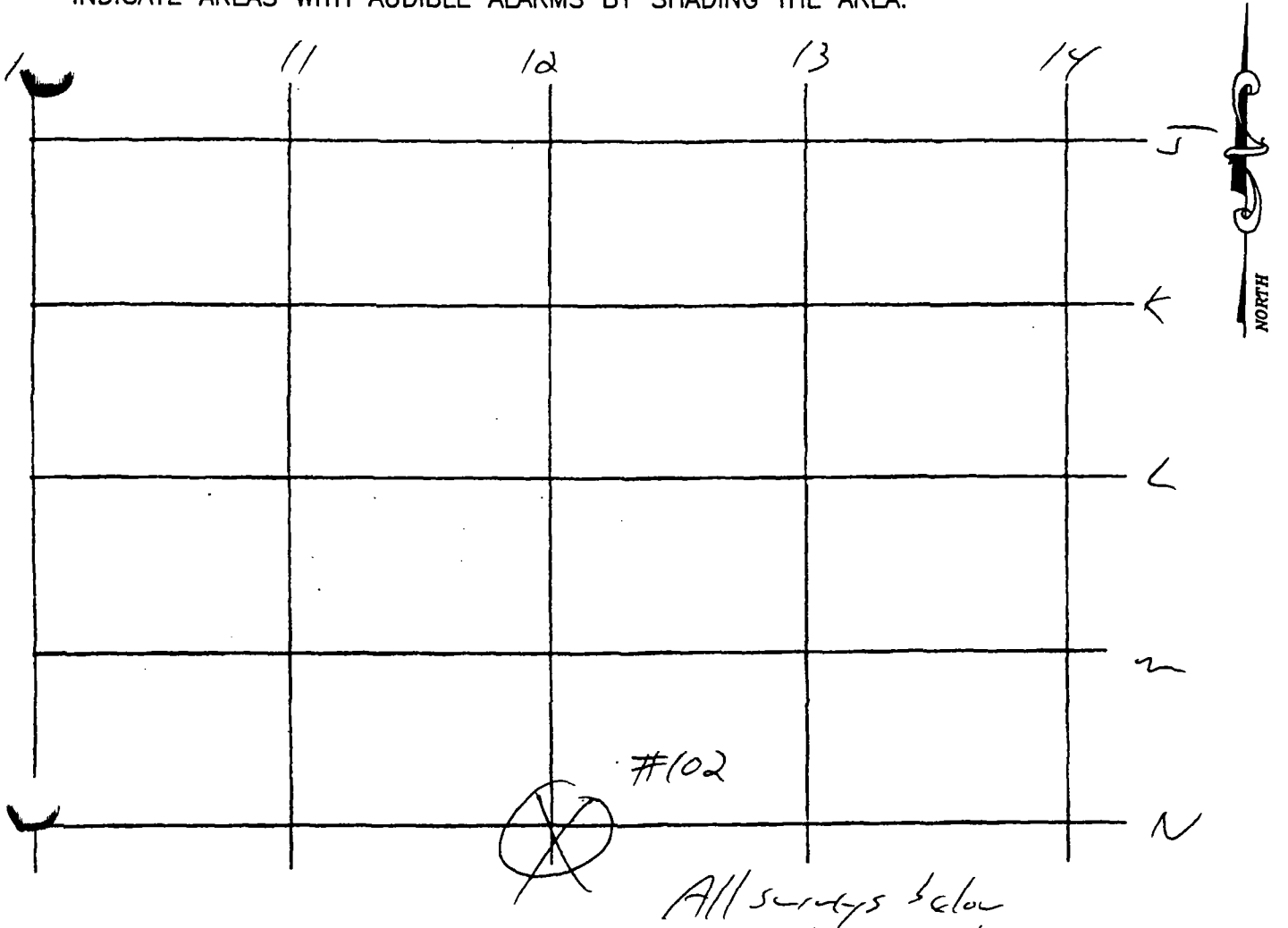
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/11/00 TECHNICIAN: Glen Huber

INST. MODEL: 222/ unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Caisson #102

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below surface level of Caisson. GAH

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

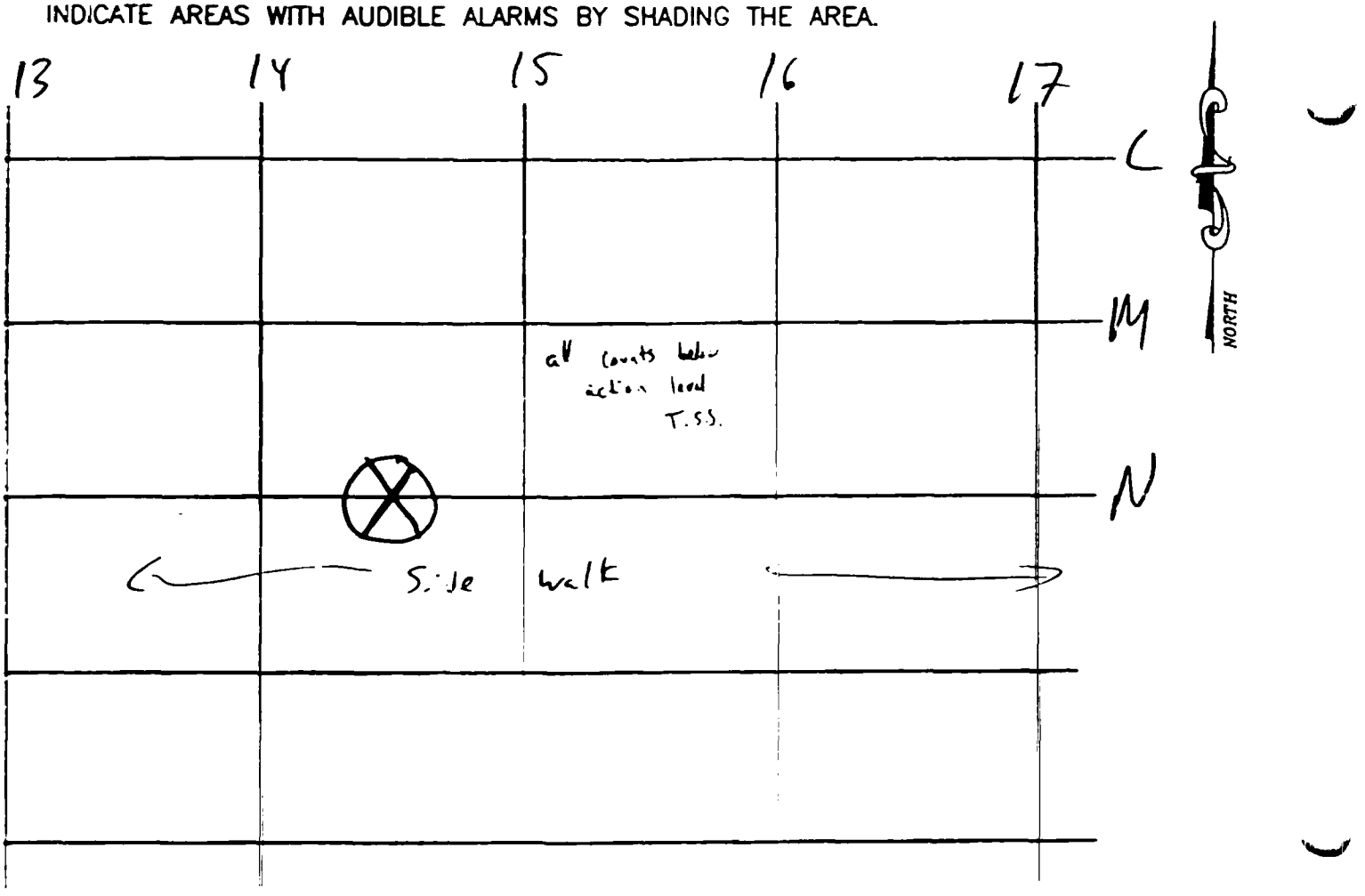
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/07/00 TECHNICIAN: Toby Sleven

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 03/07/00 ~~LIFT ELEVATION~~: 103
Cuisson H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

AREA C: PRE-REMEDIATION

SURFACE SCANS OF PREVIOUSLY OBSTRUCTED AREAS
SURVEYS PERFORMED AFTER GRADING

LIFT SURVEYS OF AREAS UNEXCAVATED AFTER GRADE BEAM COMPLETION,
PER USEPA REQUEST

STS Consultants Ltd.

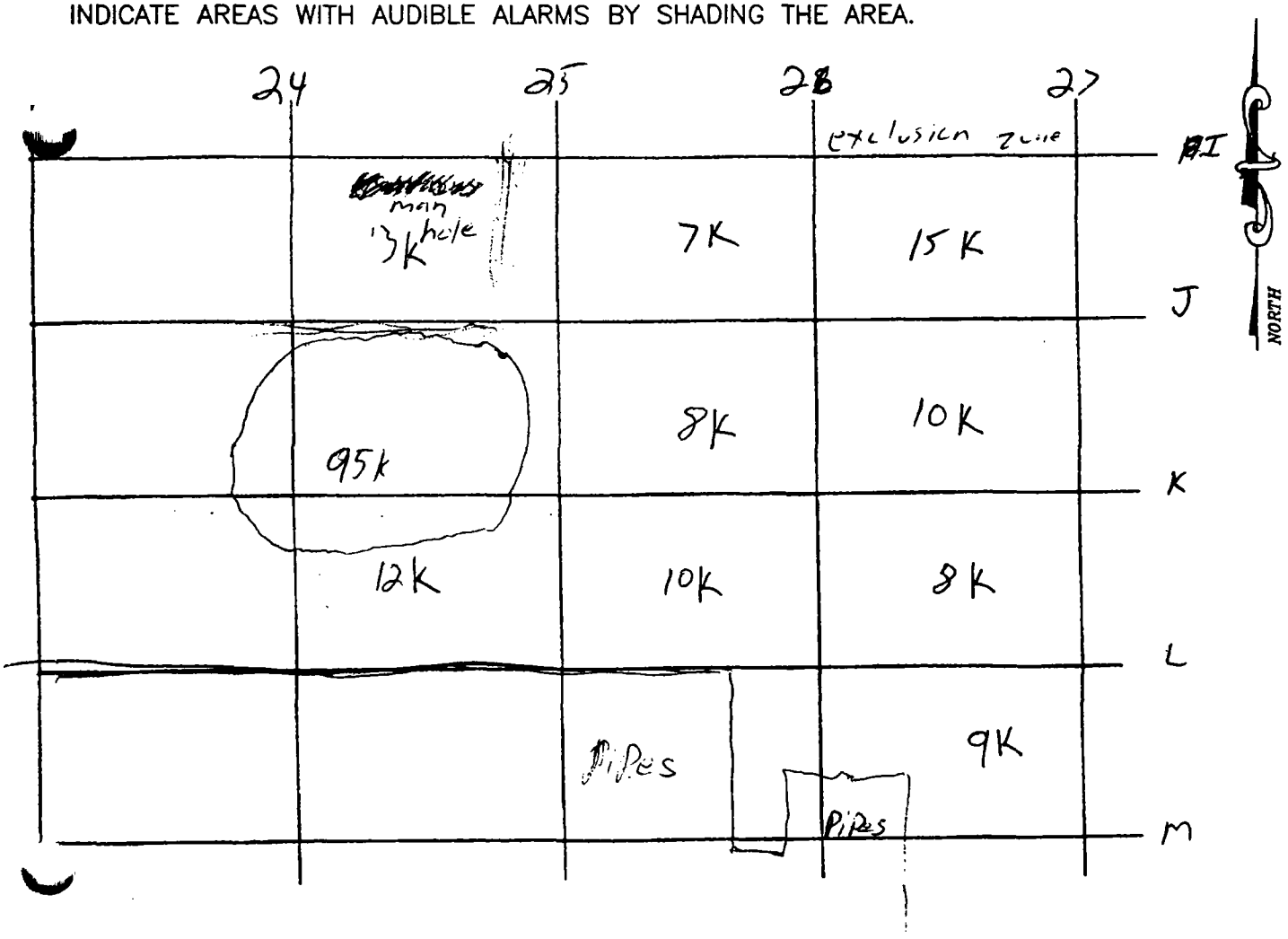
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-12 TECHNICIAN: JT

INST. MODEL: 2221 unshielded SERIAL NO.: 184512

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

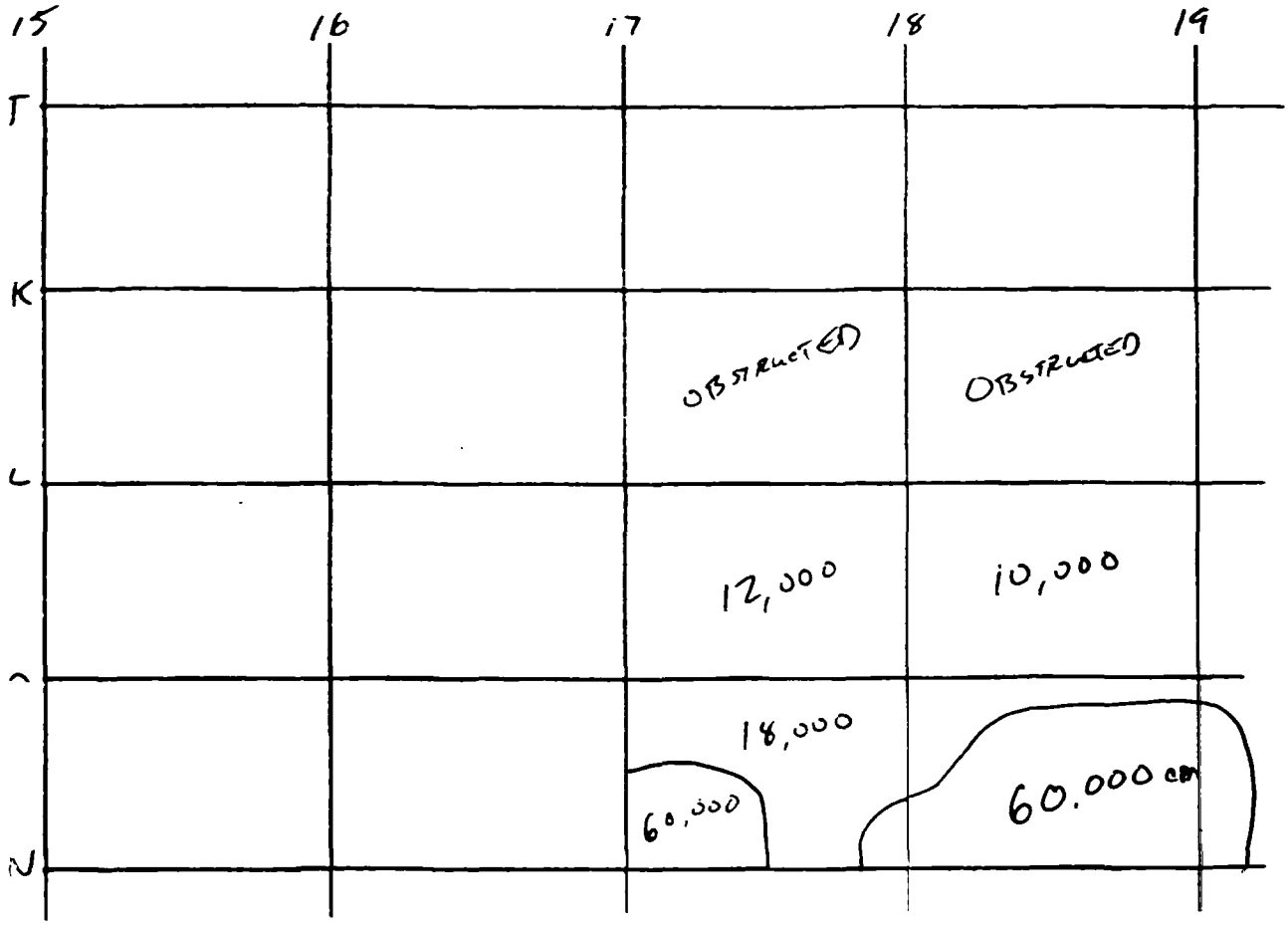
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00 TECHNICIAN: BRETT / JOEL

INST. MODEL: Ludlum 2221 ratemeter/scaler SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/00 LIFT ELEVATION: Ø

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

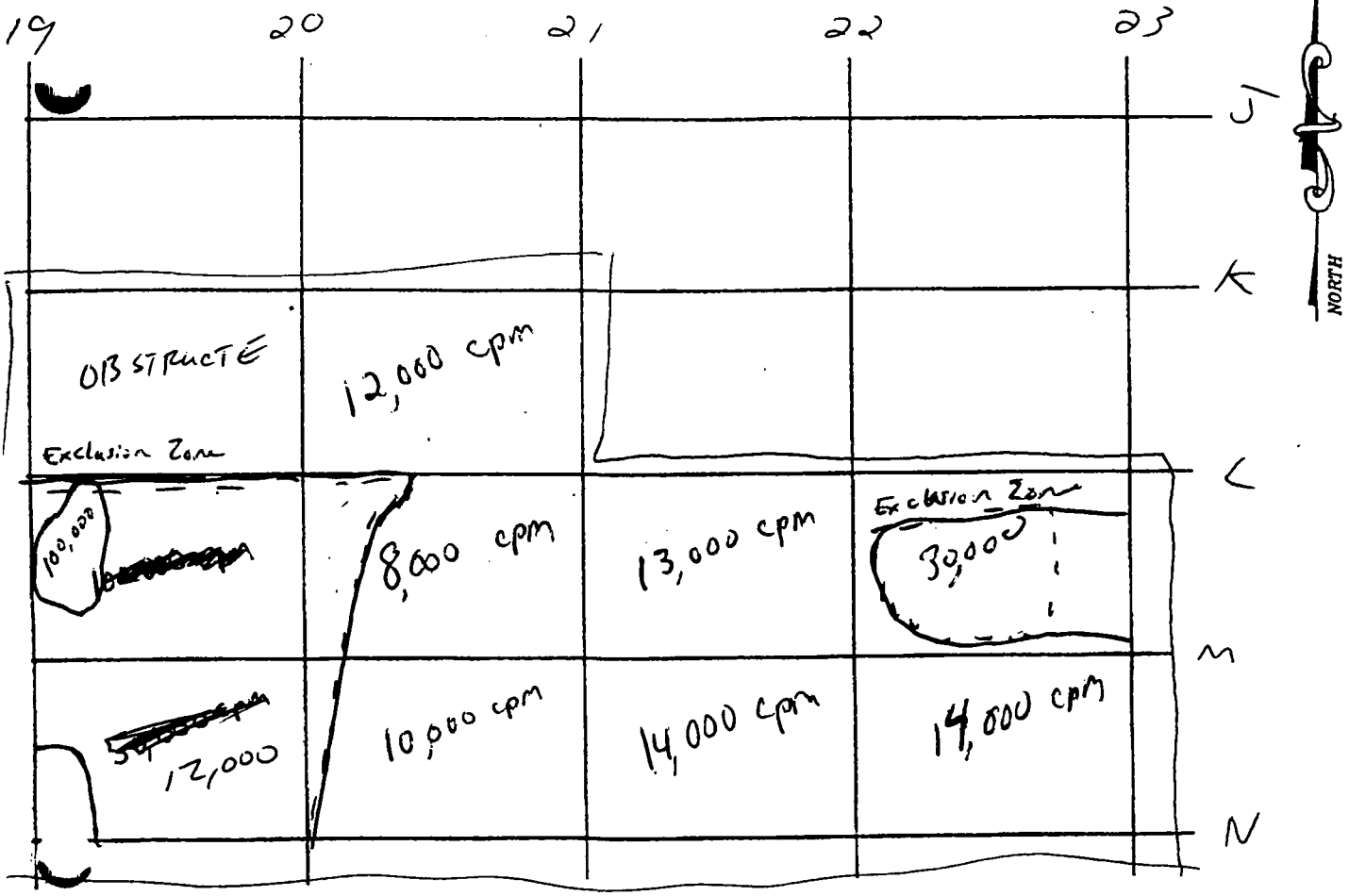
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00 TECHNICIAN: Joel M. Arwood

INST. MODEL: Ludl 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y 3/7/00 LIFT ELEVATION: surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

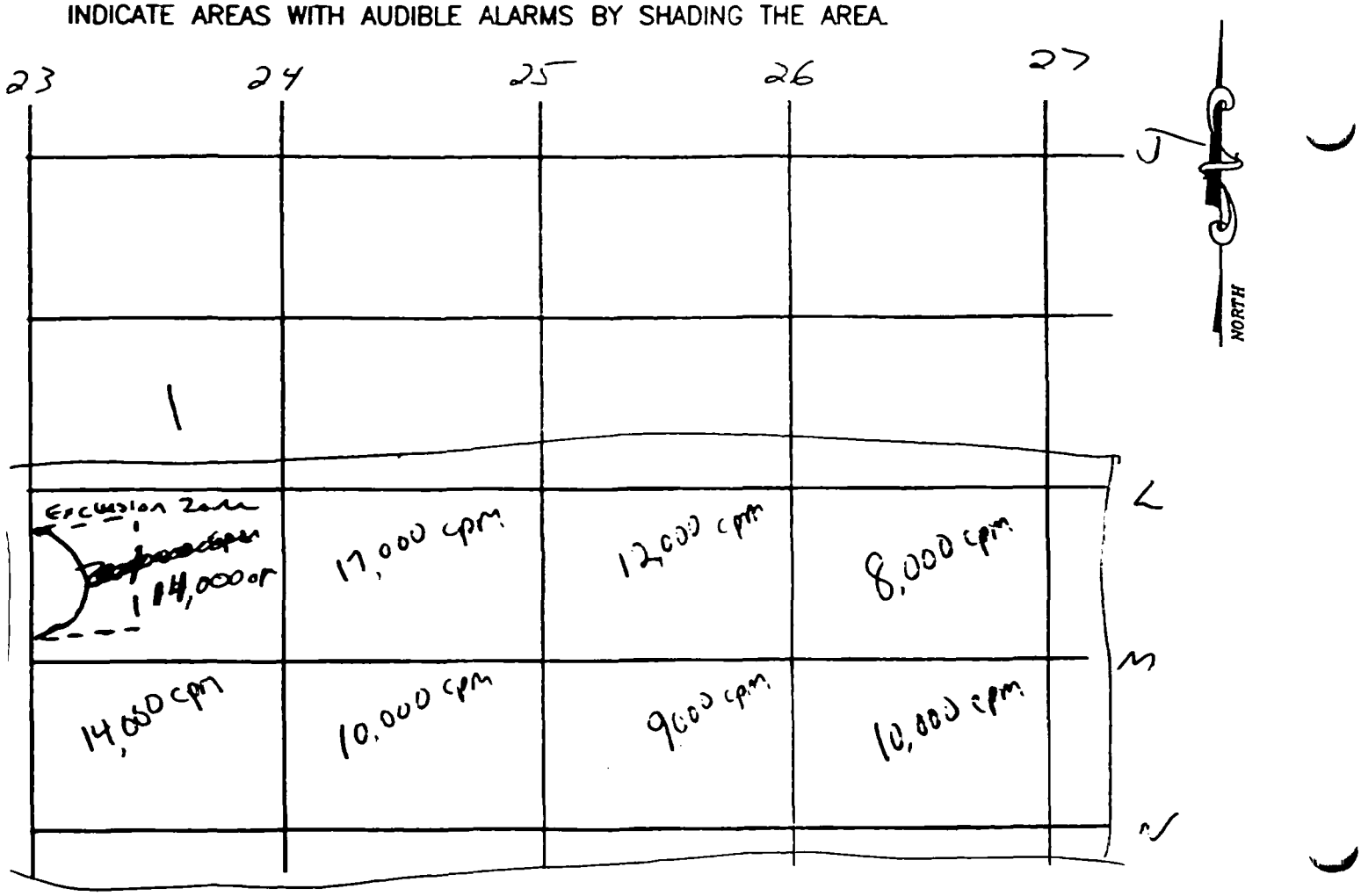
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/28/00 TECHNICIAN: Joel M. Alrwenter

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y 3/7/00 LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

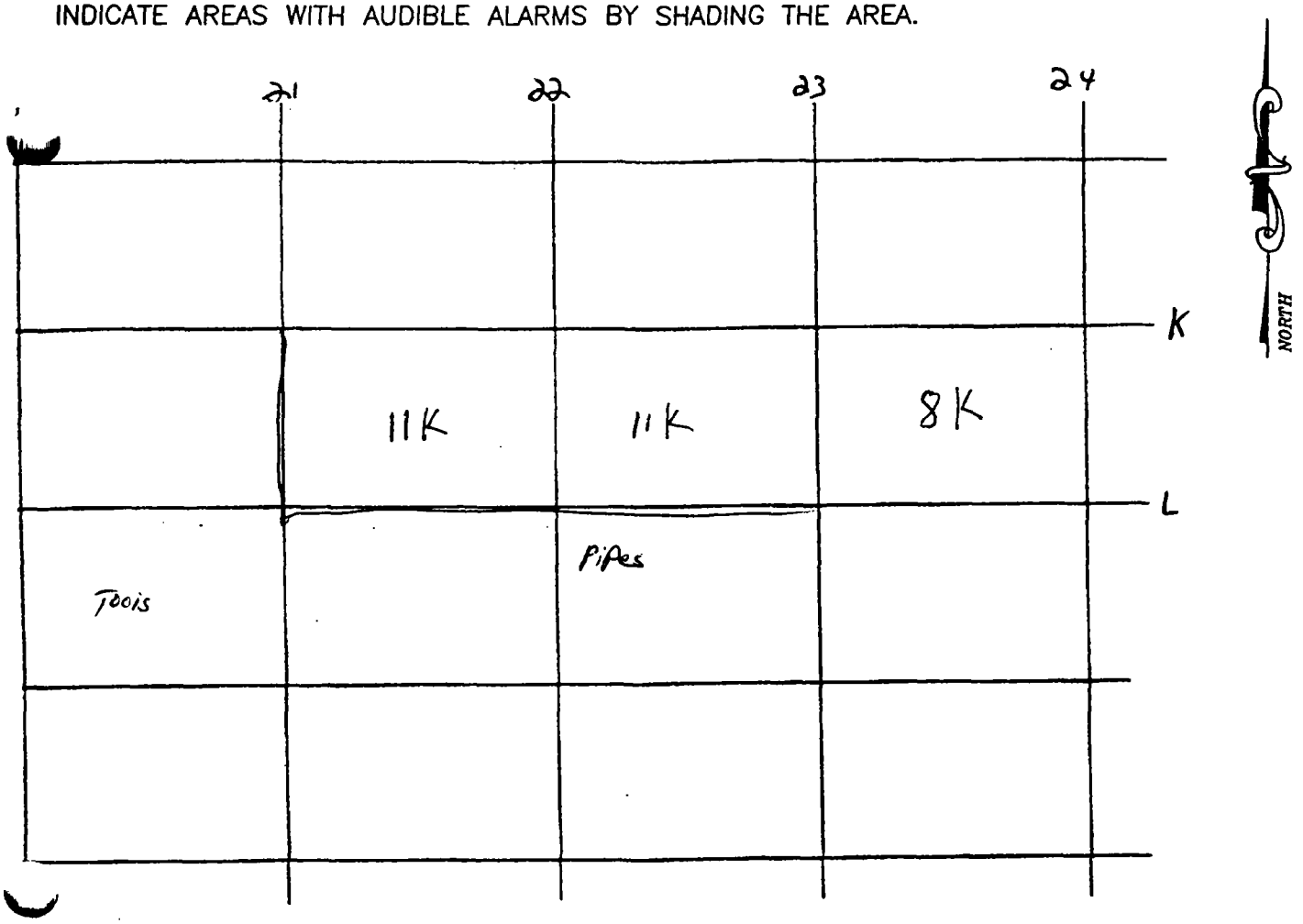
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-12 TECHNICIAN: TT

INST. MODEL: 2221 unshielded SERIAL NO.: 18451L2

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

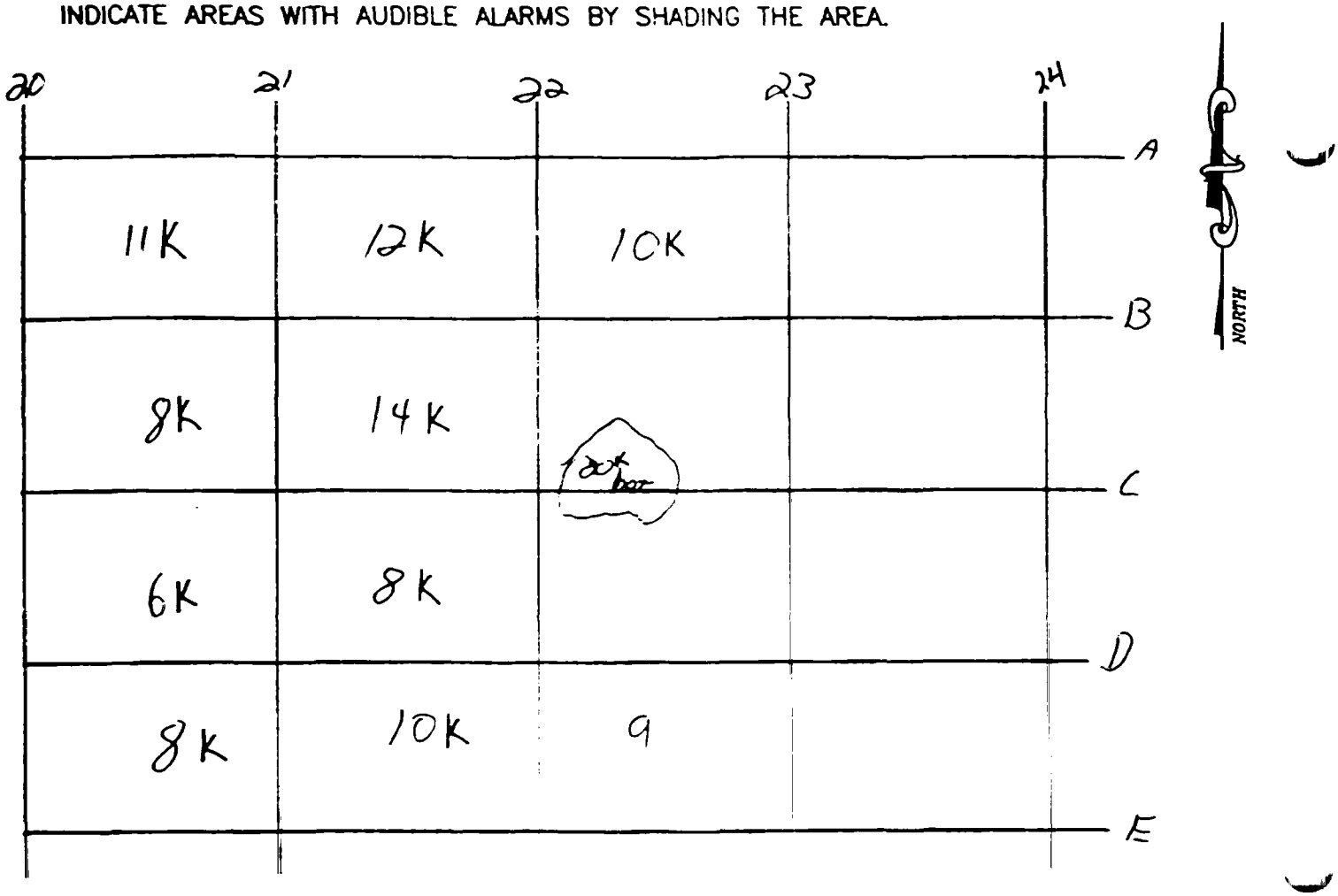
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-12-00 TECHNICIAN: TT

INST. MODEL: 2221 Unshielded SERIAL NO.: 15451

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

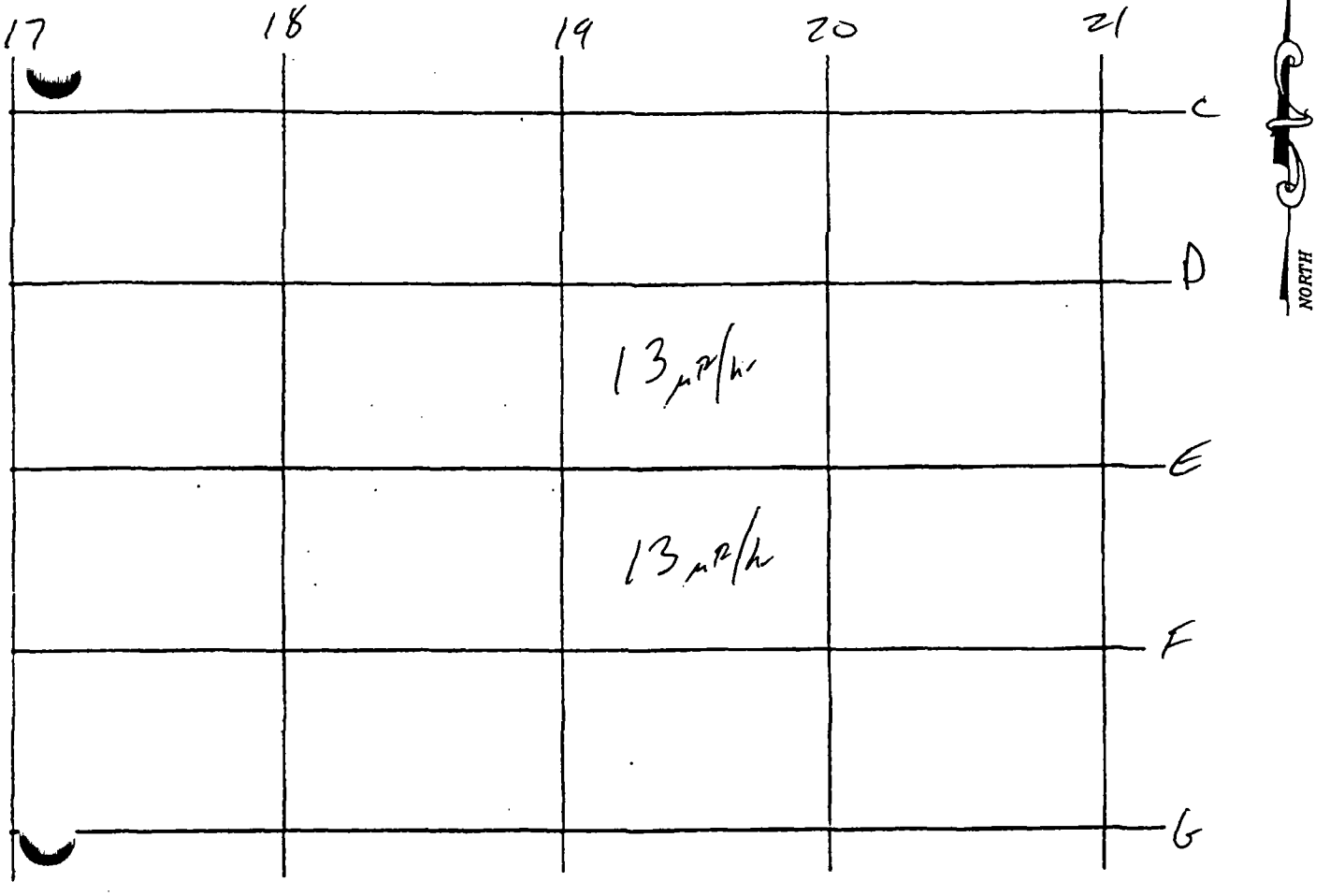
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00 TECHNICIAN: Brock Burton

INST. MODEL: Ludlum 3 μR/h SERIAL NO.: 124358

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00

TECHNICIAN: Brett Burton

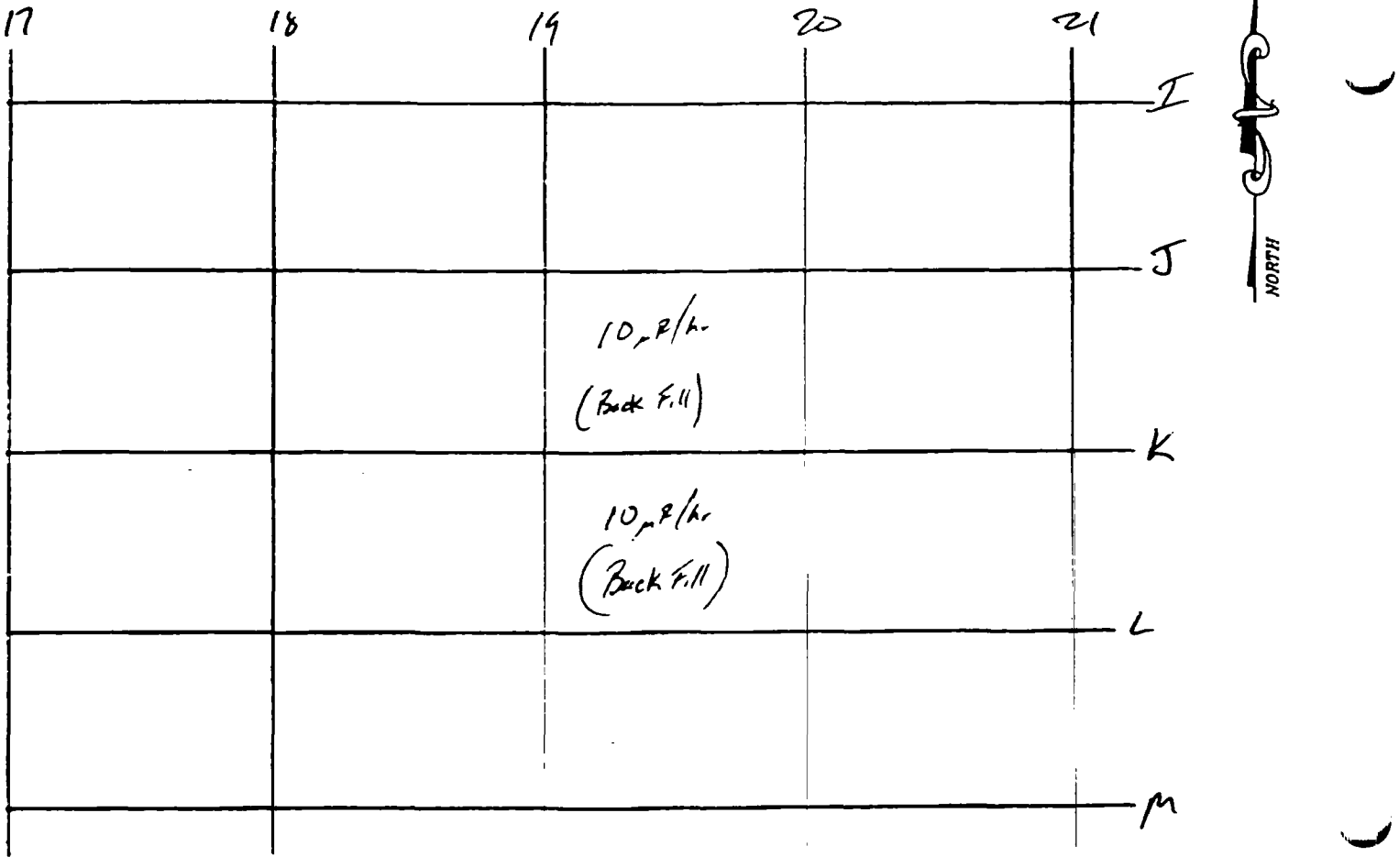
INST. MODEL: Ludlum 3

SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

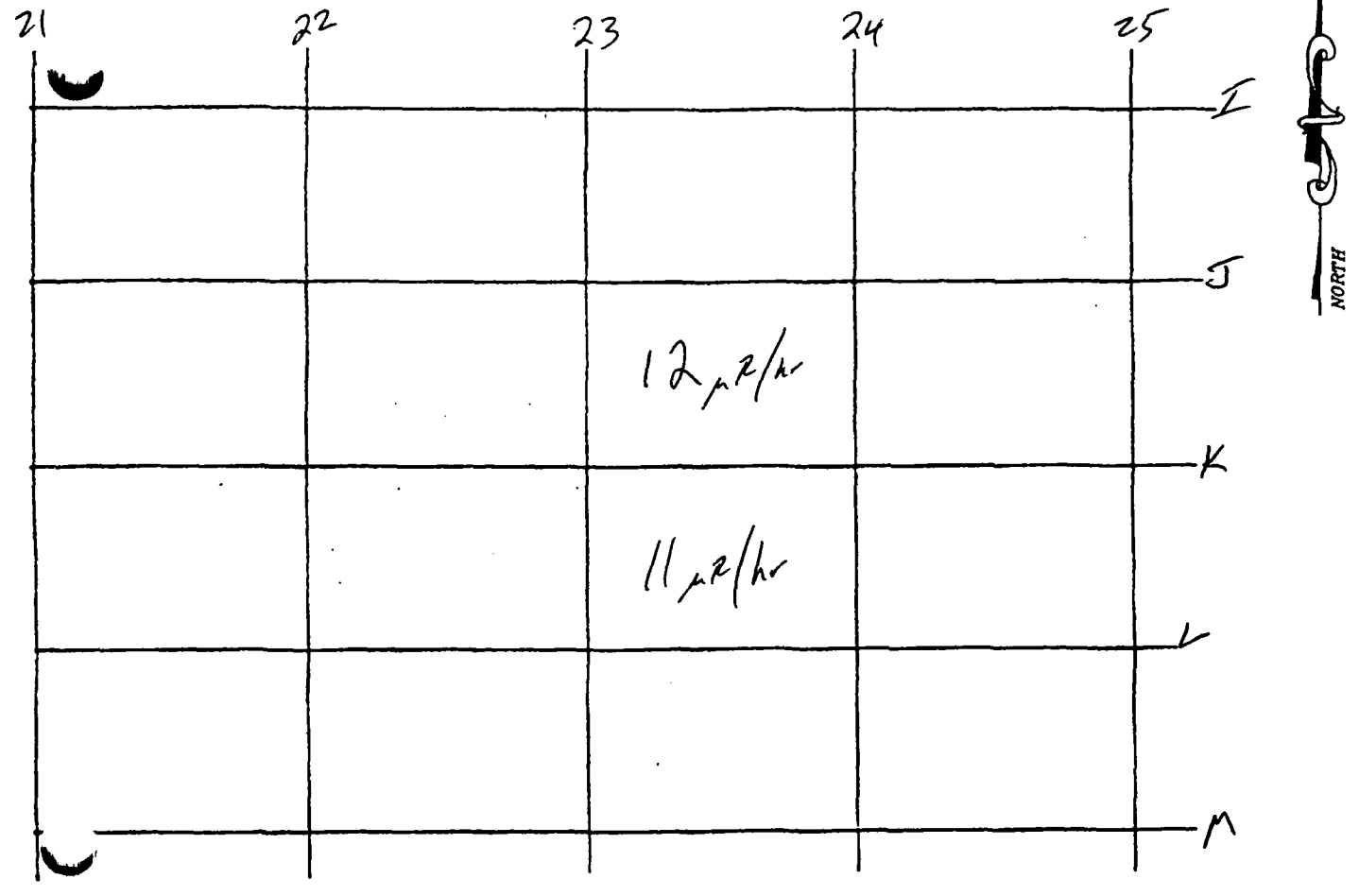
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00 TECHNICIAN: Brett Burton

INST. MODEL: Ludlum 3 SERIAL NO.: 124358

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

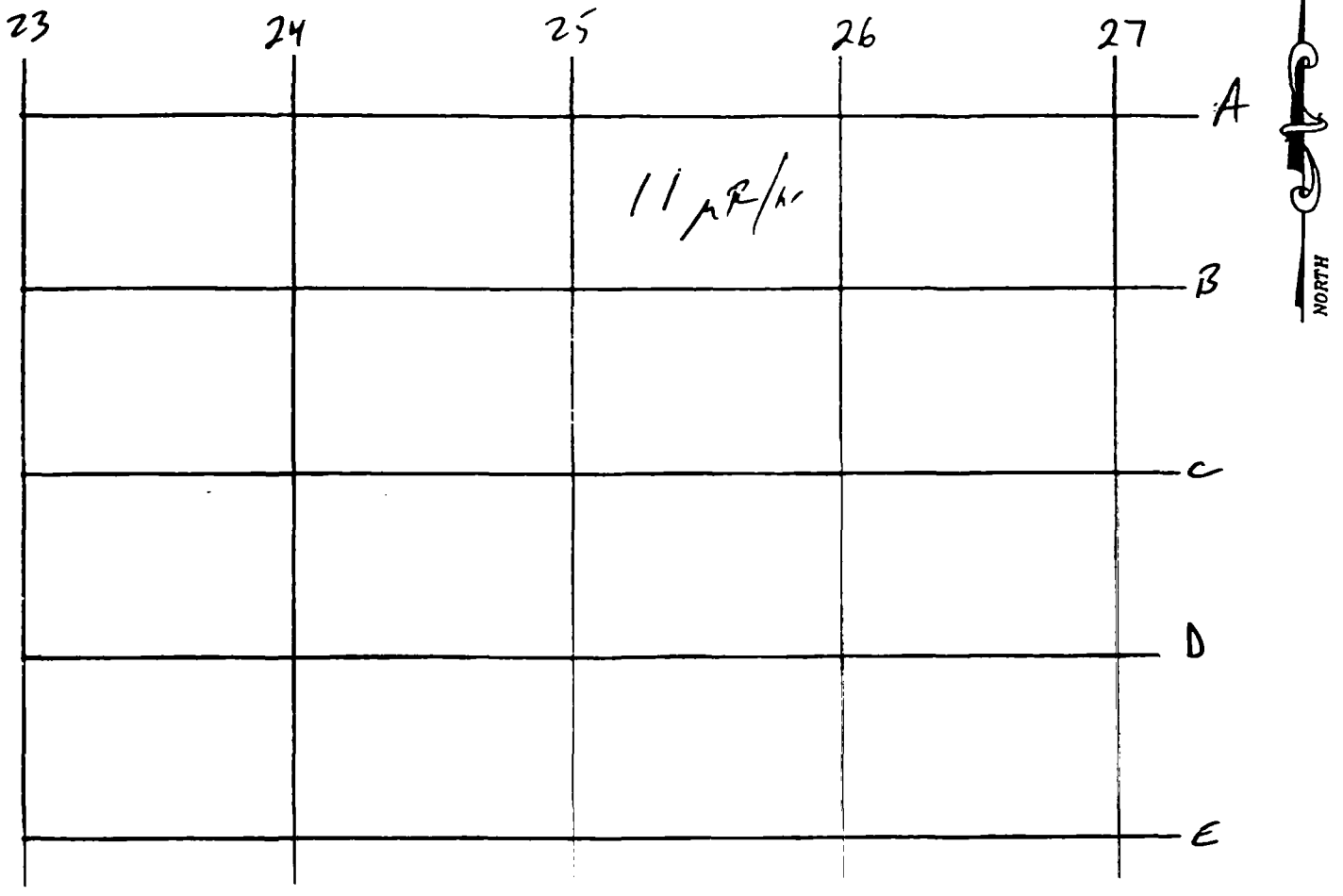
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00 TECHNICIAN: Brett Burton

INST. MODEL: Ludlum 3 SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/5/00

TECHNICIAN: Brett Burton

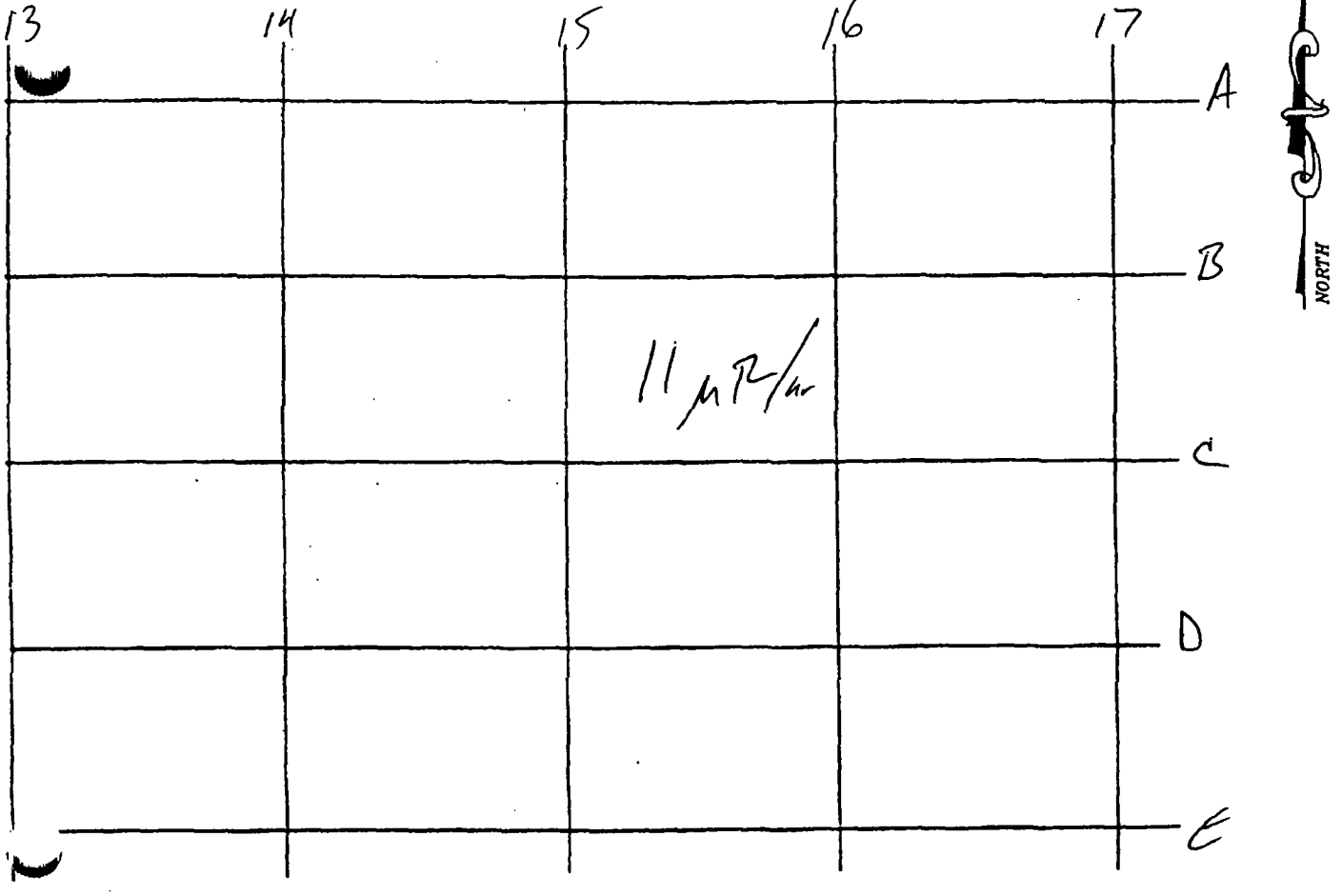
INST. MODEL: Ludlum 3

SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? ____

LIFT ELEVATION: Surface

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

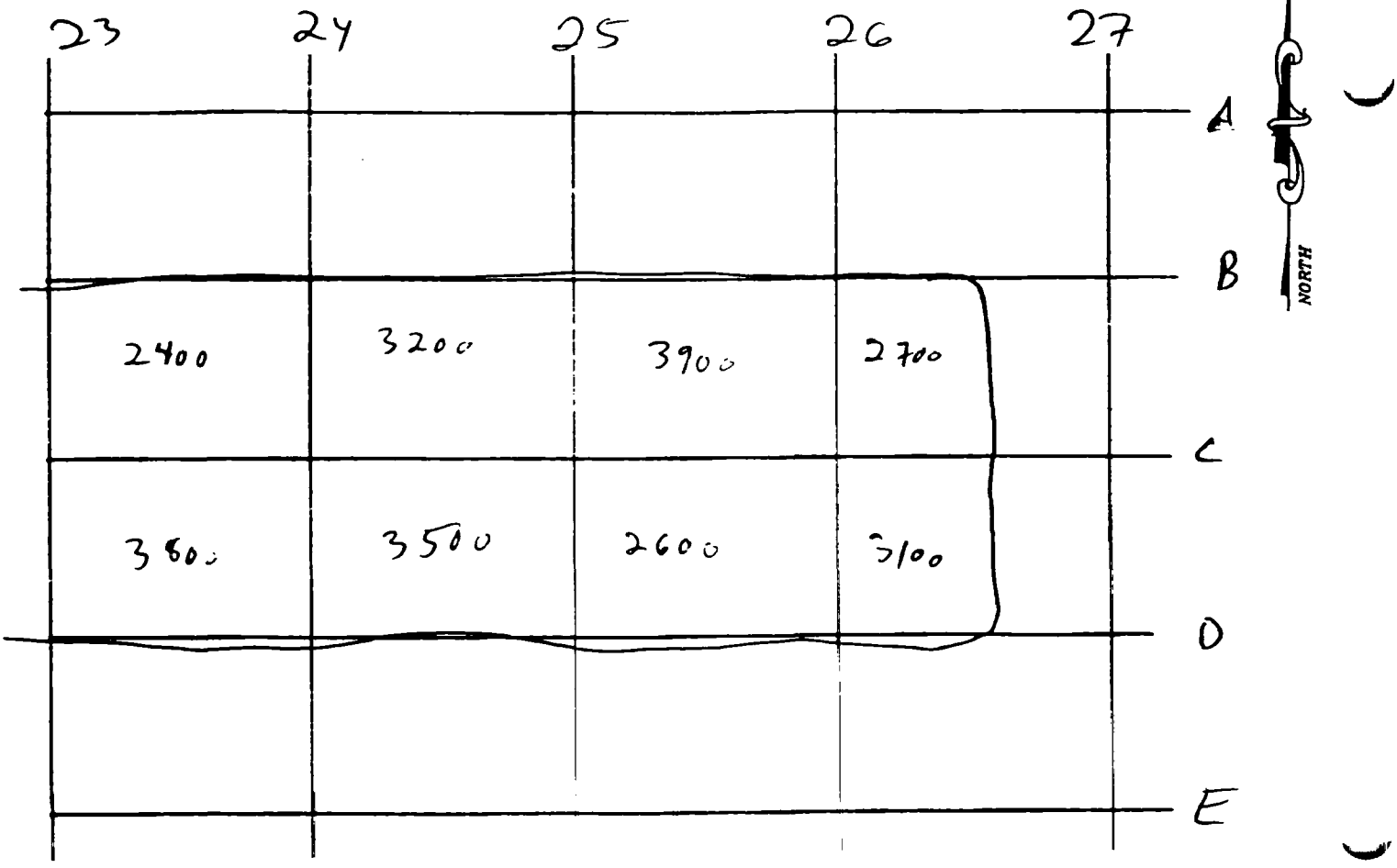
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00 TECHNICIAN: Toby Slowan

INST. MODEL: 2221, SN 1866 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-1')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

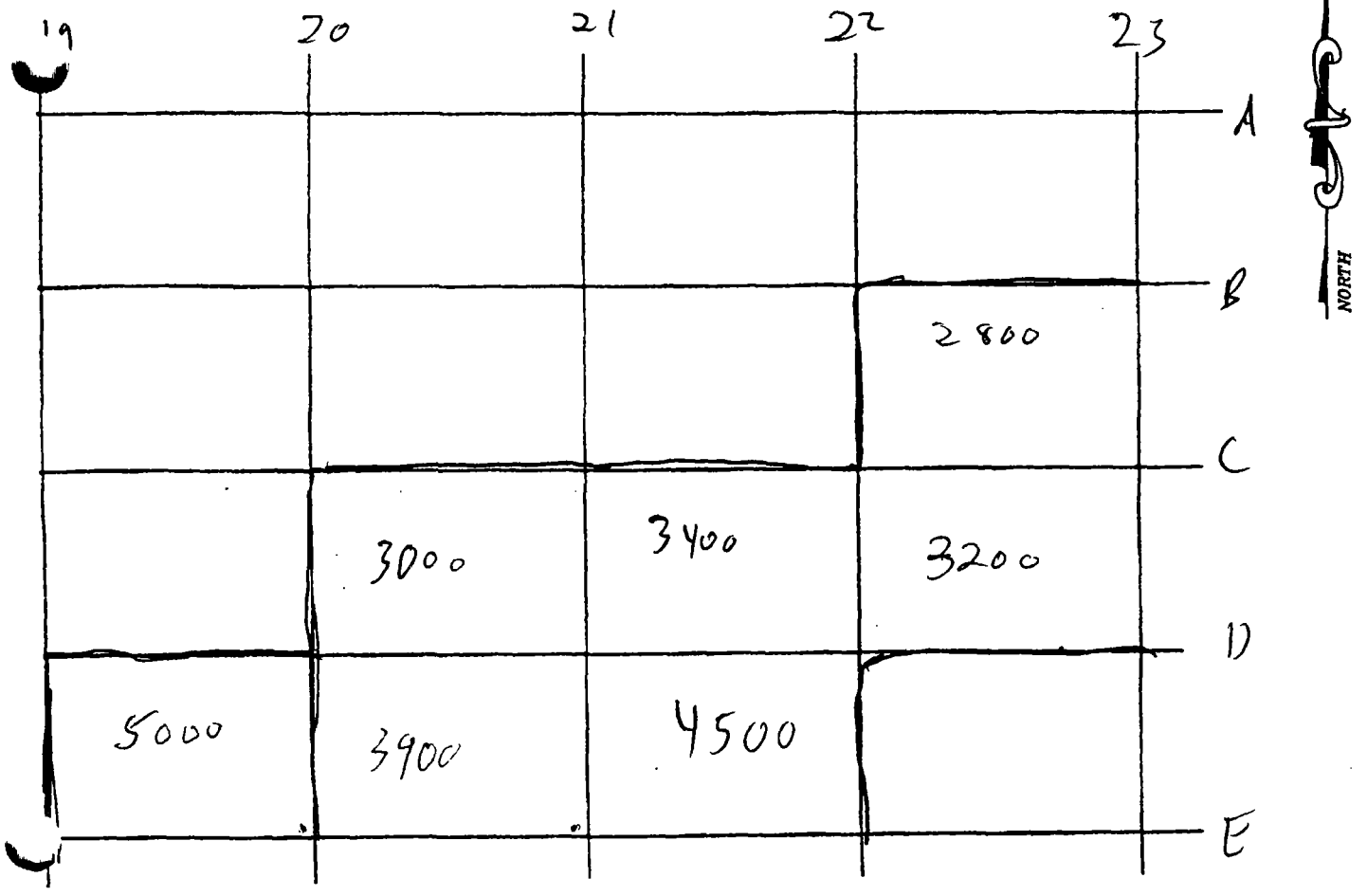
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00 TECHNICIAN: Toby Slowan

INST. MODEL: 2224 (Shielded) SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-1')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00

TECHNICIAN: Toby Shewn

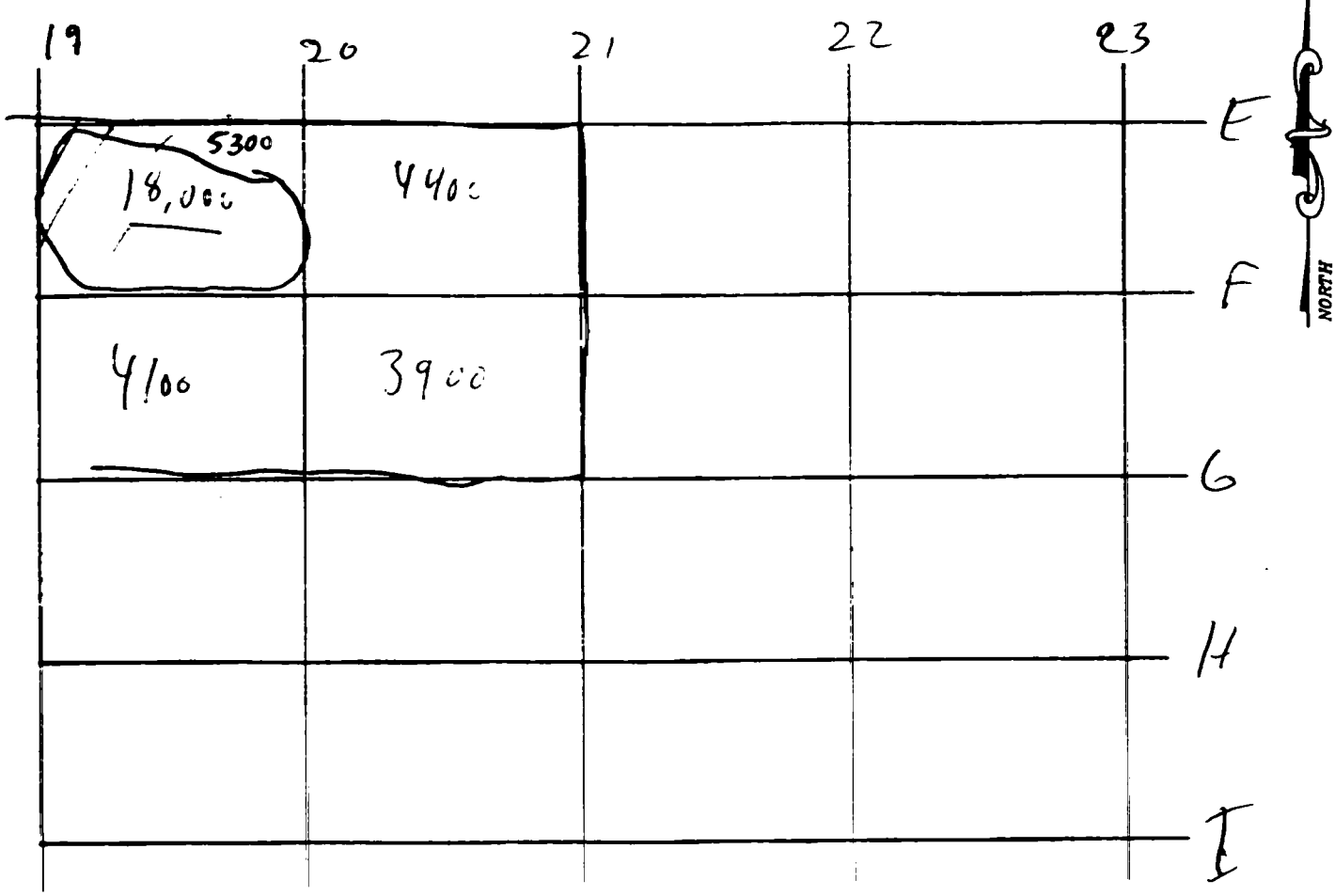
INST. MODEL: 2221 (shielded)

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: (-1')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

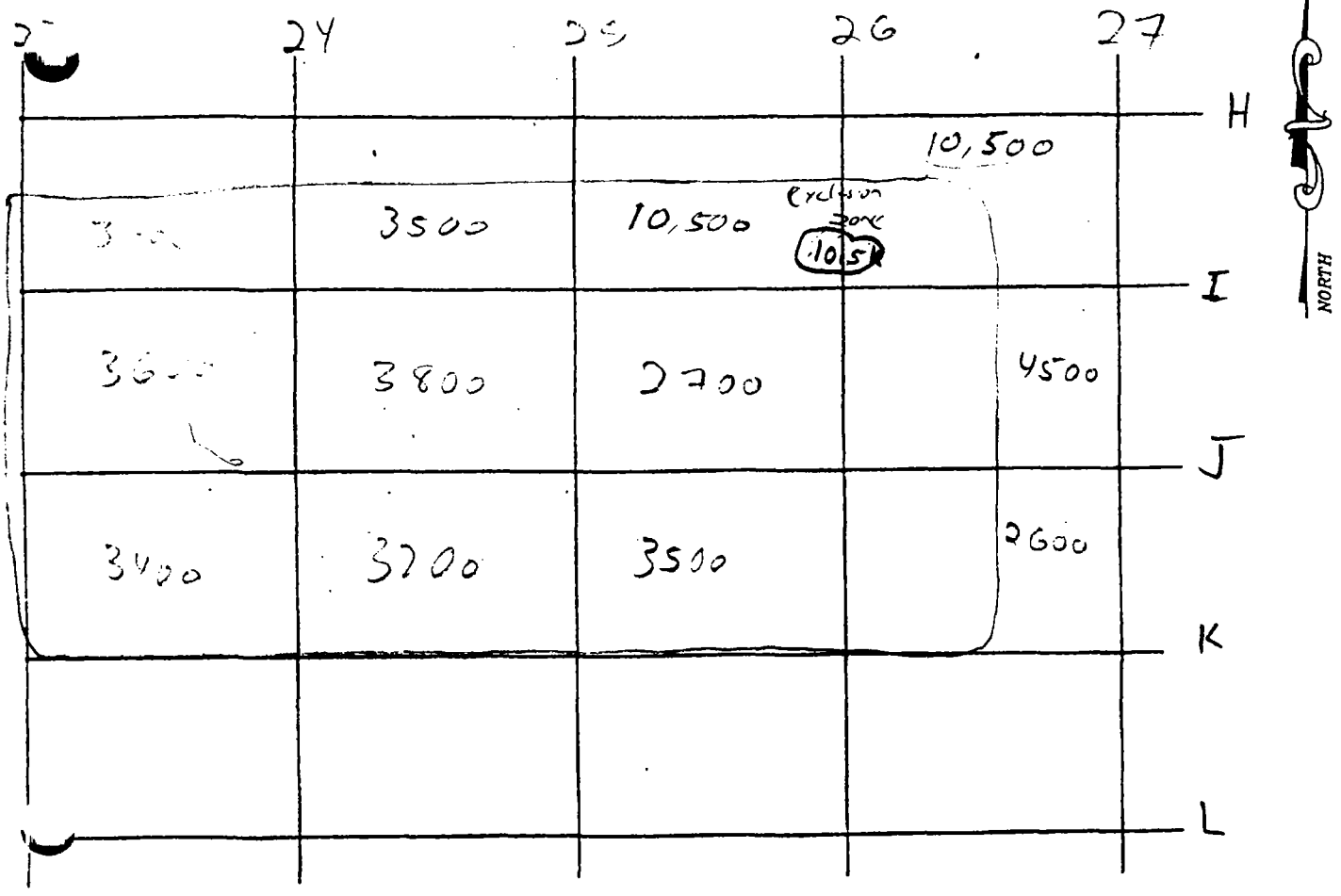
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/21/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-1) Area between grade beams after leveling 1' down

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

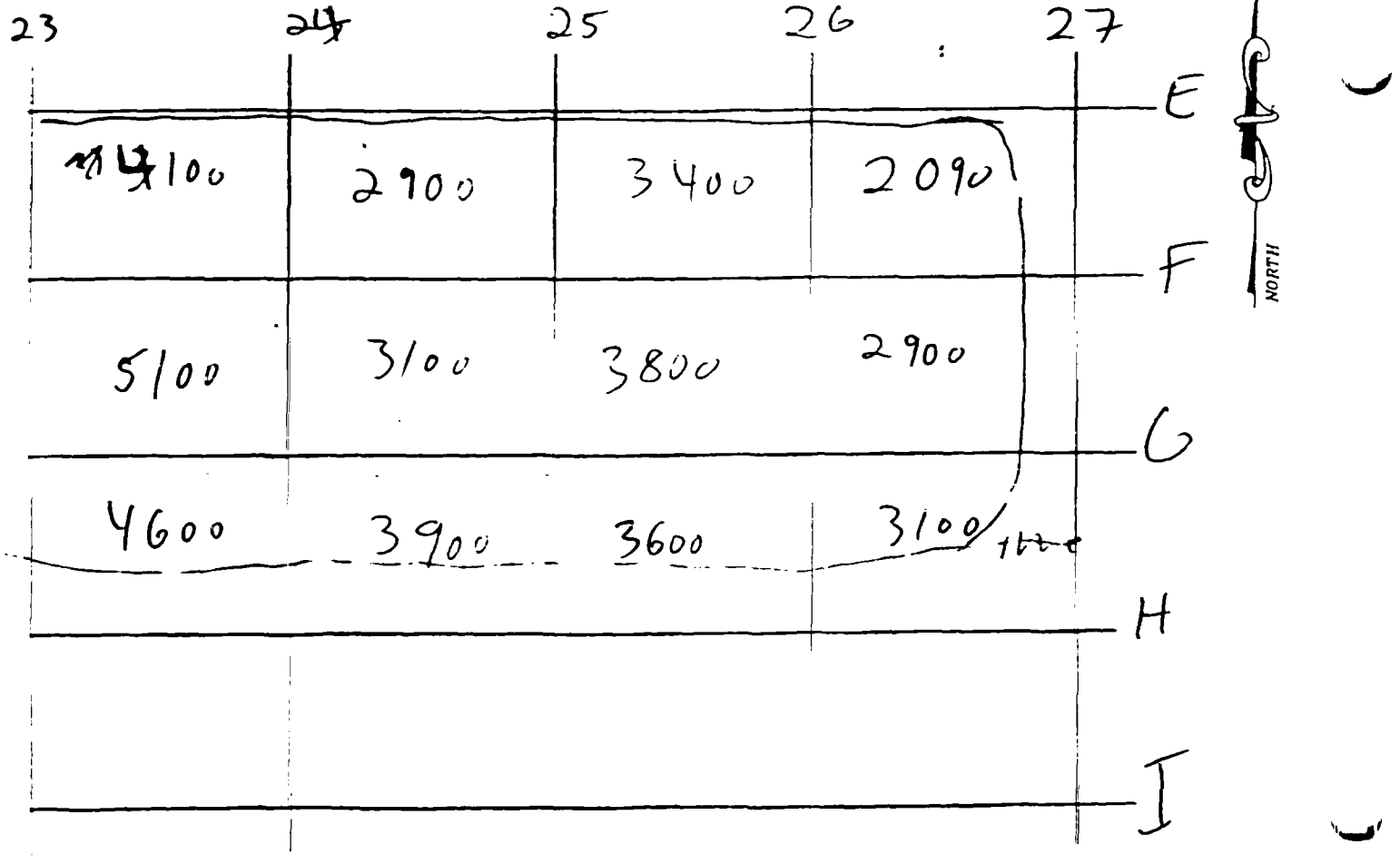
1 of 2

DATE: 7/28/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-1') Area between grade beams after lifting 16 ft

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

#2 of 2

DATE: 7/28/00

TECHNICIAN: Tony Shewan

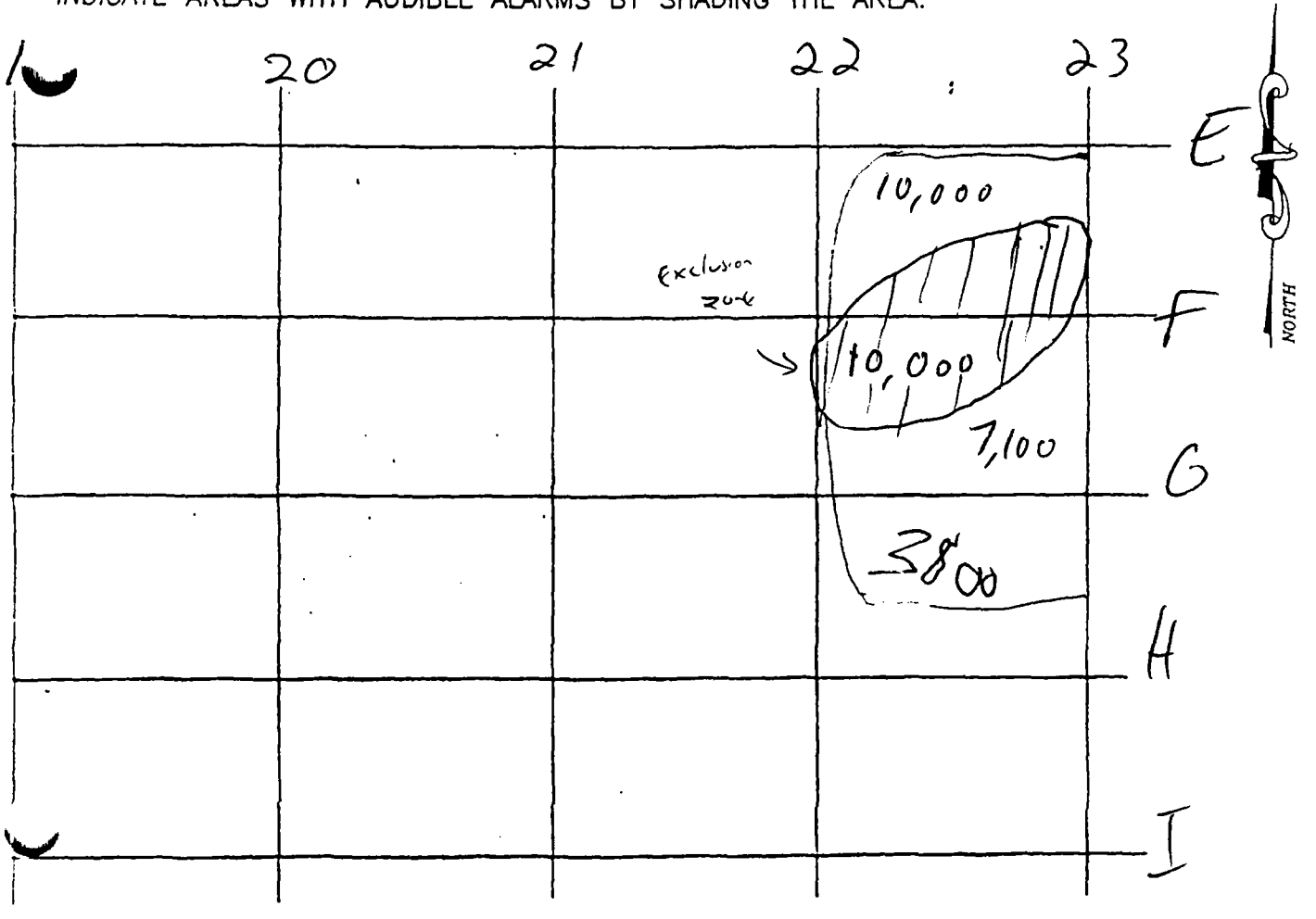
INST. MODEL: 2221 shielded

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: (1') Area between grade stakes after leveling 1' down

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION_INVENTORY.dwg

STS Consultants Ltd.

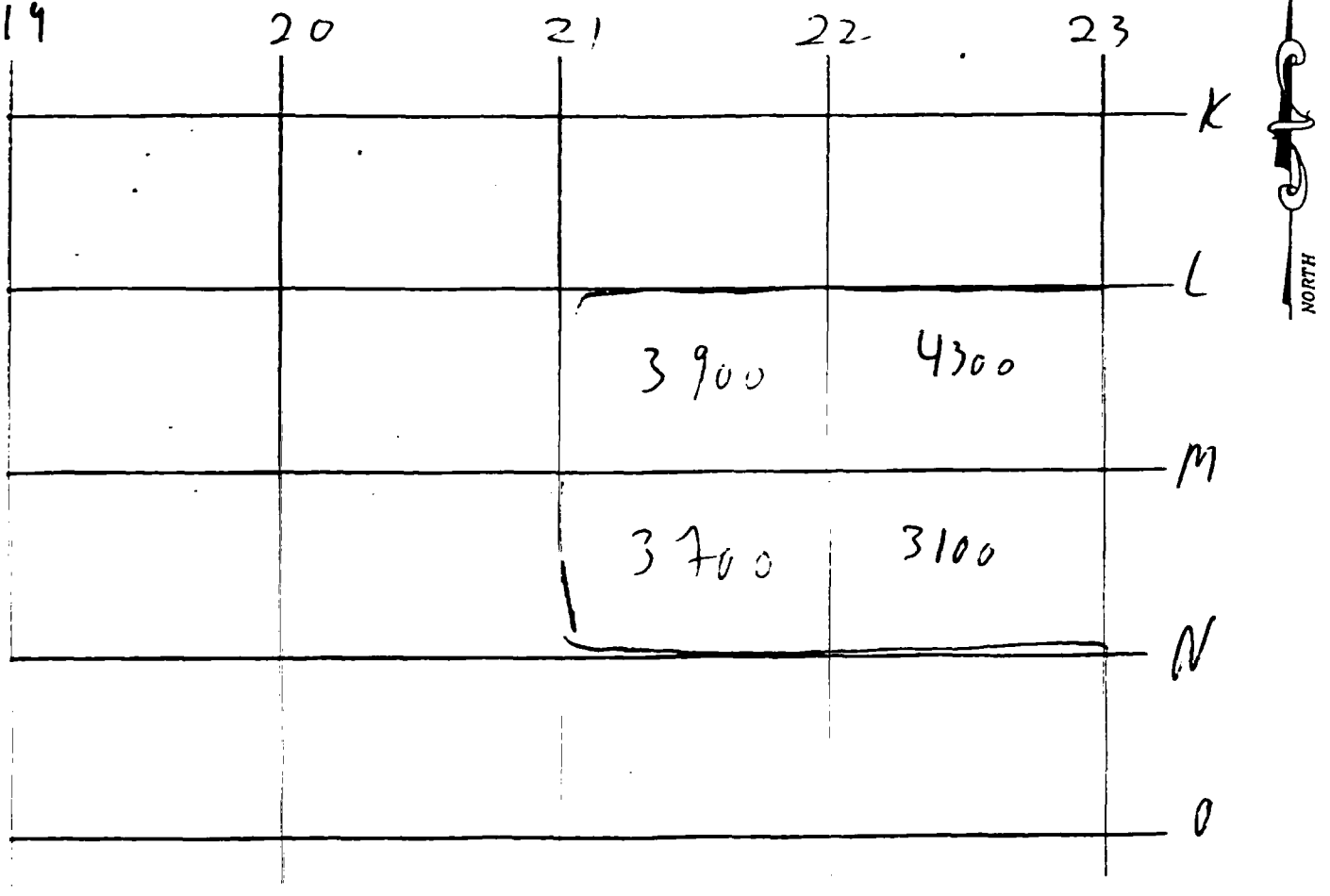
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/1/00 TECHNICIAN: Toby Stewart

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-1) Area scraped grade seems after leveling 1' down

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

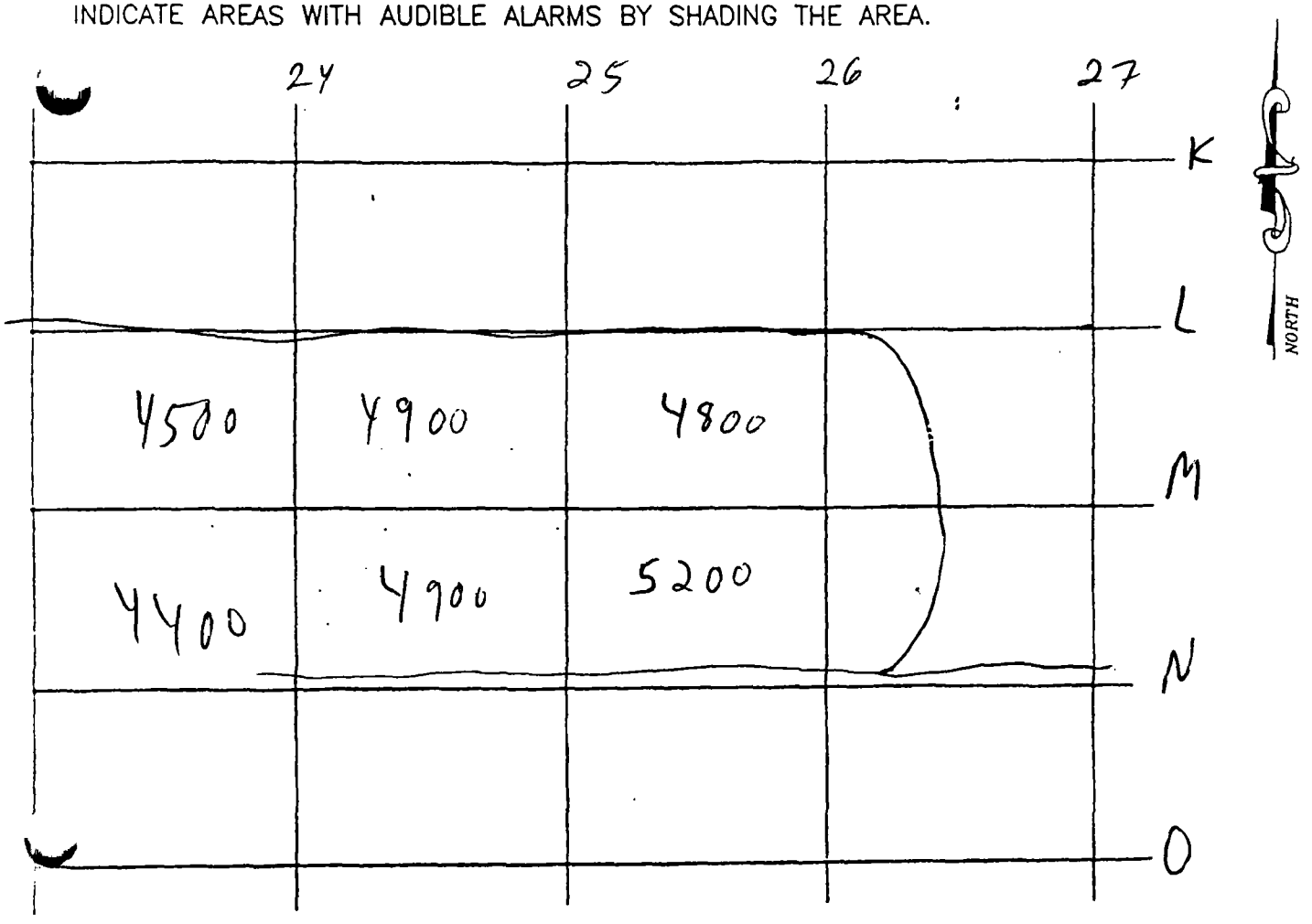
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/1/00 TECHNICIAN: Toby Skewes

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/31/00 LIFT ELEVATION: (-1') Area between grade stems after leveling 1' down

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION_INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-12

TECHNICIAN: TT

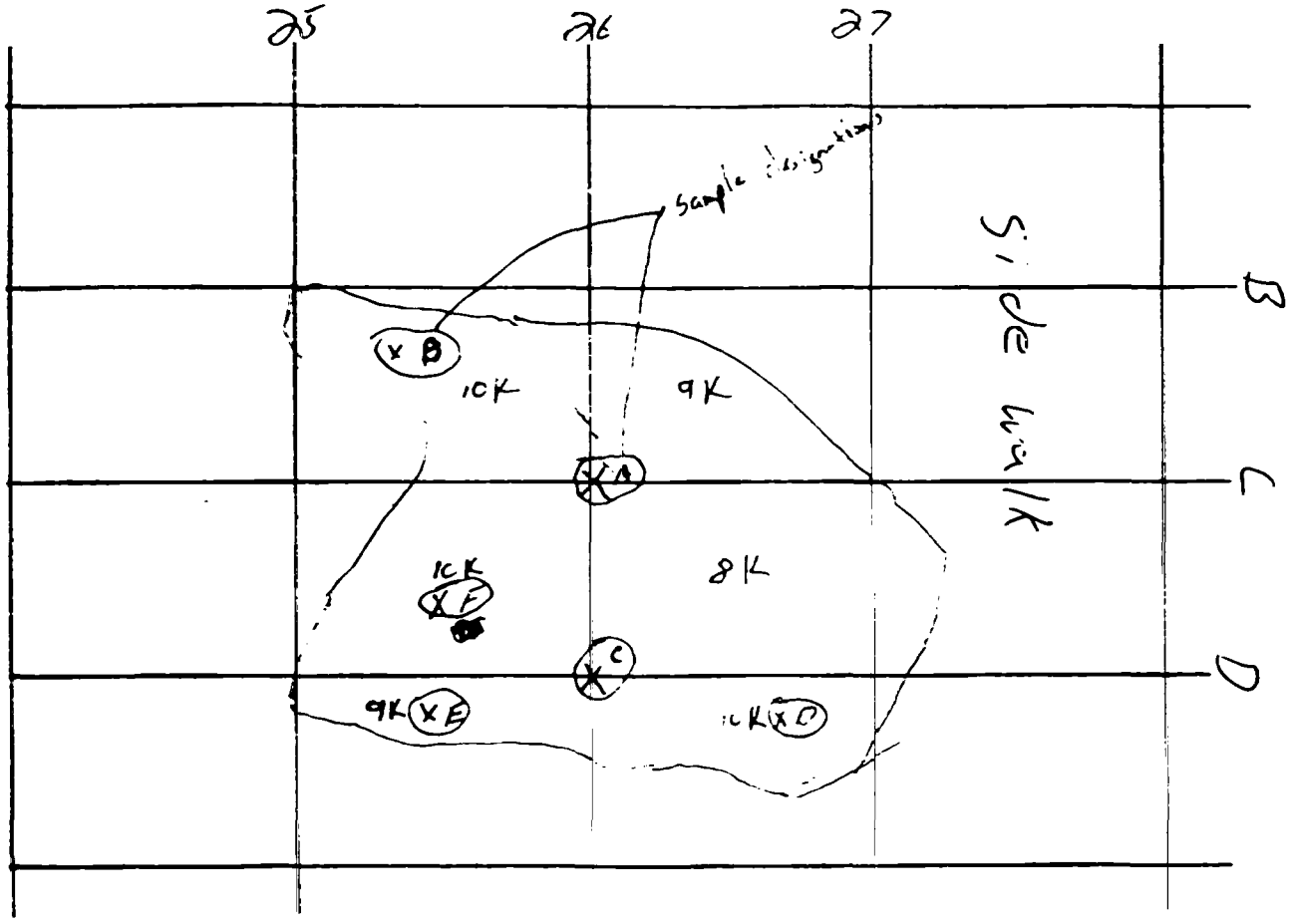
INST. MODEL: 2221 unshielded

SERIAL NO.: 184512

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: North East Pile 10ft

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

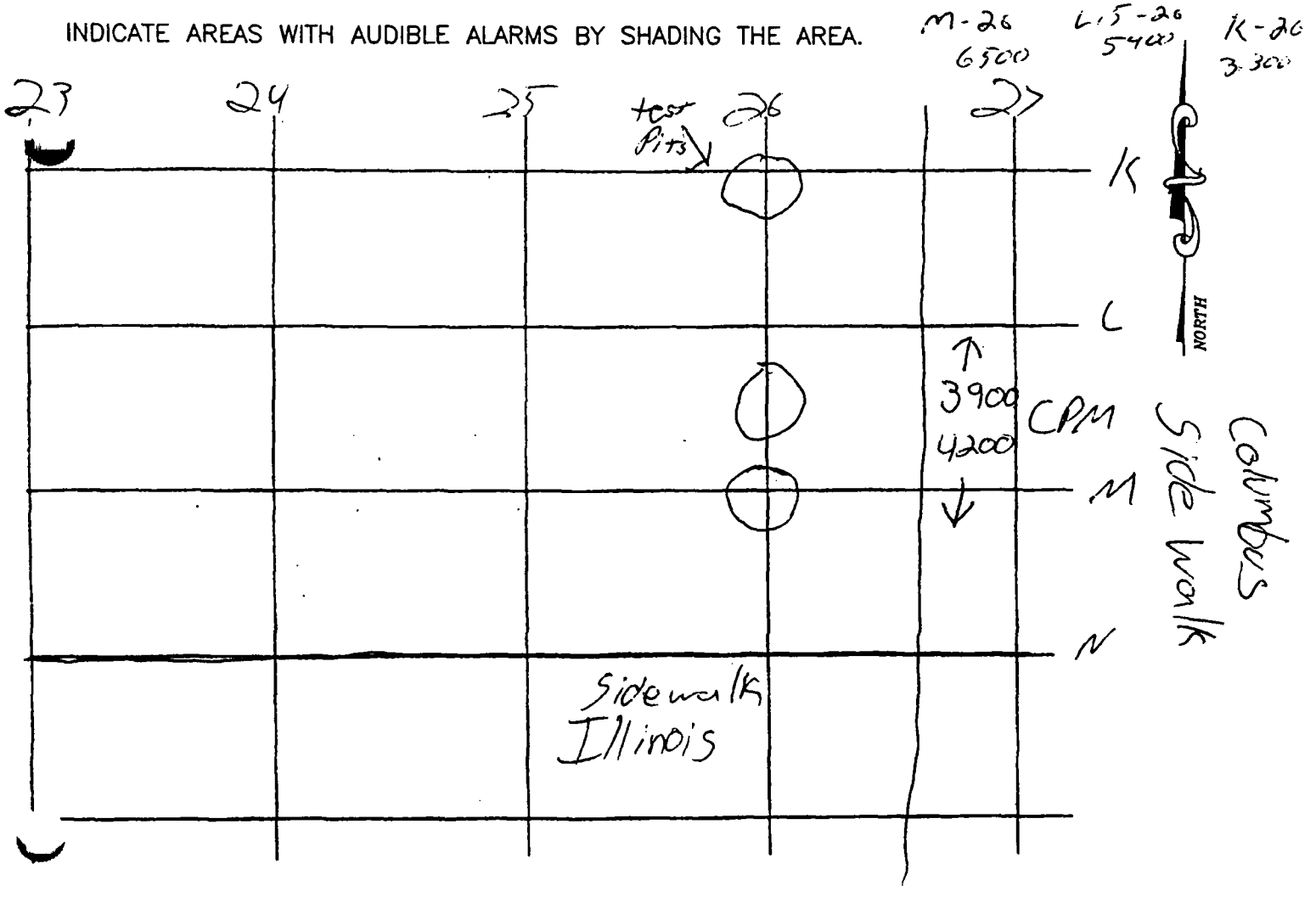
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-20-00 TECHNICIAN: Brett

INST. MODEL: 2221 shielded SERIAL NO.: 126497

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: test Pits 3ft

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

1 of 2

Surveys of unexcavated areas per EPA request

24-26/H-5-5
19-26/B-D
19-26/L-N
20-26/K-5-M

4 spots

DATE: 10/18/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221

SERIAL NO.: 127242

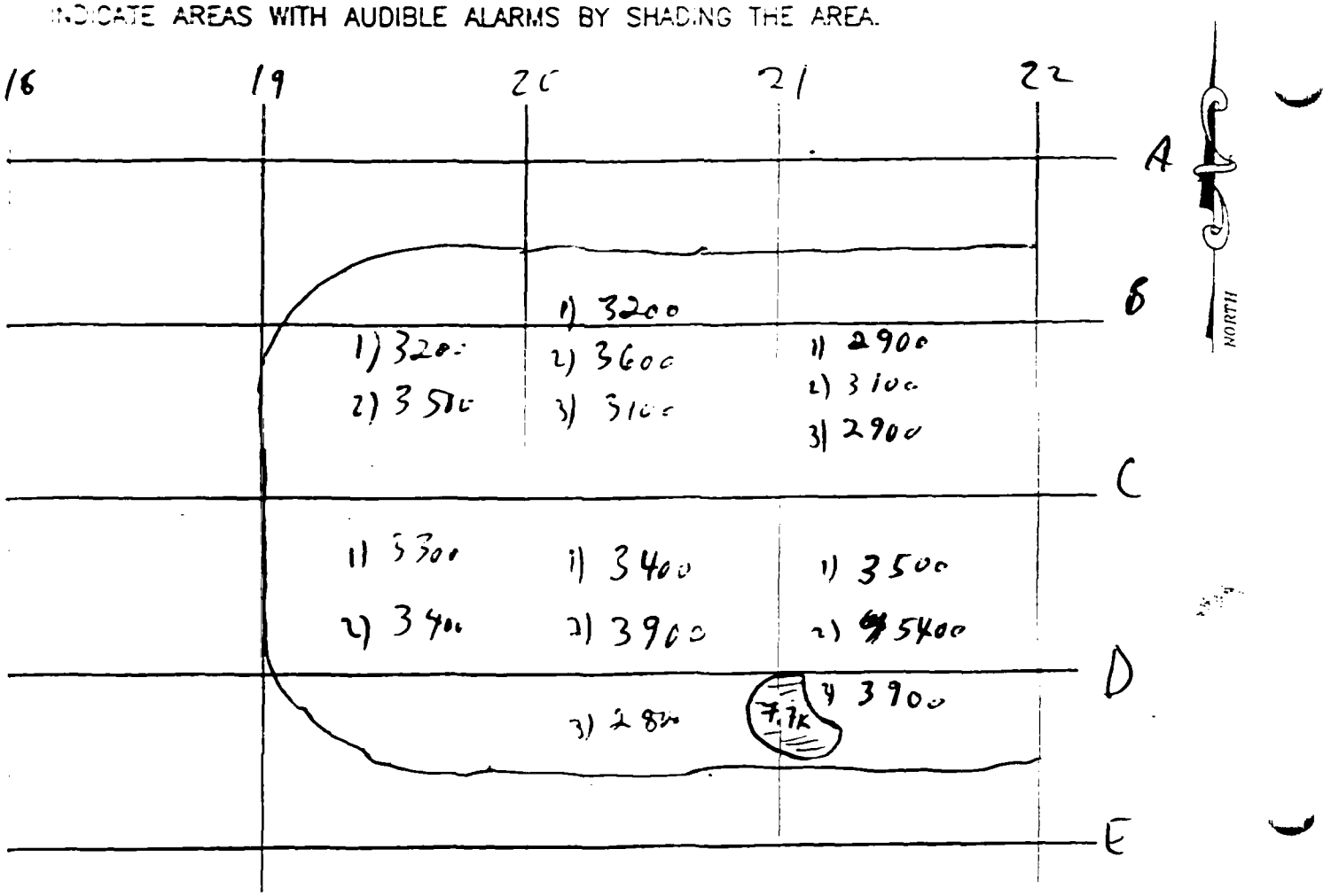
INST. CALIBRATED (Y/N)?

LIFT ELEVATION: 1-3
(lift 1 at -4')
starting at -2'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



\PROJECTS\24418\xk\

STS Consultants Ltd.

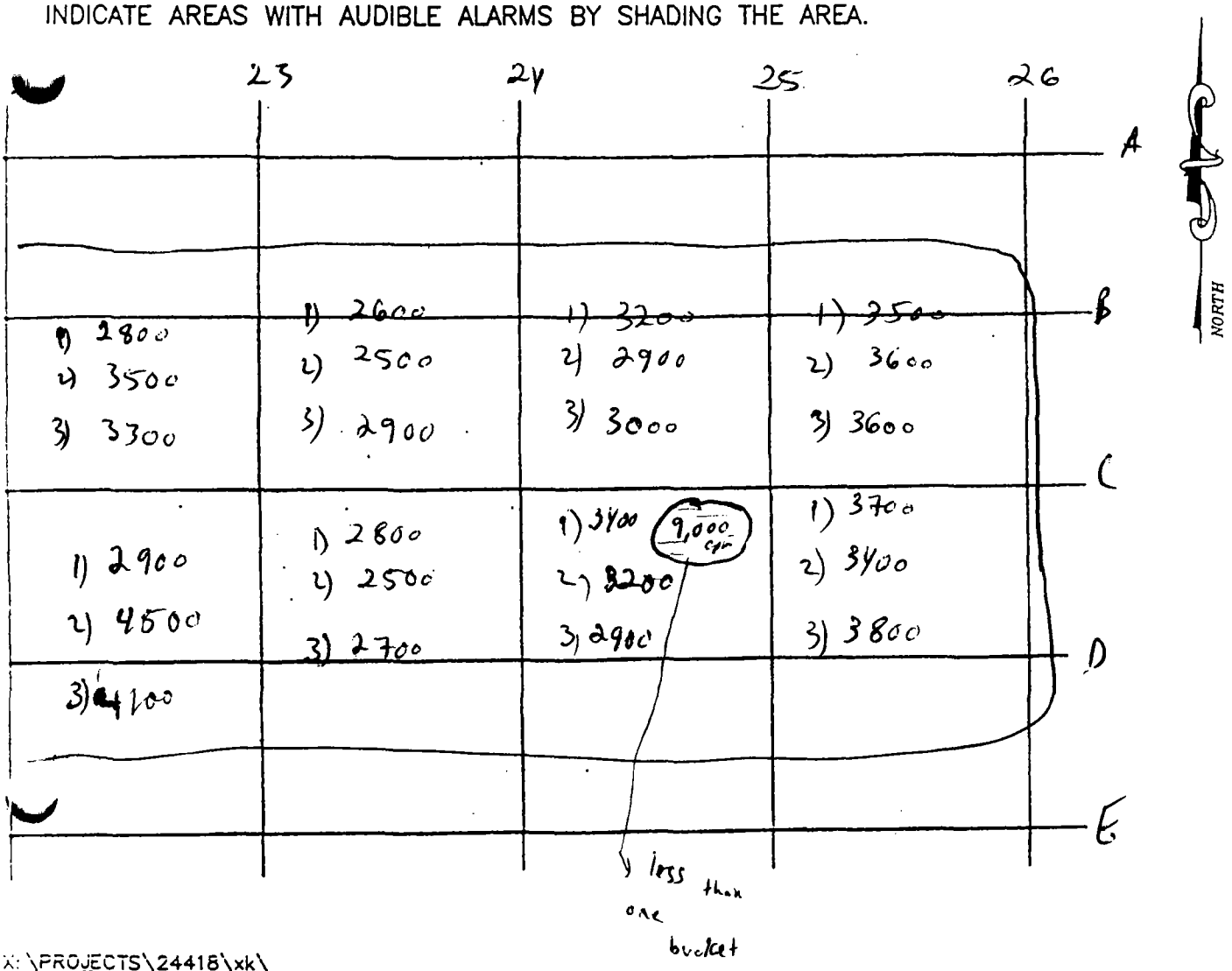
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/14/00 TECHNICIAN: Toby Stewart

INST. MODEL: 2221 SERIAL NO.: 12721

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: 1-3 (1st / at -4')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

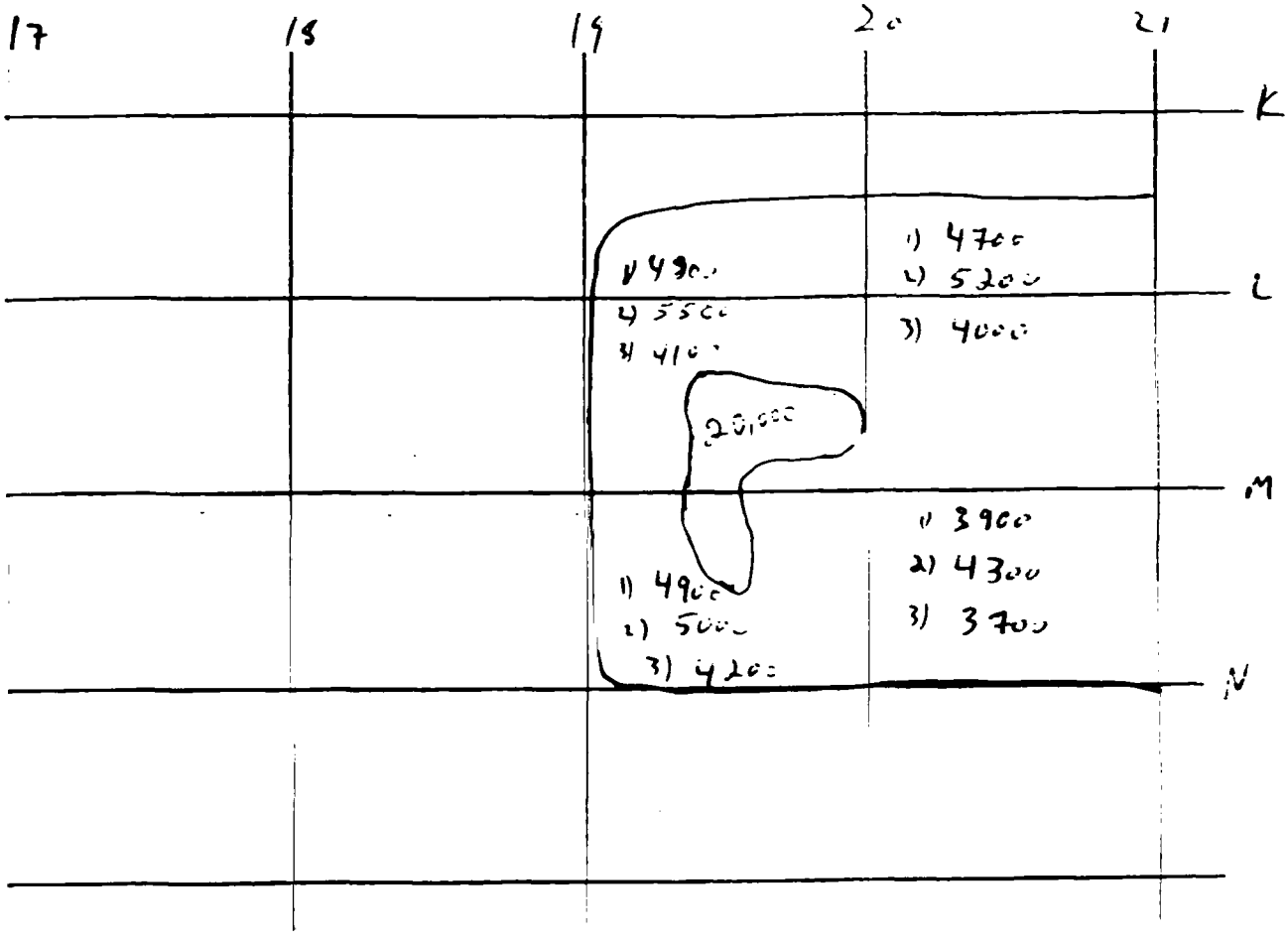
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/9/12 TECHNICIAN: Tod Sloan

INST. MODEL: 2221 SERIAL NO.: 127212

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 1-3
lift 1 at -4')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

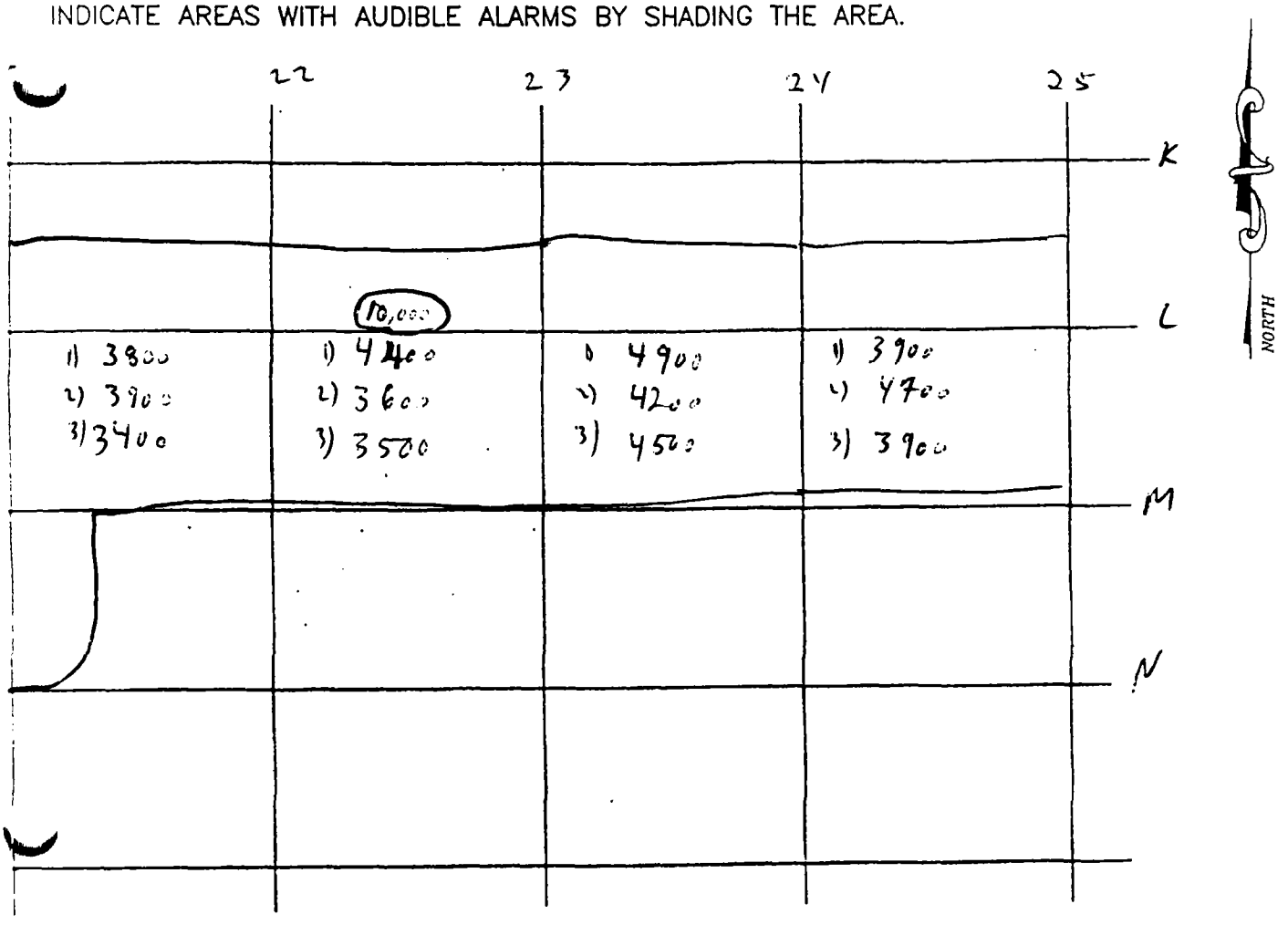
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/9/00 - 10/10/00 TECHNICIAN: Toby Shaw

INST. MODEL: 2221 SERIAL NO.: 127212

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: lift 1-3
(lift 1 at -V)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/9/00

TECHNICIAN: Toby Shewen

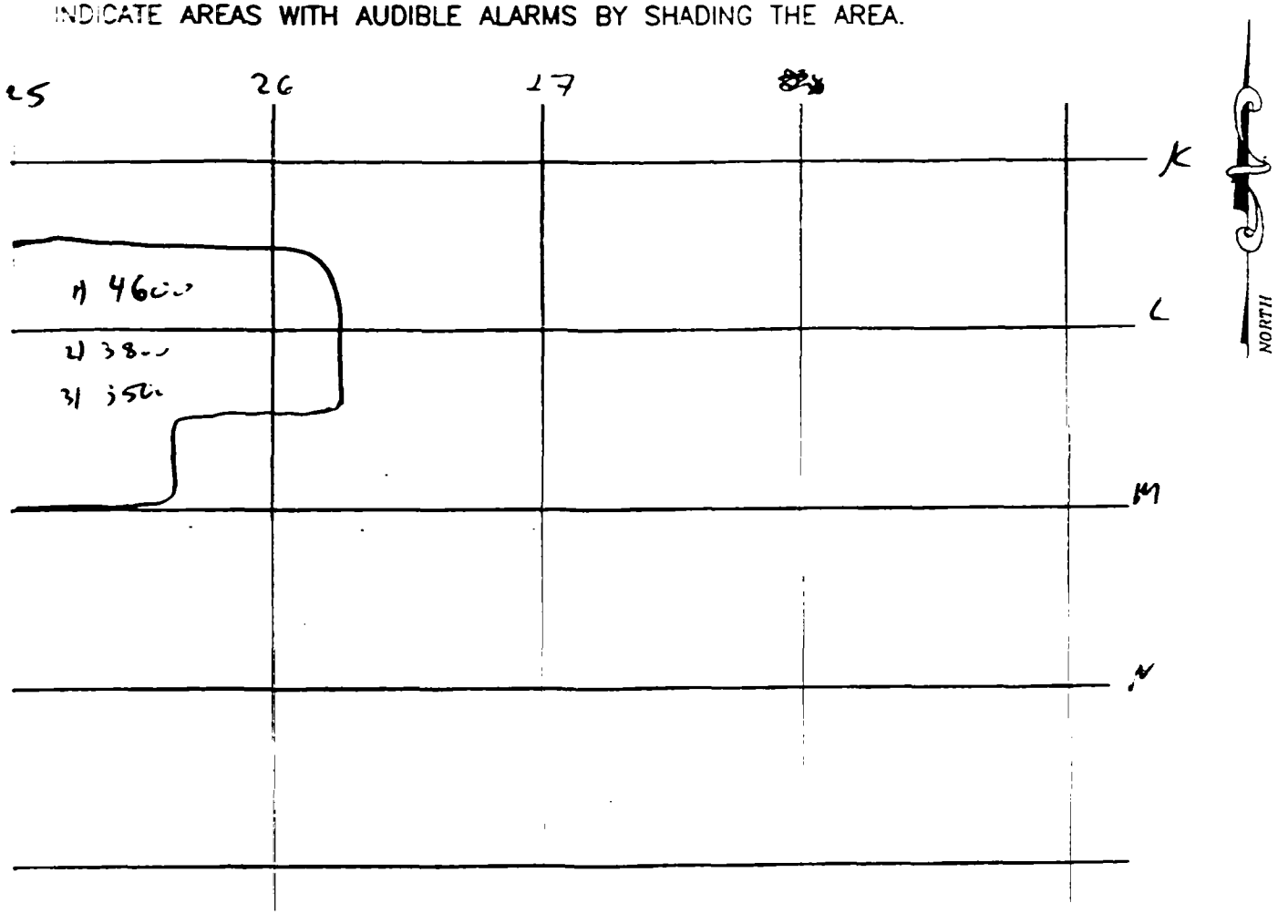
INST. MODEL: 2221

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: 1 - 3

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

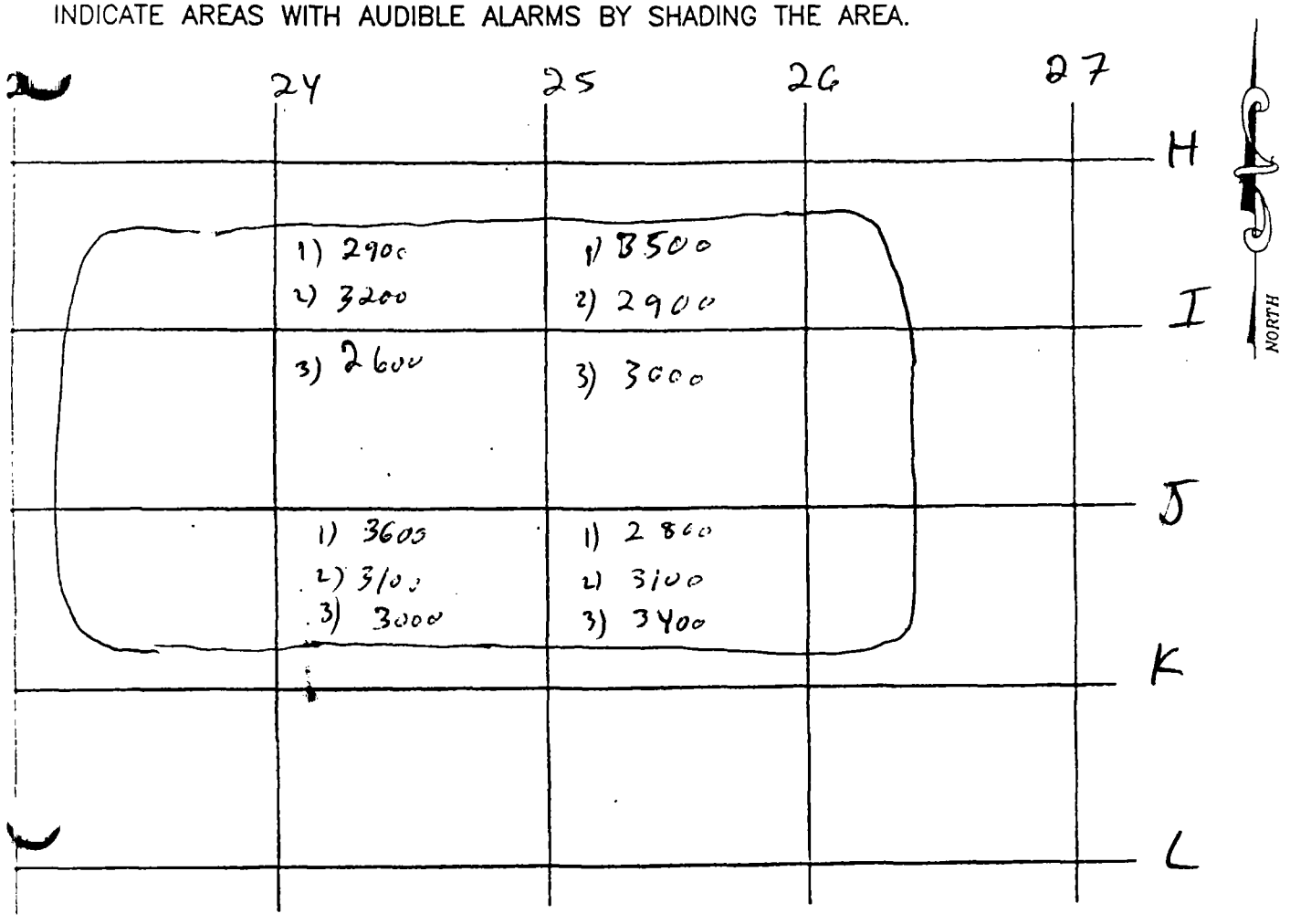
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/11/00 TECHNICIAN: Toby Slawan

INST. MODEL: 2221 SERIAL NO.: 12724

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 1-3
(1st 1 at -4')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

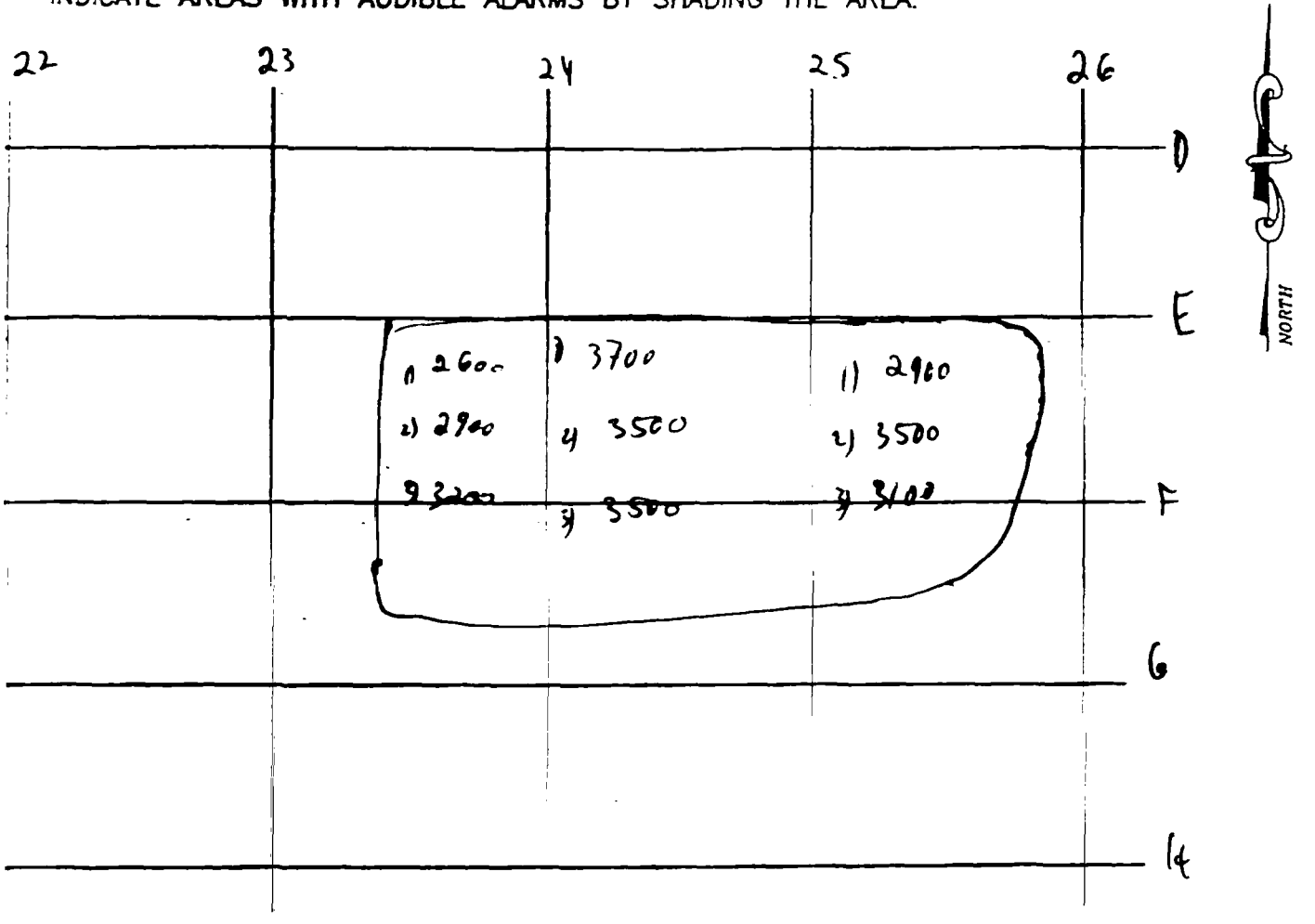
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/11/00 TECHNICIAN: Toby Stowe

INST. MODEL: 2221 SERIAL NO.: 12742

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 1-3
(1st 1 at -4')

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

AREA C SURVEYS: GRADE BEAM EXCAVATIONS

Where grade beam data?

CAISSON SURVEYS

AREA C

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/11/00

TECHNICIAN: Toby Shewa

INST. MODEL: 2221

SERIAL NO.: 132844

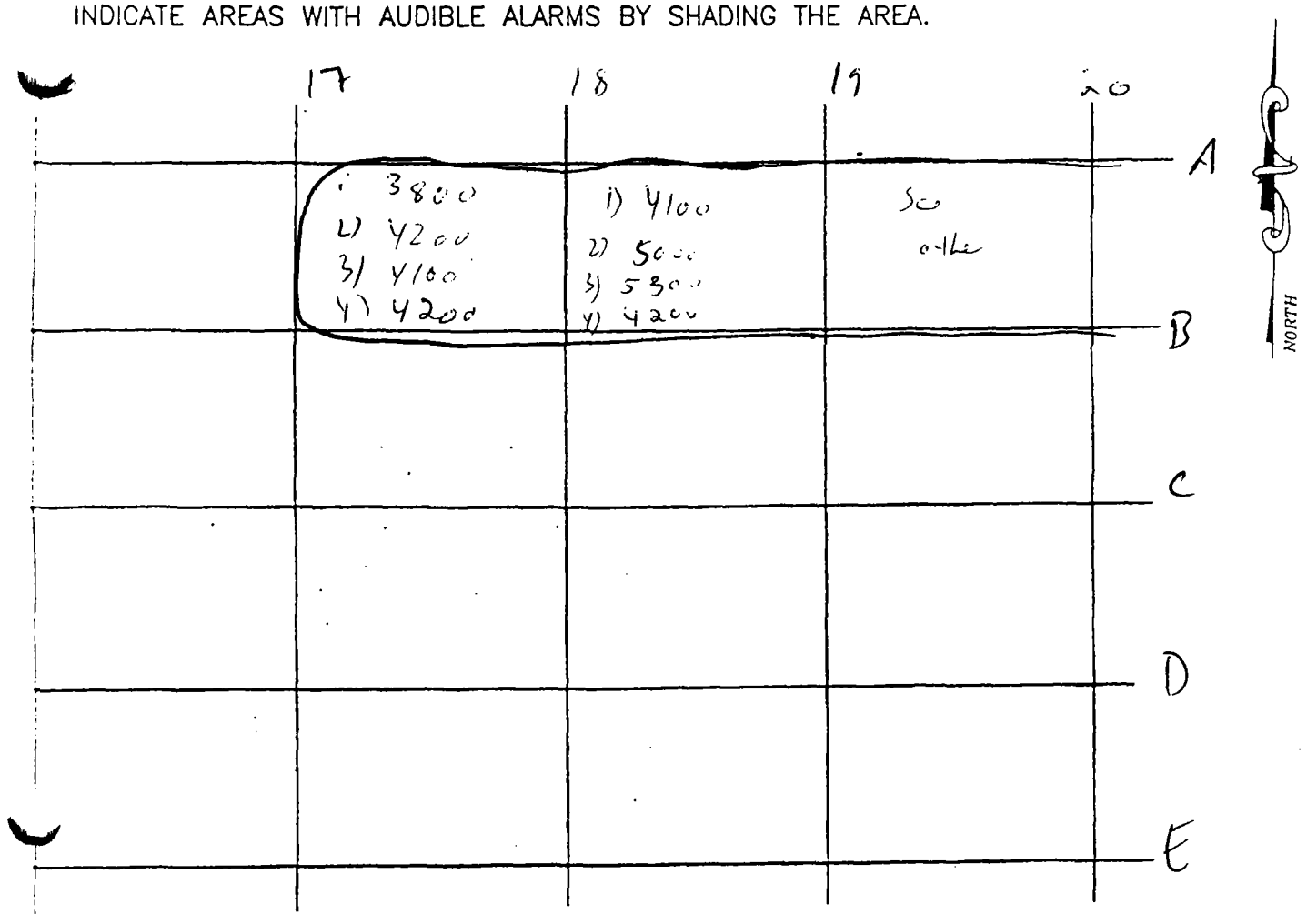
INST. CALIBRATED (Y/N)? (Shielded)

LIFT ELEVATION: Grade Beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

2 .F

DATE: ~~7~~ 8/4/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221 shielded

SERIAL NO.: 134542

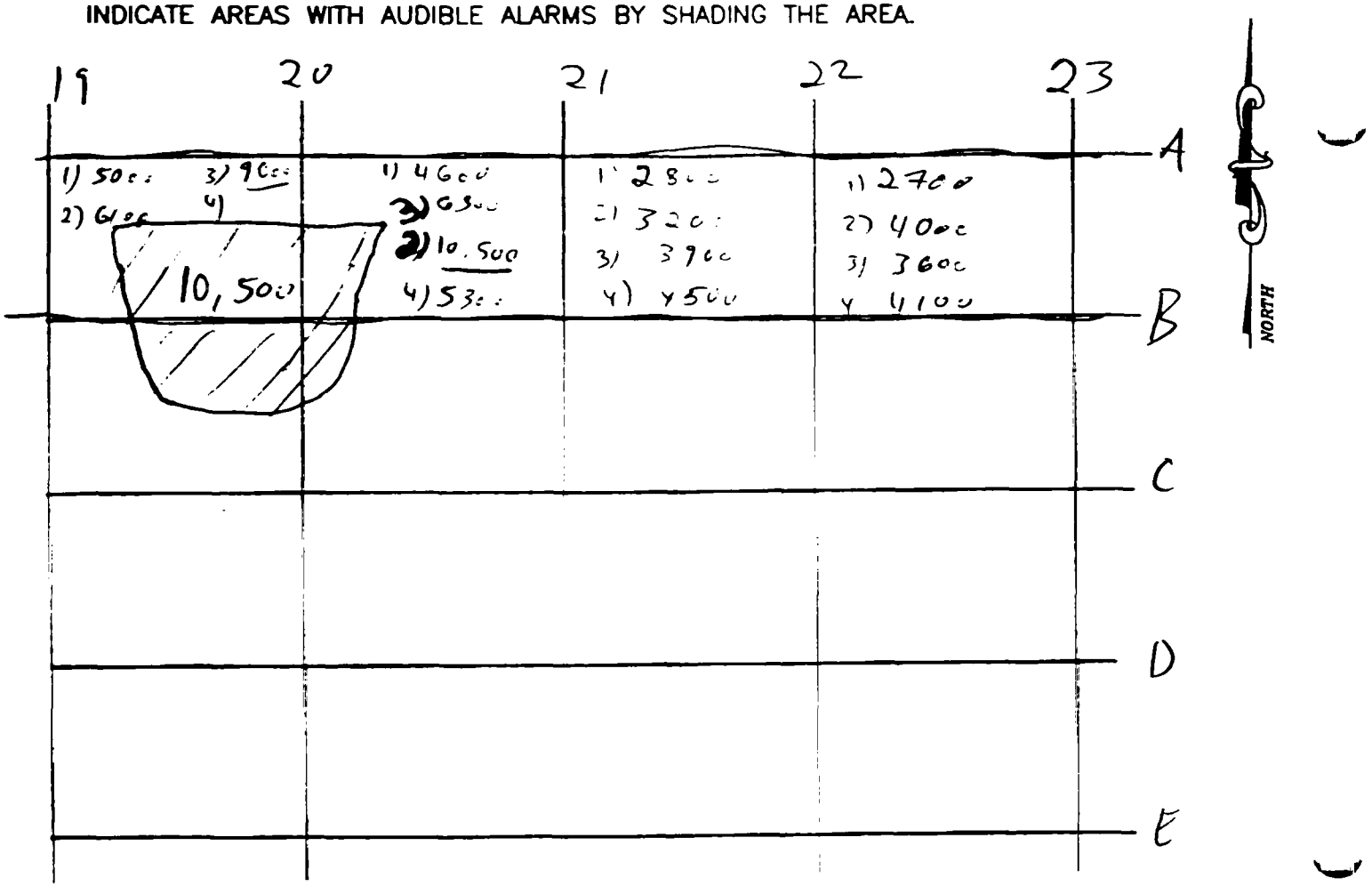
INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: grade beam excavations lifts 1-4

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

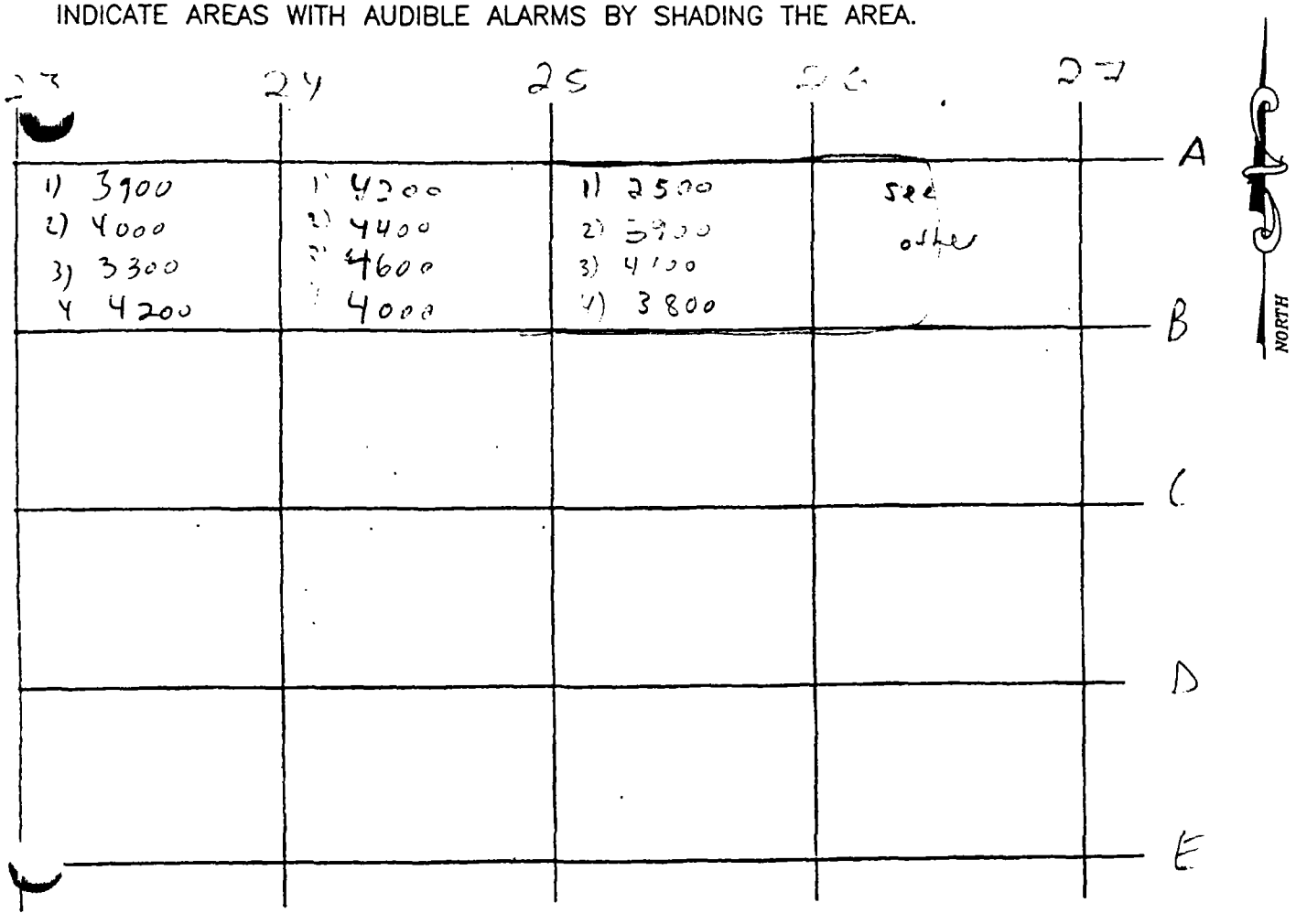
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/13/00 TECHNICIAN: T.S.

INST. MODEL: 2221 shielded SERIAL NO.: 13452

INST. CALIBRATED (Y)/N)? 3/31/00 LIFT ELEVATION: grade beam excavation lifts 1-4

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/10/00

TECHNICIAN: Toby Shewan

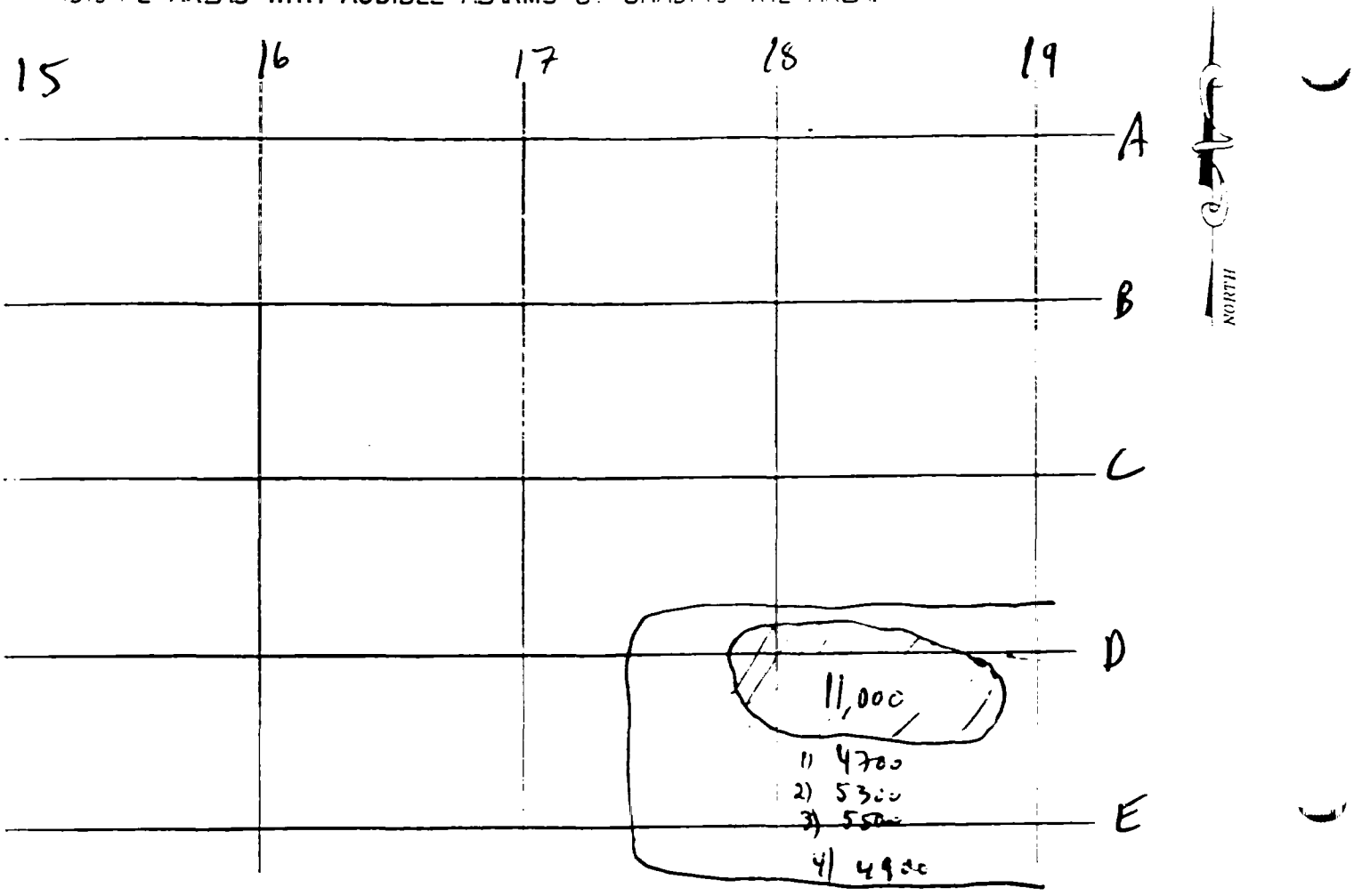
INST. MODEL: 2221

SERIAL NO.: 132 844

INST. CALIBRATED (Y/N)? [illegible]

LIFT ELEVATION: Grade Beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

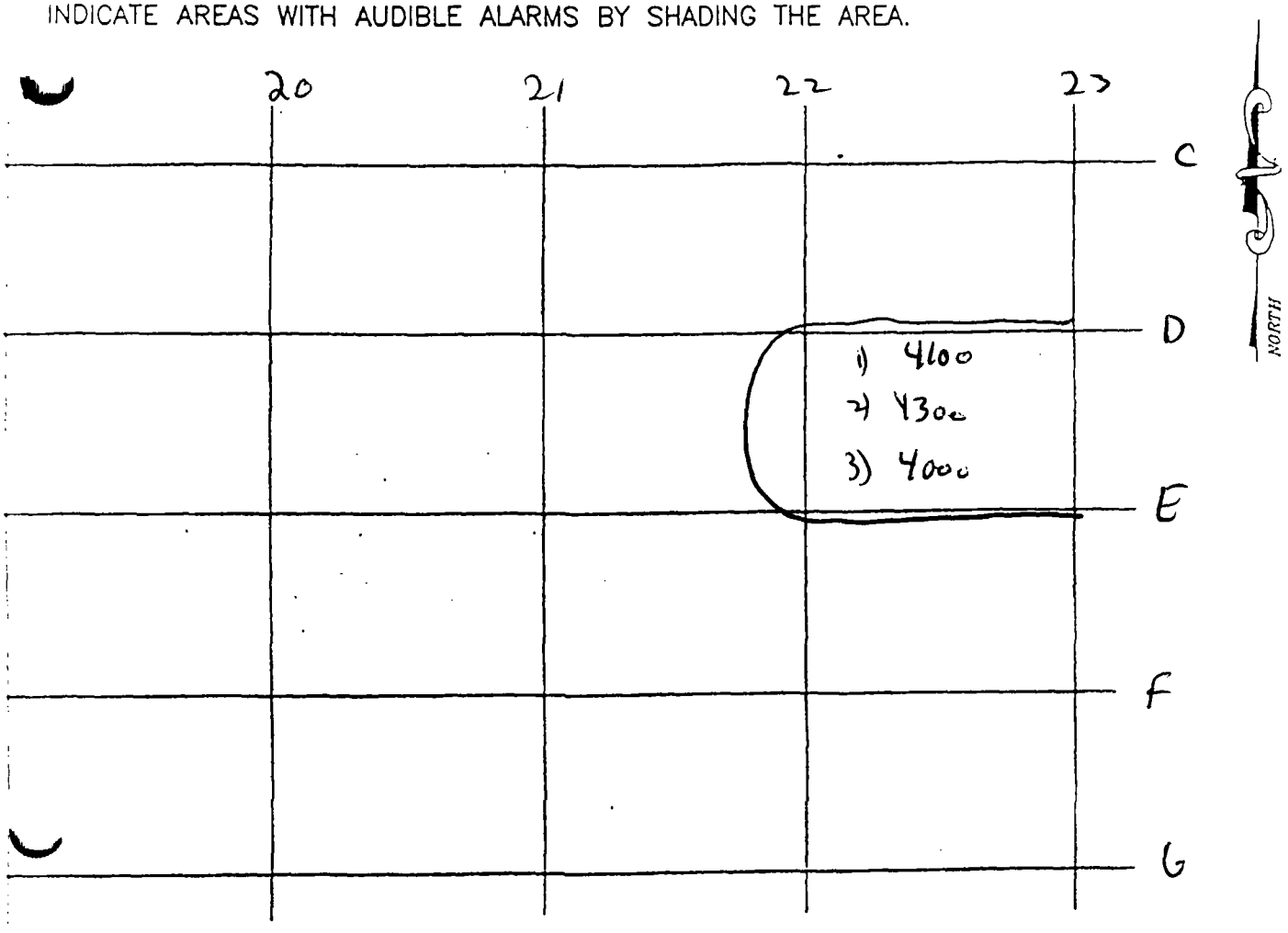
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/24/00 TECHNICIAN: Toby Skewes

INST. MODEL: 2221 SERIAL NO.: 127242

INST. CALIBRATED (Y)/N)? Scaled LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

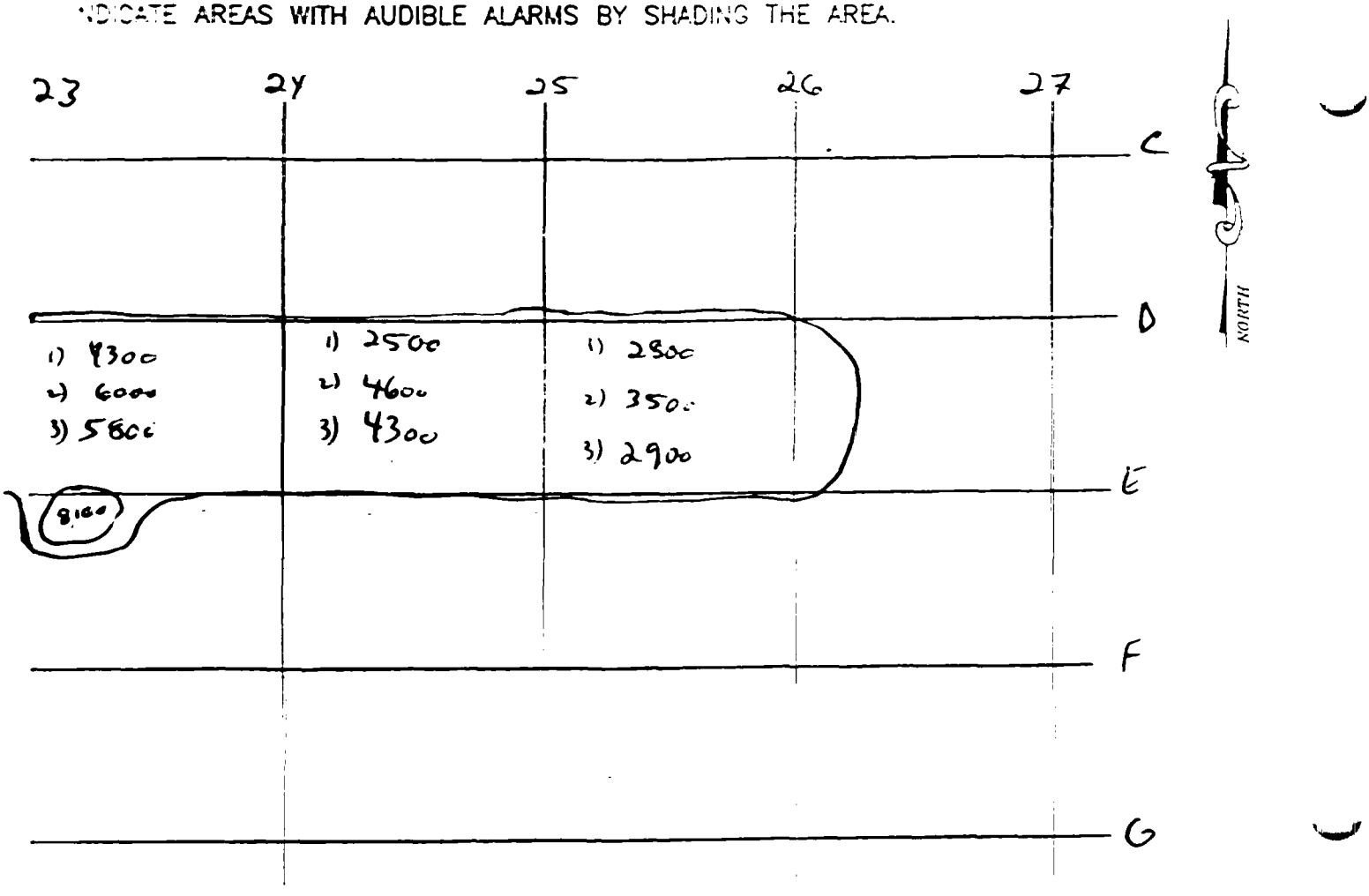
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/24/00 TECHNICIAN: Tob, Shawn

GST. MODEL: 2221 SERIAL NO.: 127242

GST. CALIBRATED (Y/N)? Checked LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/21 & 8/22

TECHNICIAN: BRETT BARTON

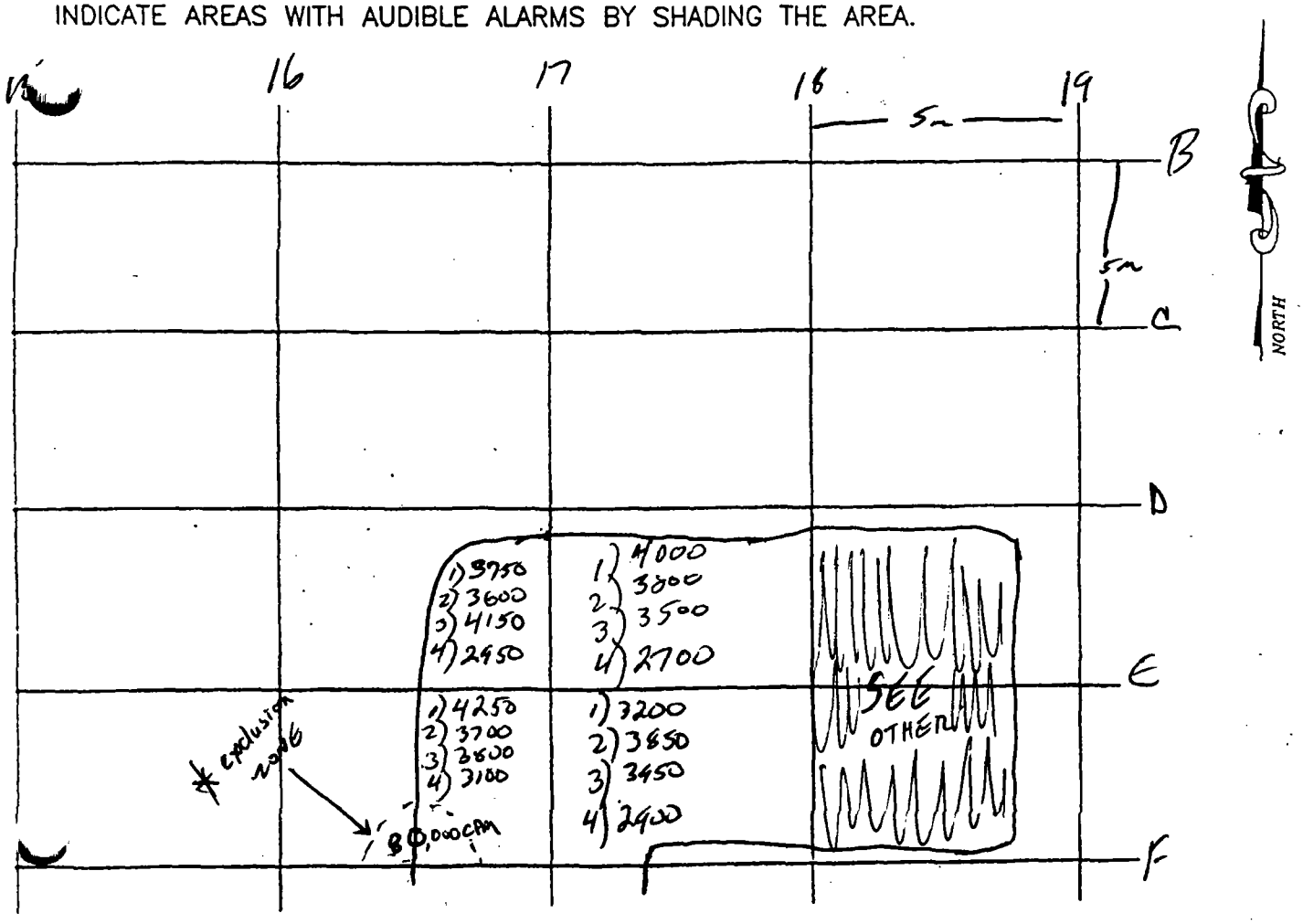
INST. MODEL: Ludlum 2221 (6th. edited)

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 3/5/2002

LIFT ELEVATION: GRADE BEAM

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/21 & 8/22

TECHNICIAN: Brent Baldwin

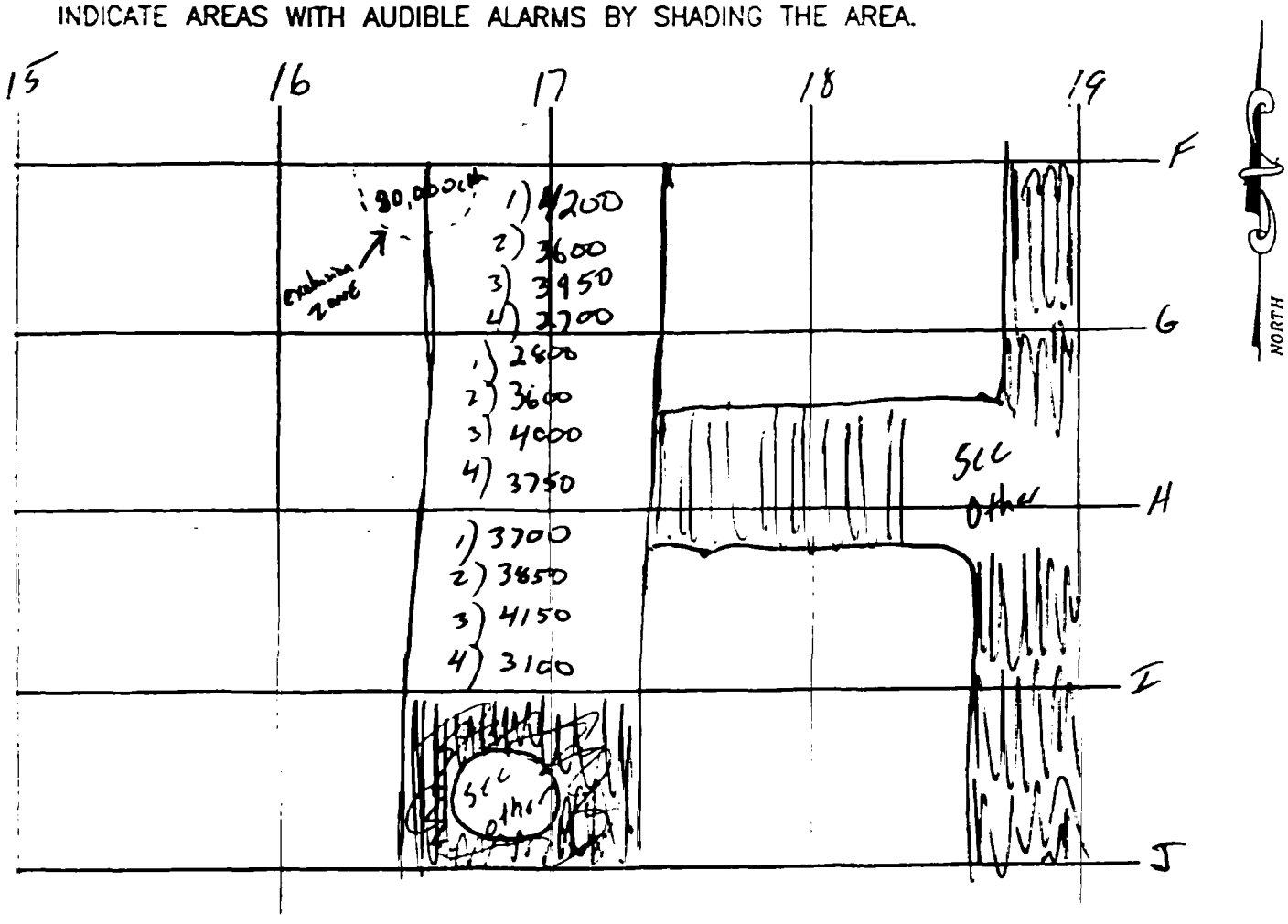
INST. MODEL: Ludlum 2221 (shielded)

SERIAL NO.: 132 844

INST. CALIBRATED (Y/N)? 3/5/2000

LIFT ELEVATION: GRADE BEAM

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

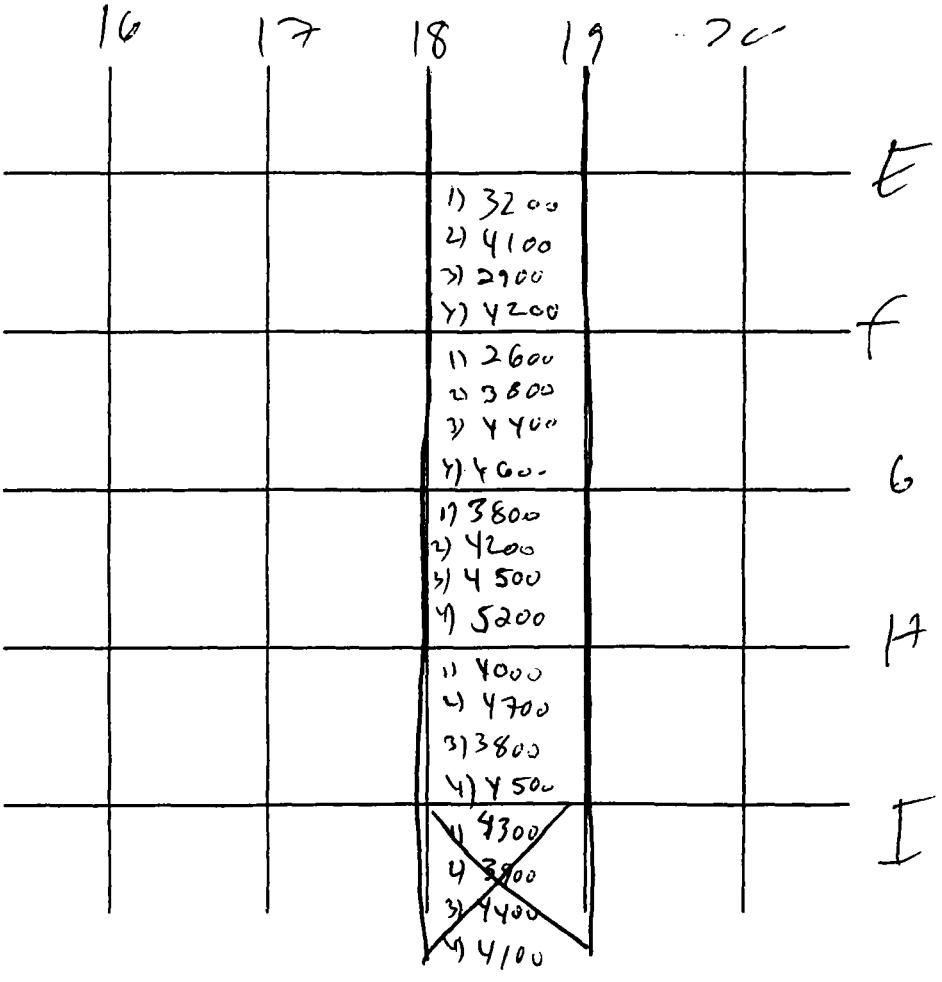
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/14/00 TECHNICIAN: Toby Shawn

INST. MODEL: 2221 Strelled SERIAL NO.: 1328644

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

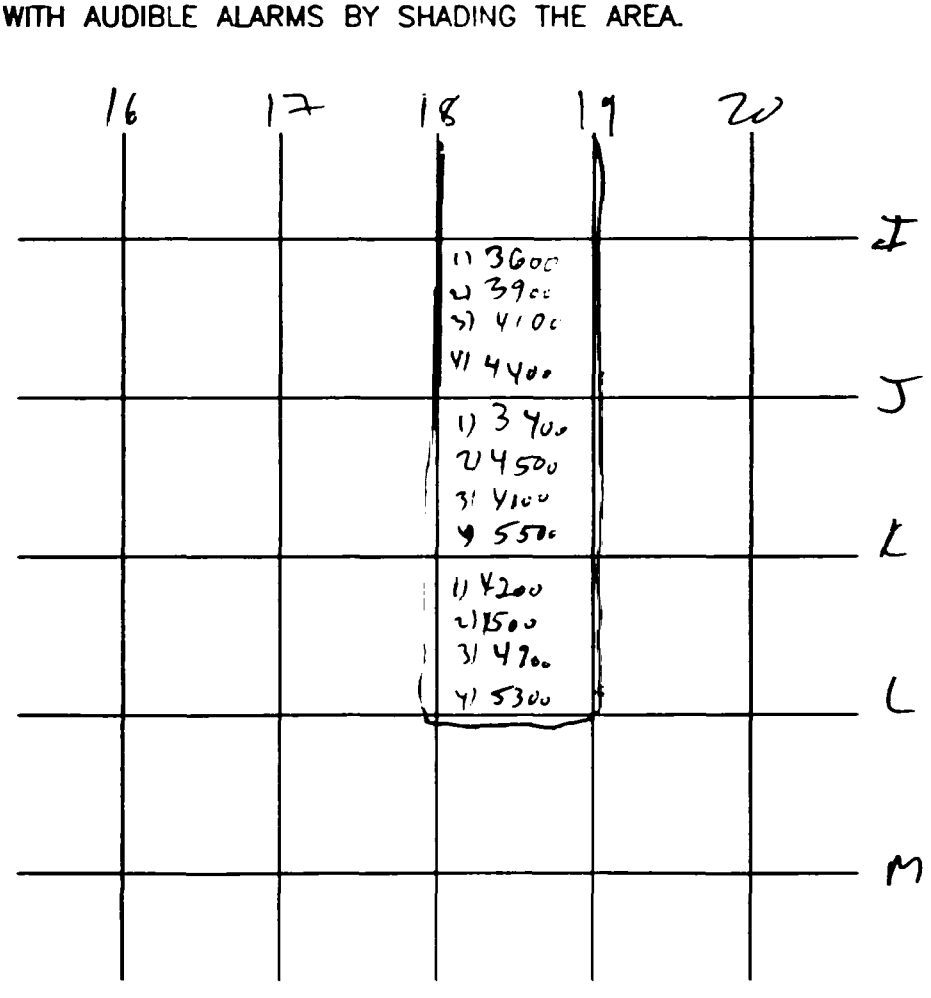
2 of

DATE: 8/15/00 TECHNICIAN: Toby Shaw

INST. MODEL: 2221 (shielded) SERIAL NO.: 1325049

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 08/25/00

TECHNICIAN: Toby Slewan

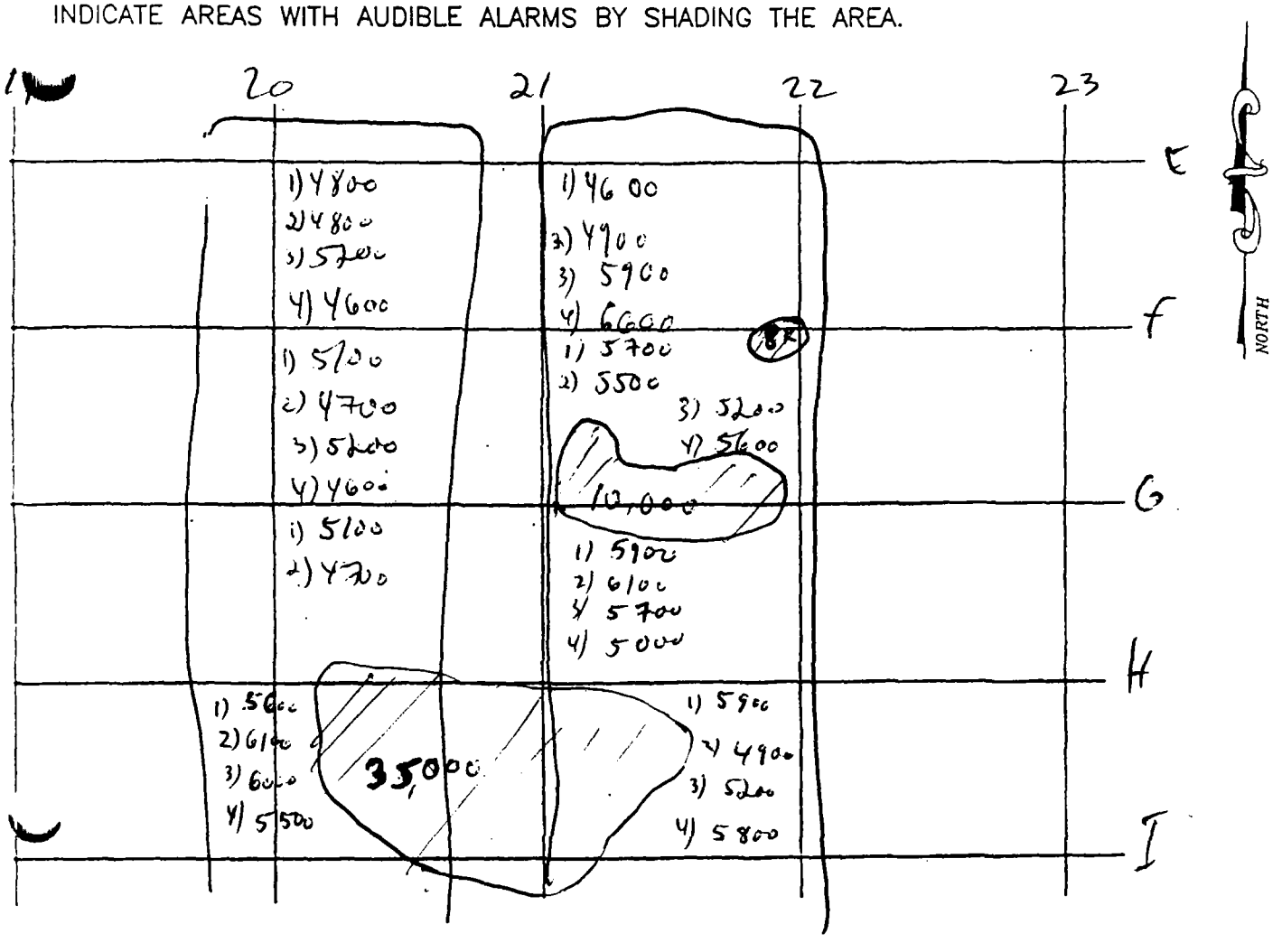
INST. MODEL: 2221

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? shielded

LIFT ELEVATION: ~~[illegible]~~ grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

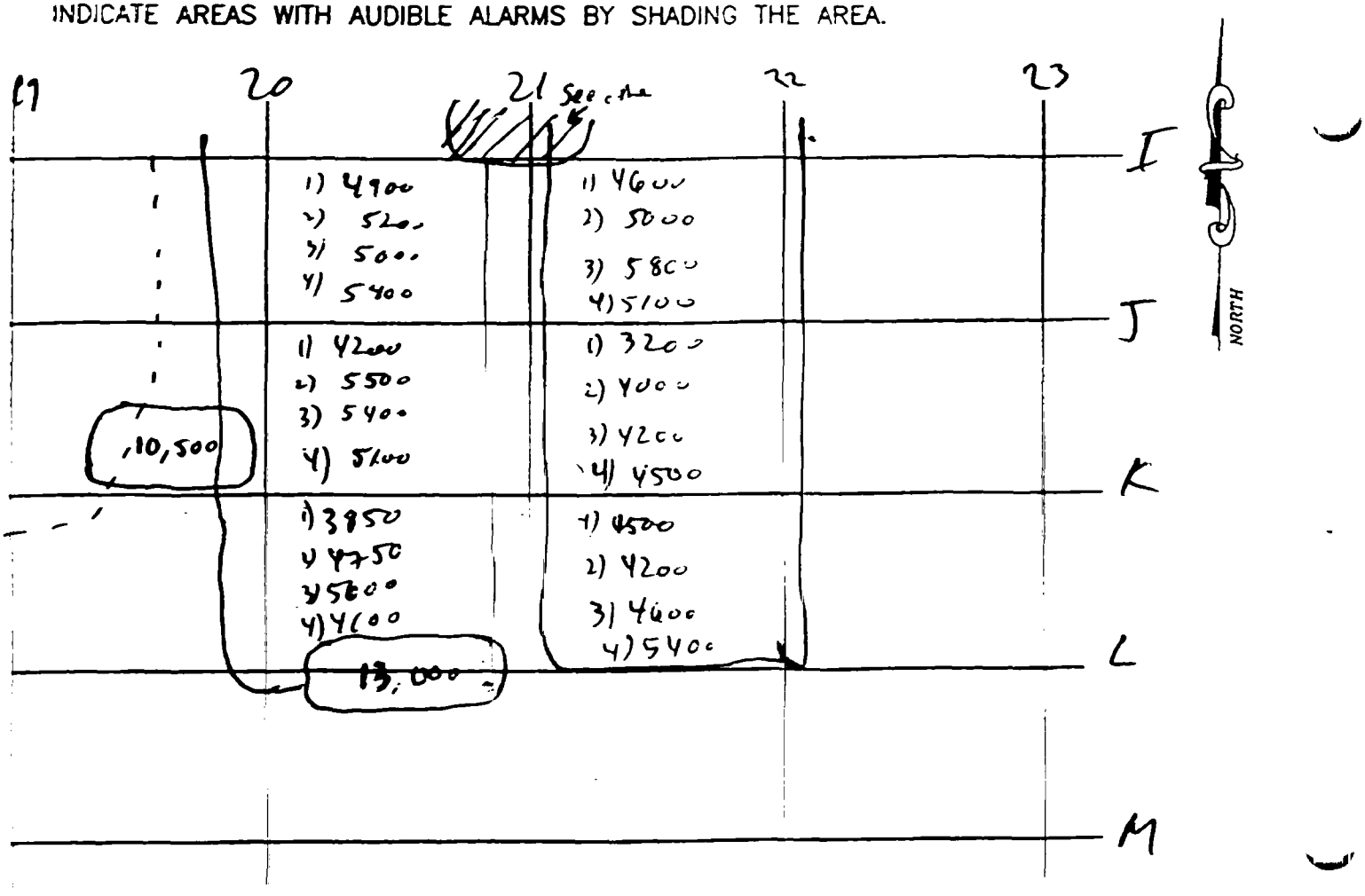
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 08/24/00 TECHNICIAN: Toby Shearn

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? calibrated LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

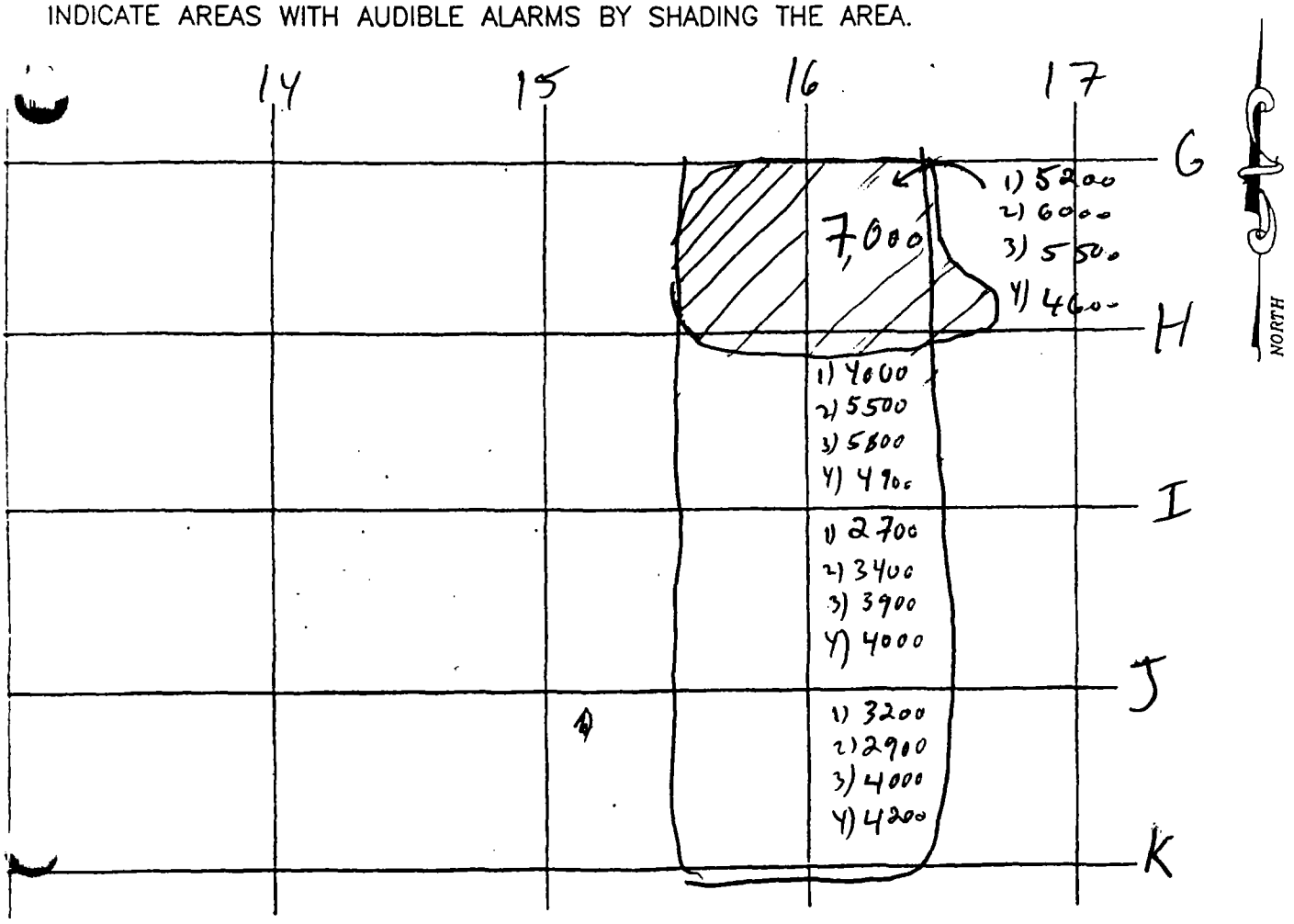
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/17/00 TECHNICIAN: Toby Skewan

INST. MODEL: 2221 unshielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 3/3/00 LIFT ELEVATION: Grade Beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

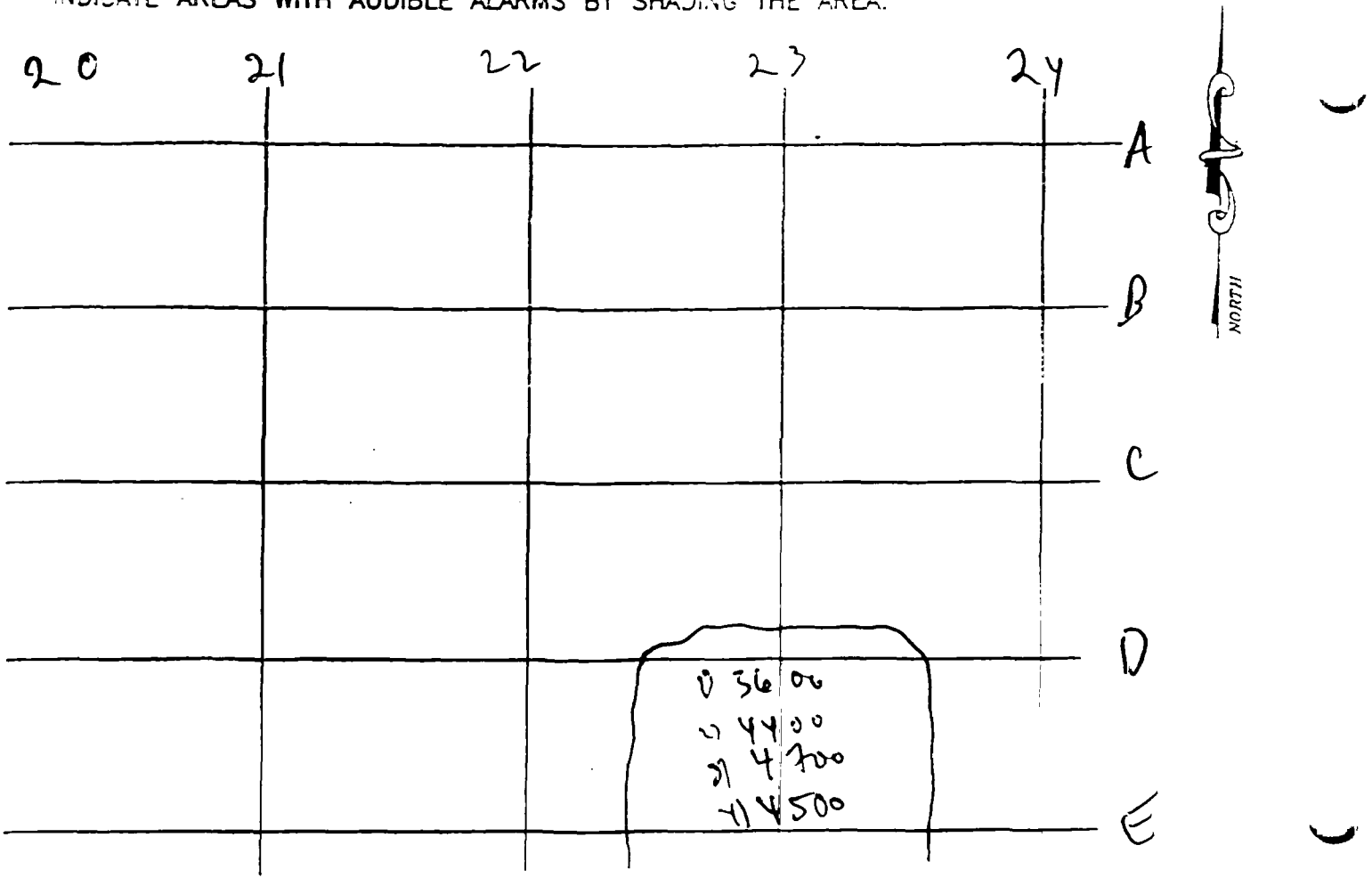
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/9/00 TECHNICIAN: Toby Skewes

INST. MODEL: 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? Shield LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

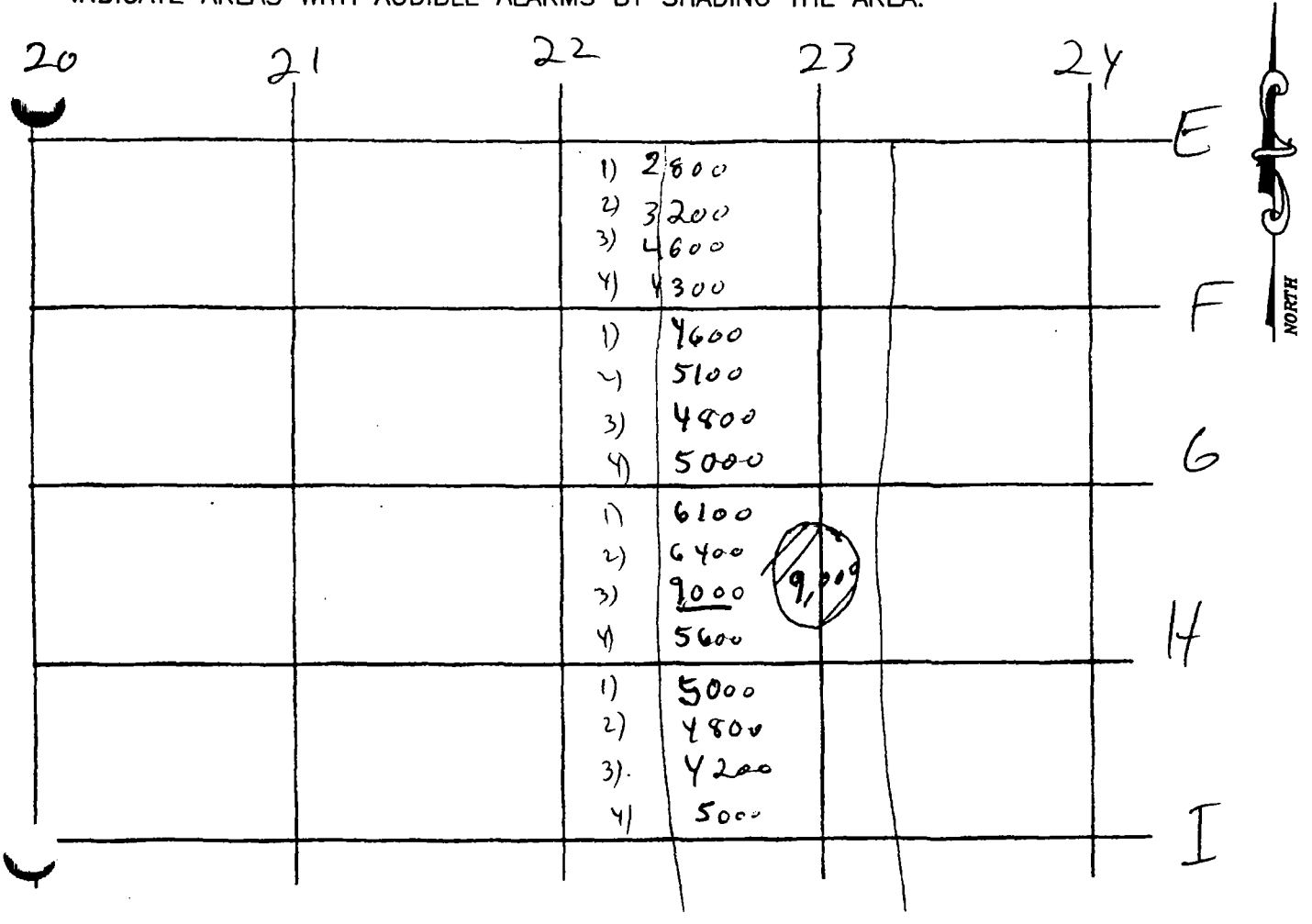
2 of 3

DATE: 9/9/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 (shielded) SERIAL NO.: 13542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

3 of 3

DATE: 8/10/00 TECHNICIAN: Toby Shewan

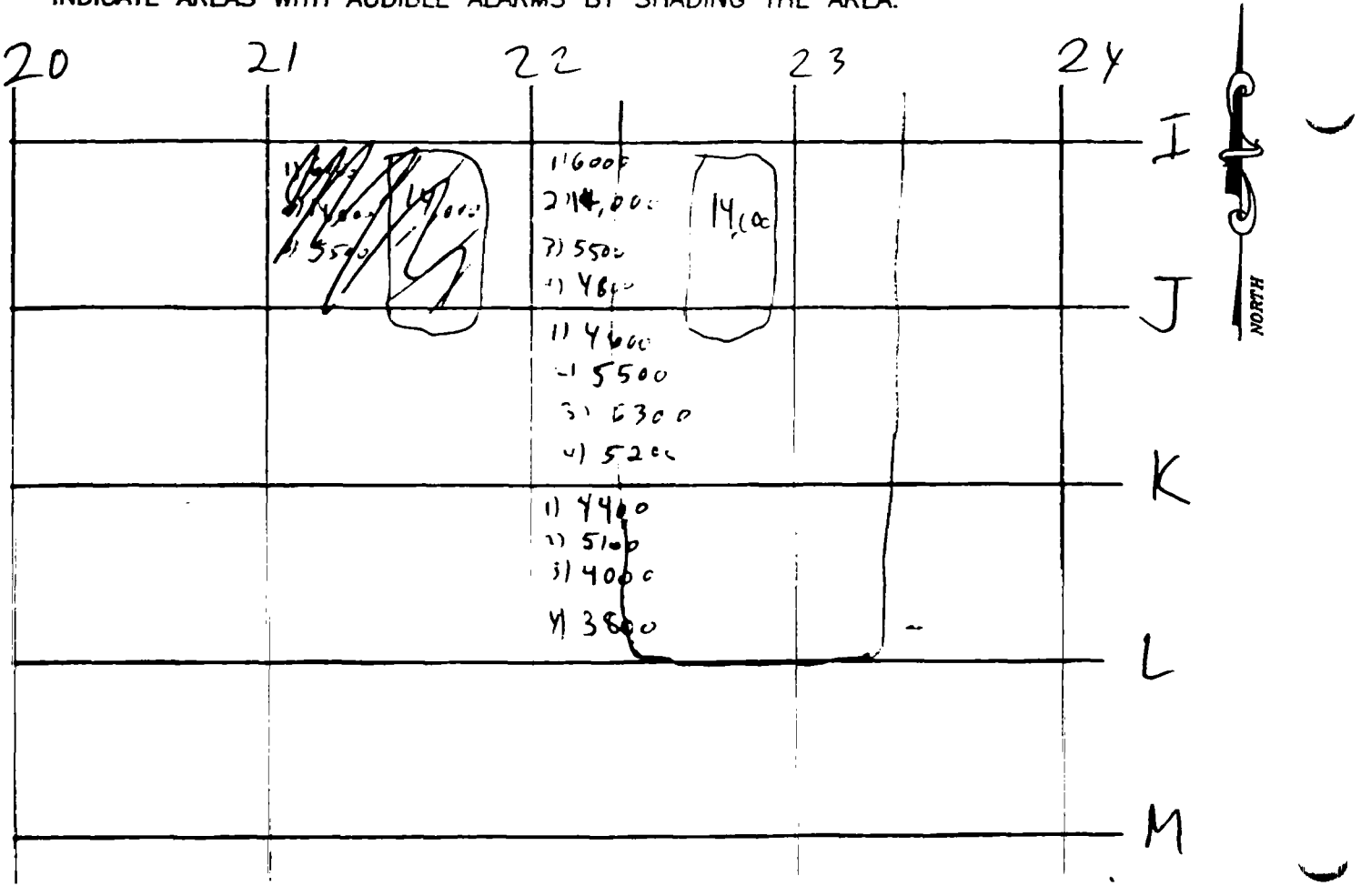
INST. MODEL: 2221, shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE

INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.

INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

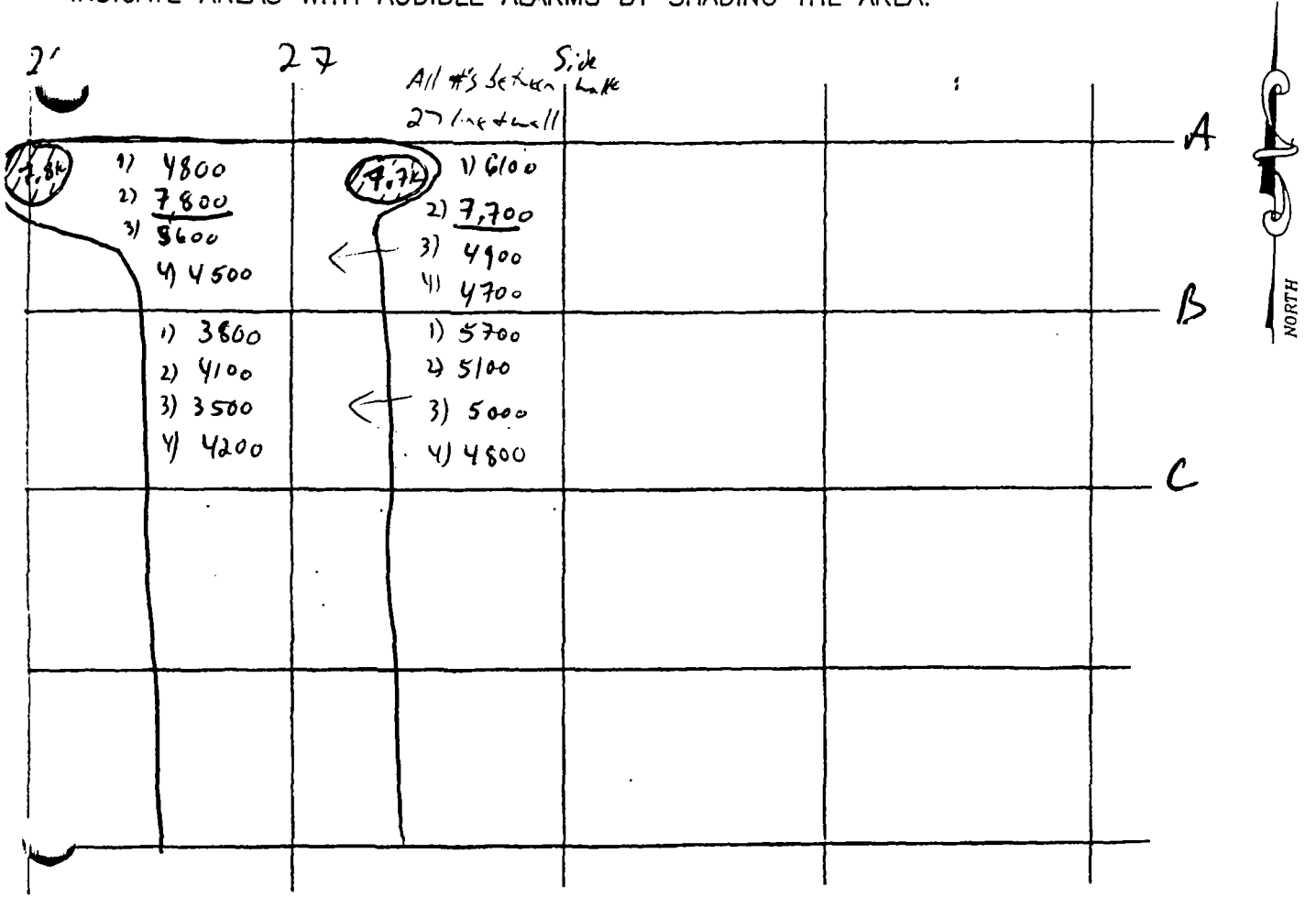
GRAND PIER EXCAVATION INVENTORY 1 of 4
24418-XK

DATE: 7/18/00 TECHNICIAN: Toby Slewan

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade Segm excavations lifts 1-4 @ 2' each

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

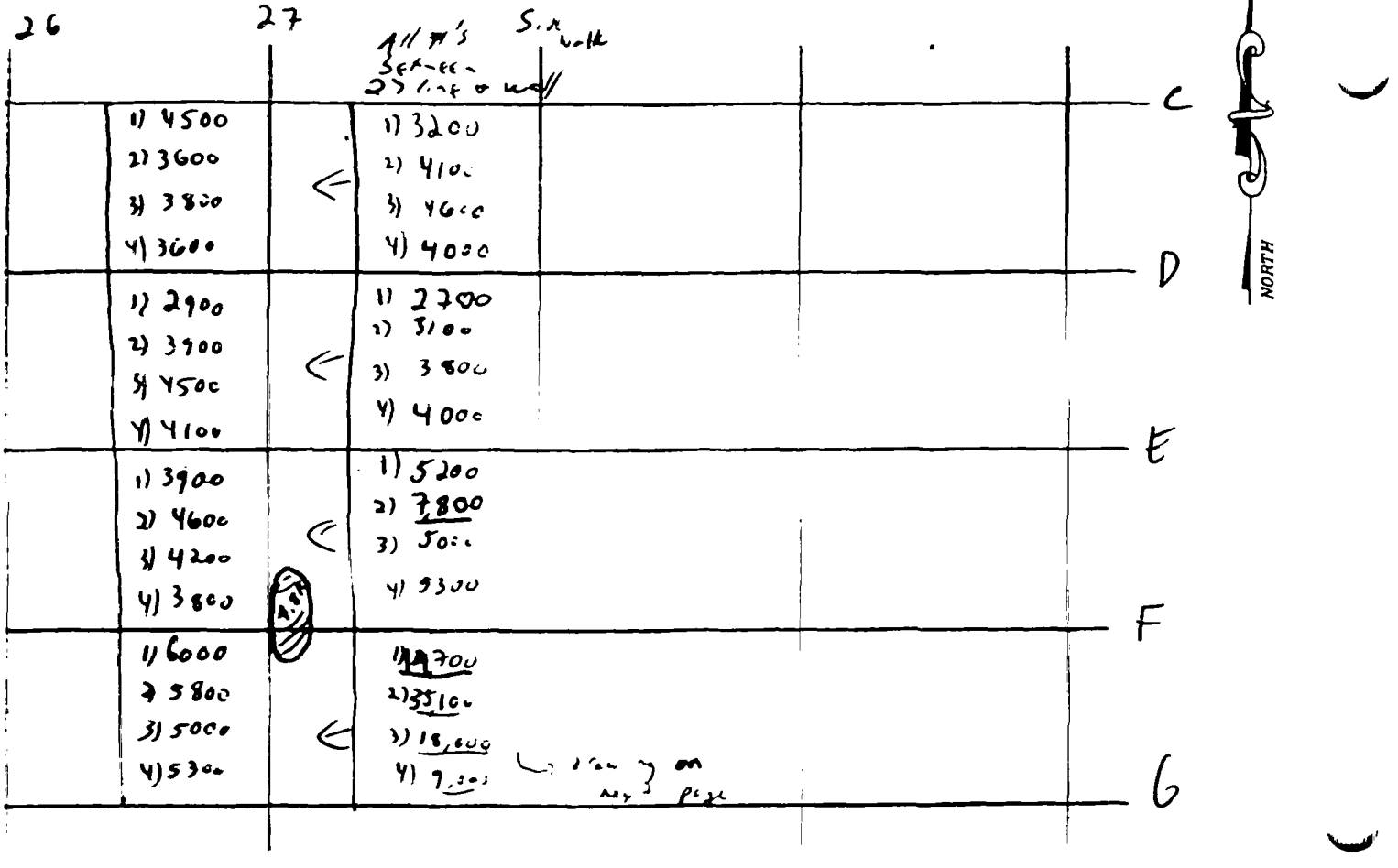
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/18/00 TECHNICIAN: Toby Shewan

INST. MODEL: 22h1 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade beam excavations 1-4 @ lifts of 1.5 to 2' each

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



26 27 All #'s between 27 line & wall Six walk

	1) 4500 2) 3600 3) 3800 4) 3600	←	1) 3200 2) 4100 3) 4600 4) 4000			C
	1) 2900 2) 3900 3) 4500 4) 4100	←	1) 2700 2) 3100 3) 3800 4) 4000			D
	1) 3900 2) 4600 3) 4200 4) 3800	←	1) 5200 2) 7800 3) 5000 4) 5300			E
	1) 6000 2) 5800 3) 5000 4) 5300	←	1) 14700 2) 35100 3) 18,600 4) 9,000 ↳ drawing on next page			F
						G

NORTH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

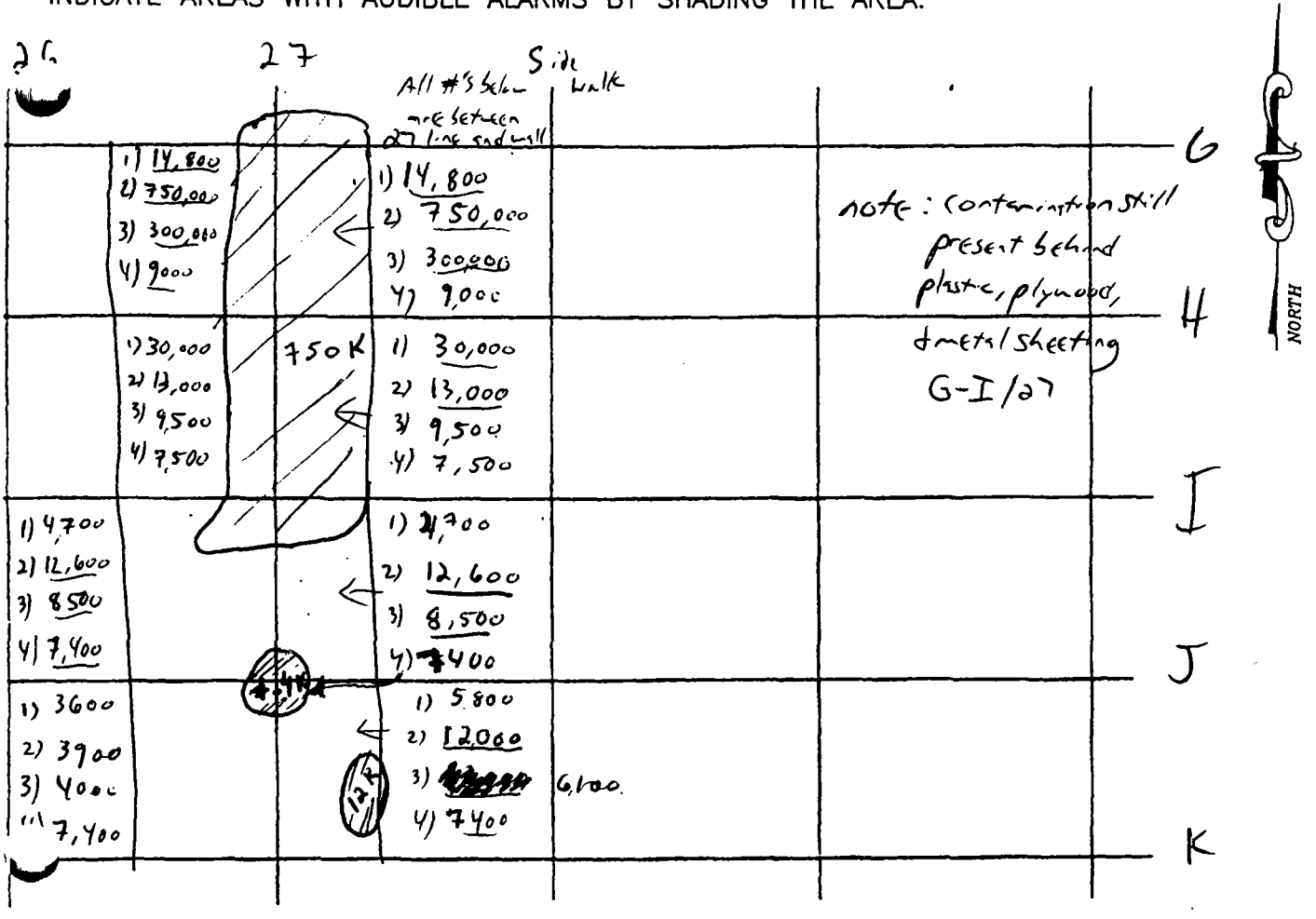
3 of 4

DATE: 7/18/00 TECHNICIAN: T.S.

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade seam excavation lifts 1-4 @ 1.5'-2' EST.

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

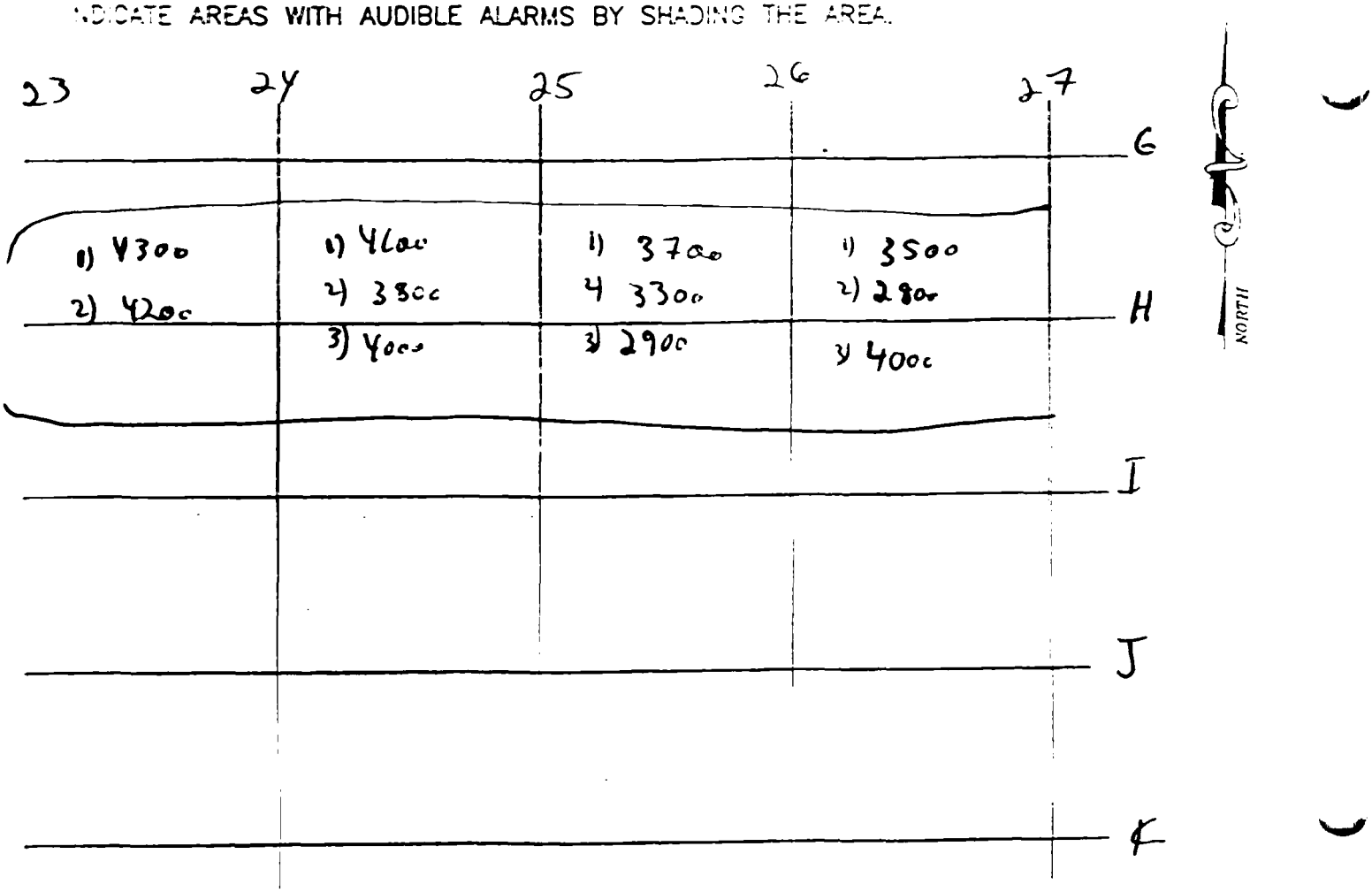
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/26/00 TECHNICIAN: Toby Shewan

INST. MODEL: 2221 SERIAL NO.: 132694

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

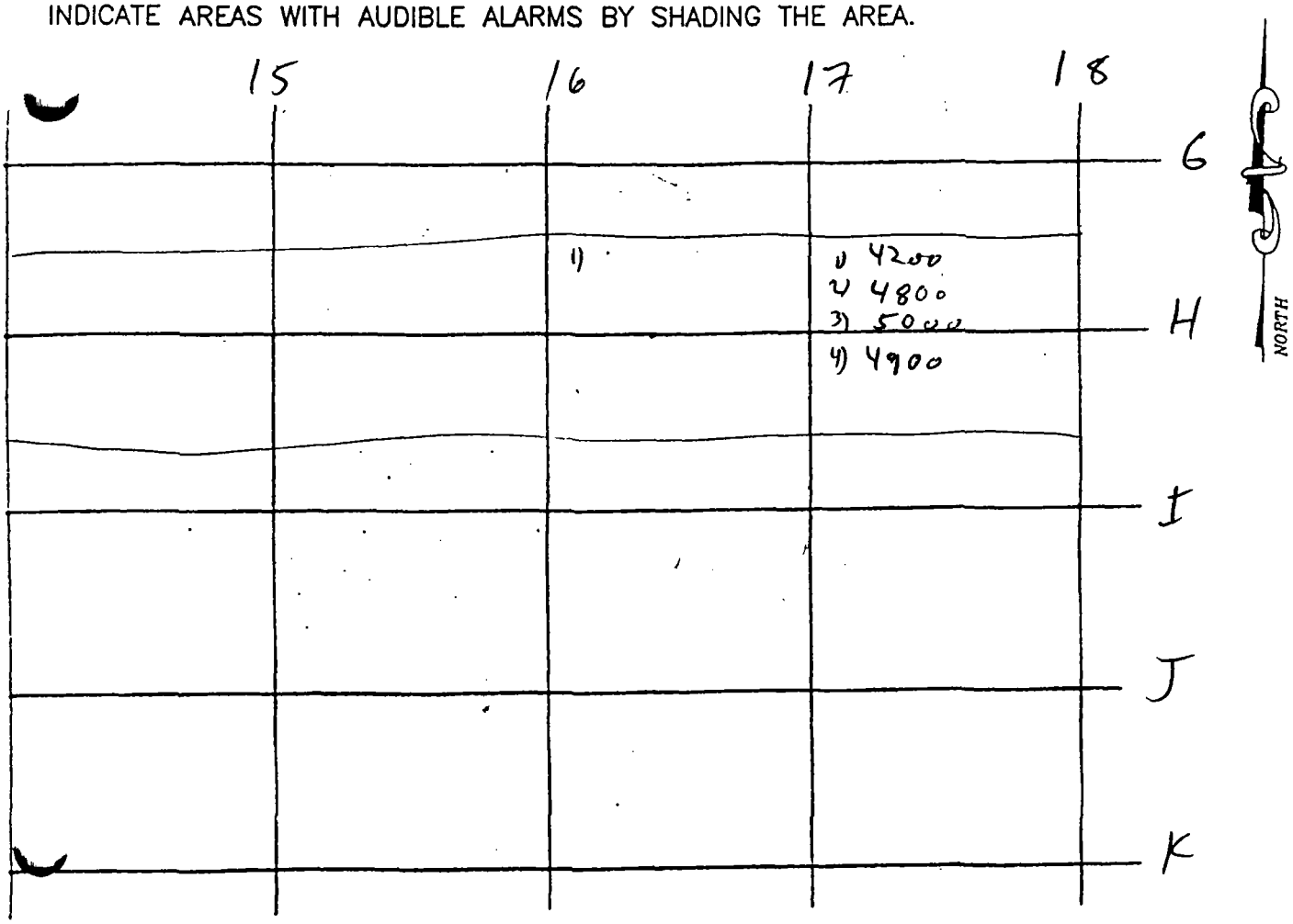
?

DATE: 8/16/00 TECHNICIAN: Toby Shaver

INST. MODEL: 2221 unshielded SERIAL NO.: 132844

INST. CALIBRATED (Y)/N)? _____ LIFT ELEVATION: Grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/15/00

TECHNICIAN: Toby Shemin

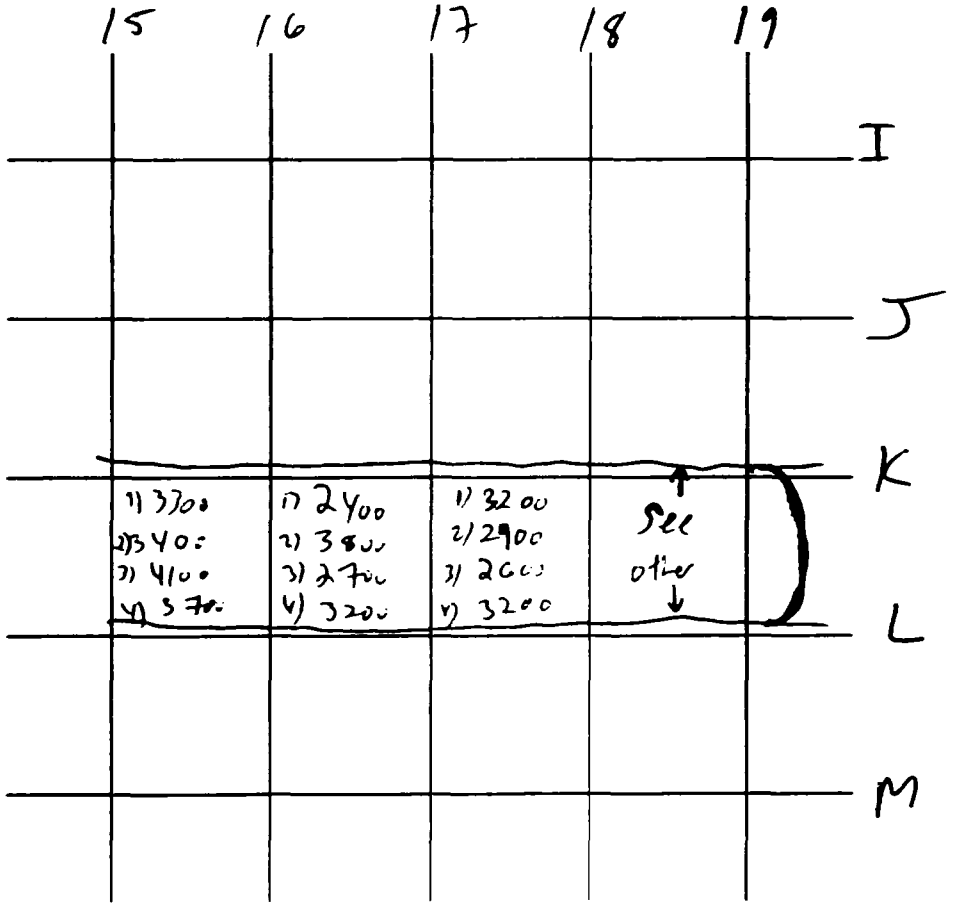
INST. MODEL: 2221 shielded

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)?

LIFT ELEVATION: grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

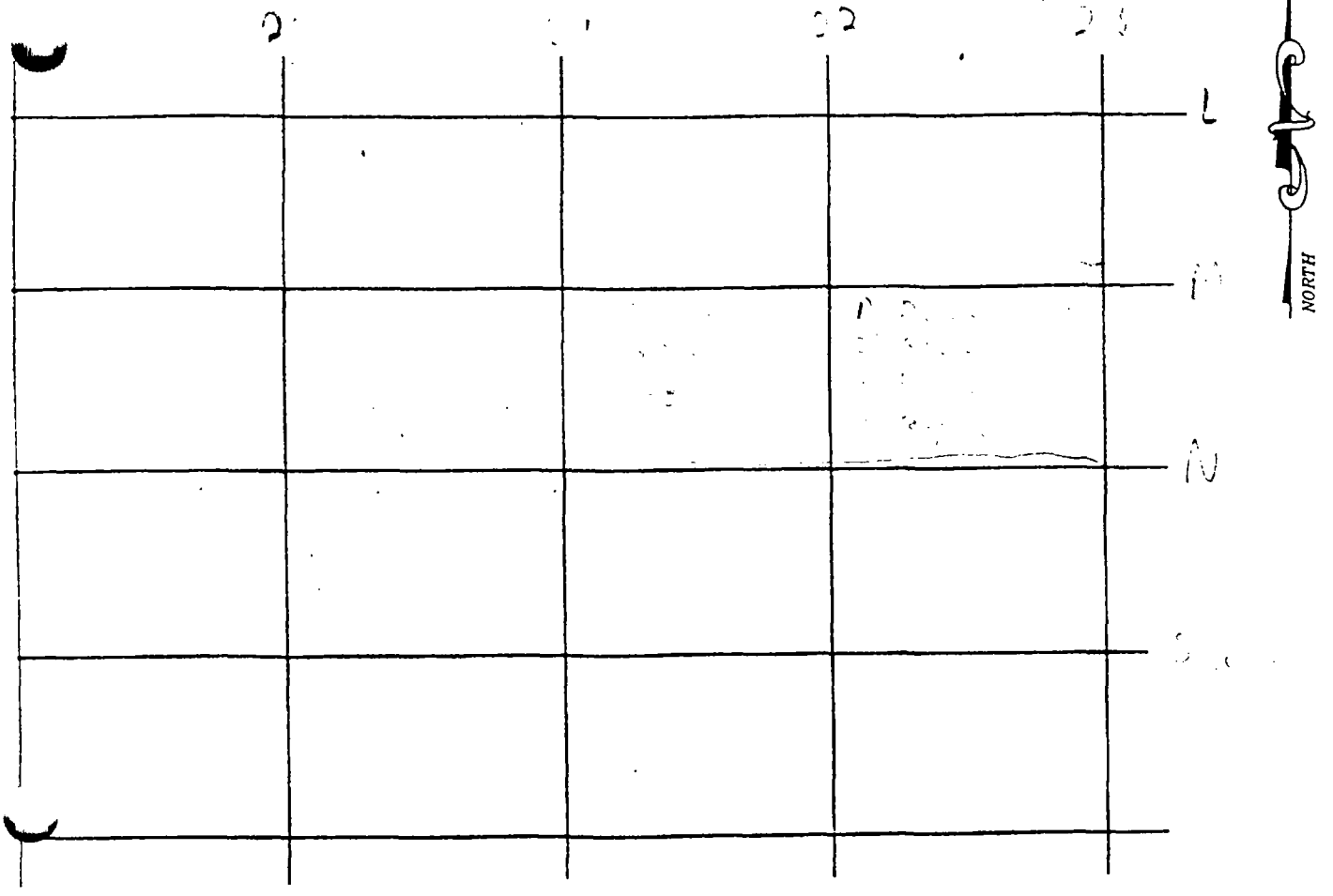
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/3/00 TECHNICIAN: Toby Shewan

INST. MODEL: [illegible] shielded SERIAL NO.: 13[illegible]

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: grade slope excavations lifts 1-4

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/25/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221

SERIAL NO.: 132814

INST. CALIBRATED (Y/N)? shielded

LIFT ELEVATION: Grade beams

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

	23	24	25	26	27
K	1) 2700 2) 4100 3) 4400	1) 3600 2) 3900 3) 2900	1) 2500 2) 2900 3) 3500	See other	
L					
M					
N					
Sine Walk					

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/3/00

TECHNICIAN: Toby Shewan

INST. MODEL: [illegible] Shielded

SERIAL NO.: 13[illegible]

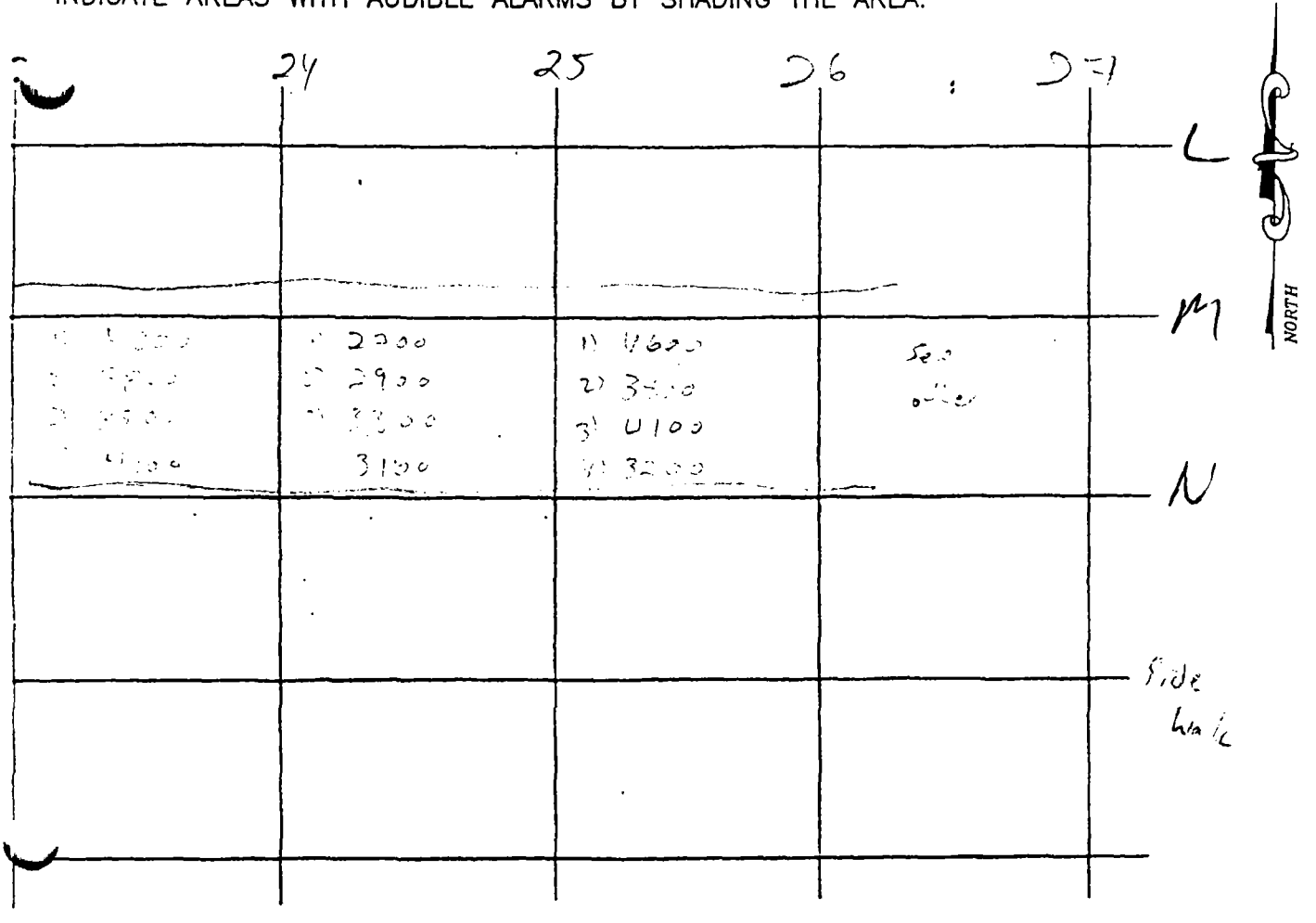
INST. CALIBRATED (Y/N)? [illegible]

LIFT ELEVATION: grade beam excavation lifts 1-4

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

	24	25	26	27	
					L
					M
[illegible]	2700	1) 4600	See other		
[illegible]	2900	2) 3[illegible]			
[illegible]	[illegible]	3) 4100			
[illegible]	3100	4) 3200			N
					Side walk

NORTH



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

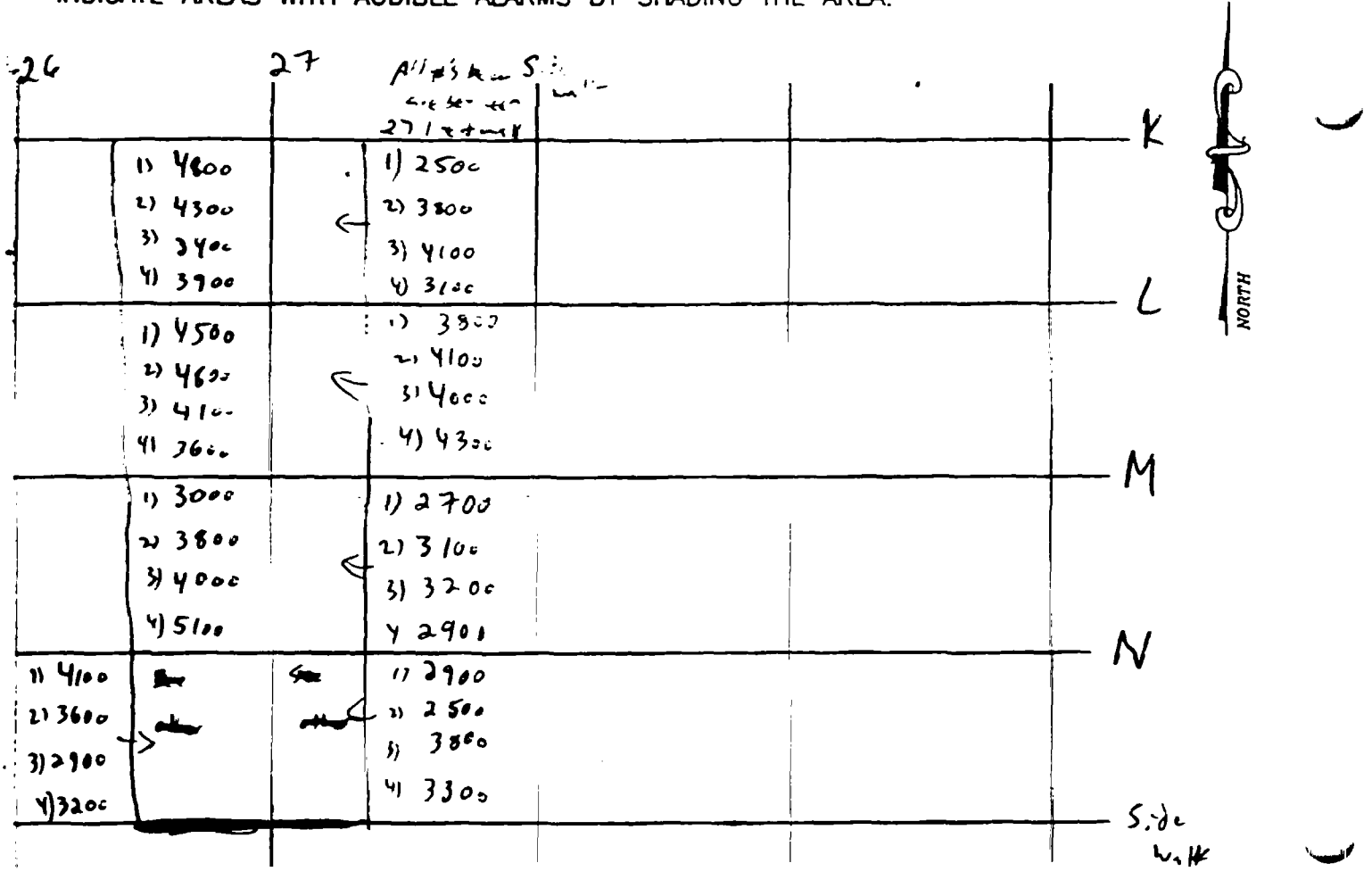
4 of 4

DATE: 7/18/00 TECHNICIAN: T. S.

INST. MODEL: 2221 shielded SERIAL NO.: 13x542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade to excavation lifts 1-4 @ 1.5' to 2' each

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

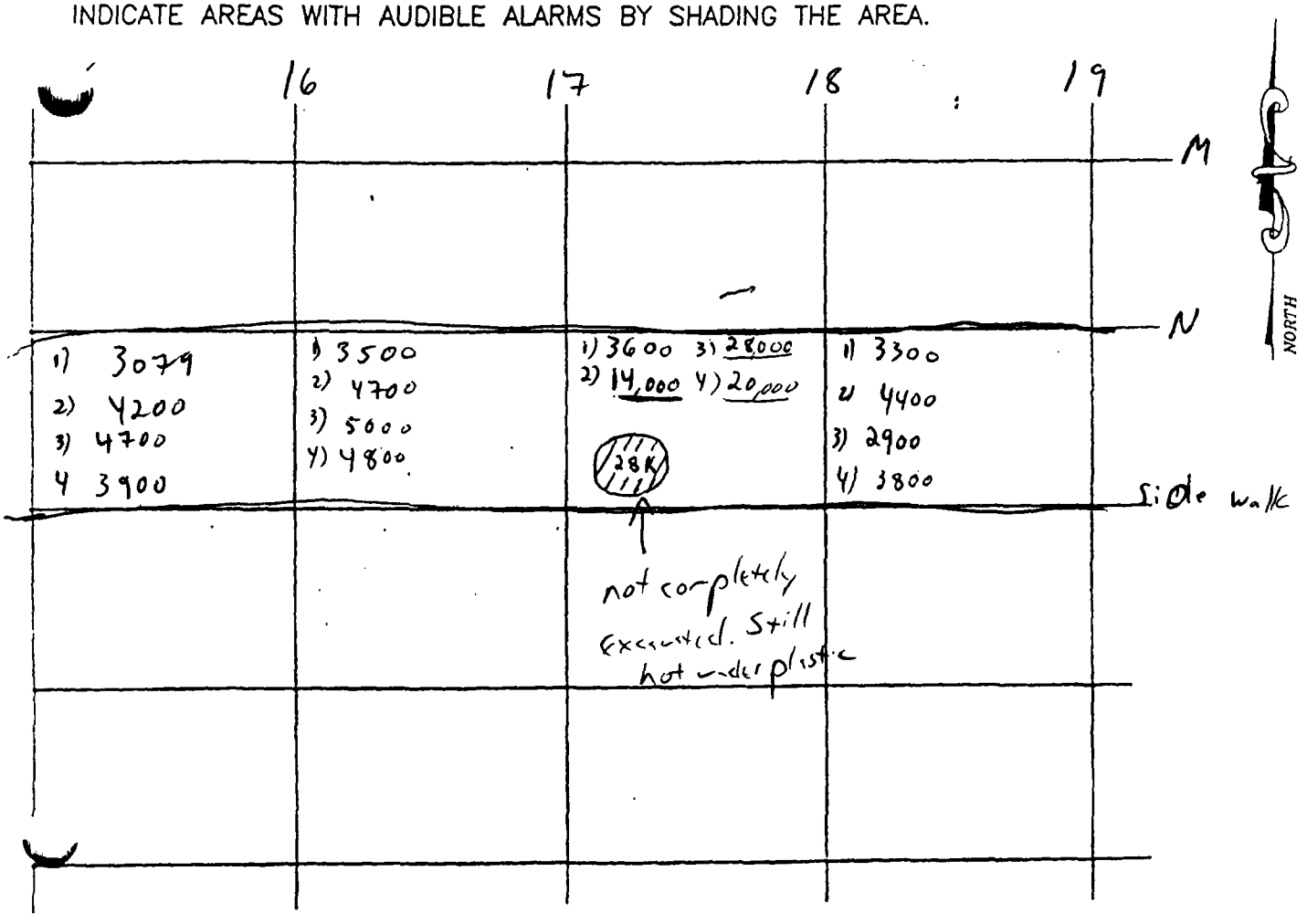
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/17/00 TECHNICIAN: Toby Stewart

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade seam excavations
Lifts 1-4 @ 1.5' to 2' ea

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

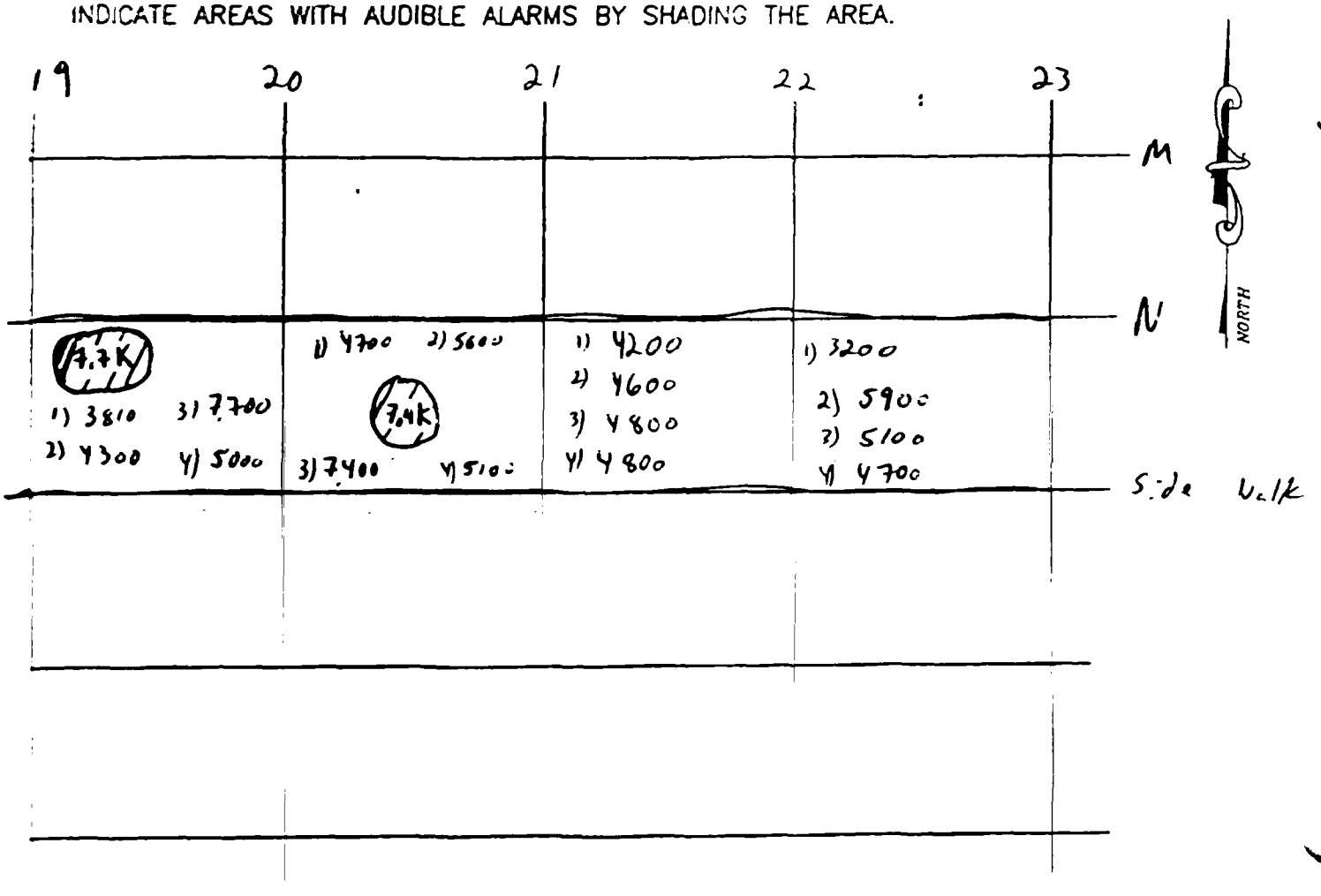
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/17/00 TECHNICIAN: T. S.

INST. MODEL: 2221 Shield SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: grade Seam excavations lifts 1-4 @ 1.5' to 2' each

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

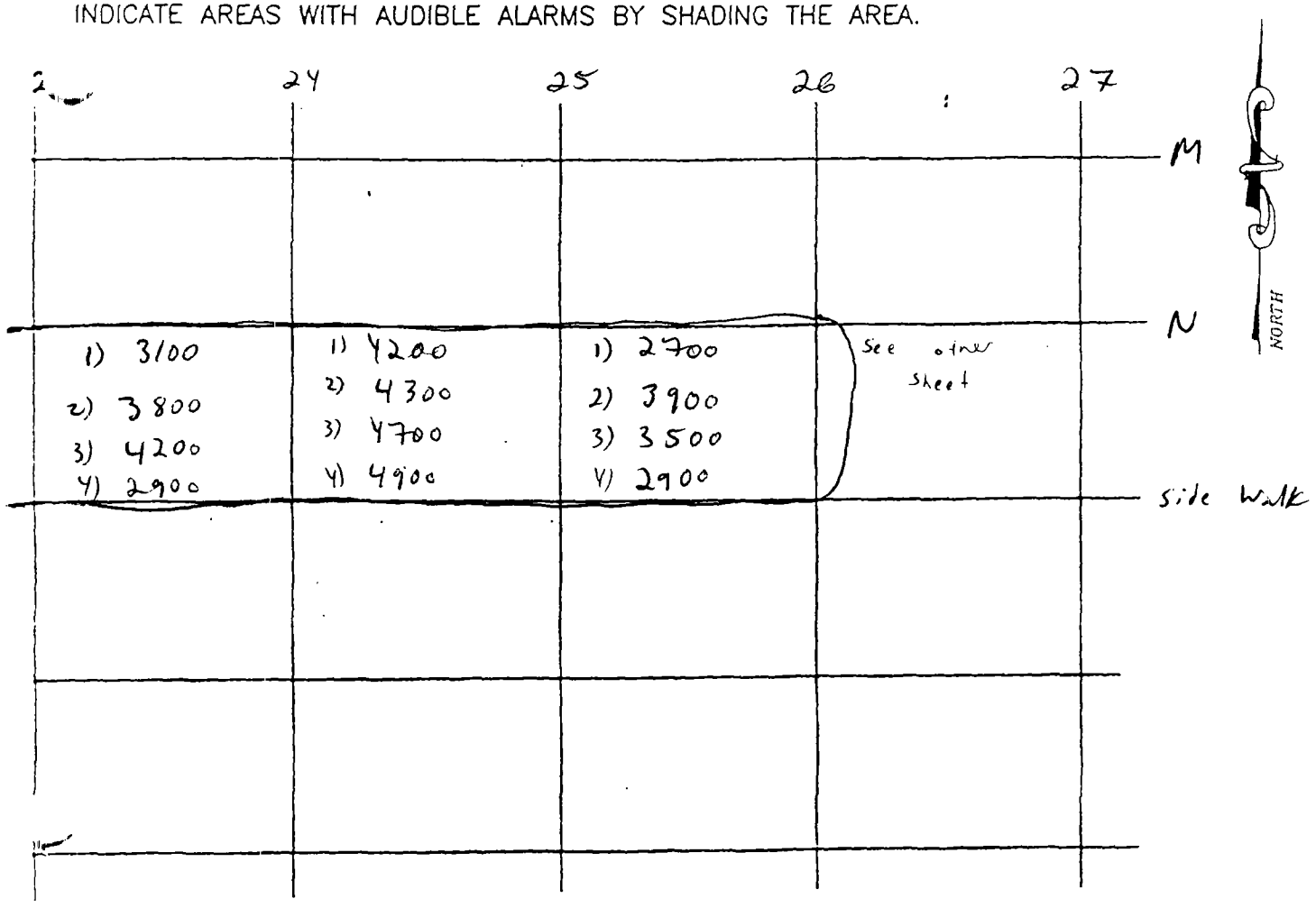
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/17/00 TECHNICIAN: T.S.

INST. MODEL: 2221 shelled SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/31/00 LIFT ELEVATION: grade beam excavations 1-4 @ 1.5 ft of 1.5 to 2' each

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



AREA C SURVEYS: POST-REMEDIATION

EXCLUSION ZONE SURVEYS AFTER CLEAN-UP

STS Consultants Ltd.

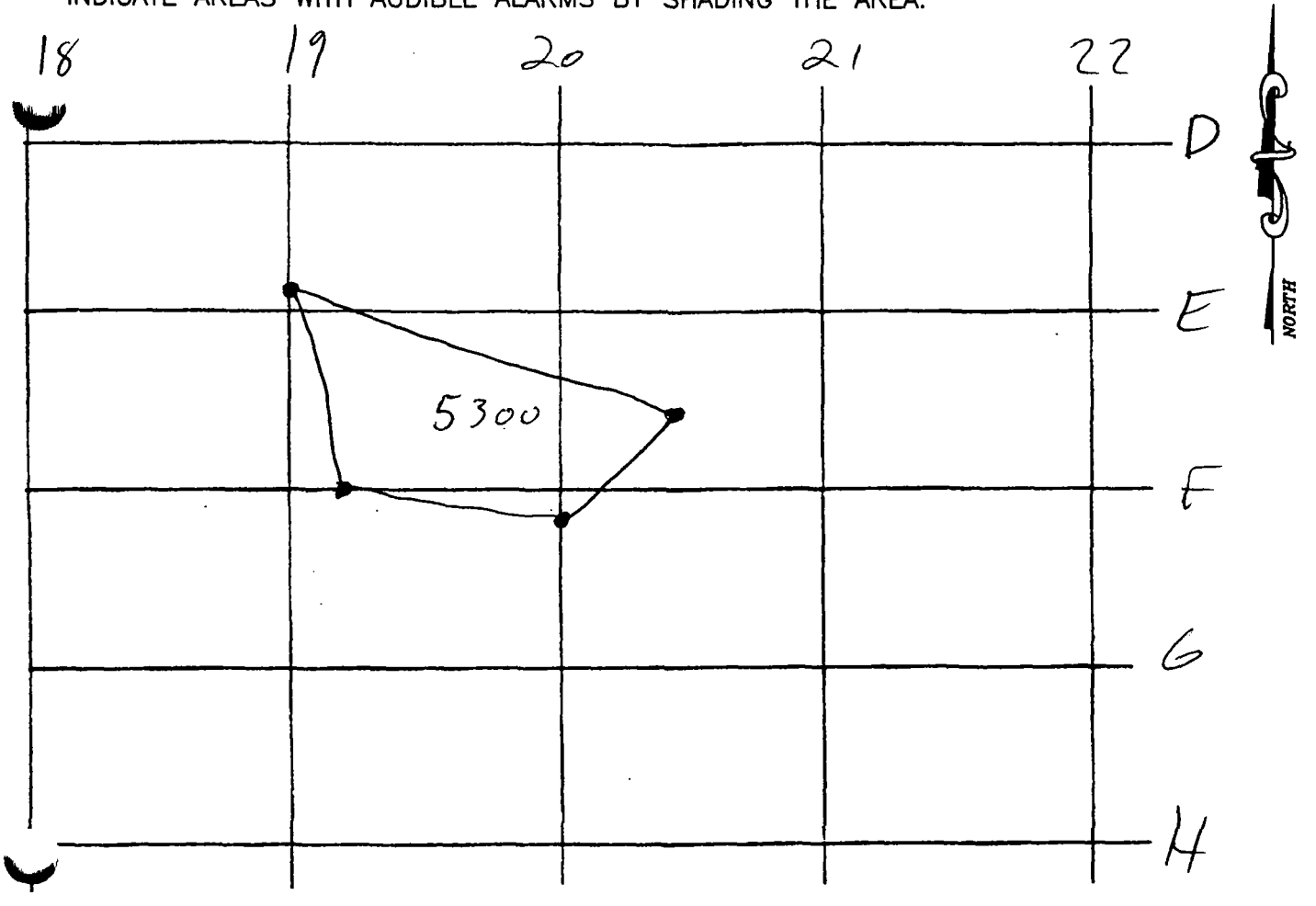
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/7/00 TECHNICIAN: Toby Stevens

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/3/00 LIFT ELEVATION: * Exclusion zone after remediation.

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

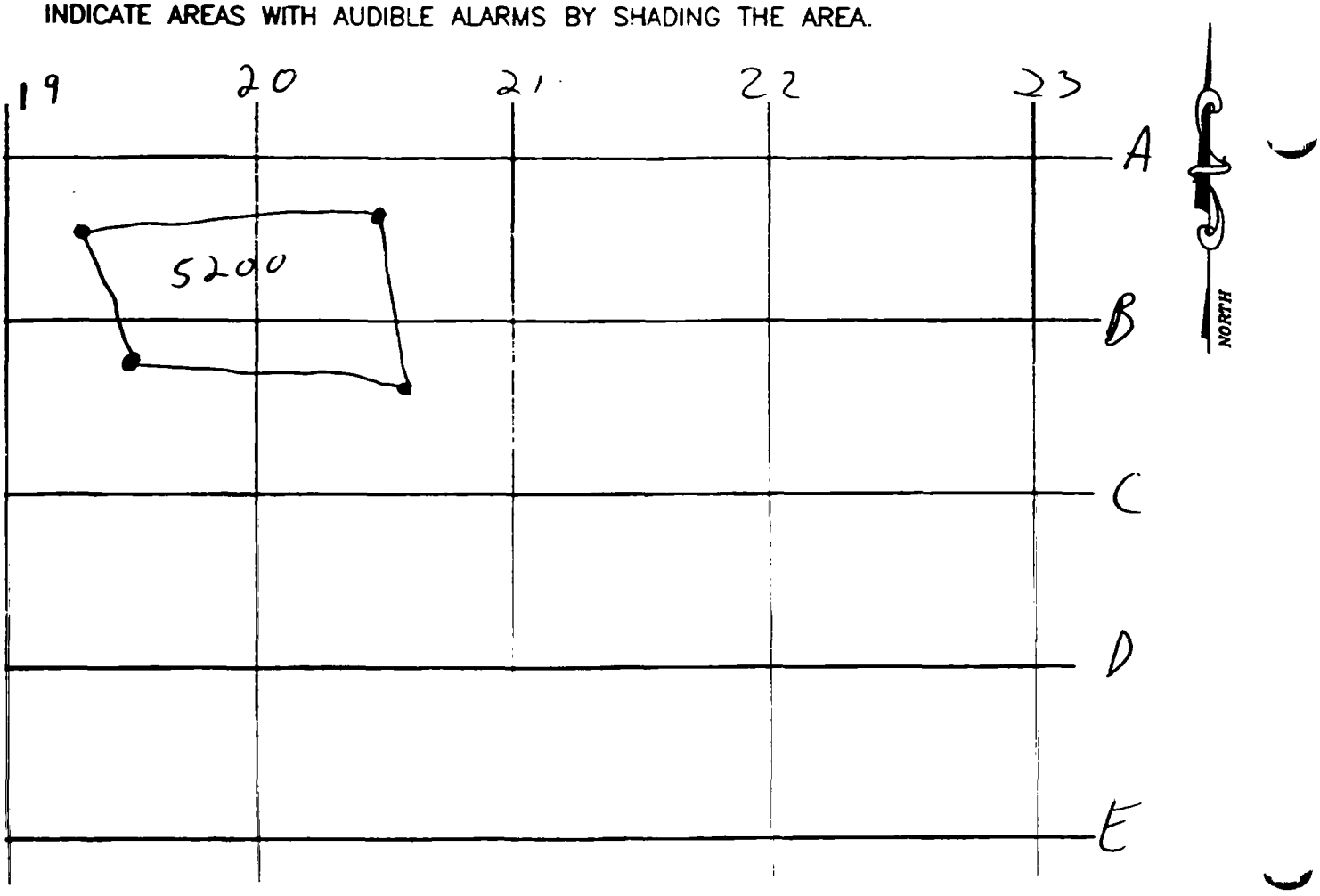
DATE: 8/7/00 TECHNICIAN: Toby Stevens

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 7/31/00 LIFT ELEVATION: (-4')

* Excision zone after remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

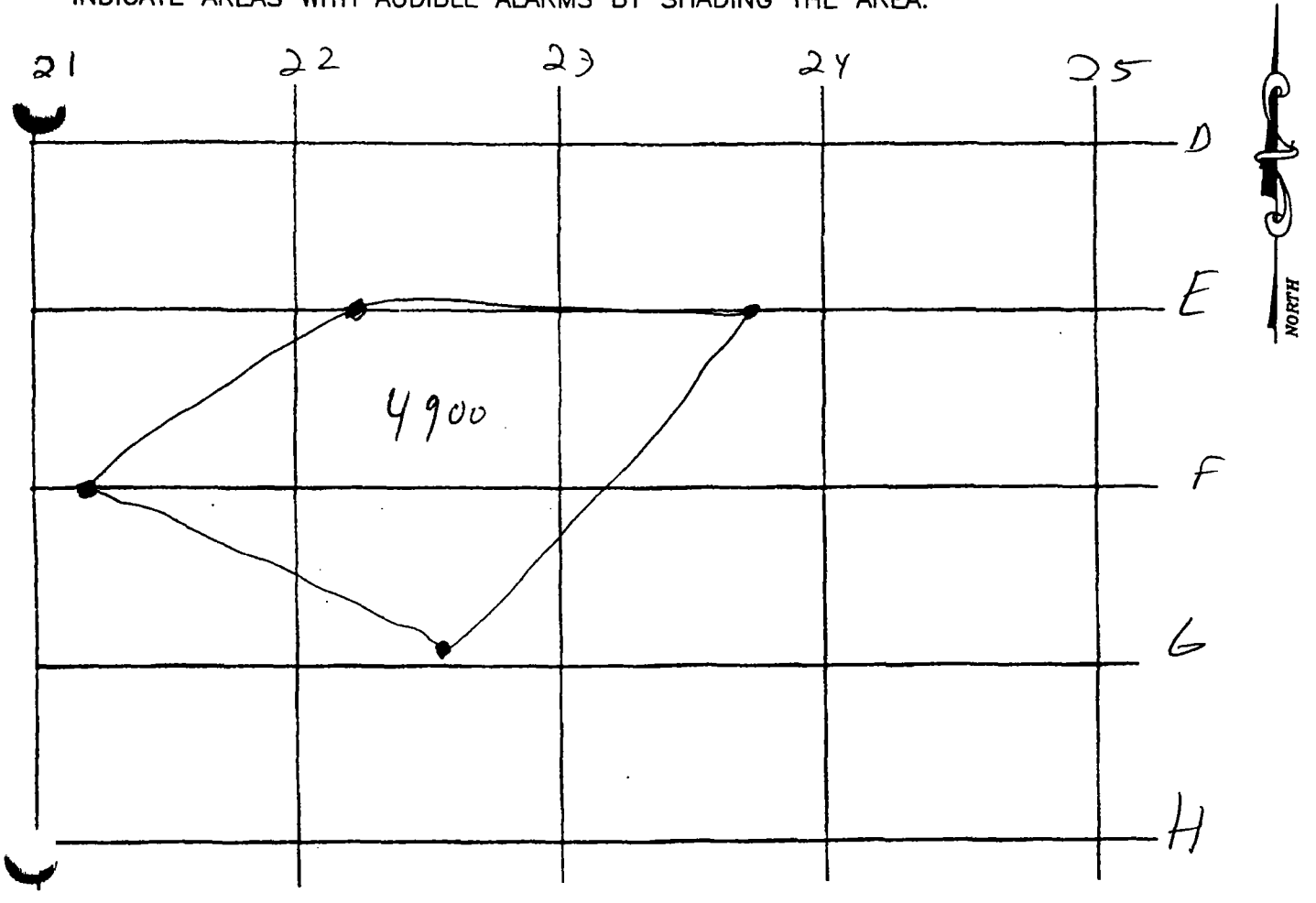
DATE: 7/28/00 TECHNICIAN: Toby Sullivan

INST. MODEL: 2221 shielded SERIAL NO.: 134541

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-3')

* Exclusion zone after remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

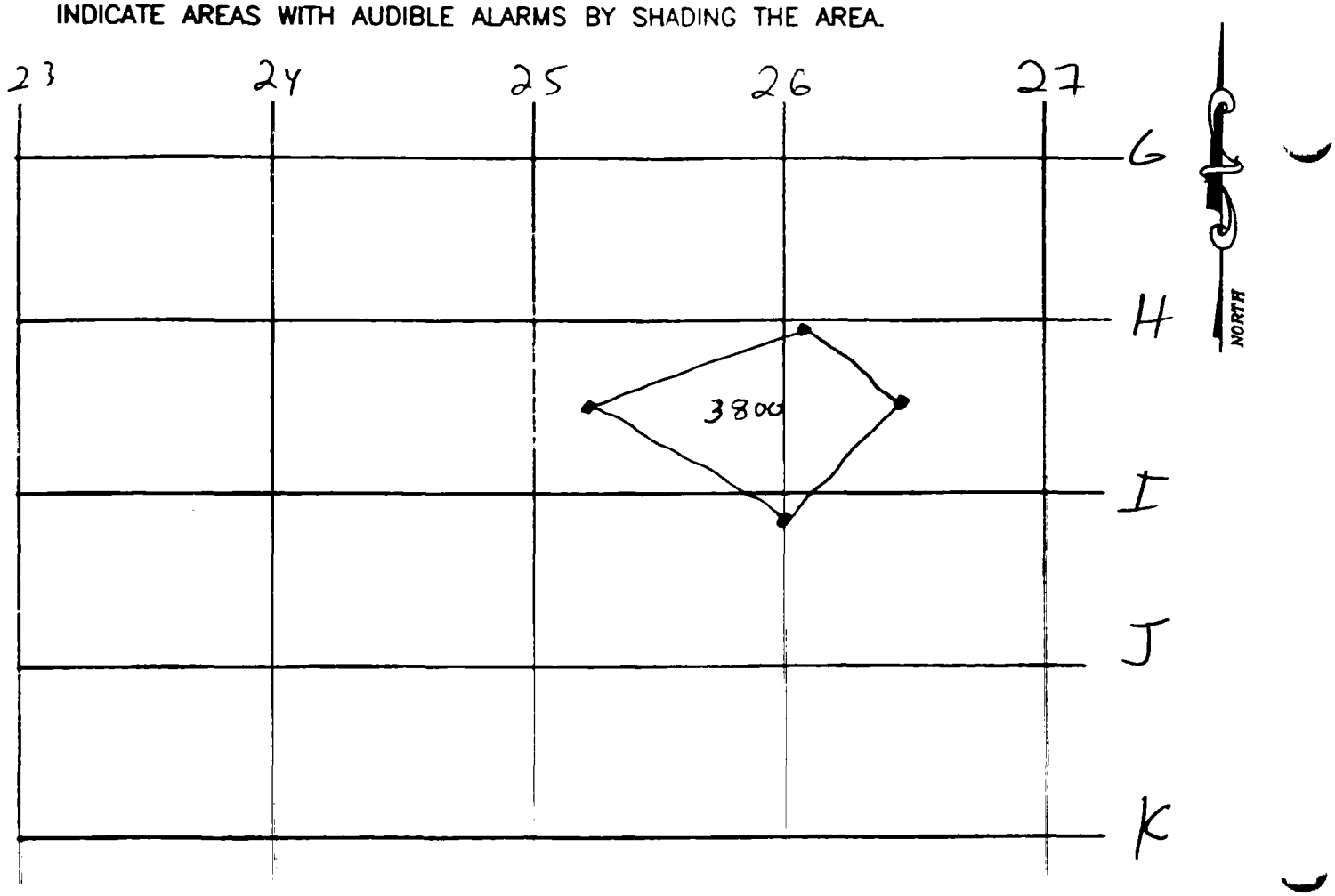
DATE: 7/28/00 TECHNICIAN: Tim Sherman

INST. MODEL: 2221 Shielded SERIAL NO.: 134547

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: (-3')

Excavation zone after Remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/17/00

TECHNICIAN: Joel Ahrweiler

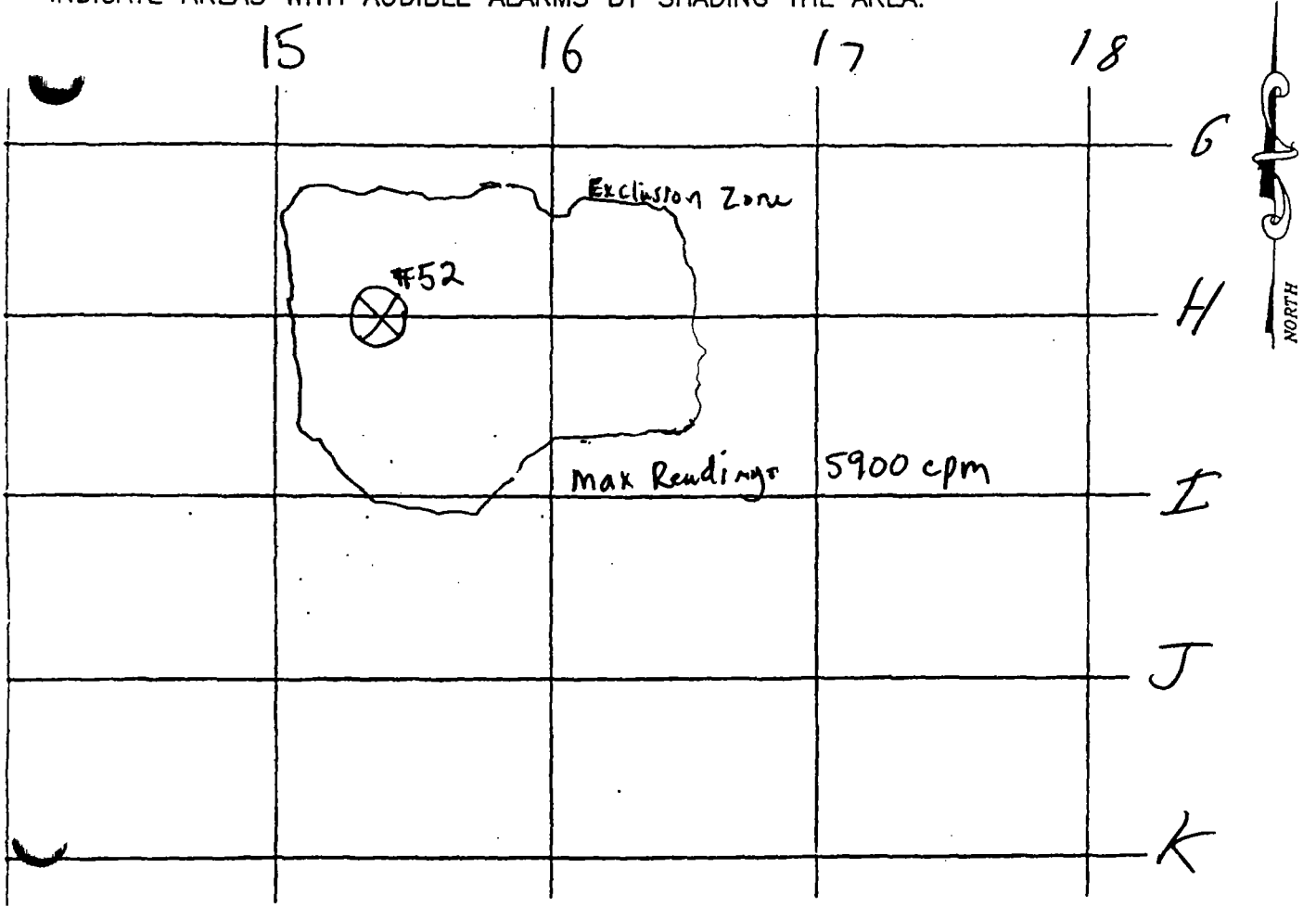
INST. MODEL: 2200 shielded

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? Yes

LIFT ELEVATION: post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/17/00

TECHNICIAN: Toby Shewan

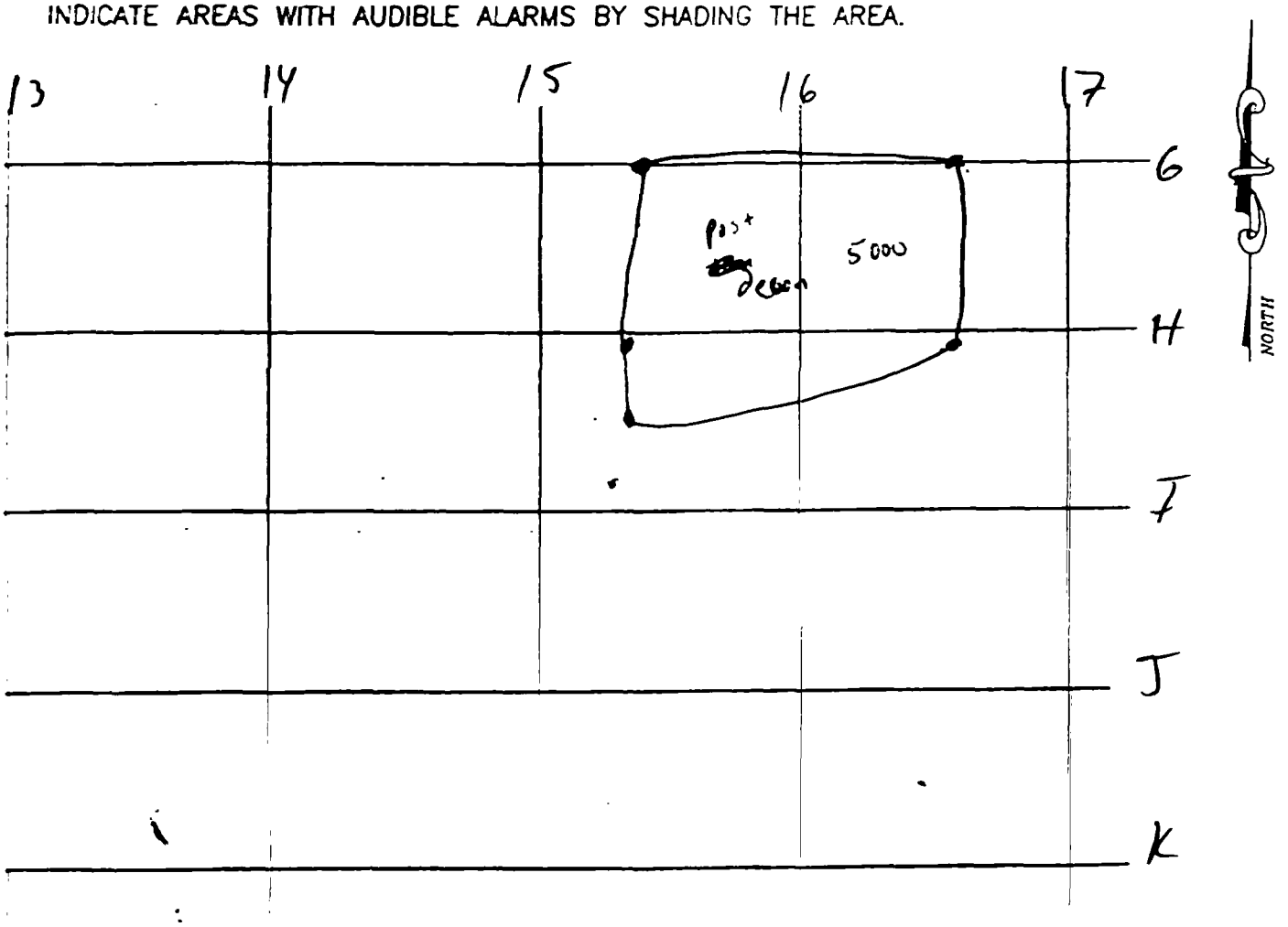
INST. MODEL: 2221 (shielded)

SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: 8 exclusion zone (post decon)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

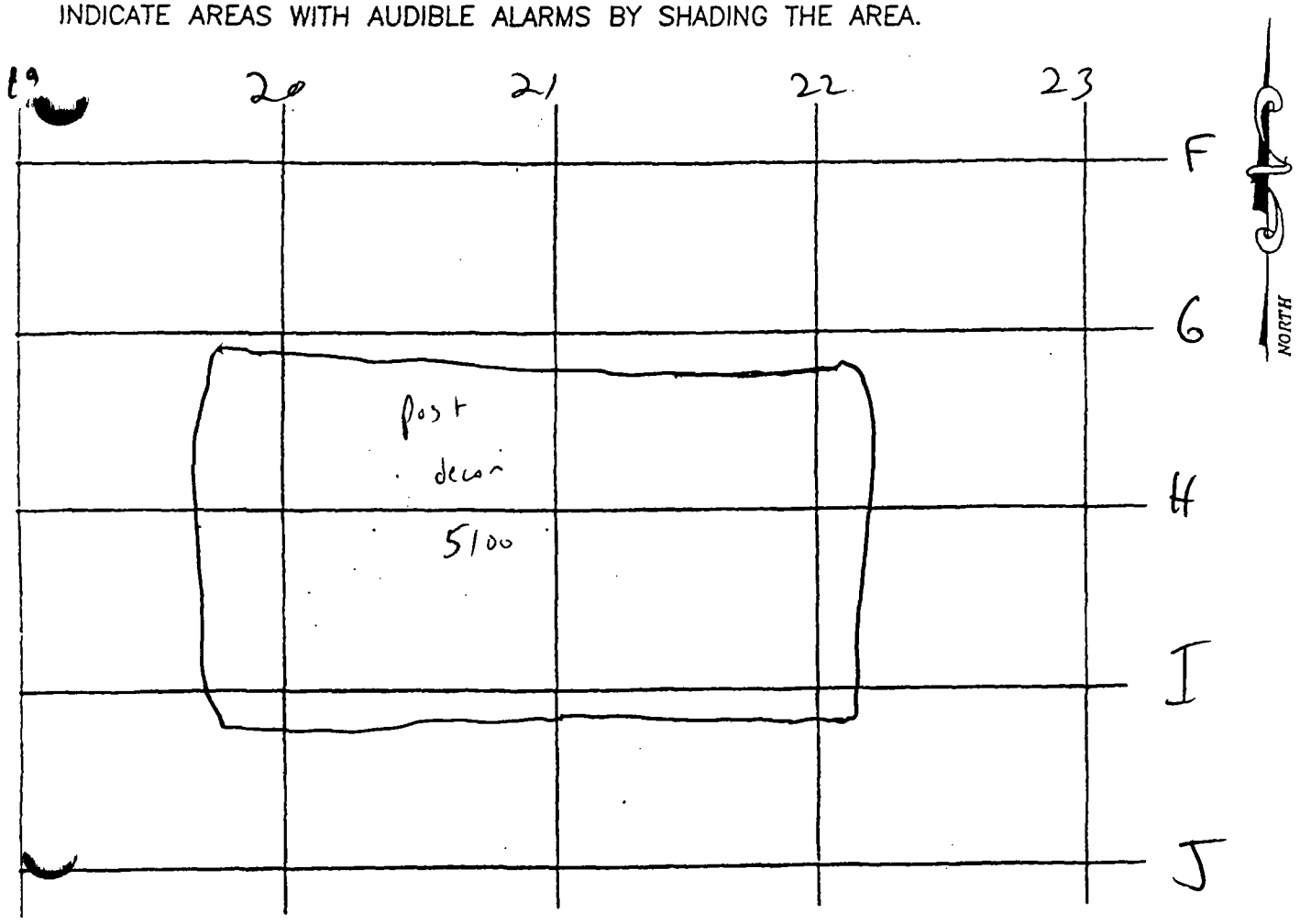
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/23/00 TECHNICIAN: Toby Sherman

INST. MODEL: 2221 SERIAL NO.: 13284

INST. CALIBRATED (Y/N)? Shielded LIFT ELEVATION: Exclusion Zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/16/00

TECHNICIAN: Toby Shewan

INST. MODEL: 2221 (shielded)

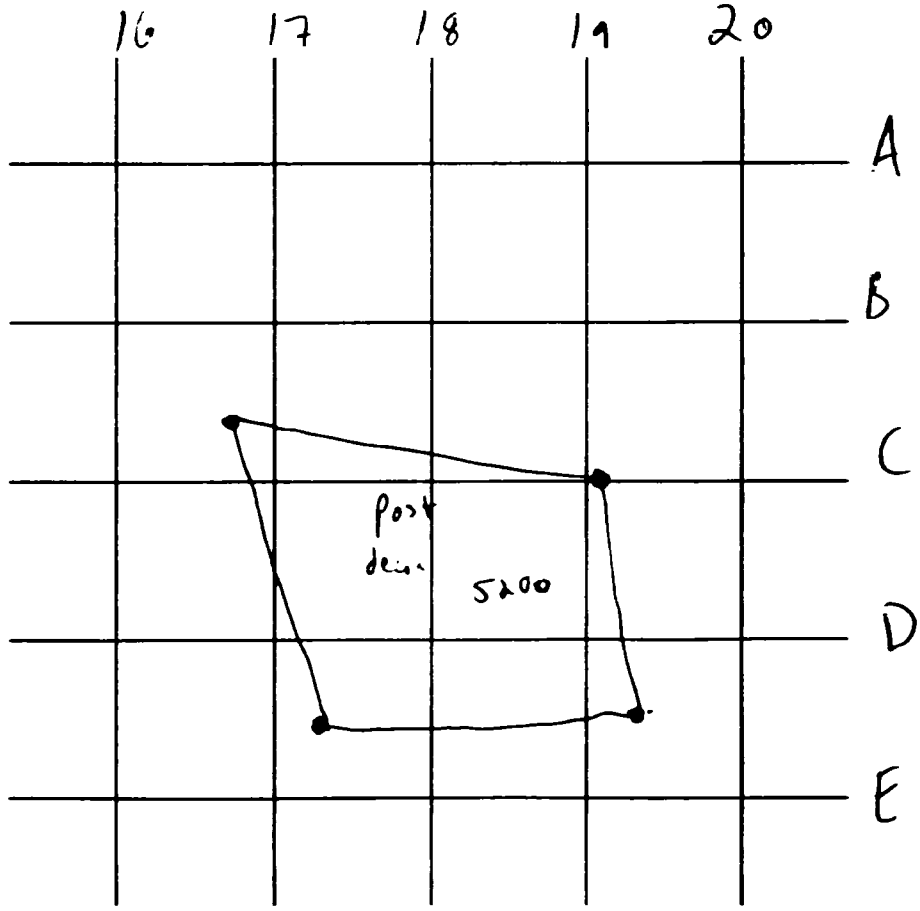
SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

exclusion zone



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

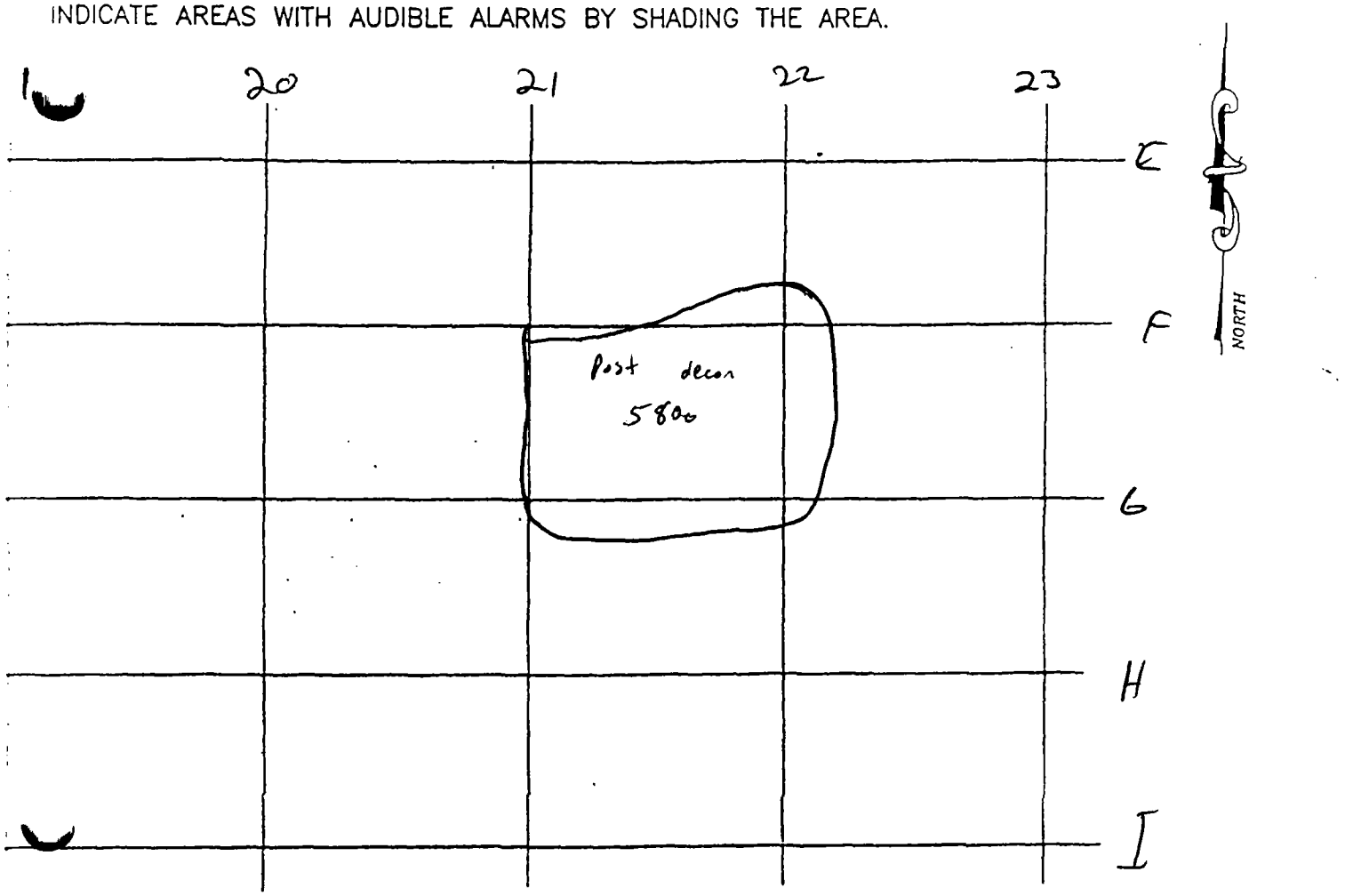
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/24/00 TECHNICIAN: Toby Slemm

INST. MODEL: 2221 SERIAL NO.: 132844

INST. CALIBRATED (Y)N)? Scheduled LIFT ELEVATION: exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

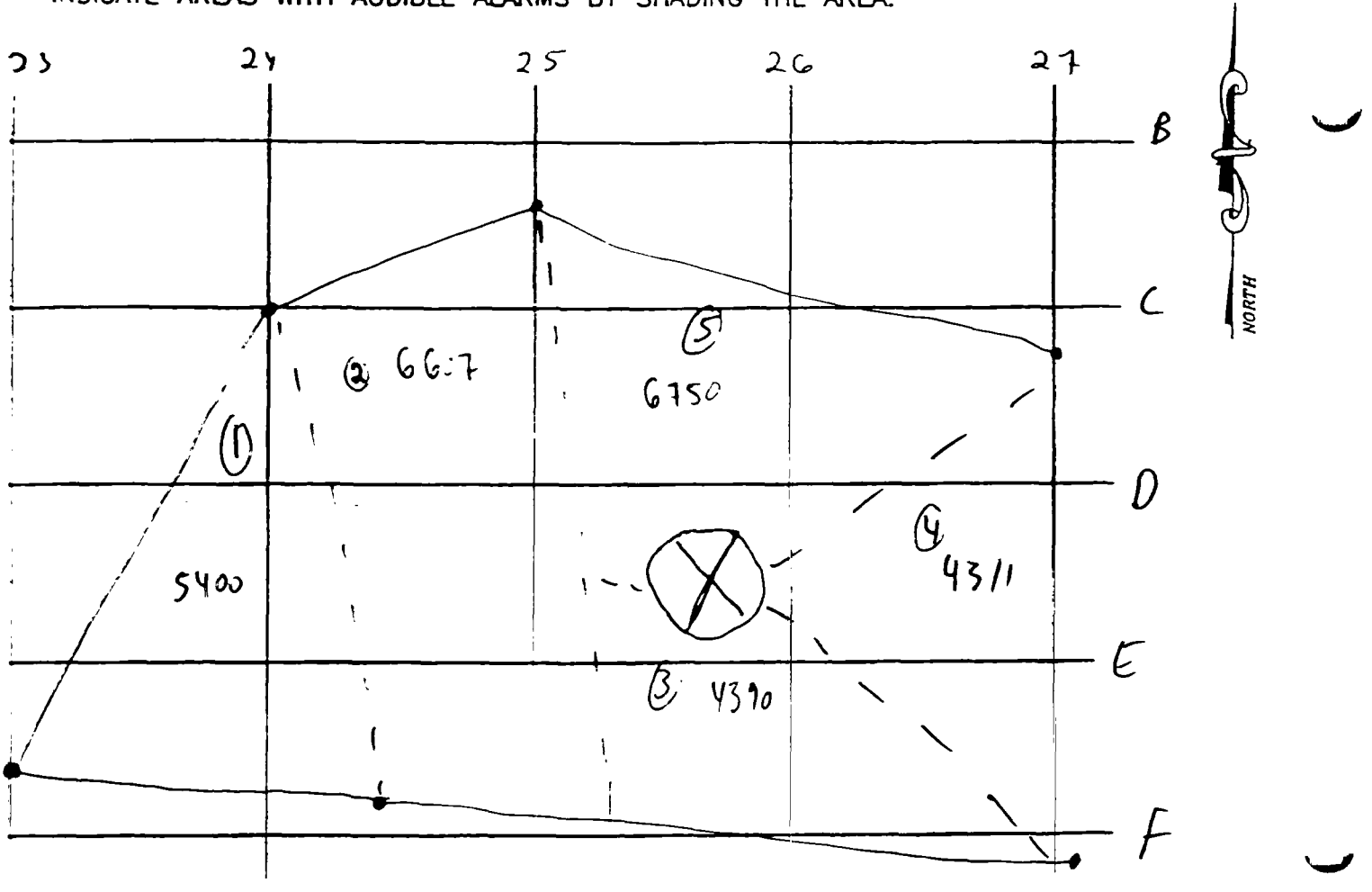
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/12/00 TECHNICIAN: Toby Shawn

INST. MODEL: 2221 shield SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? 5/5/00 LIFT ELEVATION: msr readings after exclusion zone cleared

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-19-00

TECHNICIAN: Trigman Timm

INST. MODEL: 2221 shielded

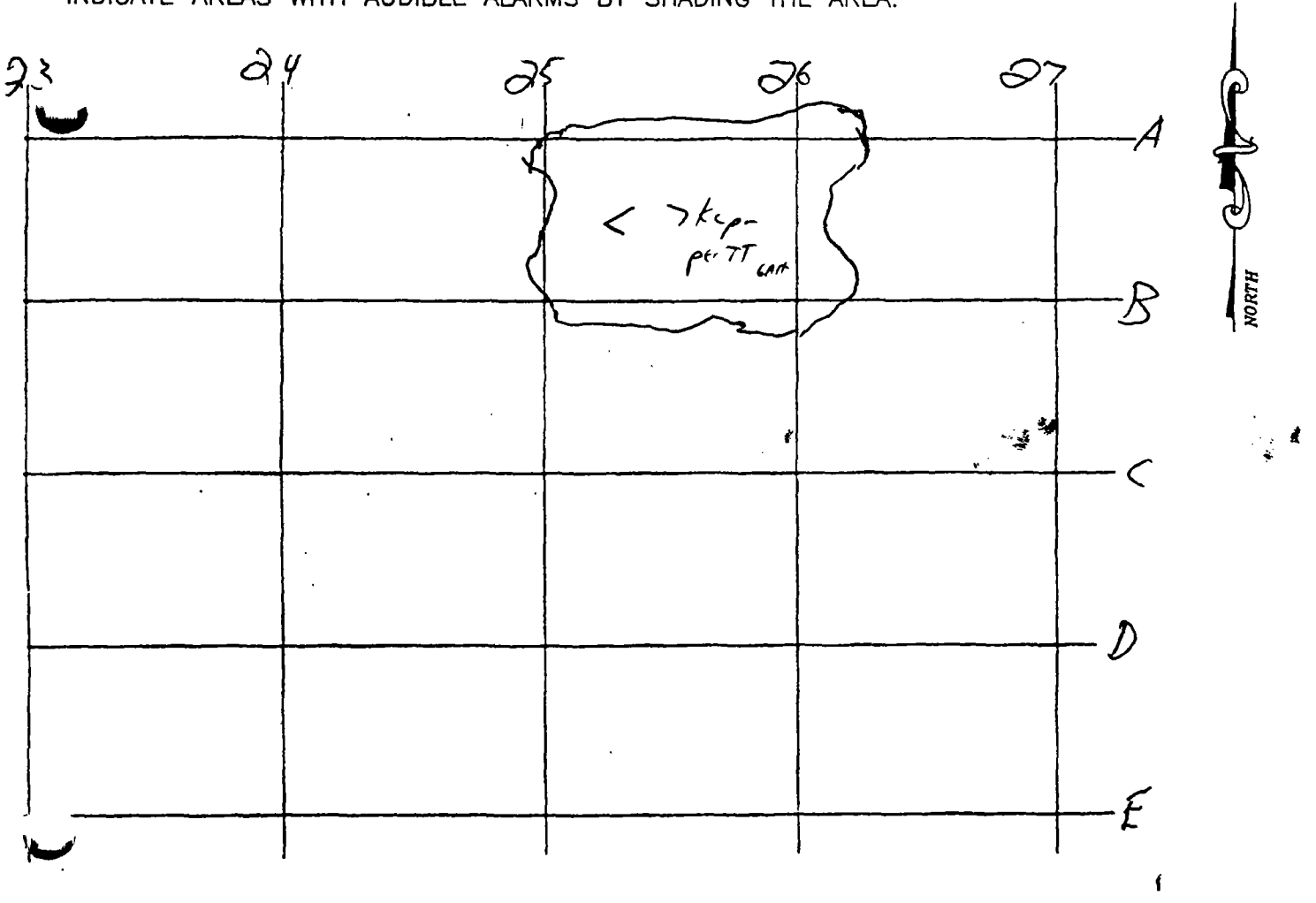
SERIAL NO.: 13454L

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: 4 ft

~~cle~~ * cleaned exclusion zone survey

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

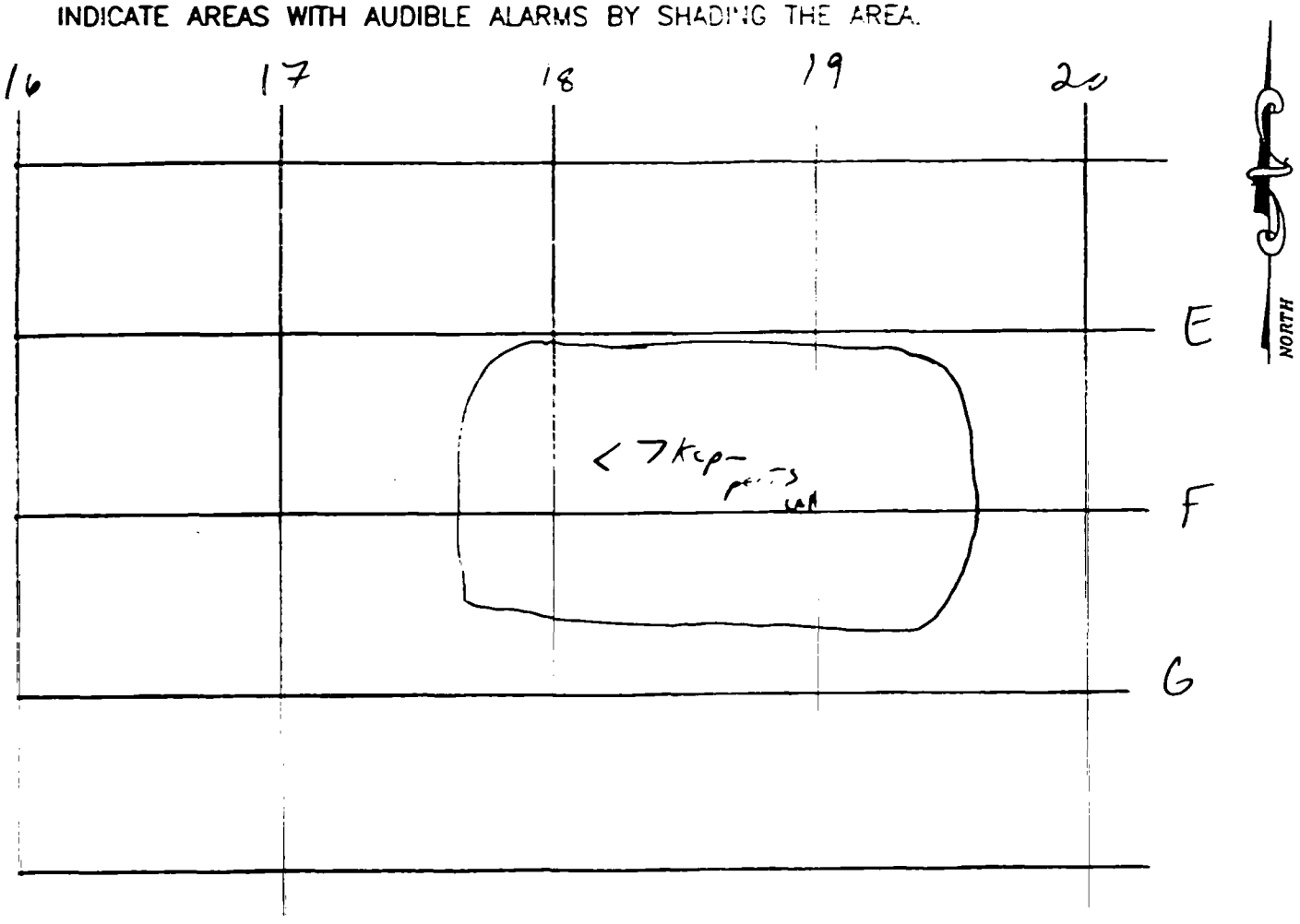
DATE: 06/19/00 TECHNICIAN: T.S.

INST. MODEL: 2221 Shielded SERIAL NO.: 13454L

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: 12 ft

Cleaned Exclusion Zone Survey

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

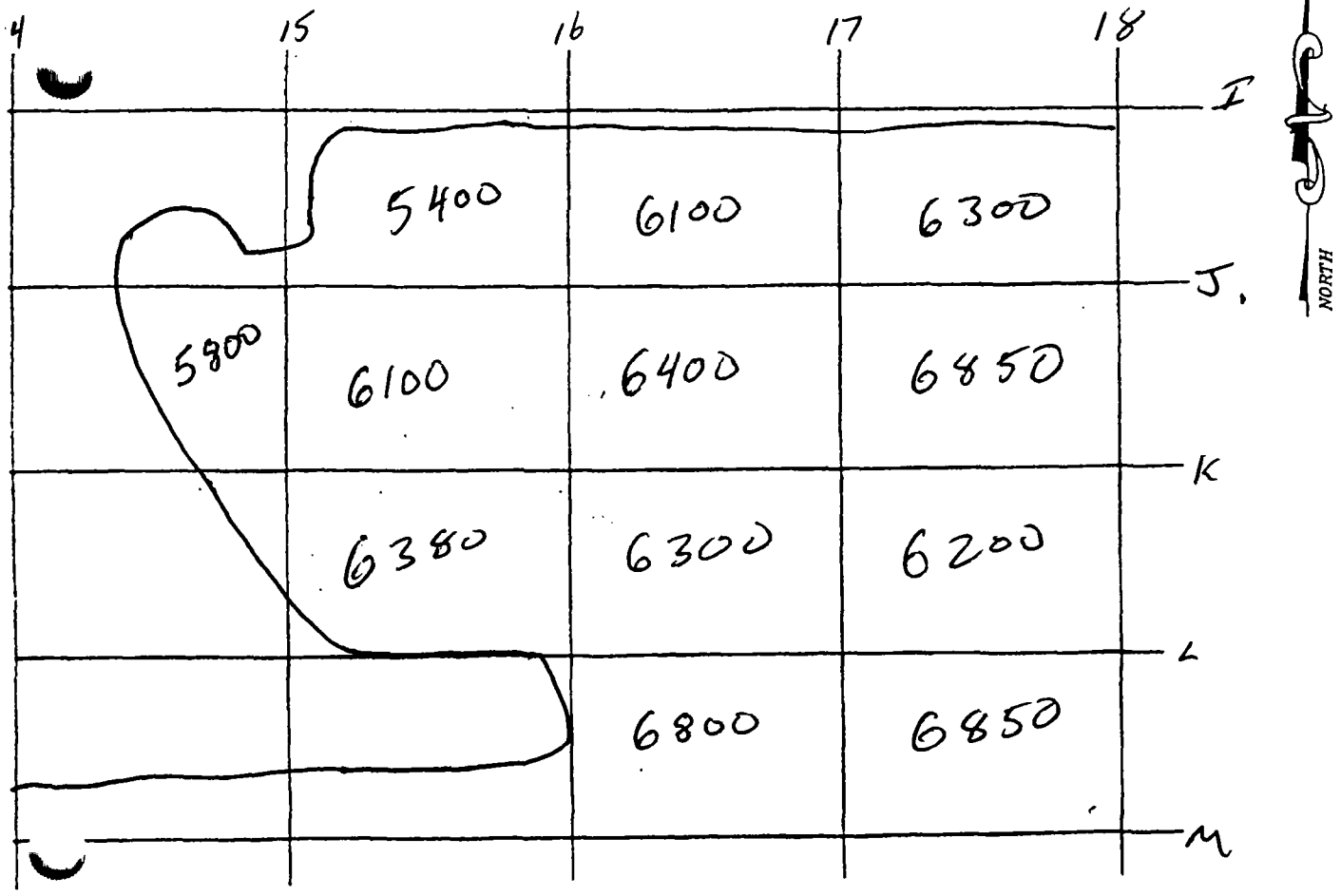
sheet 1 of 4

DATE: 5/12/00 TECHNICIAN: BRENT BARTON

INST. MODEL: Ludlum 2221 (SHIELDED) SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: Exclusion Zone after clean up

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
07/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

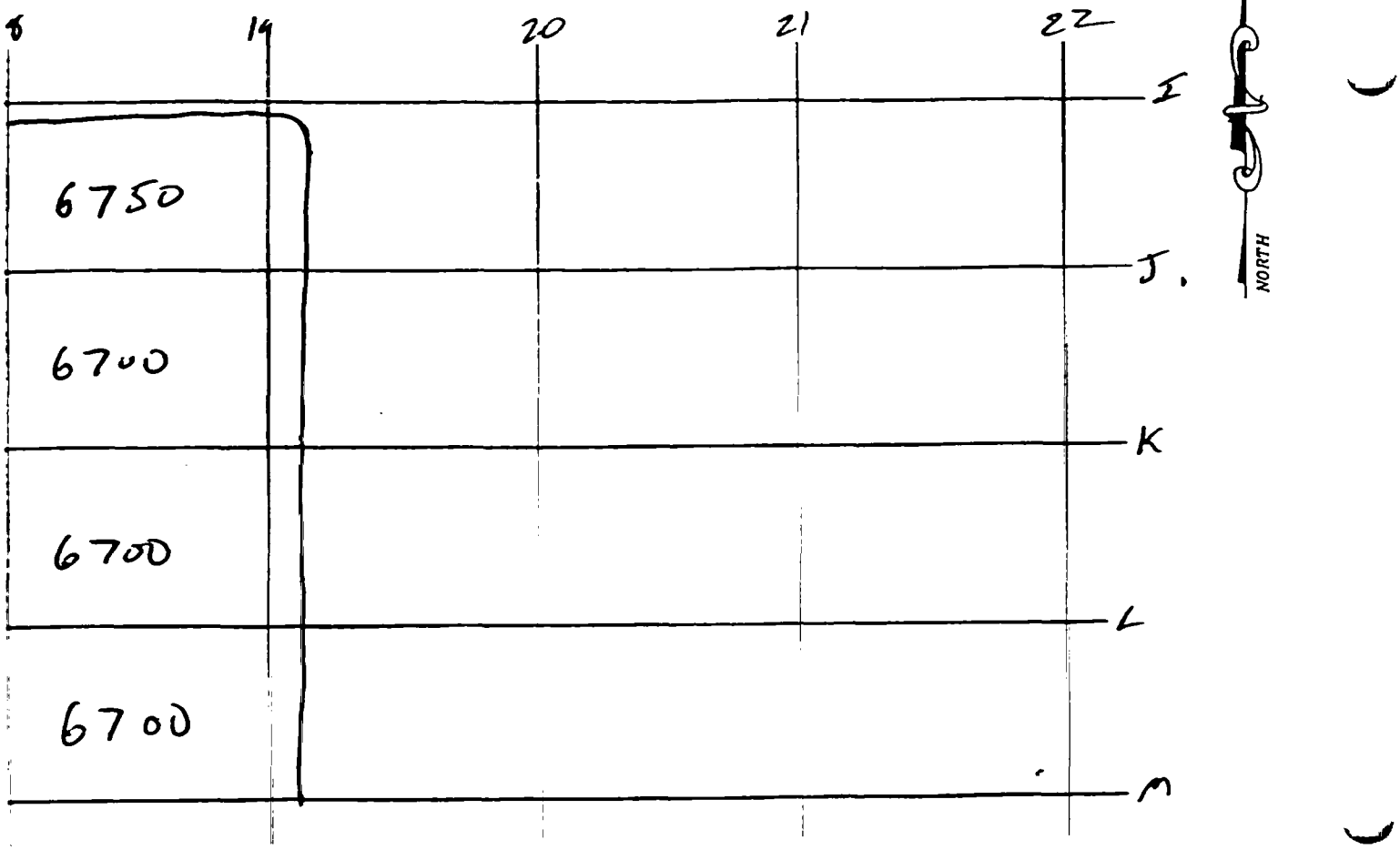
Sheet 2 of 4

DATE: 5/12/00 TECHNICIAN: Brent Barton

INST. MODEL: Ludlum 2221 (SHARED) SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? 3/31/00 LIFT ELEVATION: post drive exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xx\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

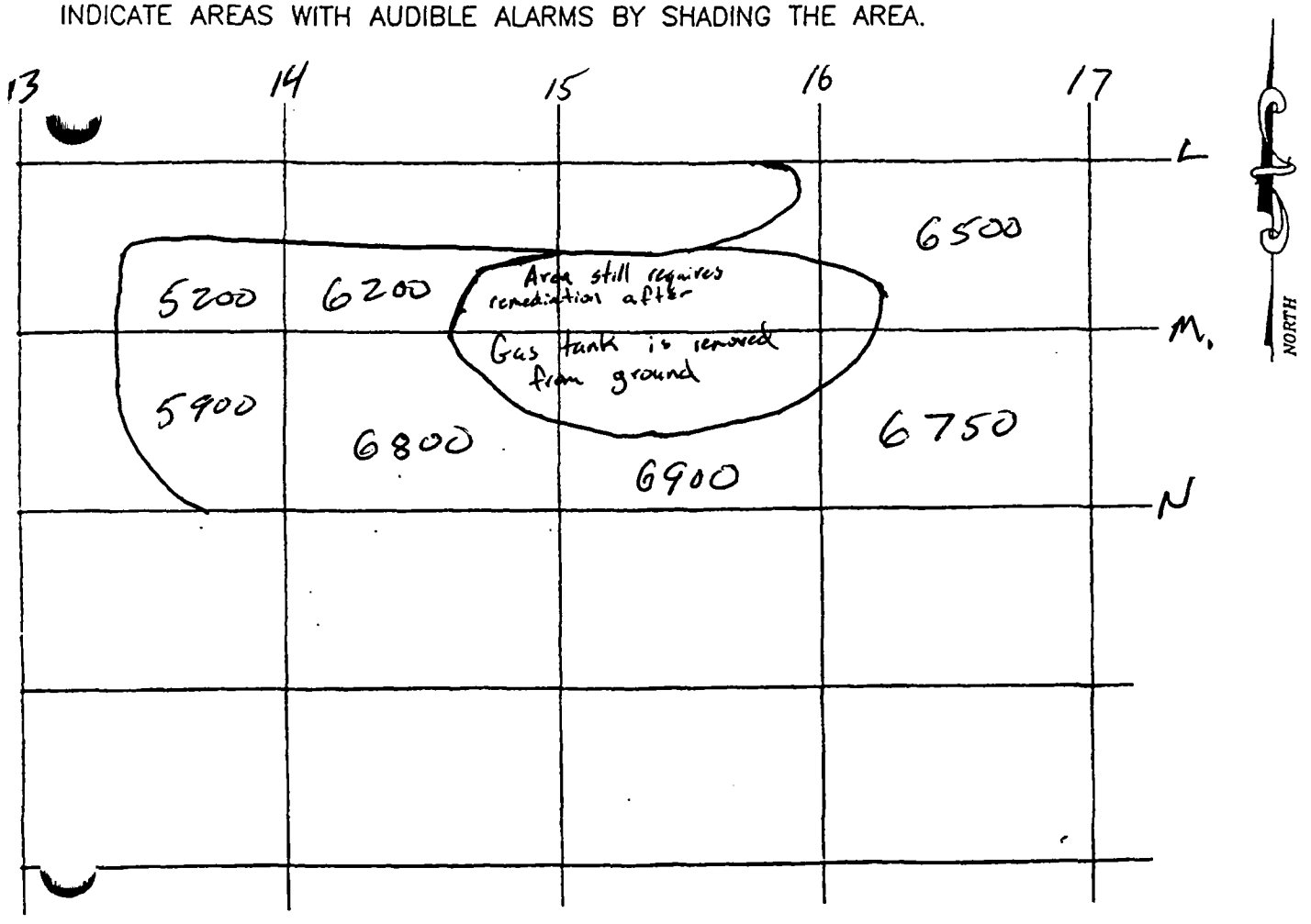
Sheet 3 of 4

DATE: 5/12/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 (SHIELDED) SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

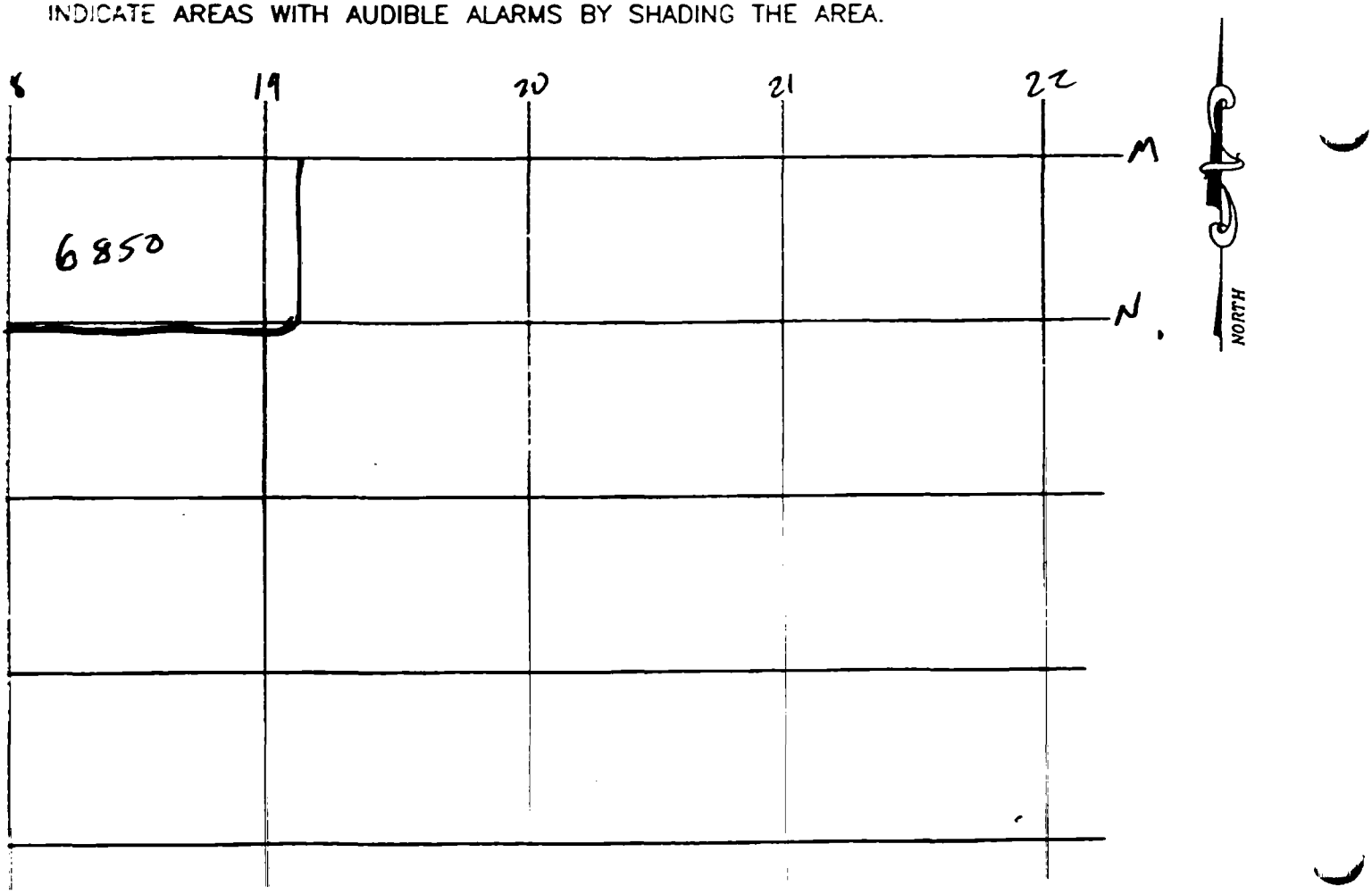
Sheet 4 of 4

DATE: 5/12/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 (SHIELDED) SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

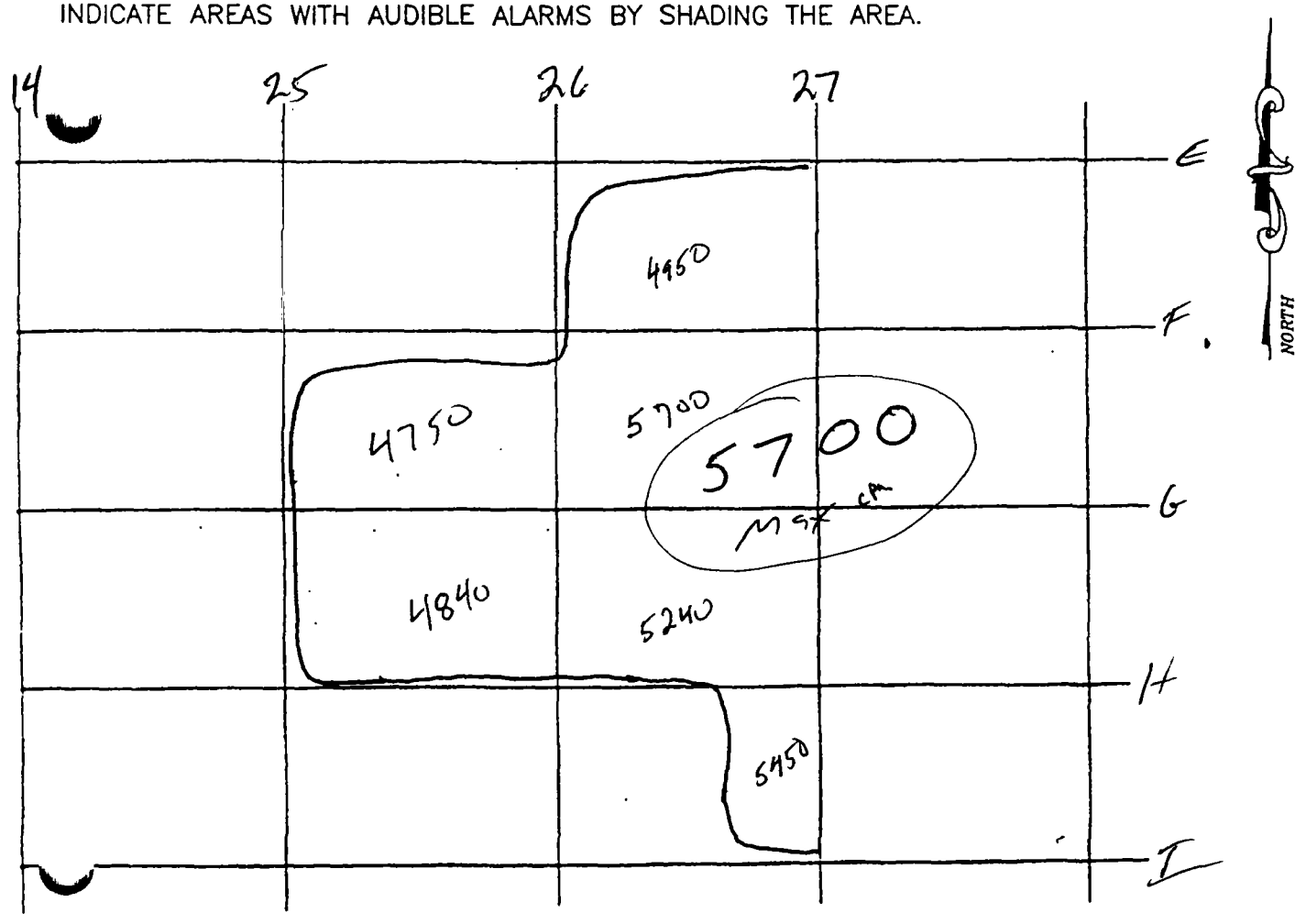
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/9/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 SHIELDED SERIAL NO.: 184542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

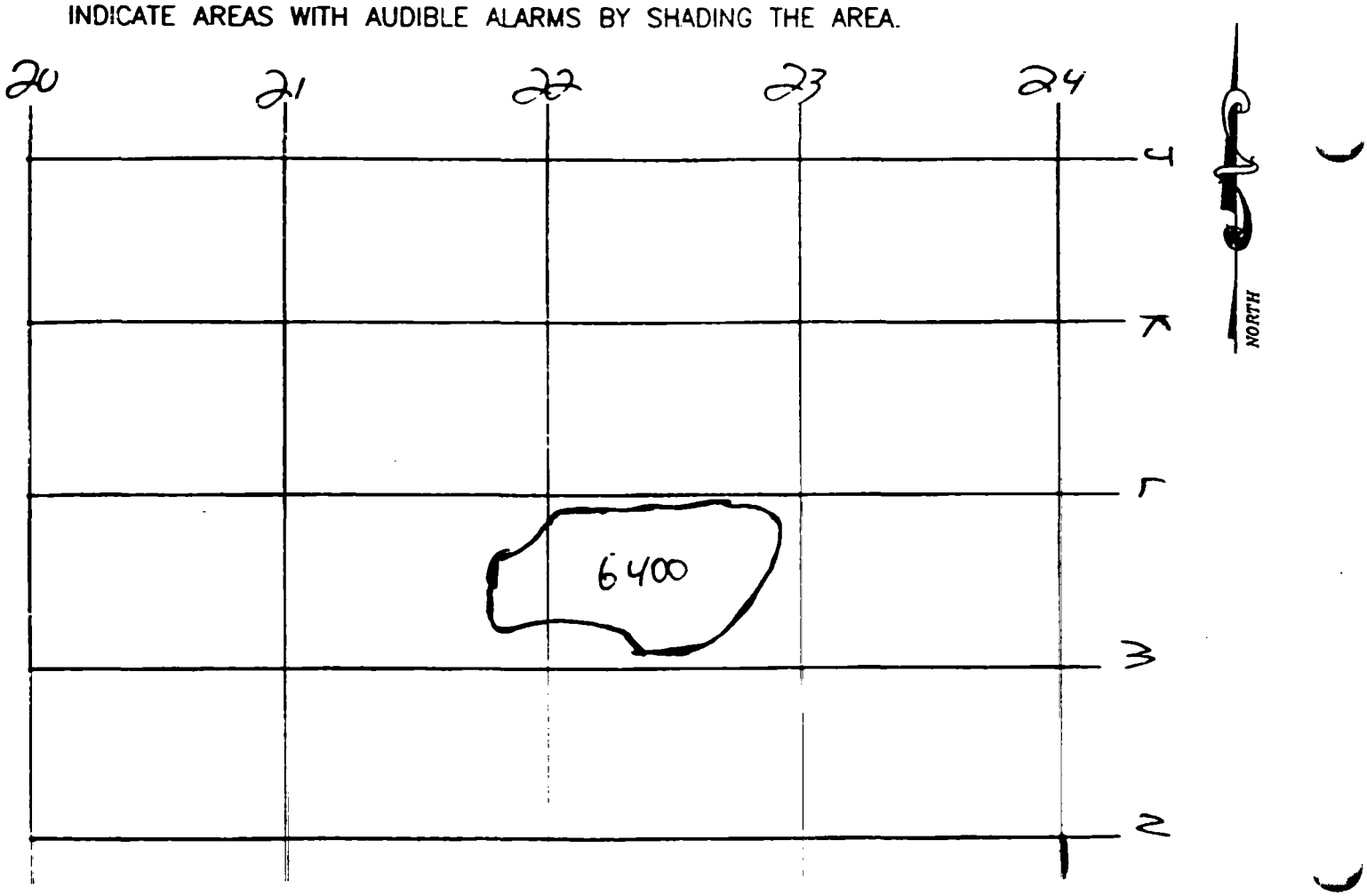
DATE: 4-29-00 TECHNICIAN: Brett

INST. MODEL: 222/ SERIAL NO.: 126497

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 2½ ft

Exclusion zone - post remediation

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants, Ltd.

Sheet 1 of 1

Date: 4-25-00 Technician: ~~[illegible]~~ Glenn Huber

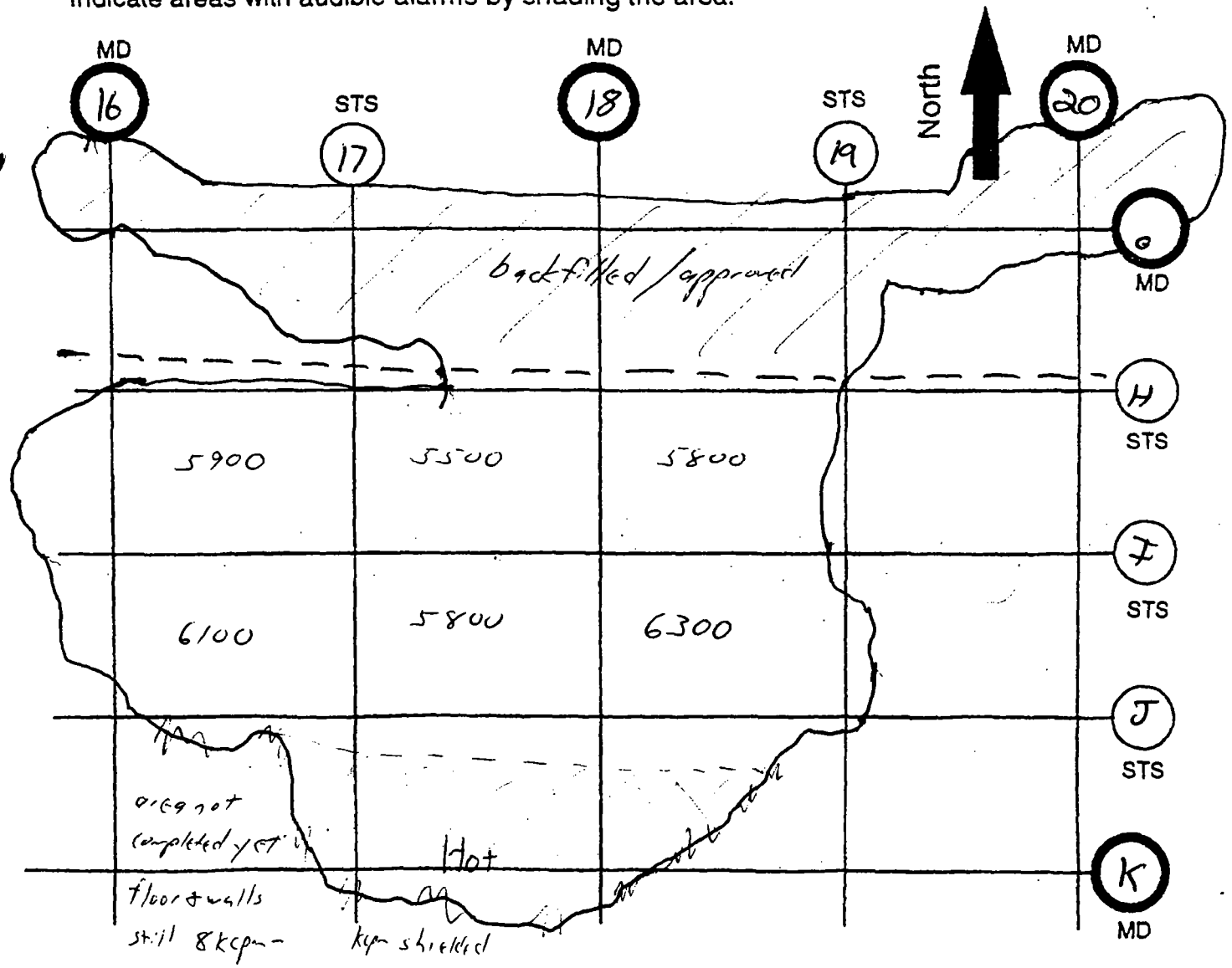
Inst. Model: 2221 Shielded Serial No.: 134542

Inst. Calibrated (y/n)? y Lift Elevation: pre EPA confirmatory survey approx 12" deep max

Write column lines in corresponding circles. Indicate excavated area with heavy line.

Intersecting lines require 30 second counts. Record counts at intersections in CPM.

Indicate areas with audible alarms by shading the area.



--- = Exclusion zone

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/12/2000

TECHNICIAN: Joel M. Ahrweiler

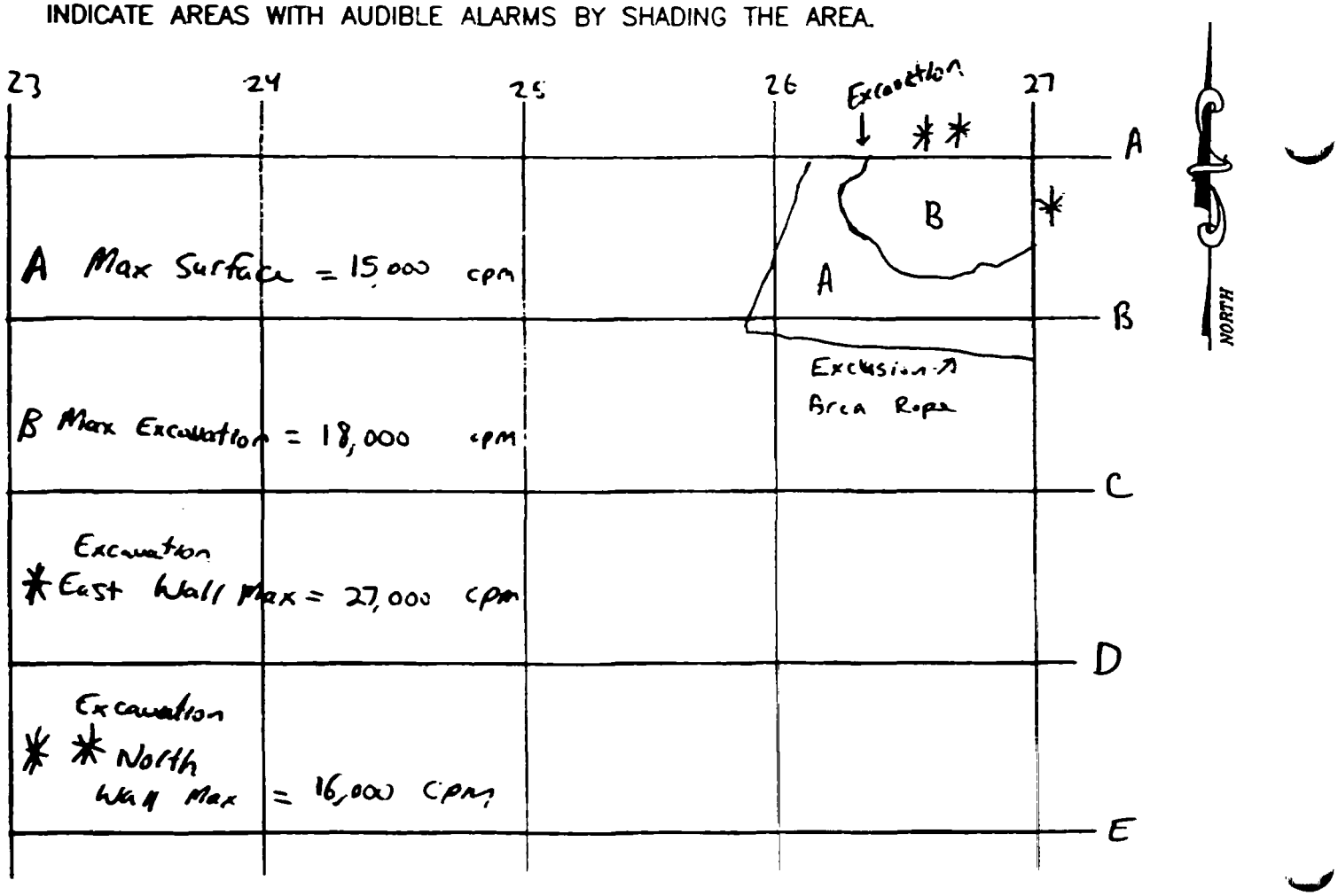
INST. MODEL: 2221

SERIAL NO.: 125496 (unshielded)

INST. CALIBRATED (Y/N)? 3/2000 - 3/2001

LIFT ELEVATION: Exclusion Zone Release

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xx\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

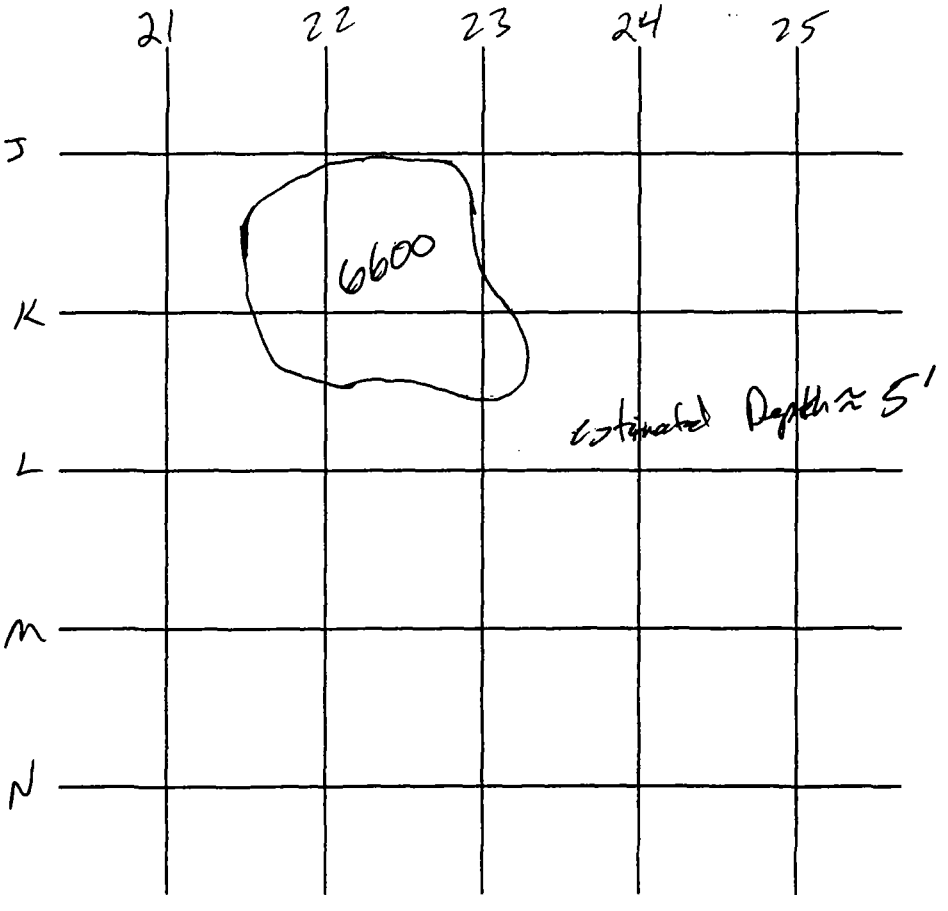
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/14/00 TECHNICIAN: BRENT BARTON

INST. MODEL: Ludlum 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? 3/31/00 LIFT ELEVATION: ~~elevation~~ post decon excavation zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-14-00

TECHNICIAN: Brett Barton

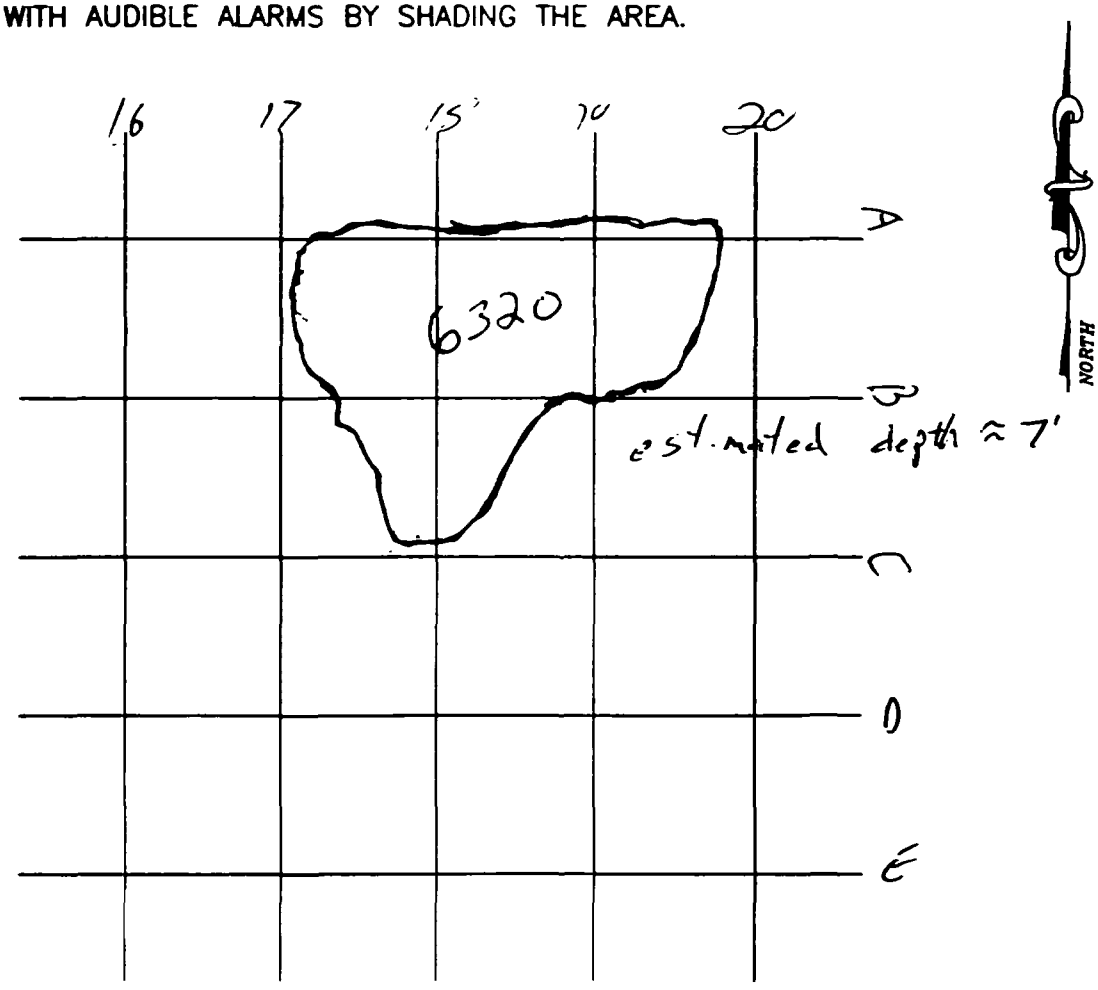
INST. MODEL: 2221 - Ludlum shielded

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: 3 feet above

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

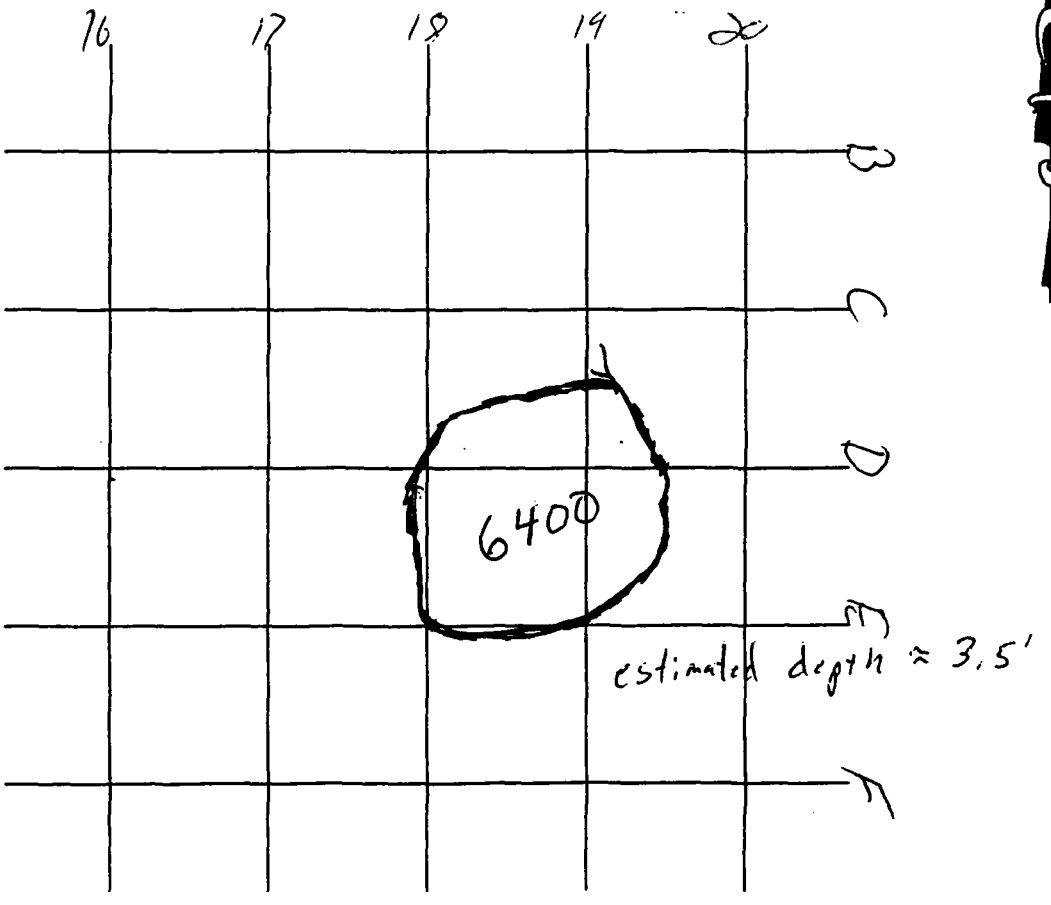
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-14-00 TECHNICIAN: Brent Barton

INST. MODEL: 2021-Ludlum shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: 3.5ft+ deep

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

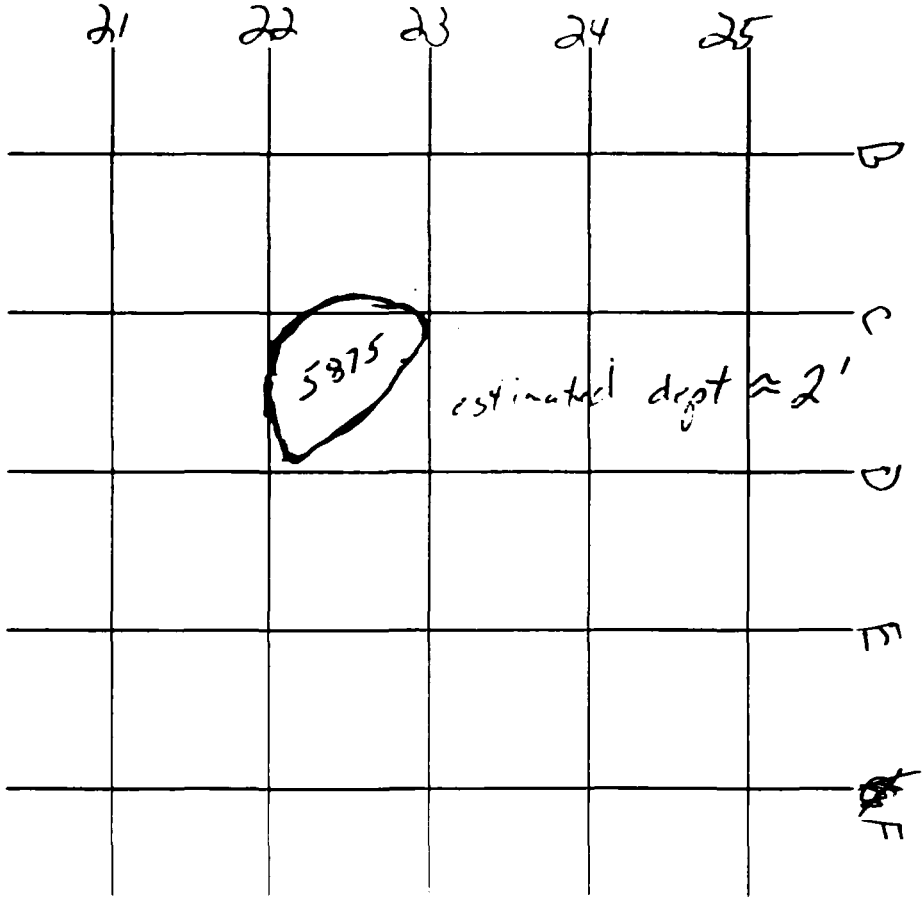
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-14-00 TECHNICIAN: Brett Barton

INST. MODEL: 2221 Cudlon shield SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? 3/31/00 LIFT ELEVATION: 2 feet deep

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/14/00

TECHNICIAN: BRETT BARTON

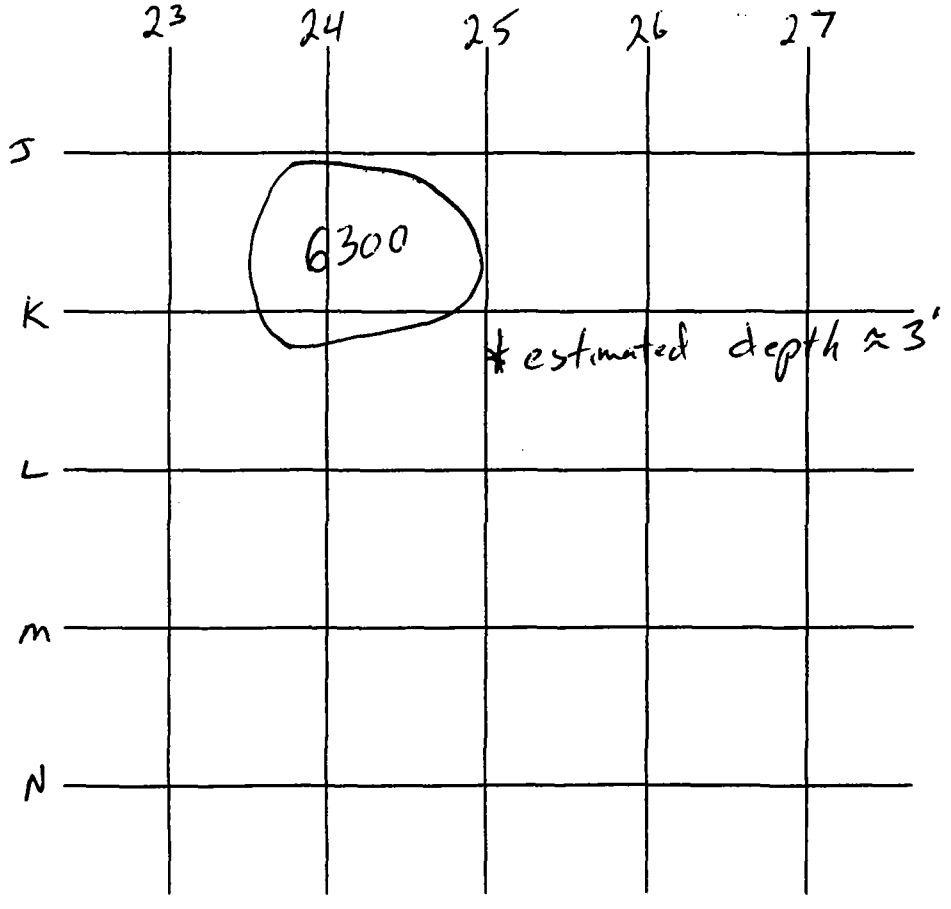
INST. MODEL: Ludlum 2221 shielded

SERIAL NO.: 134542

INST. CALIBRATED (Y)/N)? 3/31/00

LIFT ELEVATION: ~~Excavation~~ post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

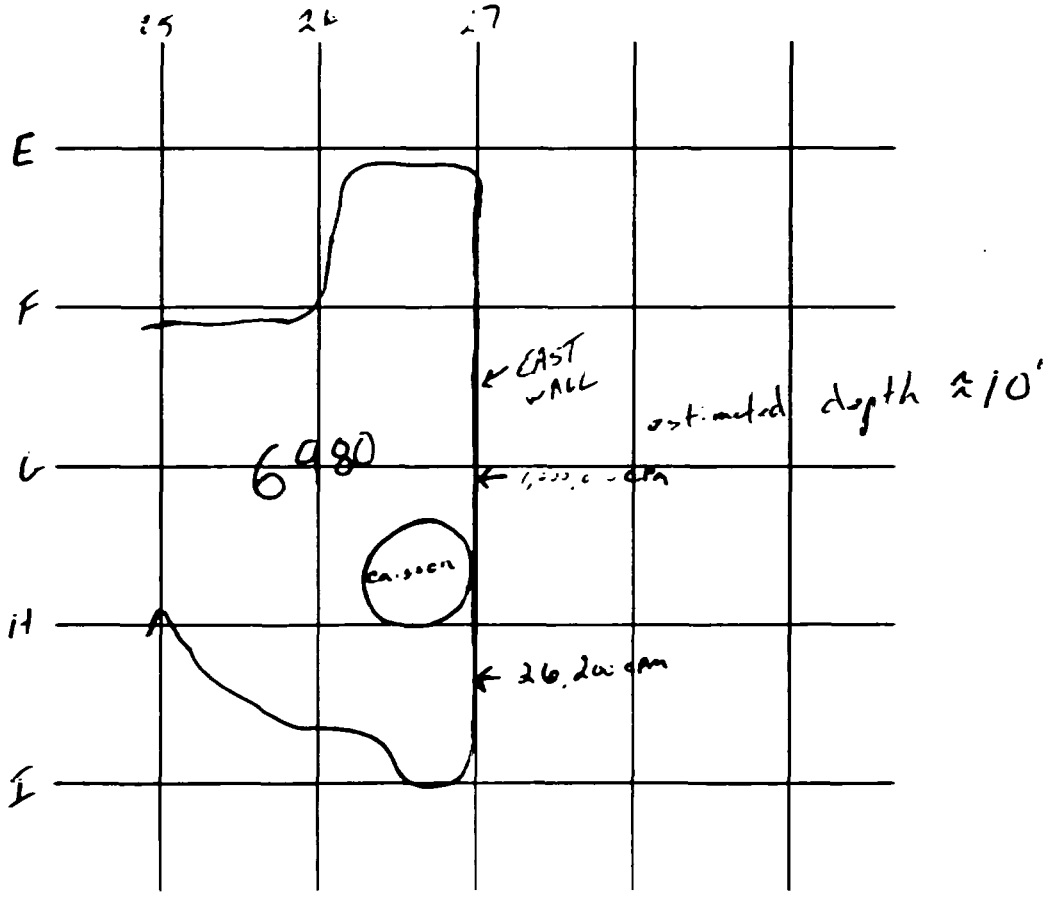
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/14/00 TECHNICIAN: Brent Barton

INST. MODEL: Ludlum 2221 SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: ~~assume~~ post excavation zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/14/00

TECHNICIAN: BRETT BARTON

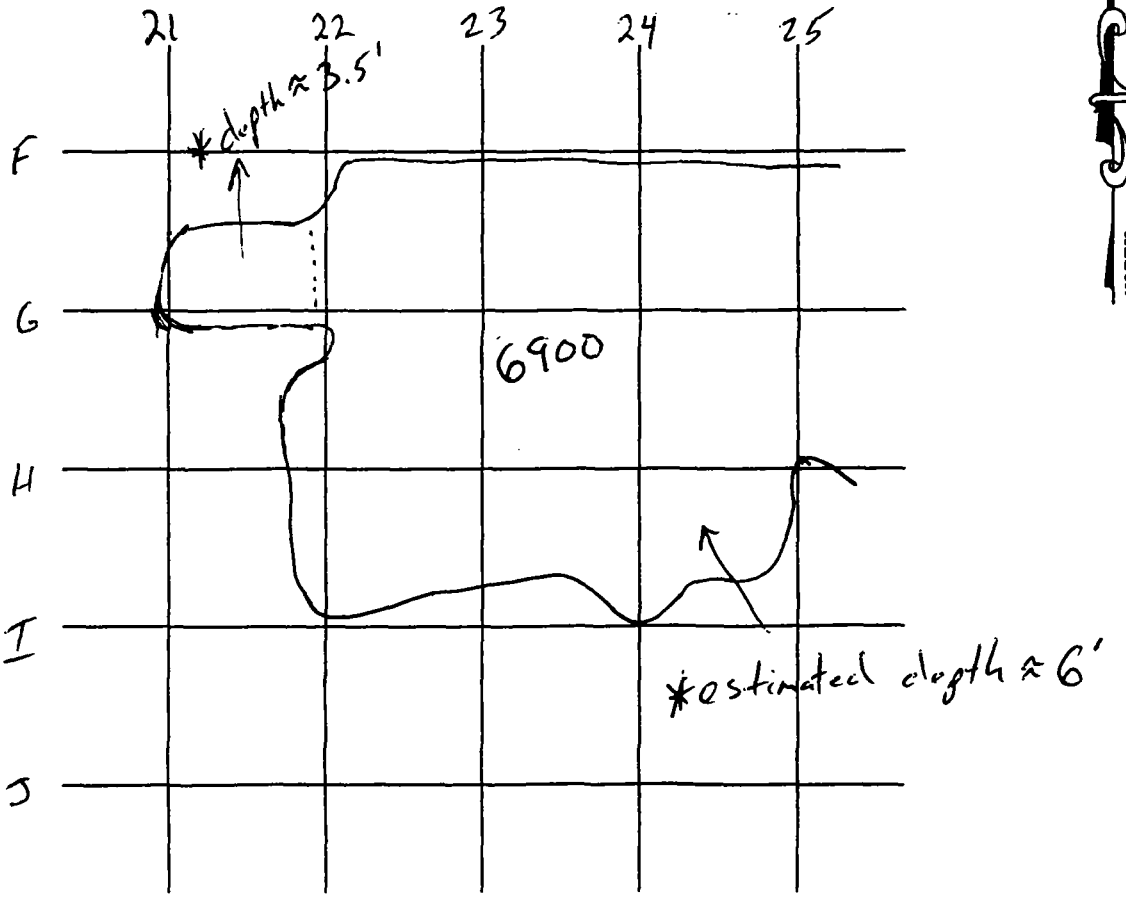
INST. MODEL: Ludlum 2221 shielded

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? Y 3/31/00

LIFT ELEVATION: ~~excavation~~ post decon exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

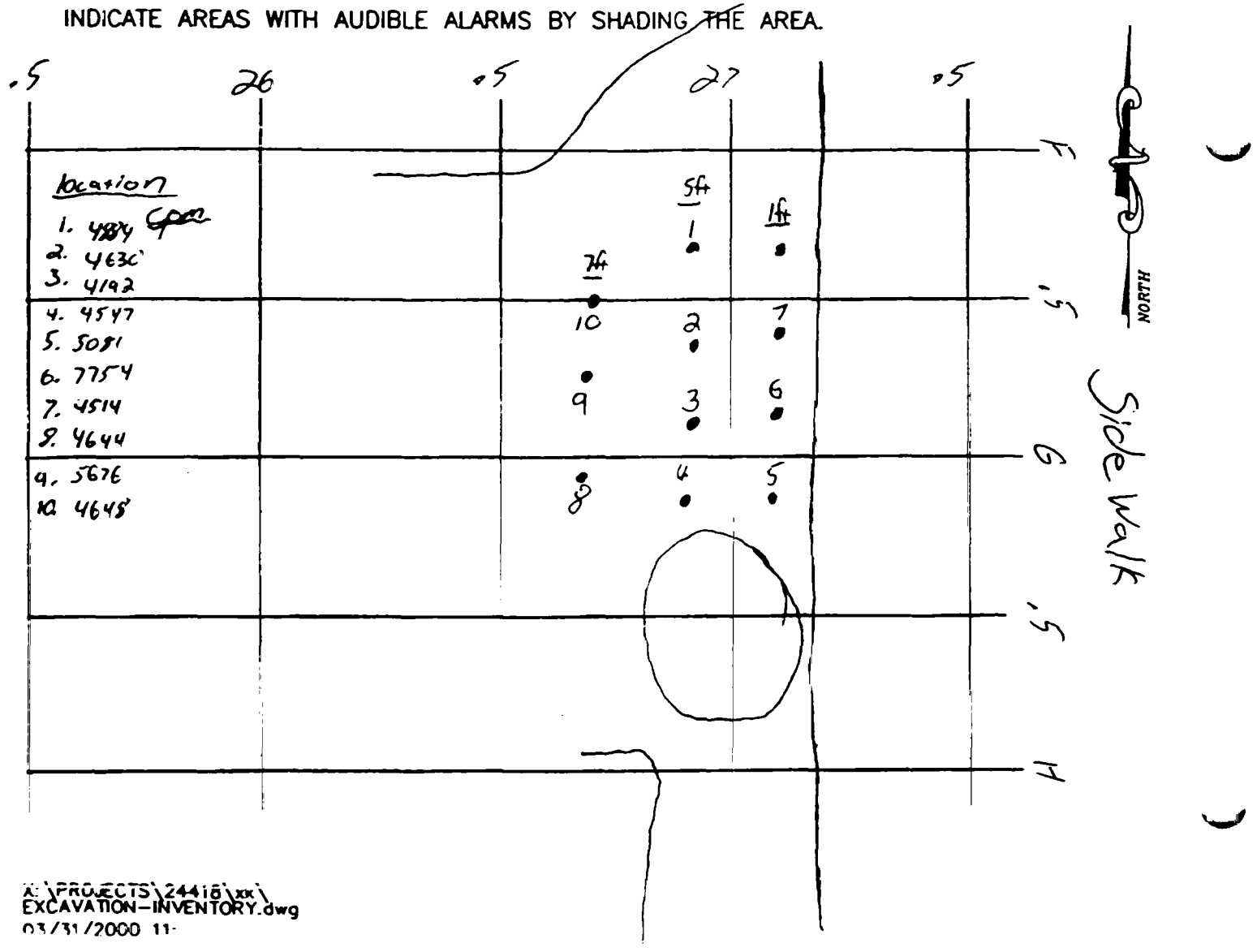
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-24-00 TECHNICIAN: Tristan Timms

INST. MODEL: 2221 Shield SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 10'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Location
1. 4584 Open
2. 4636
3. 4192
4. 4547
5. 5091
6. 7754
7. 4514
8. 4644
9. 5676
10. 4648

X:\PROJECTS\24418\xx\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

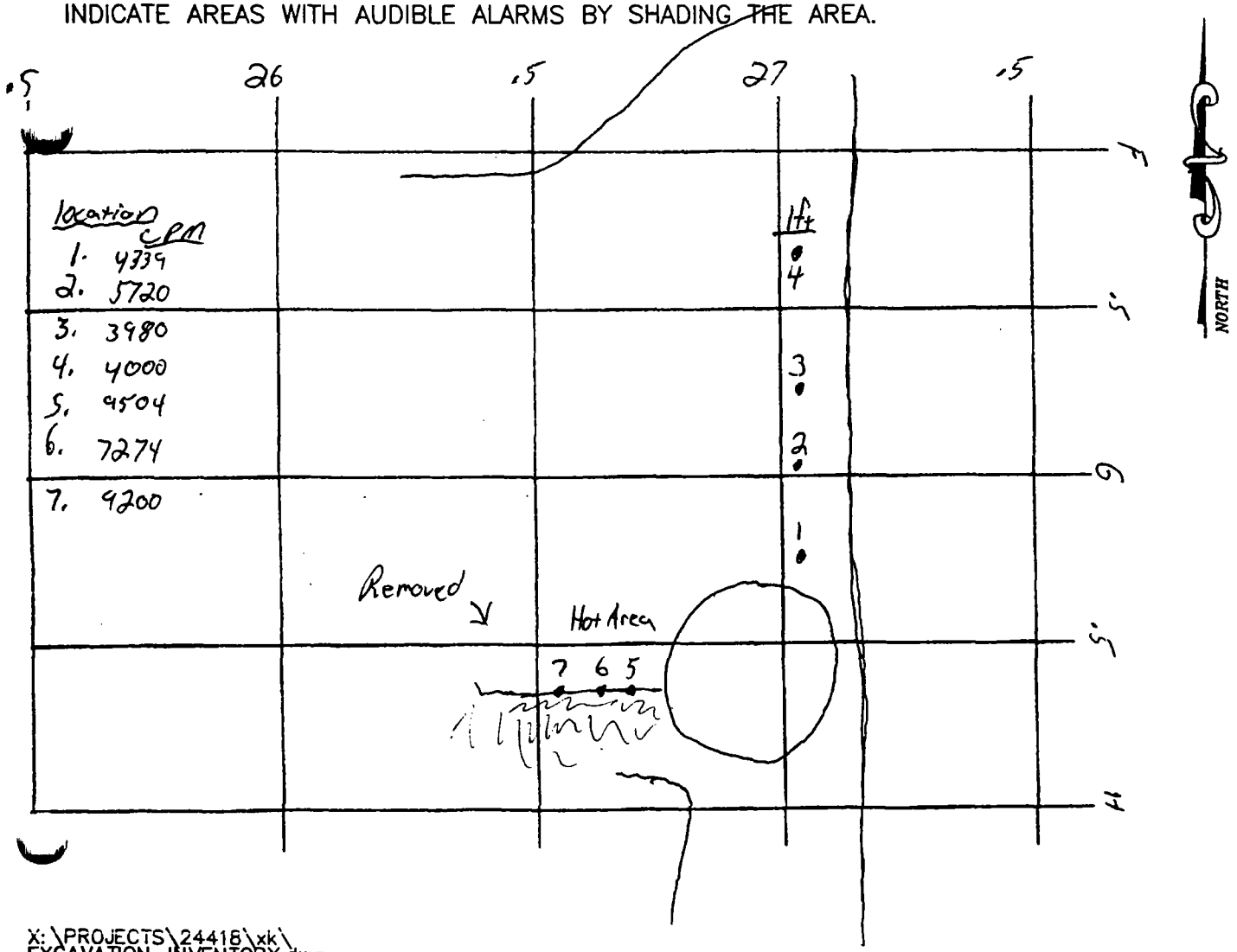
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4-26-00 TECHNICIAN: Tristan Timm

INST. MODEL: 2221 shielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: 10'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

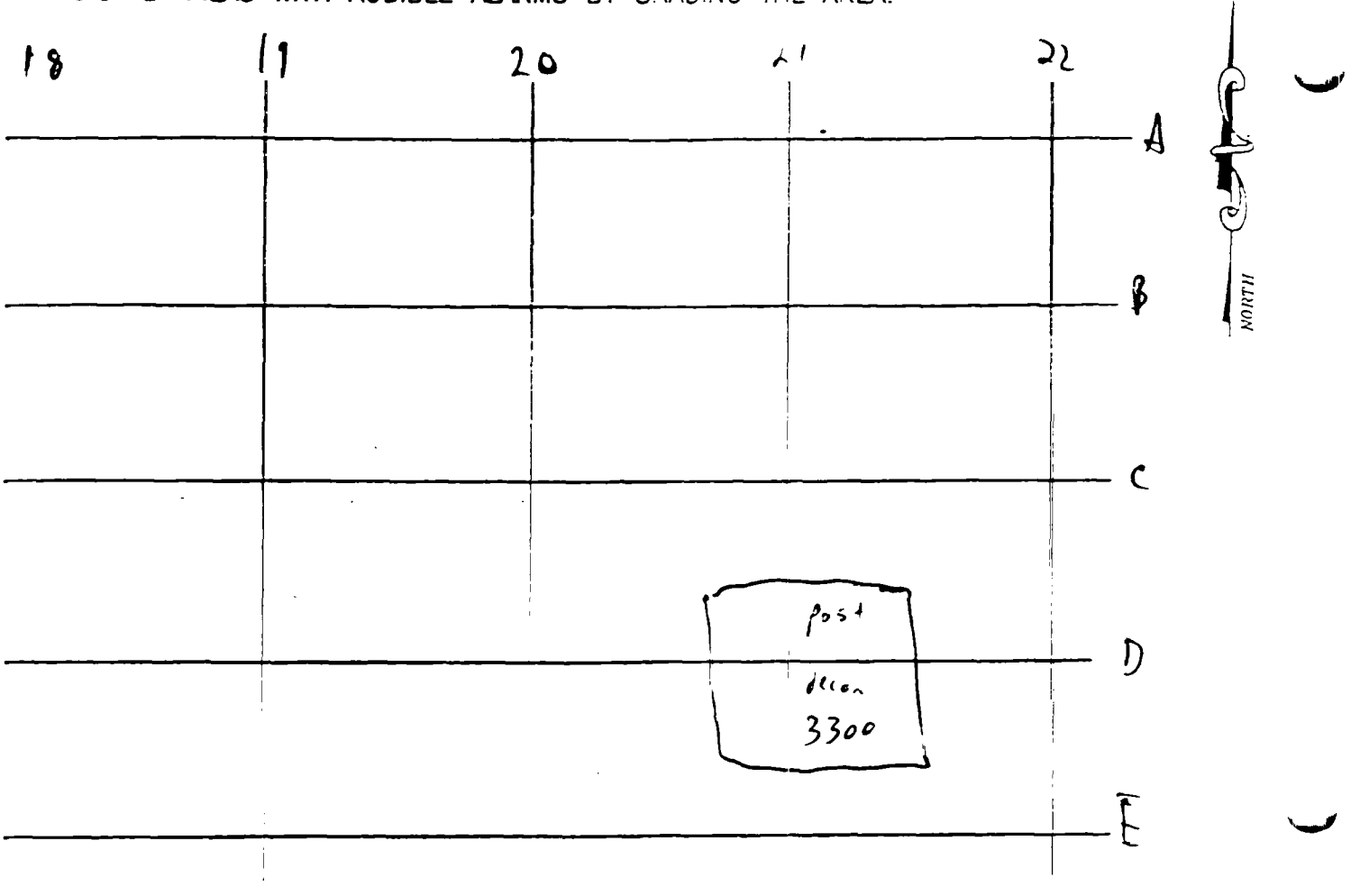
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/18/00 TECHNICIAN: Toby Sherman

INST. MODEL: 2221 SERIAL NO.: 12722

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

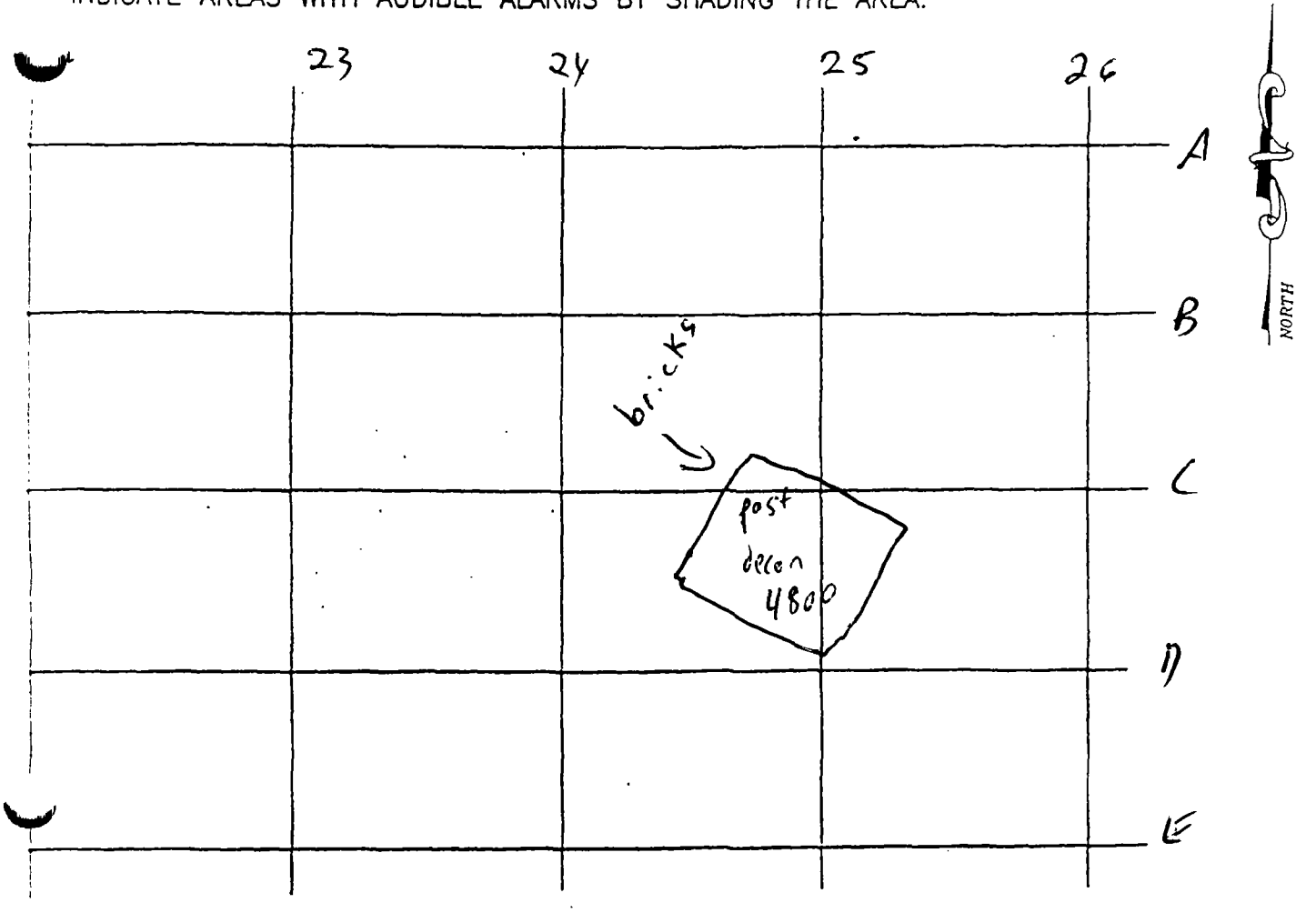
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/14/00 TECHNICIAN: Toby Skewes

INST. MODEL: 2221 SERIAL NO.: 127282

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: exclusion Zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 10/9/00

TECHNICIAN: Toby Shewen

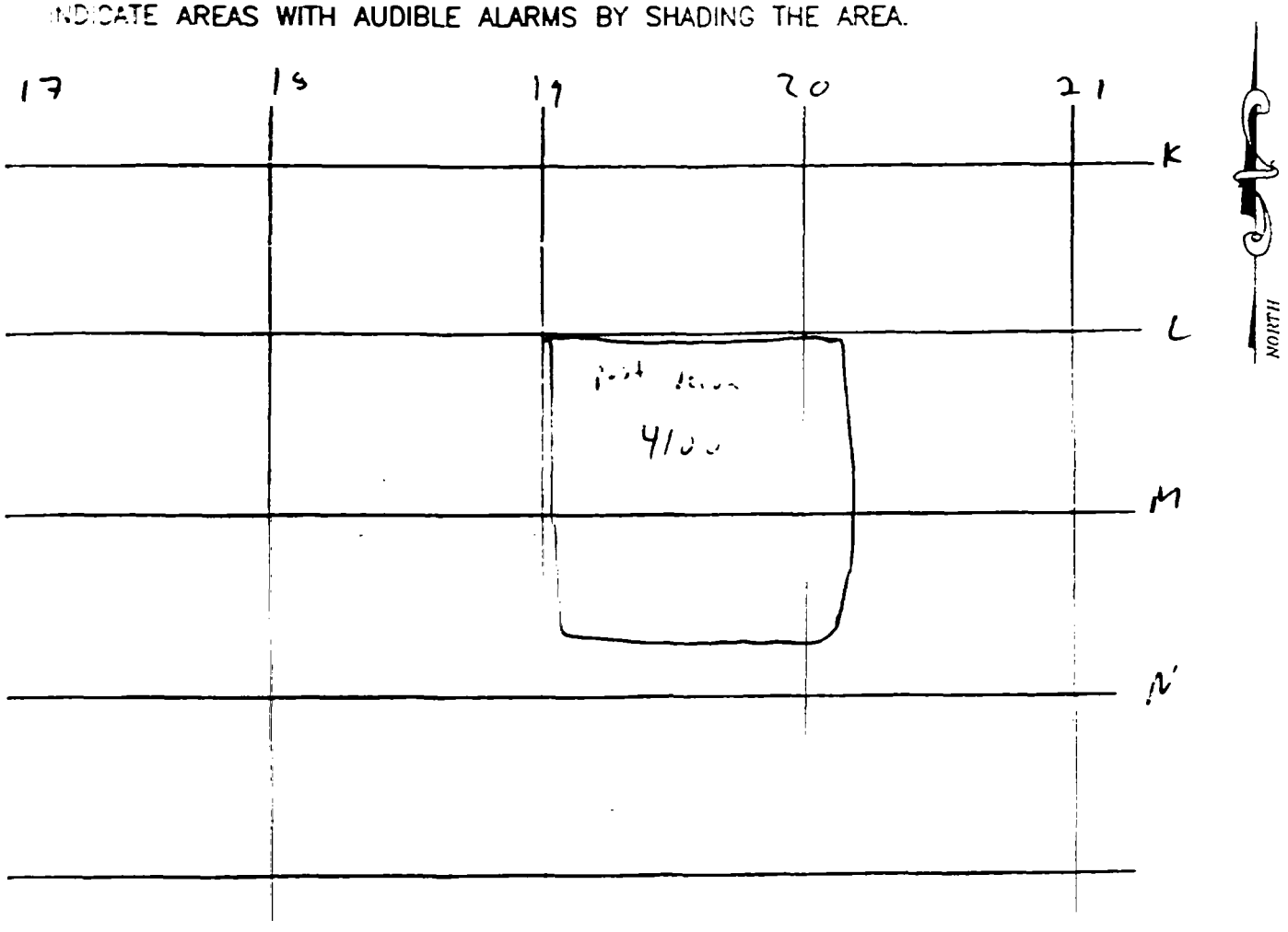
INST. MODEL: 2221

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: exclusion zone

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

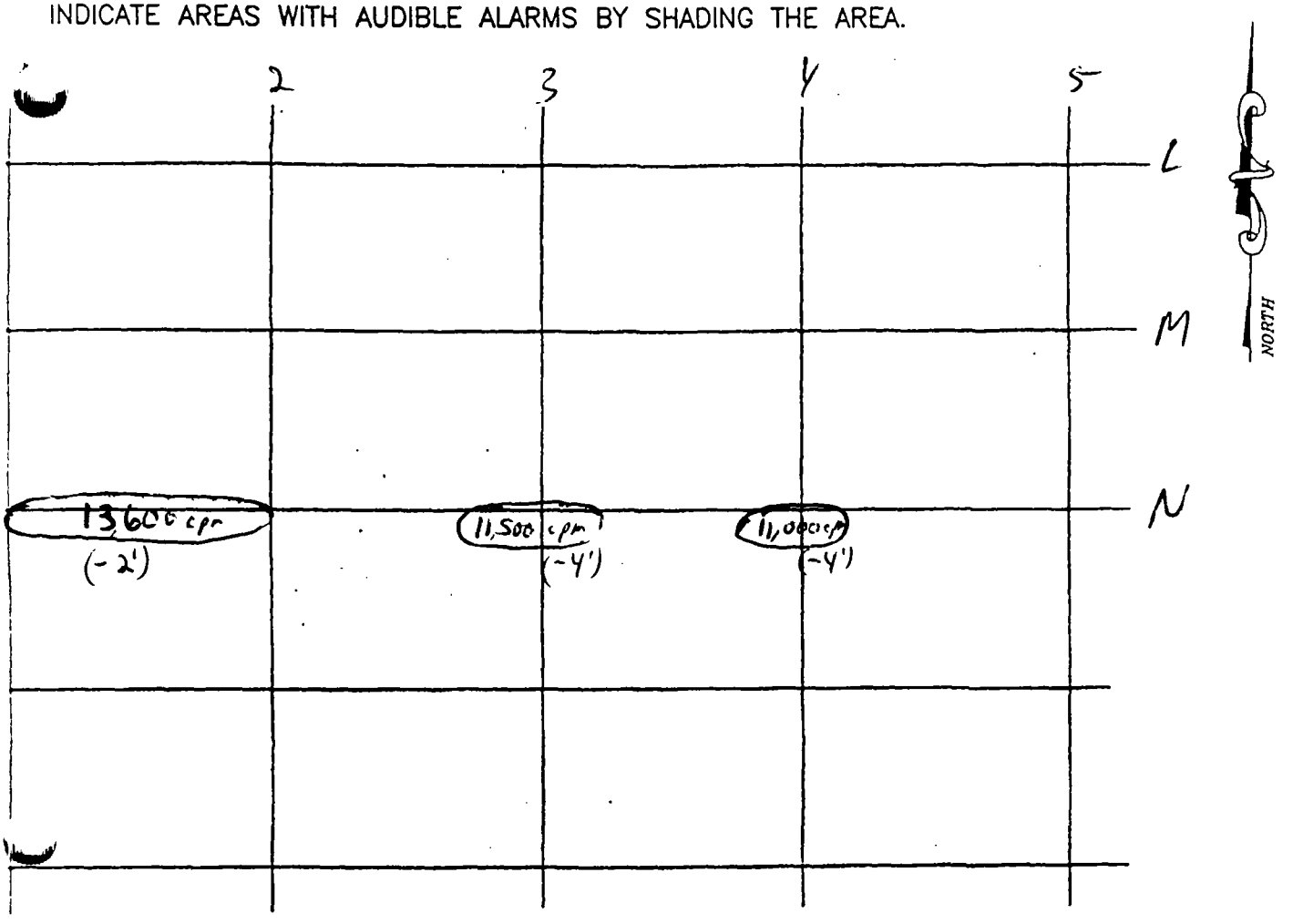
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 9/29/00 TECHNICIAN: Toby Shoman

INST. MODEL: 2221 SERIAL NO.: 12242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: areas still hot on South wall

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-17 TECHNICIAN: TRISTAN

INST. MODEL: 2221 Shielded SERIAL NO.: 132844

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Wall 6ft

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.

4	3	2	1	0	
4000	6800	14000			6ft
19000	15000	9000			5ft
23000	6900	5900			4ft
7200	5200	5800			3ft
6700	4200	3900			2ft
4200	3800	4100			1ft

A:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/15/00 TECHNICIAN: Brent Patton

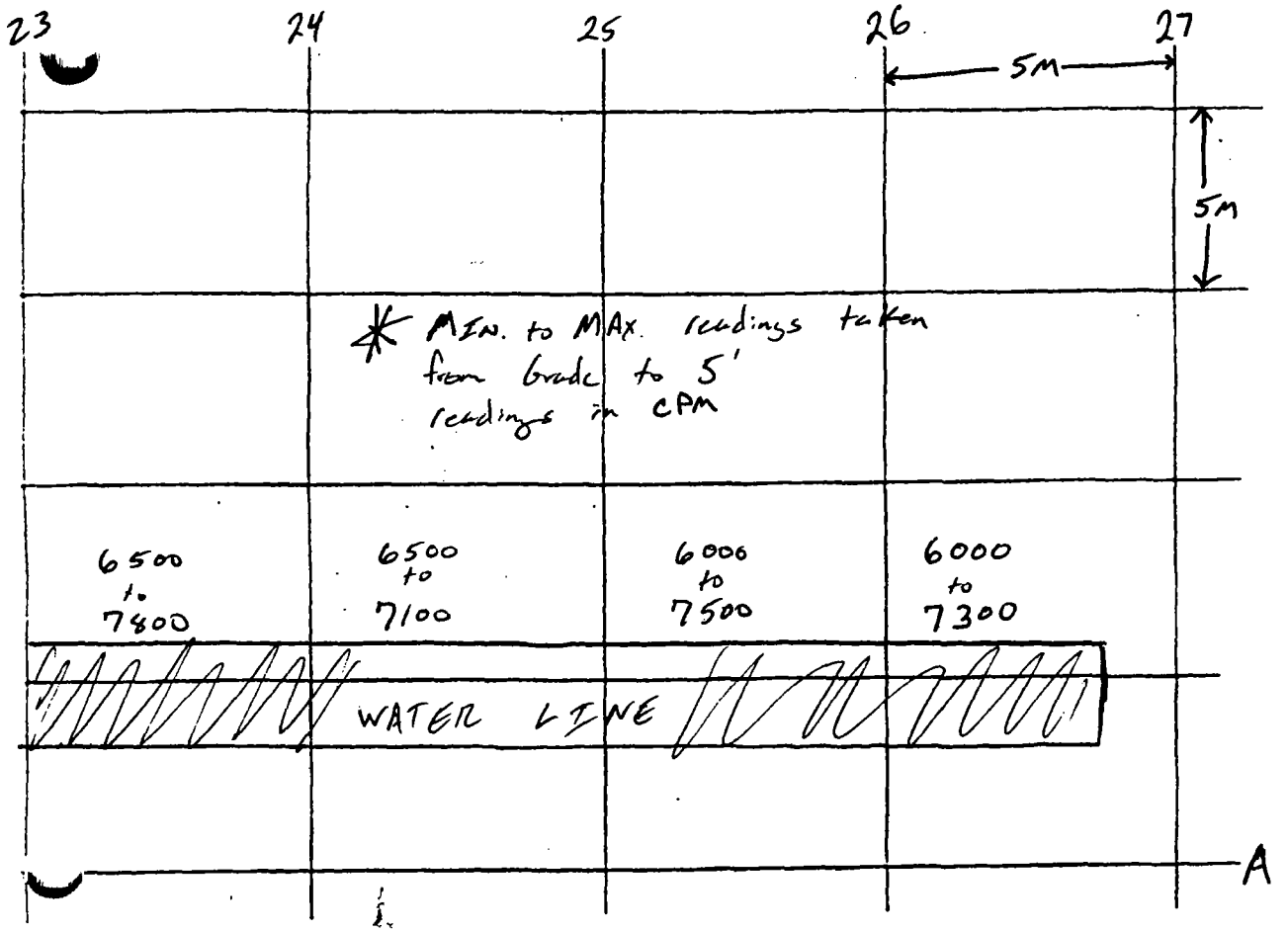
INST. MODEL: Ludlum 2221 (UNSHIELDED) SERIAL NO.: 126446

INST. CALIBRATED (Y)N)? 3/7/00 LIFT ELEVATION: 0 - 5'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

~~INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.~~

~~INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.~~



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

BACKGROUND: 5300 CPM

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/15/00

TECHNICIAN: Brett Burton

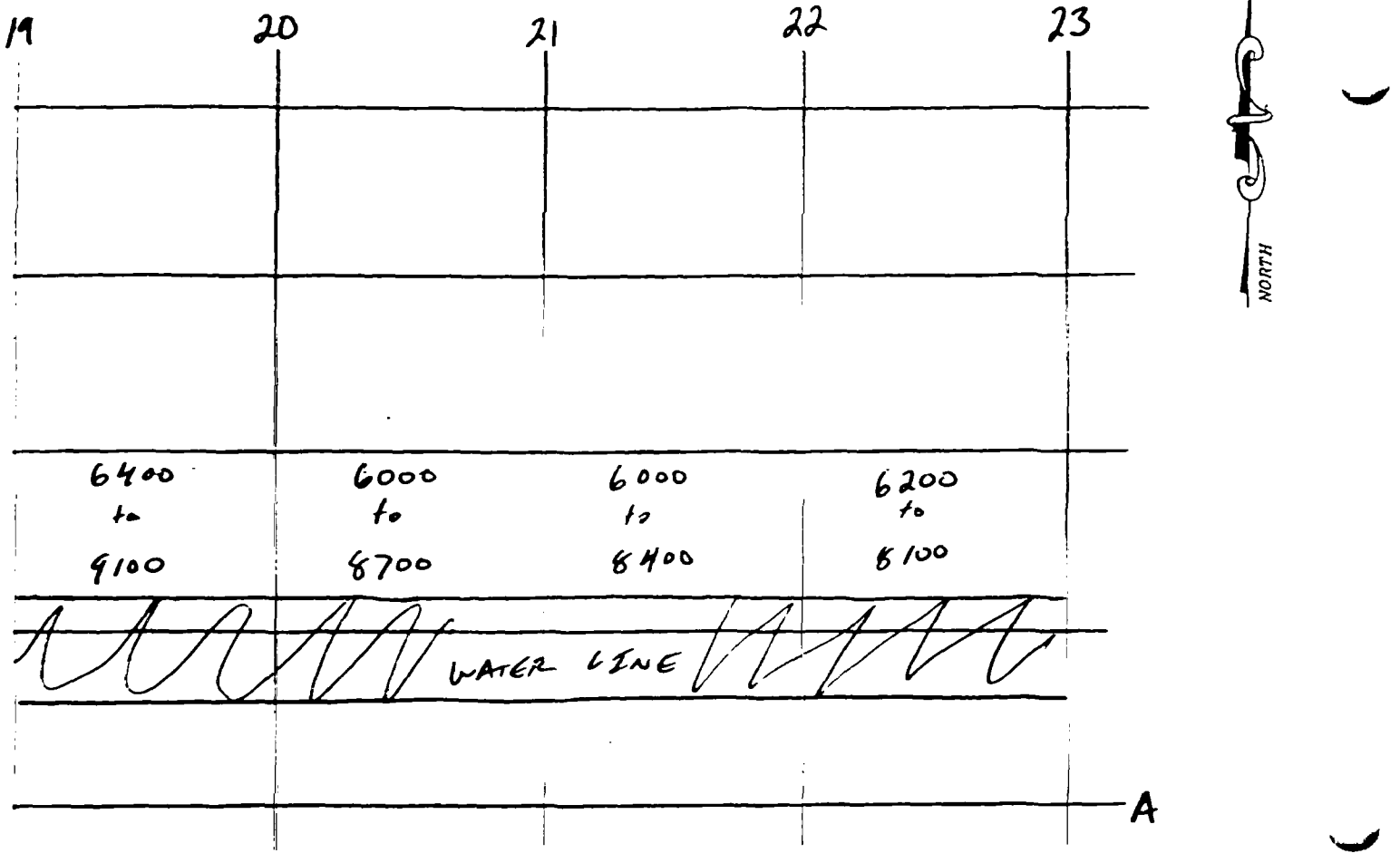
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126466

INST. CALIBRATED (Y)N)? 3/7/00

LIFT ELEVATION: 0-5'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 4/16/00

TECHNICIAN: Brent Barton

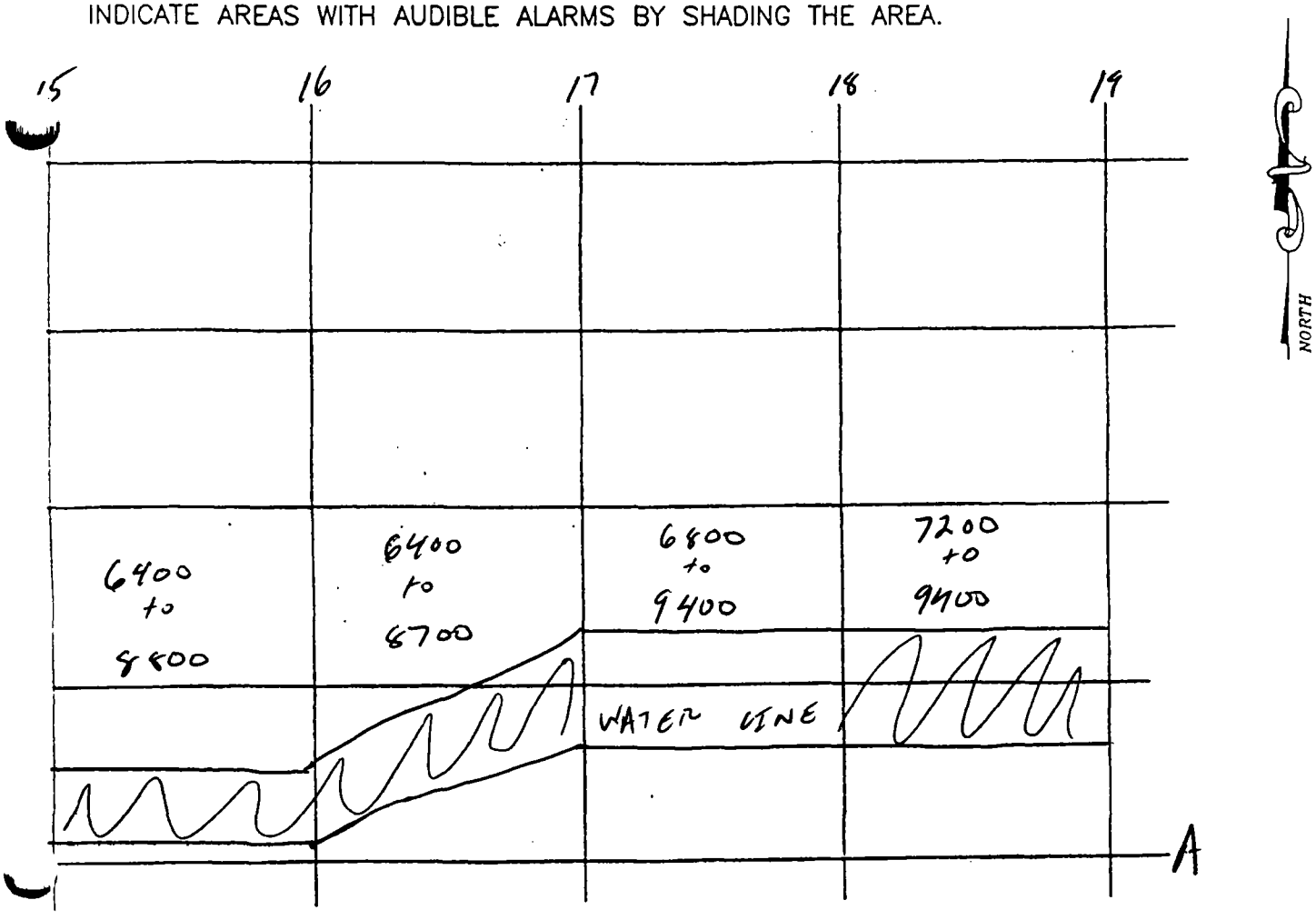
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: 0-5'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LIN
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

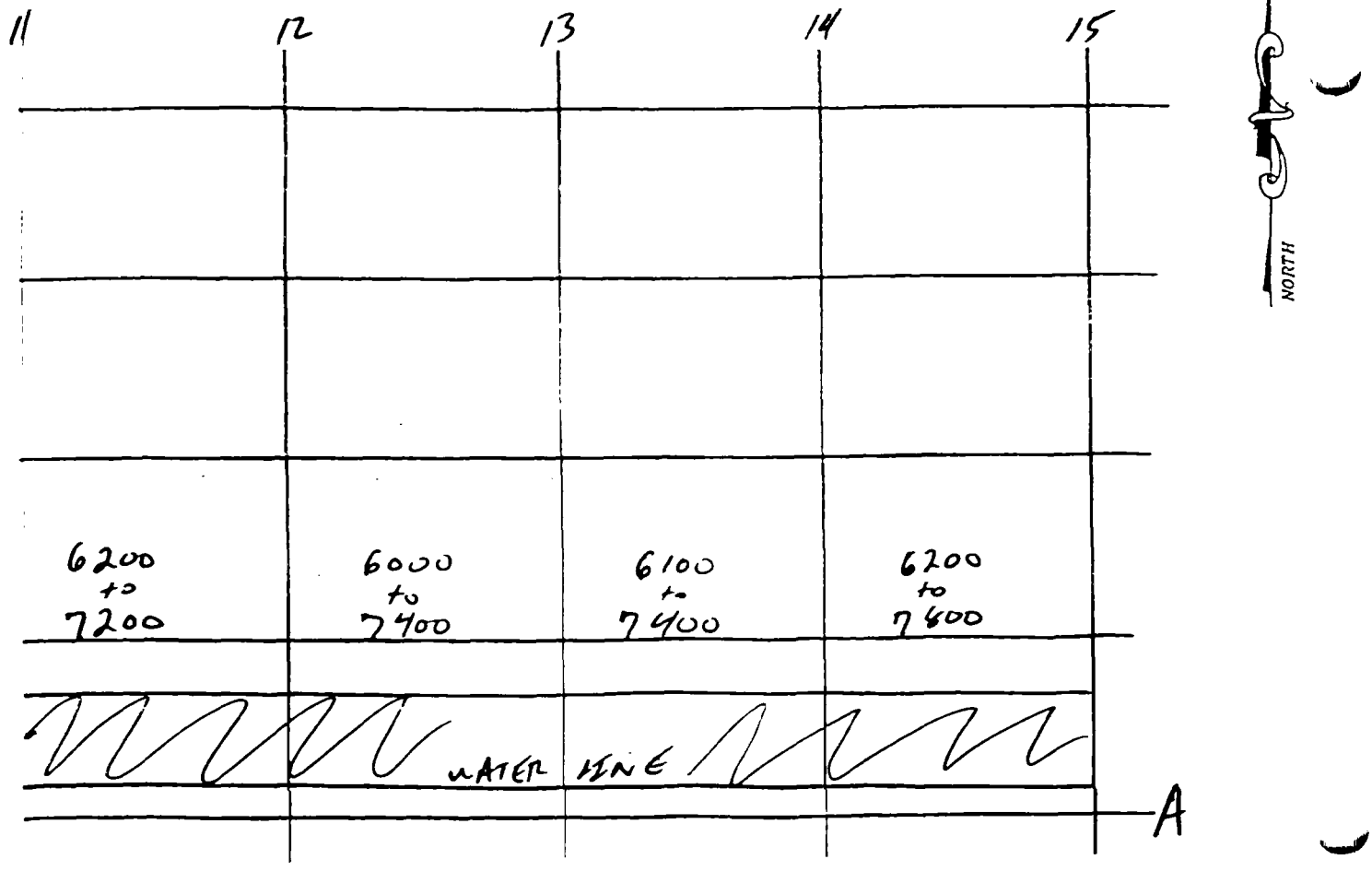
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/16/00 TECHNICIAN: Brent Barton

INST. MODEL: Cordless 2221 (unshielded) SERIAL NO.: 126446

INST. CALIBRATED (Y)N)? 3/7/00 LIFT ELEVATION: 0-5'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LI
INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPI.
INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 8/16/00

TECHNICIAN: BRETT GARTON

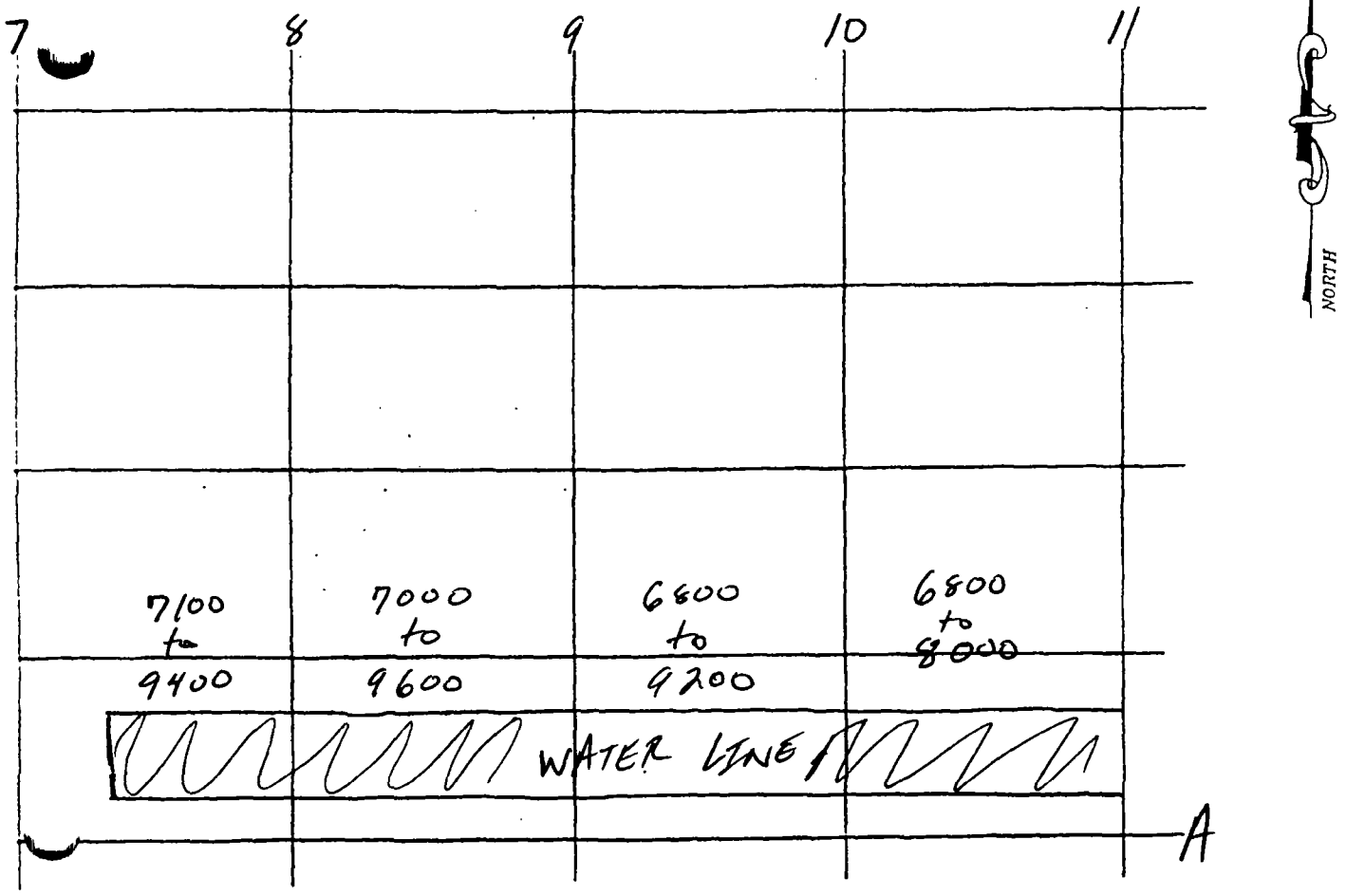
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126446

INST. CALIBRATED (Y)N)? 3/7/00

LIFT ELEVATION: 0-5'

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-1

TECHNICIAN: Tristan Timm

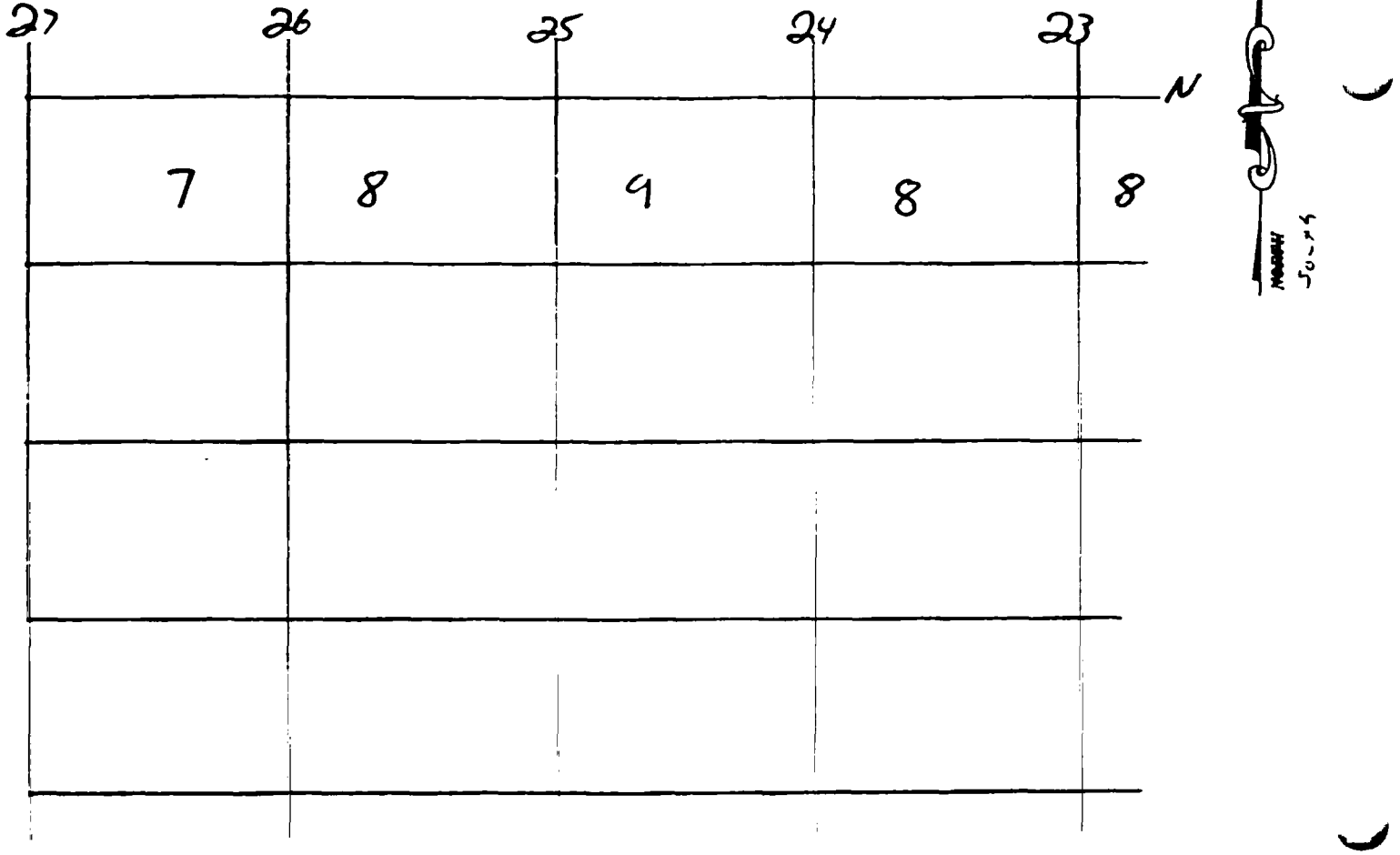
INST. MODEL: Micro R 2-dk-mdl3

SERIAL NO.: 124358

INST. CALIBRATED (Y)/N)? _____

LIFT ELEVATION: Sidewalk

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xx\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-1

TECHNICIAN: Tristan Timm

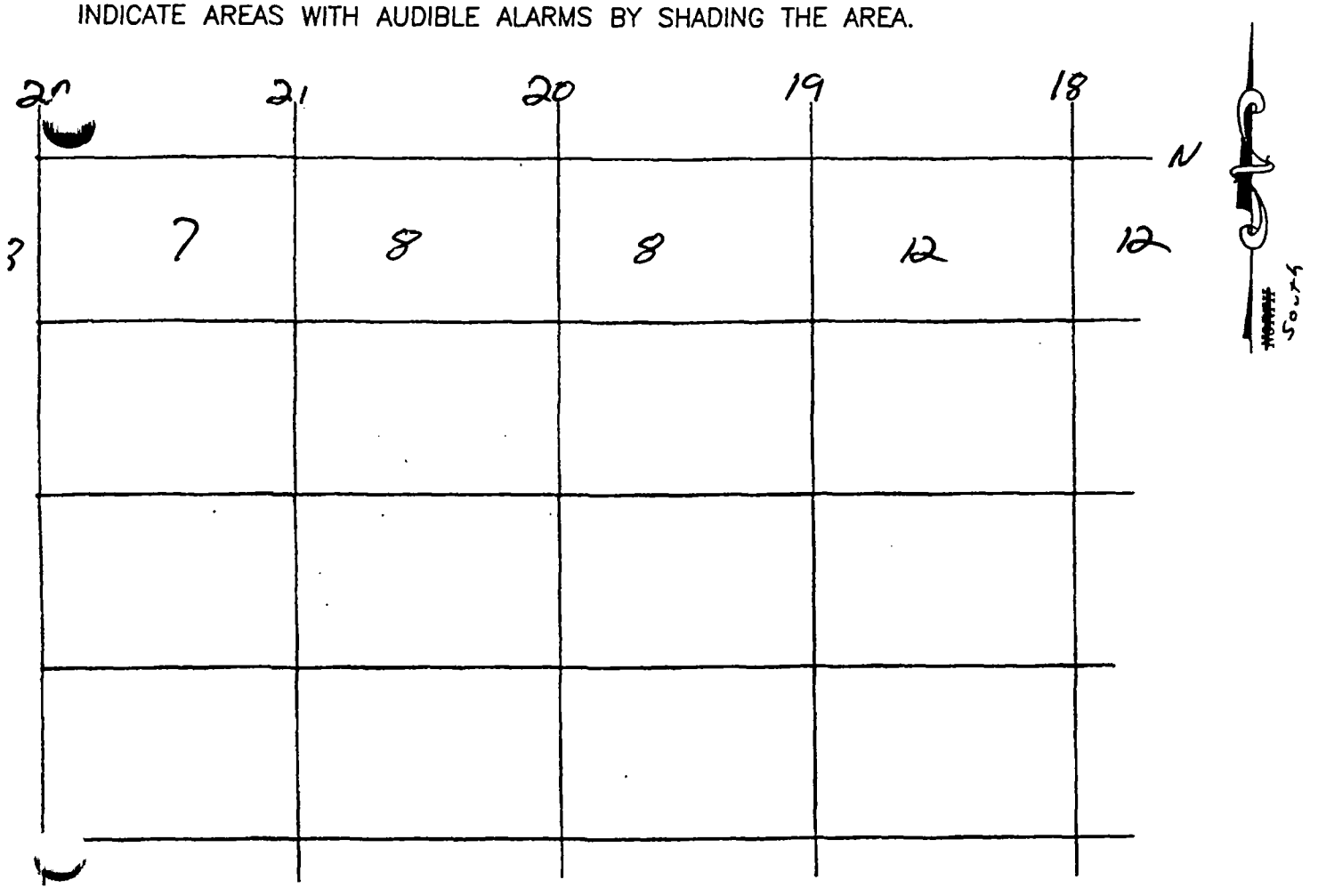
INST. MODEL: Micro R Lutron #3

SERIAL NO.: 124358

INST. CALIBRATED (Y/N)? _____

LIFT ELEVATION: Sidewalk

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

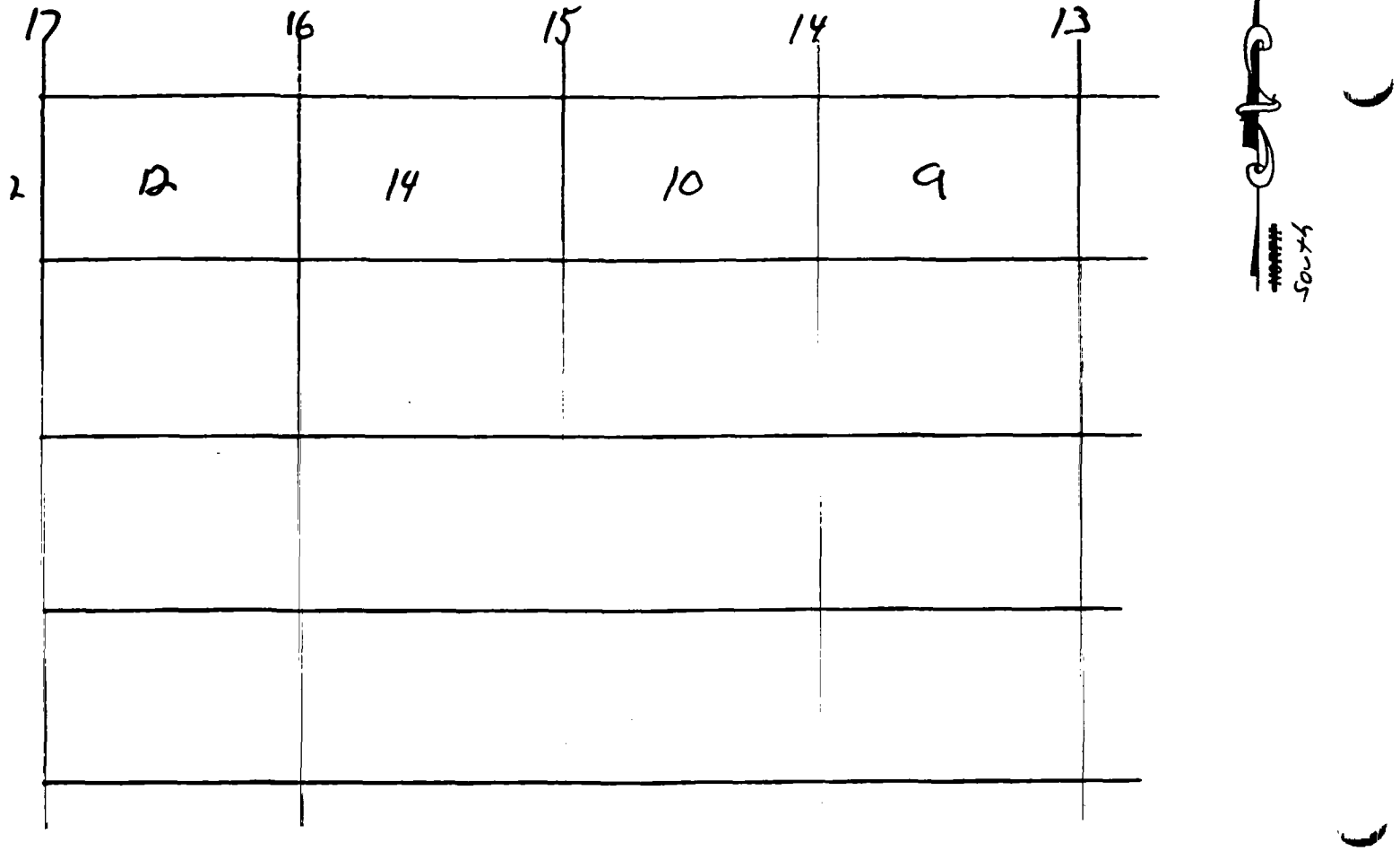
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-1 TECHNICIAN: Tristan Timm

INST. MODEL: MicRO R (John #3) SERIAL NO.: 12458

INST. CALIBRATED (Y)N)? _____ LIFT ELEVATION: Sidewalk

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\XK\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

sheet 1 of 2

SURVEYS Performed on NORTH sidewalk adjacent to site.

DATE: 4/13/00

TECHNICIAN: BRETT BARTON

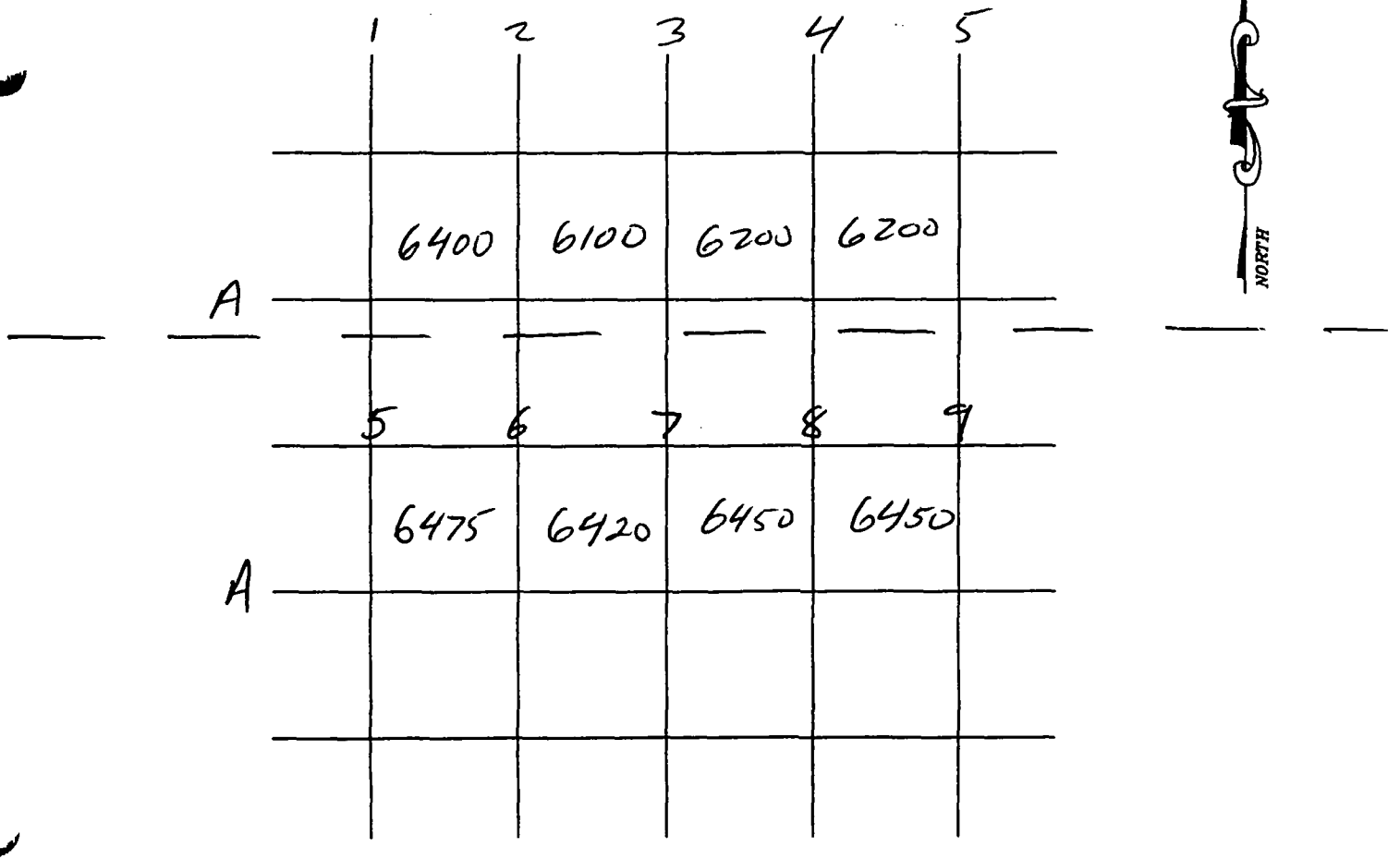
INST. MODEL: Ludlum 2221 unshielded

SERIAL NO.: 134 542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION: [illegible]

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

sheet 2 of 2

DATE: 4/13/00

TECHNICIAN: BRETT BARTON

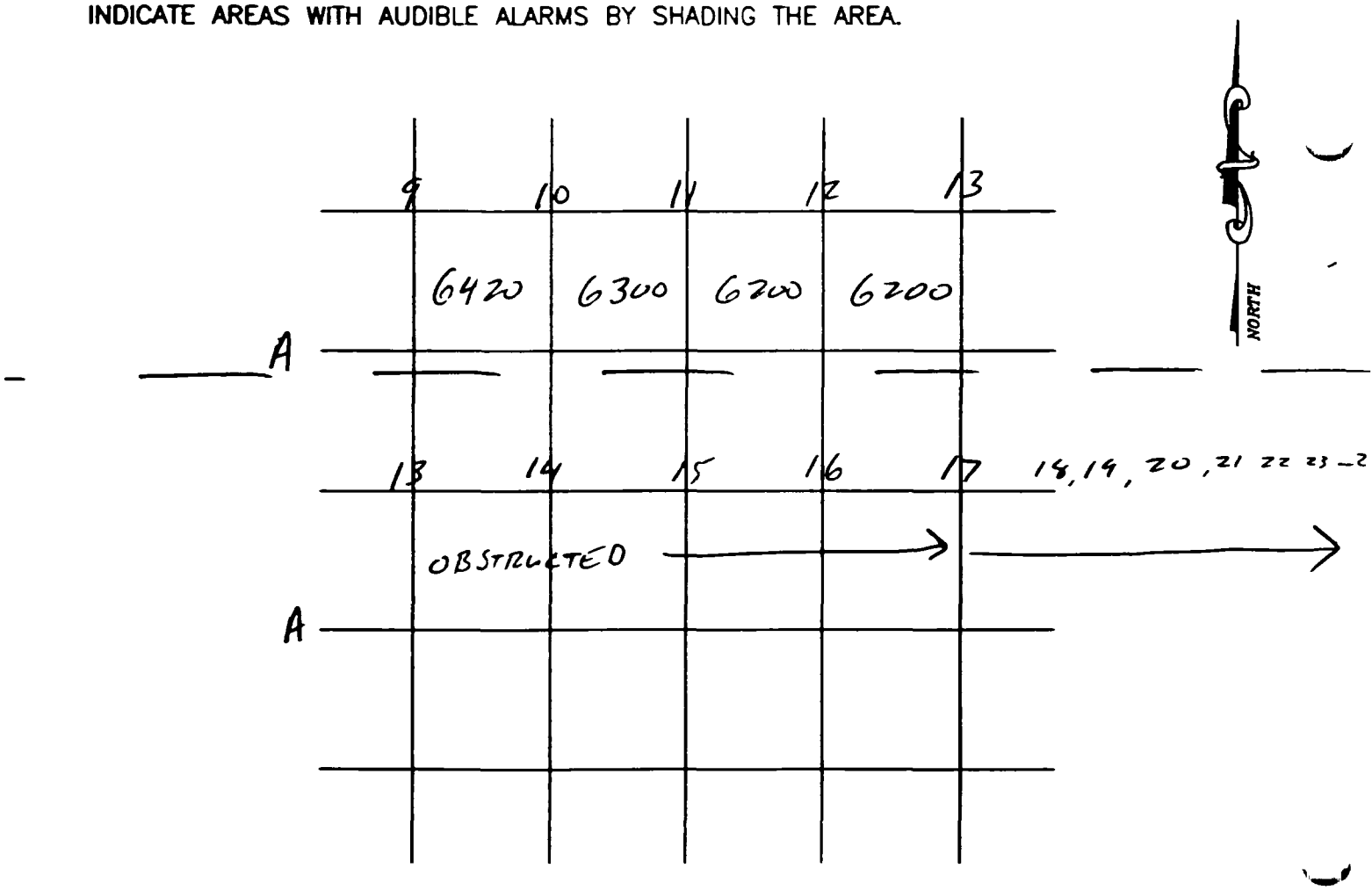
INST. MODEL: Ludlum 2221 unshielded

SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00

LIFT ELEVATION:

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

Surveys Performed on [EAST] sidewalk adjacent to site (Area C).

DATE: 4/13/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 SERIAL NO.: 134542

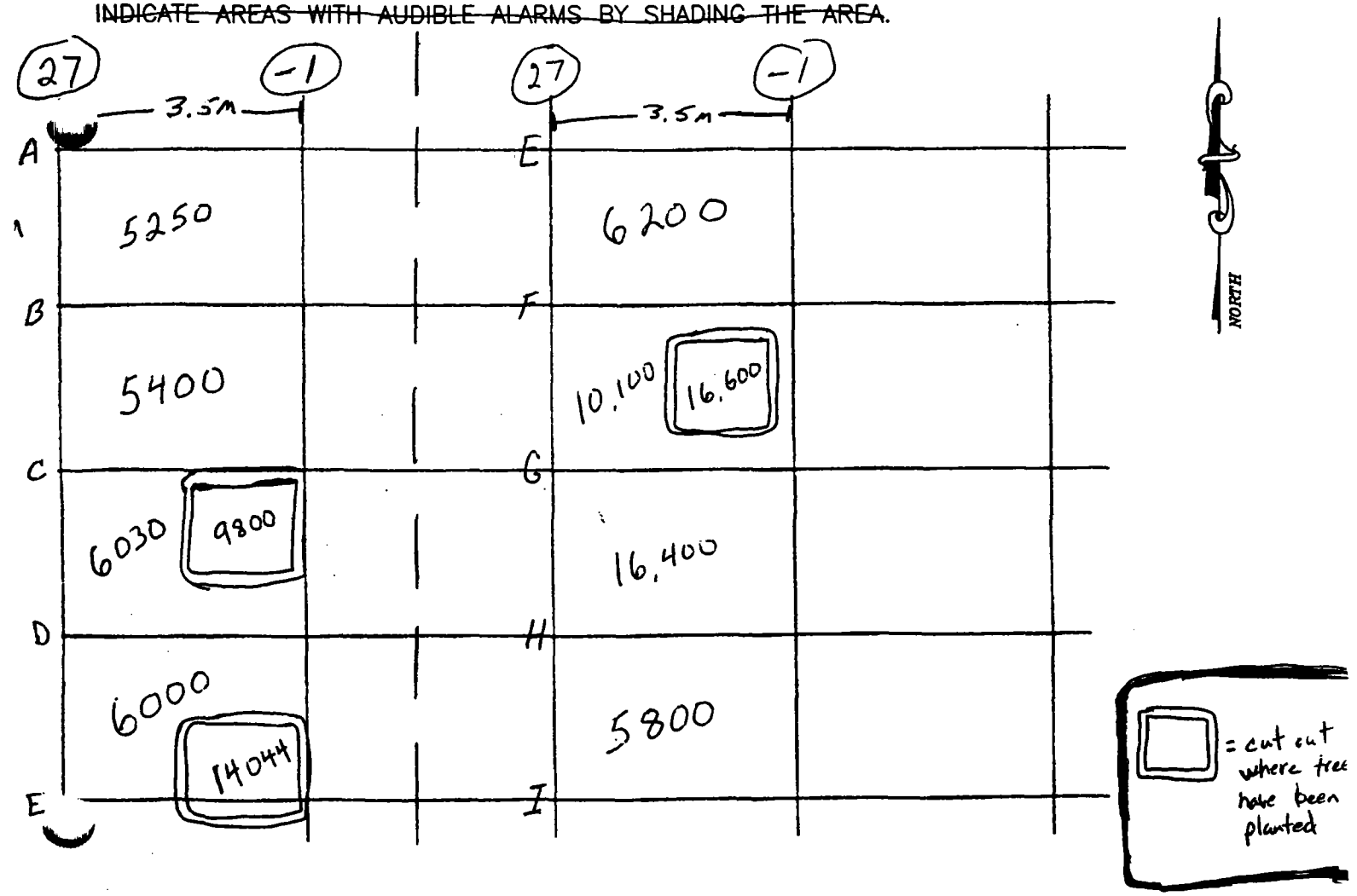
Probe: model 4410 unshielded

INST. CALIBRATED (Y)N)? 3/31/00 LIFT ELEVATION: —

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE.

~~INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM.~~

~~INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.~~



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

BKG = 5200 cpm

STS Consultants, Ltd

Sheet 2 of 2

Date: 4/13/00 Technician: BRETT BARTON

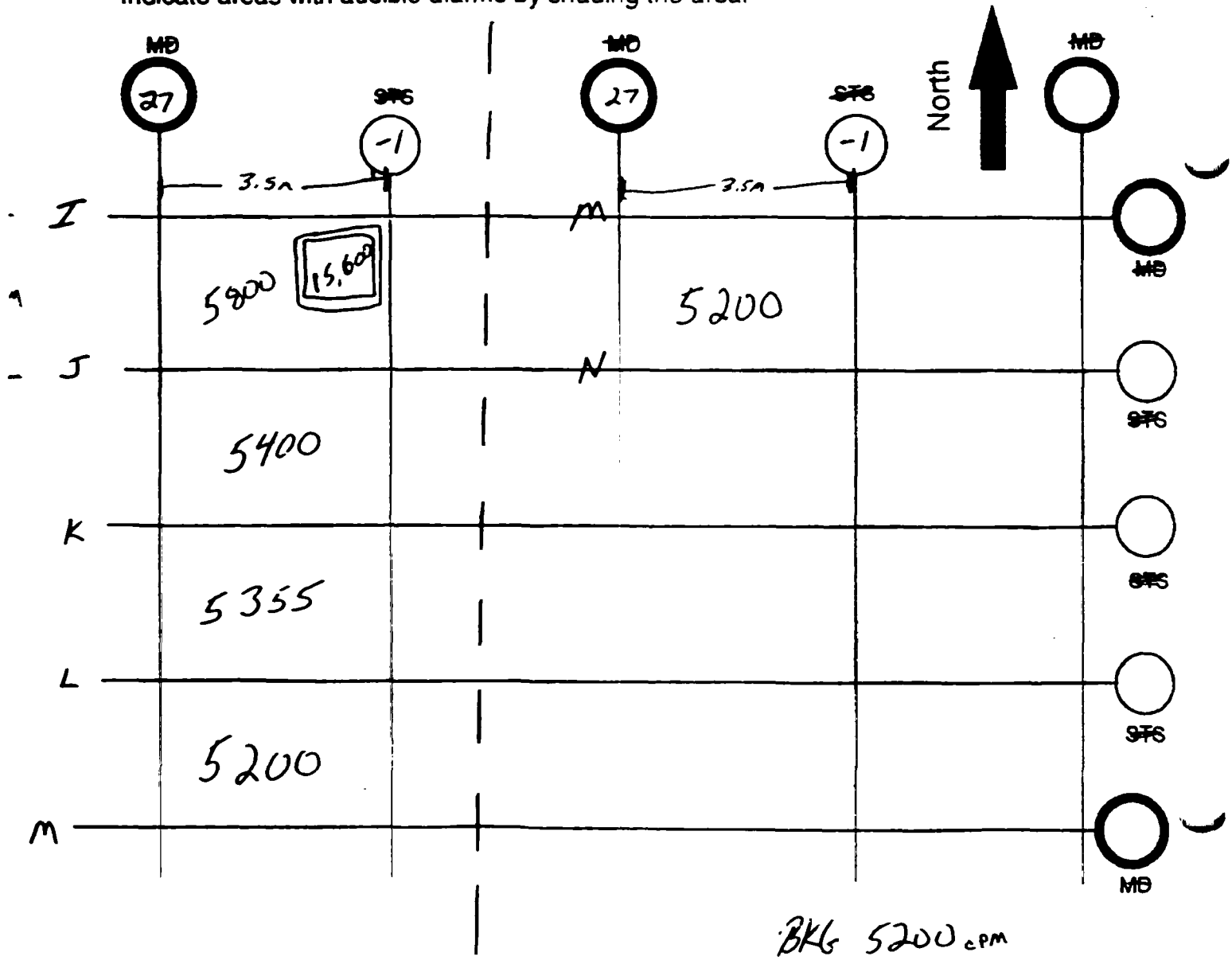
Inst. Model: Ludlum 2221 Serial No.: 134542
Probe: Model 44-10 UNSHIELDED

Inst. Calibrated (Y/n)? 3/31/00 Lift Elevation: —

Write column lines in corresponding circles. Indicate excavated area with heavy line.

~~Intersecting lines require 30 second counts. Record counts at intersections in CPM.~~

~~Indicate areas with audible alarms by shading the area.~~



BKG 5200 cpm

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

Sheet 1 of 4

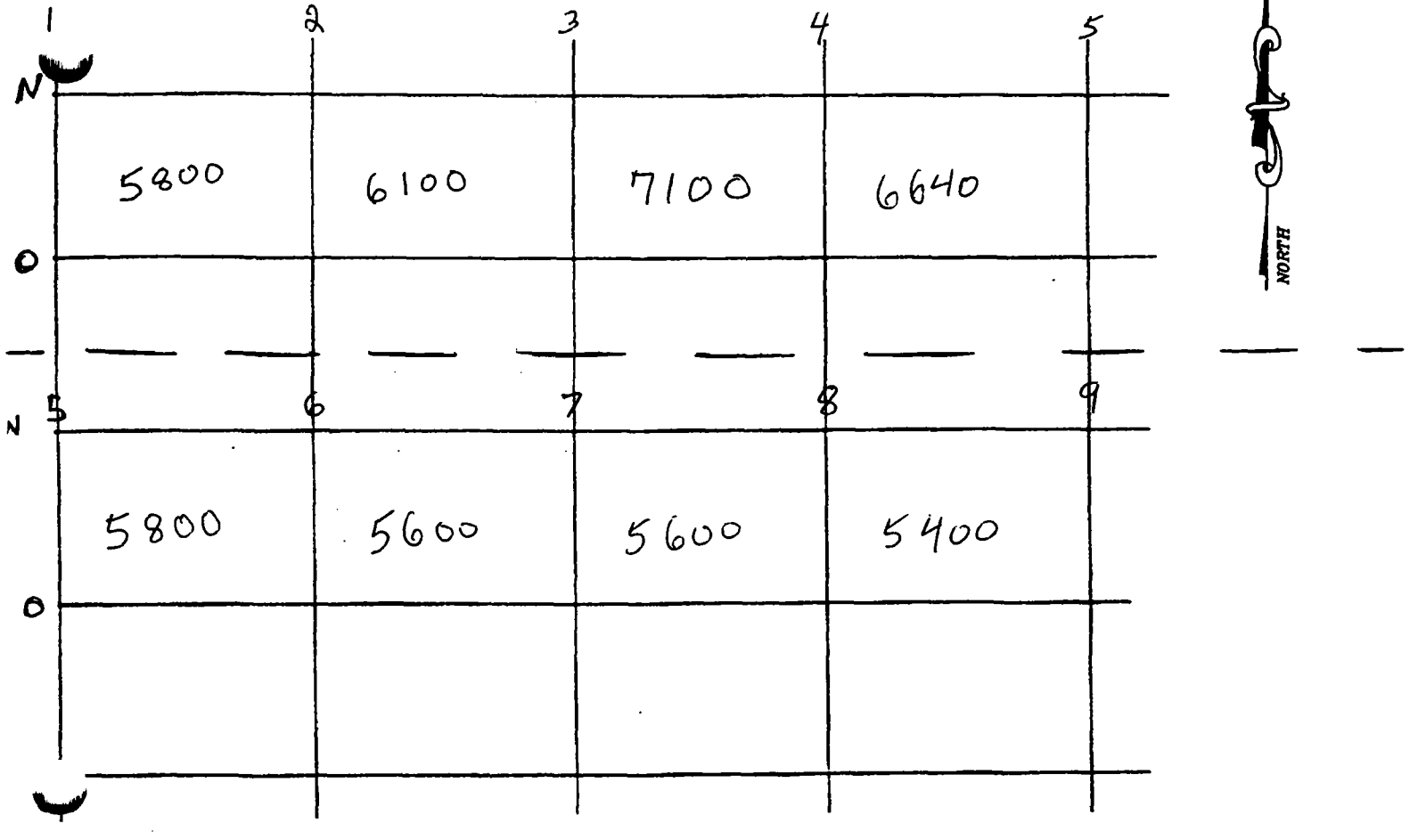
Surveys Performed on [South] sidewalk adjacent to site

DATE: 4/13/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: _____

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

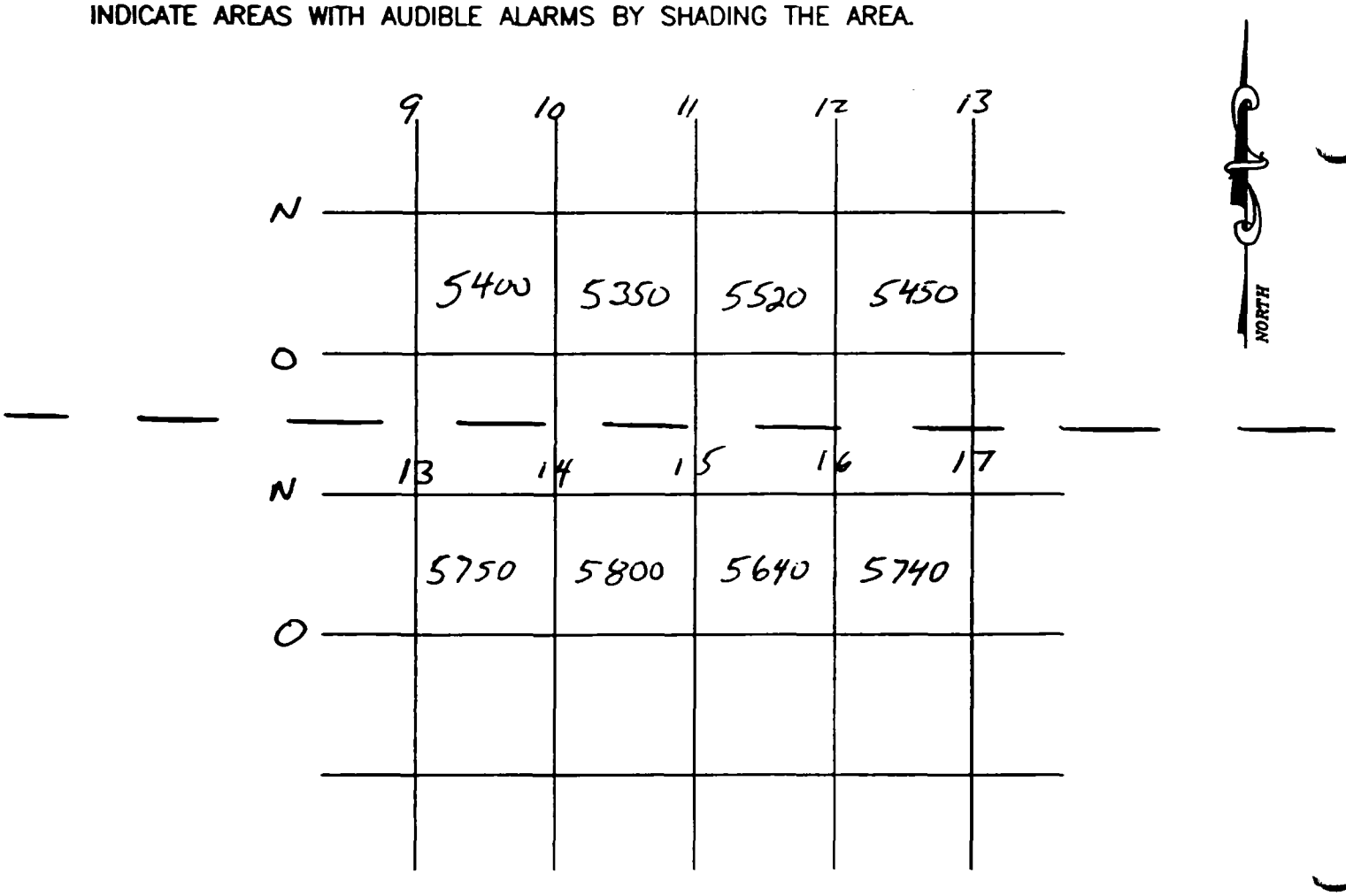
Sht 2 of 4

DATE: 4/13/00 TECHNICIAN: Brent Barton

INST. MODEL: Wolfe 2221 w/shield SERIAL NO.: 134542

INST. CALIBRATED (Y/N)? 3/31/00 LIFT ELEVATION: _____

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

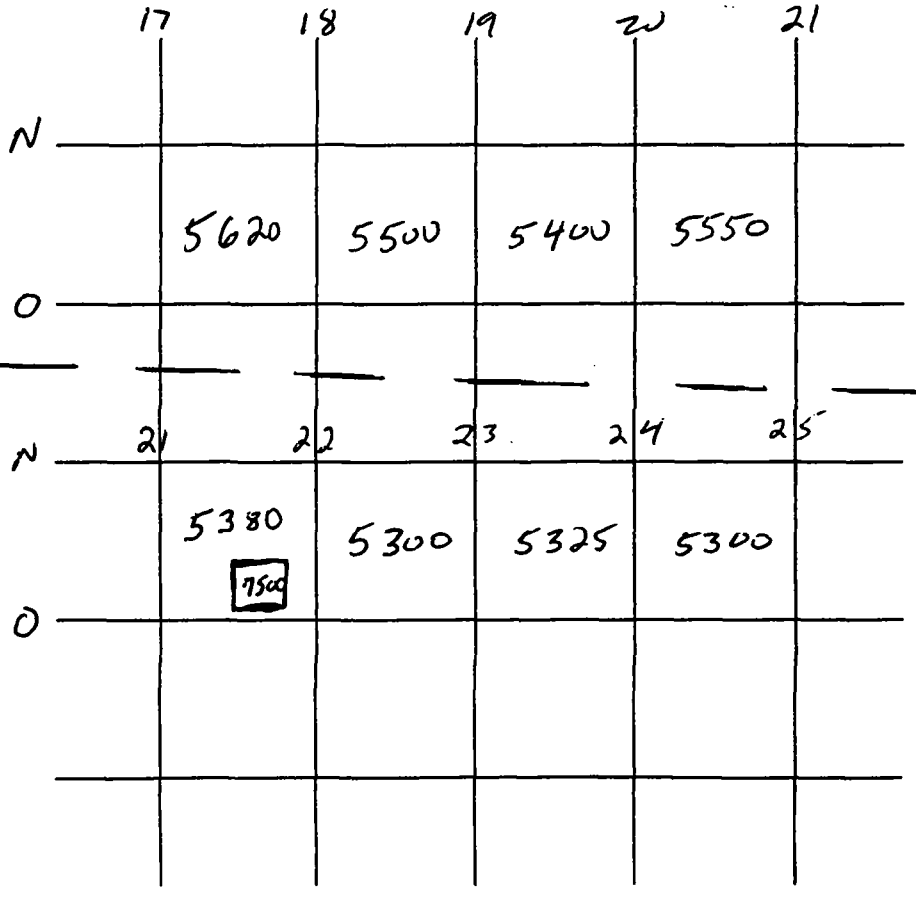
Sheet 3 of 4

DATE: 4/13/00 TECHNICIAN: Brent Barton

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? 3/31/00 LIFT ELEVATION: _____

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

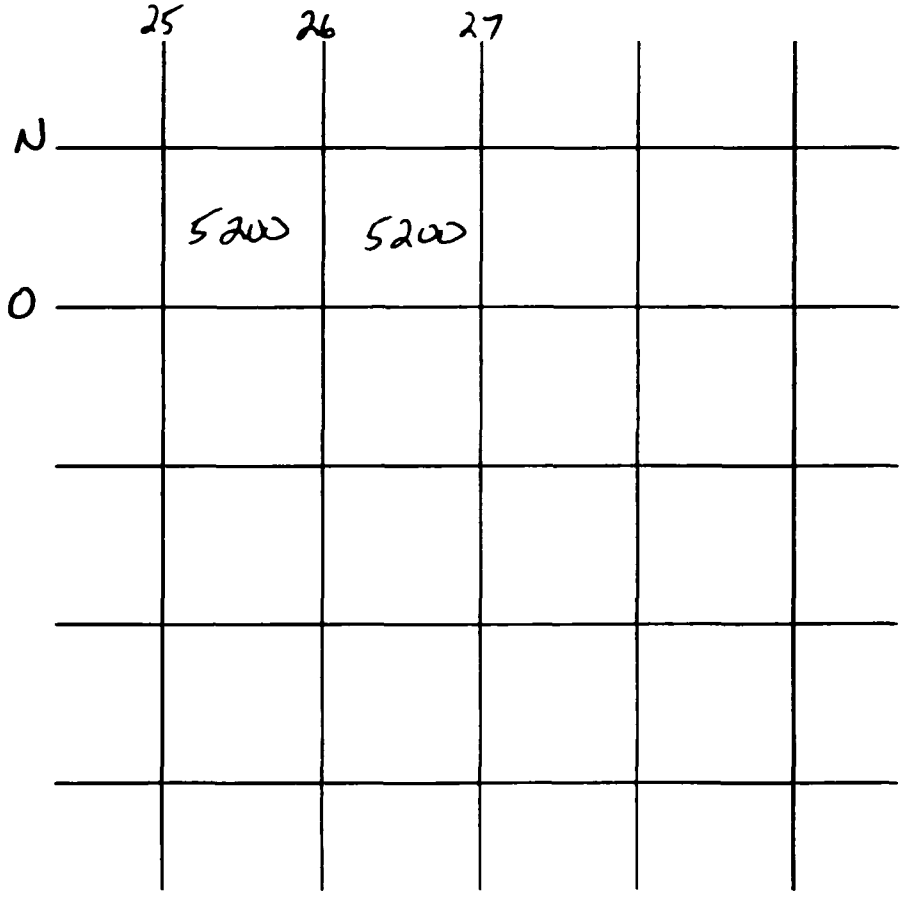
Sheet 4 of 4

DATE: 4/13/00 TECHNICIAN: Brent Barton

INST. MODEL: Ludlum 2221 w/shielding SERIAL NO.: 134542

INST. CALIBRATED (Y)N)? 3/21/00 LIFT ELEVATION: _____

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

GENERAL SURVEYS

SURVEYS OF PERIMETER WALLS WHERE CONTAMINATION IS STILL PRESENT

WATER LINE EXCAVATION ON GRAND AVENUE

PERIMETER SIDEWALK SURVEYS

STS Consultants Ltd.

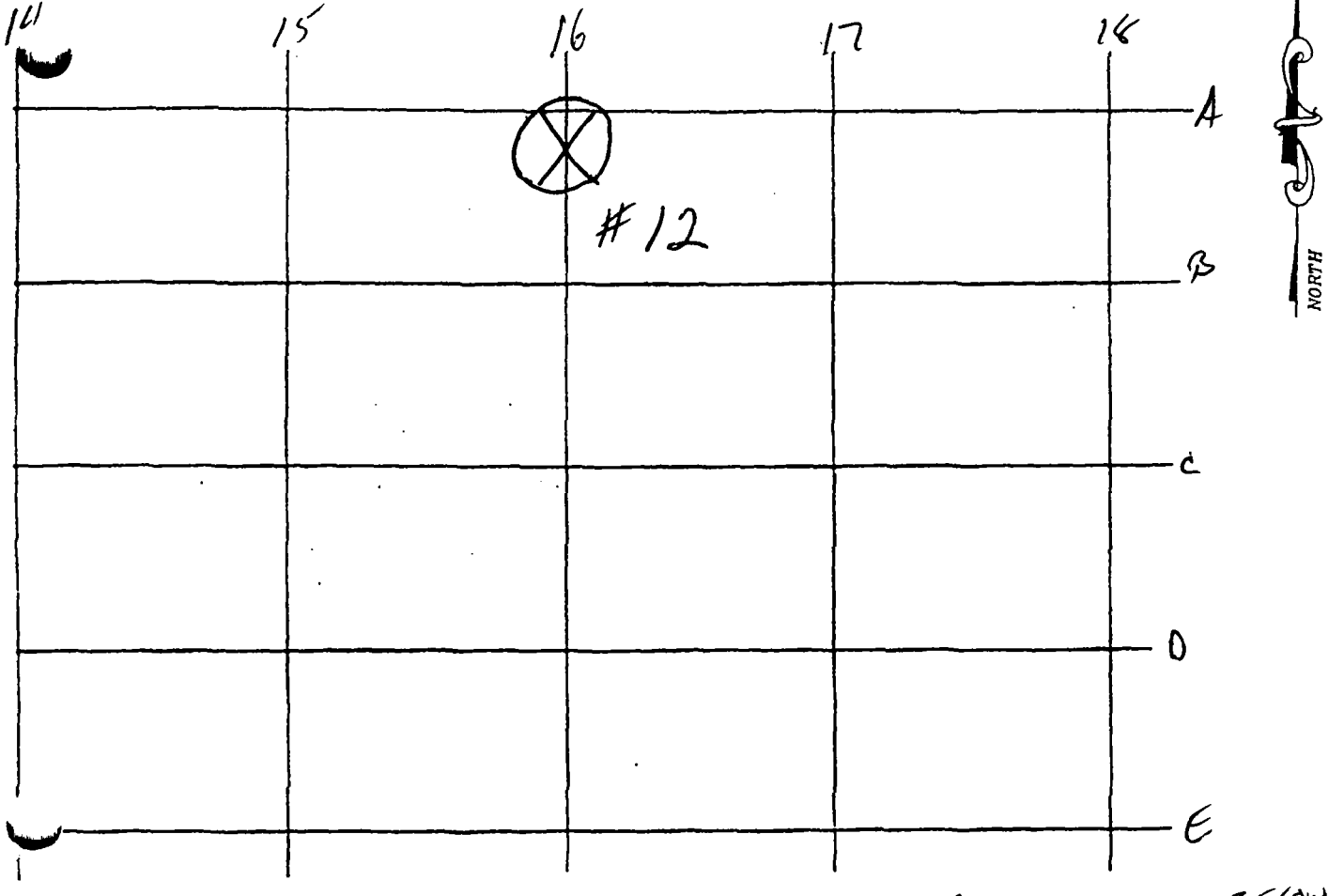
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/5/00 TECHNICIAN: Brett Boston

INST. MODEL: Hilti 2221 cushioned SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



- ALL SURVEYS BELOW ACTION LEVELS

BAB

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/6/00

TECHNICIAN: Brett Barton

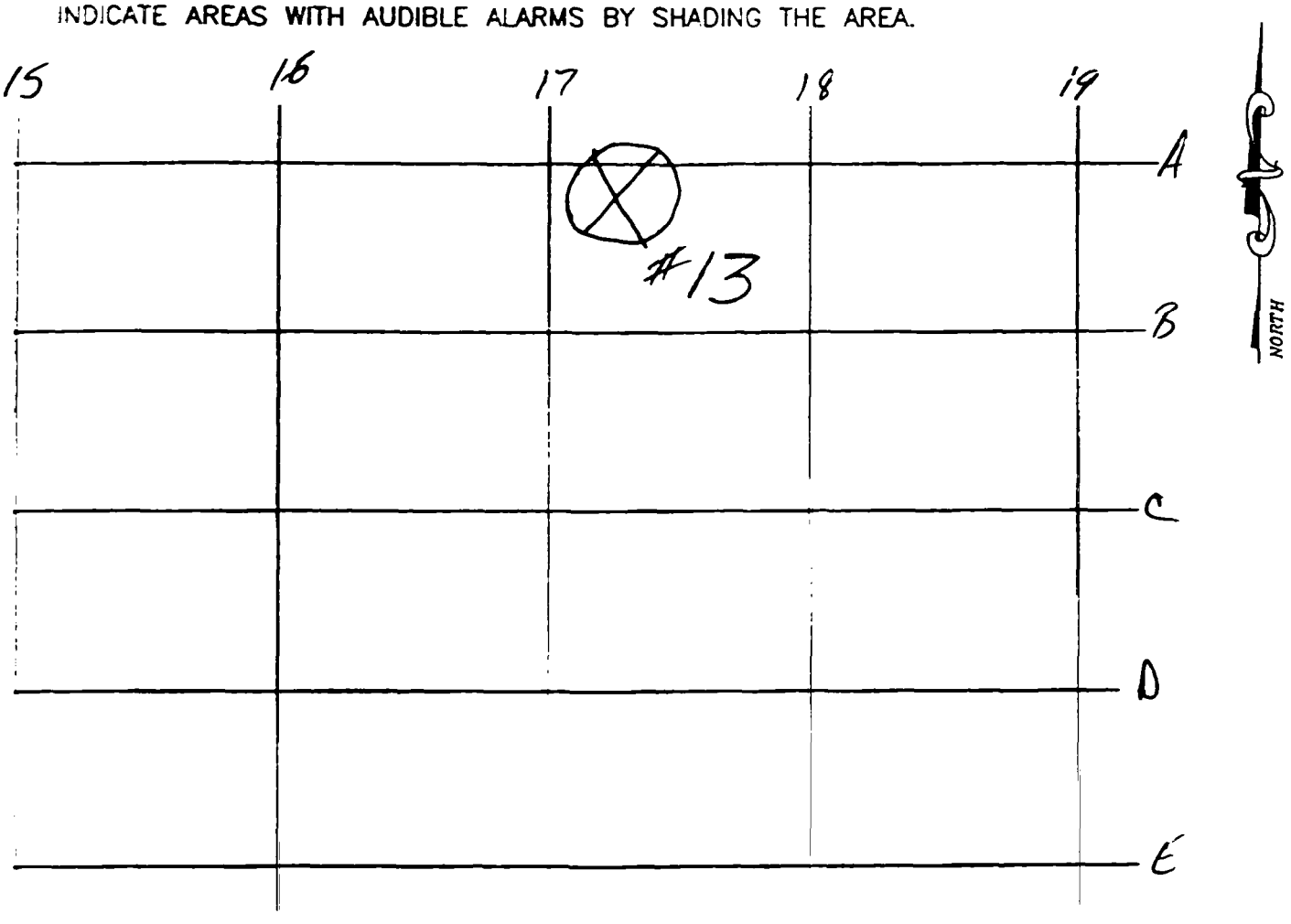
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126446

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL SURVEYS BELOW ACTION LEVELS
-BAB

\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

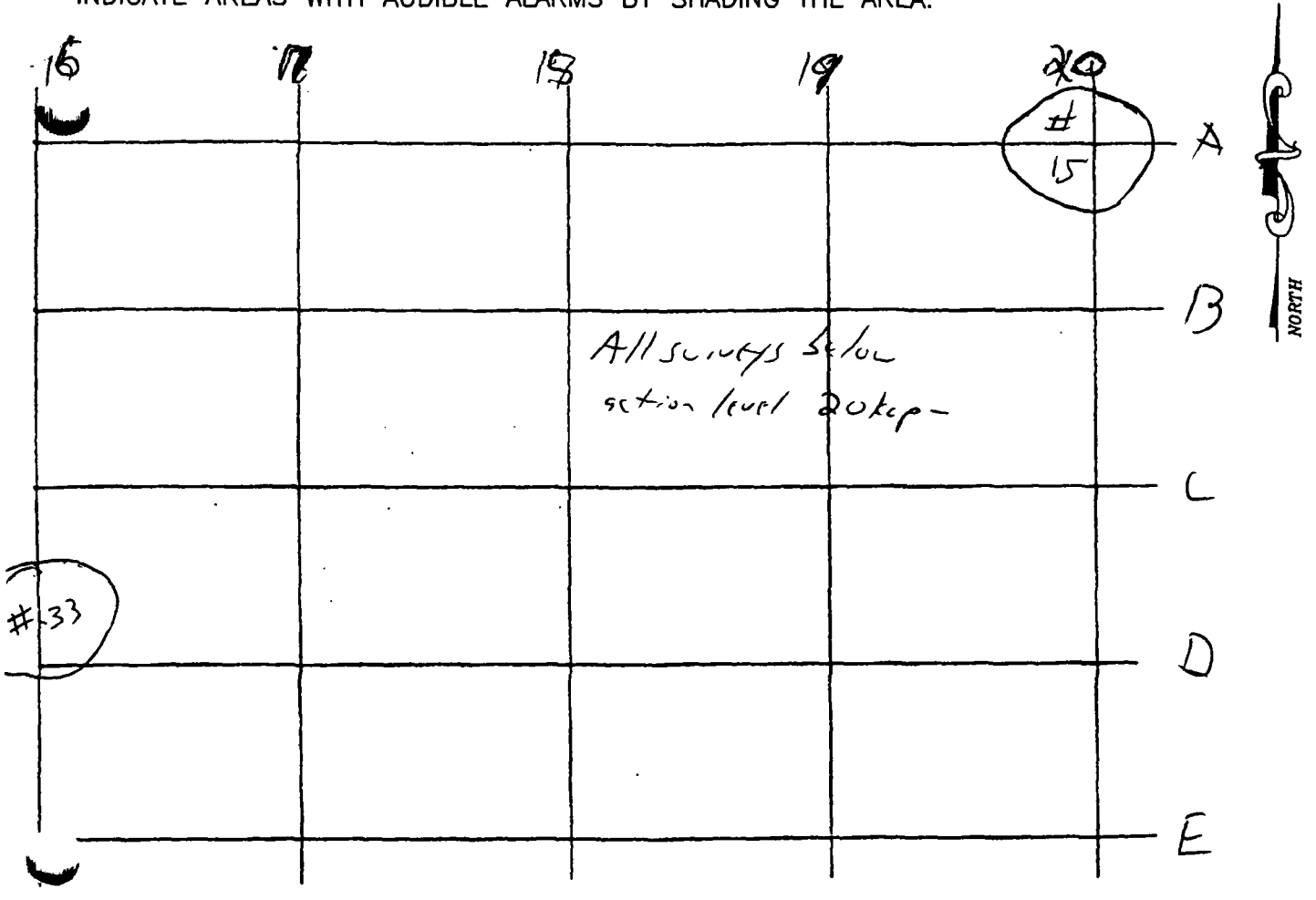
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-2 TECHNICIAN: Tristan Timm

INST. MODEL: L-dl-- 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? yes LIFT ELEVATION: ~~caisson~~ caissons

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

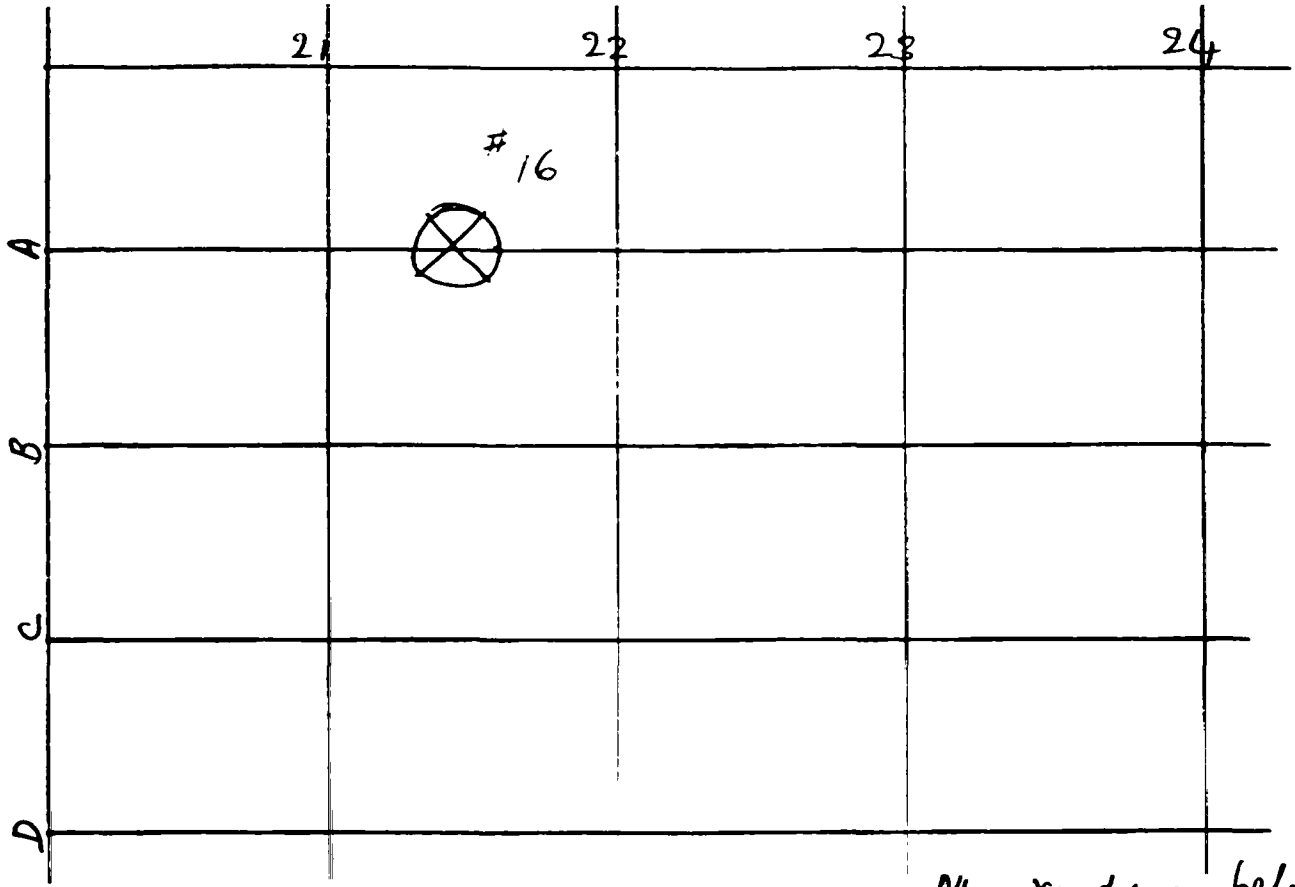
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/25/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2221 wash. cl'ied SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All readings below action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5-2

TECHNICIAN: Tristan Timm

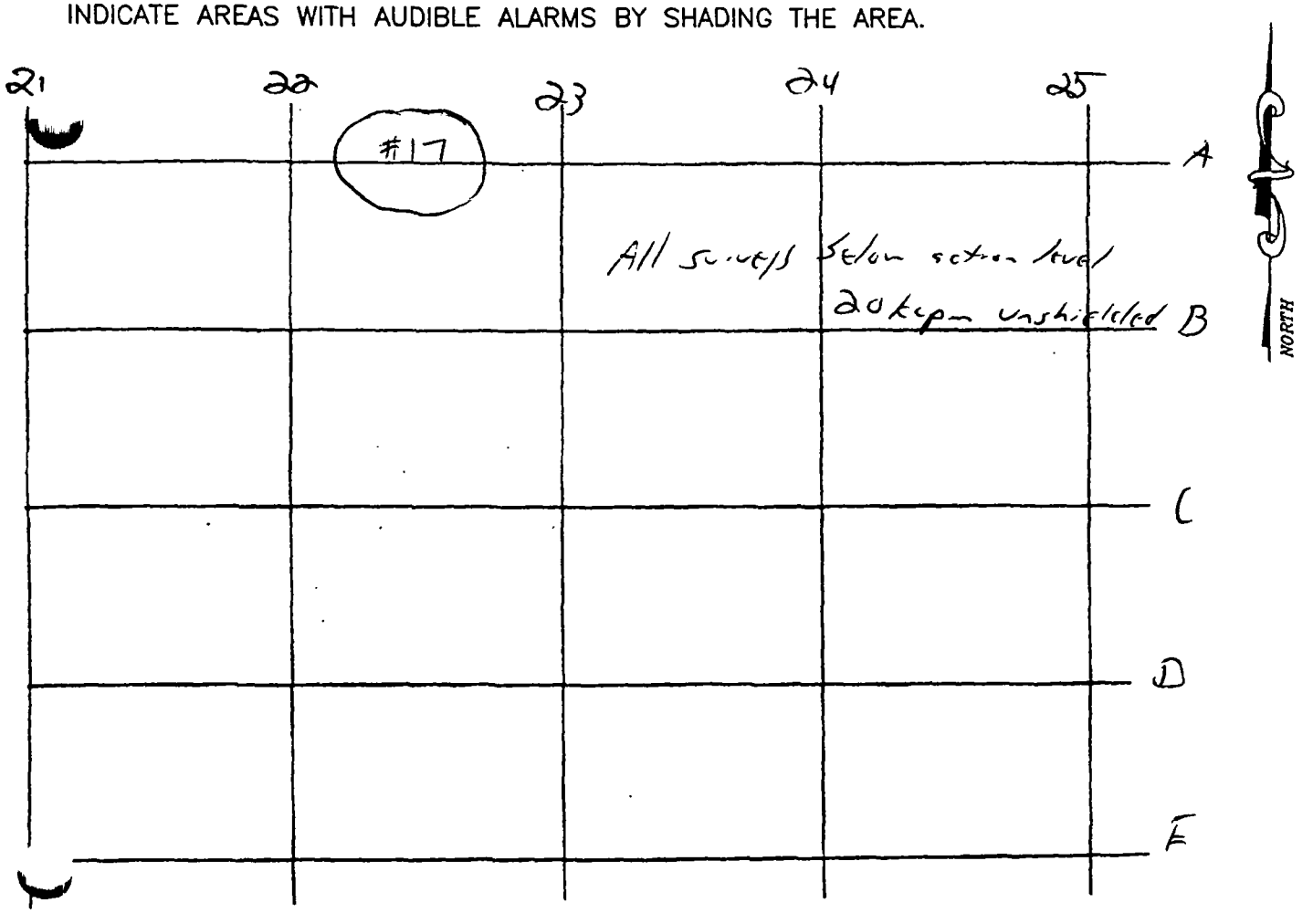
INST. MODEL: 2221 Unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: ~~Caisson~~ Caissons

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

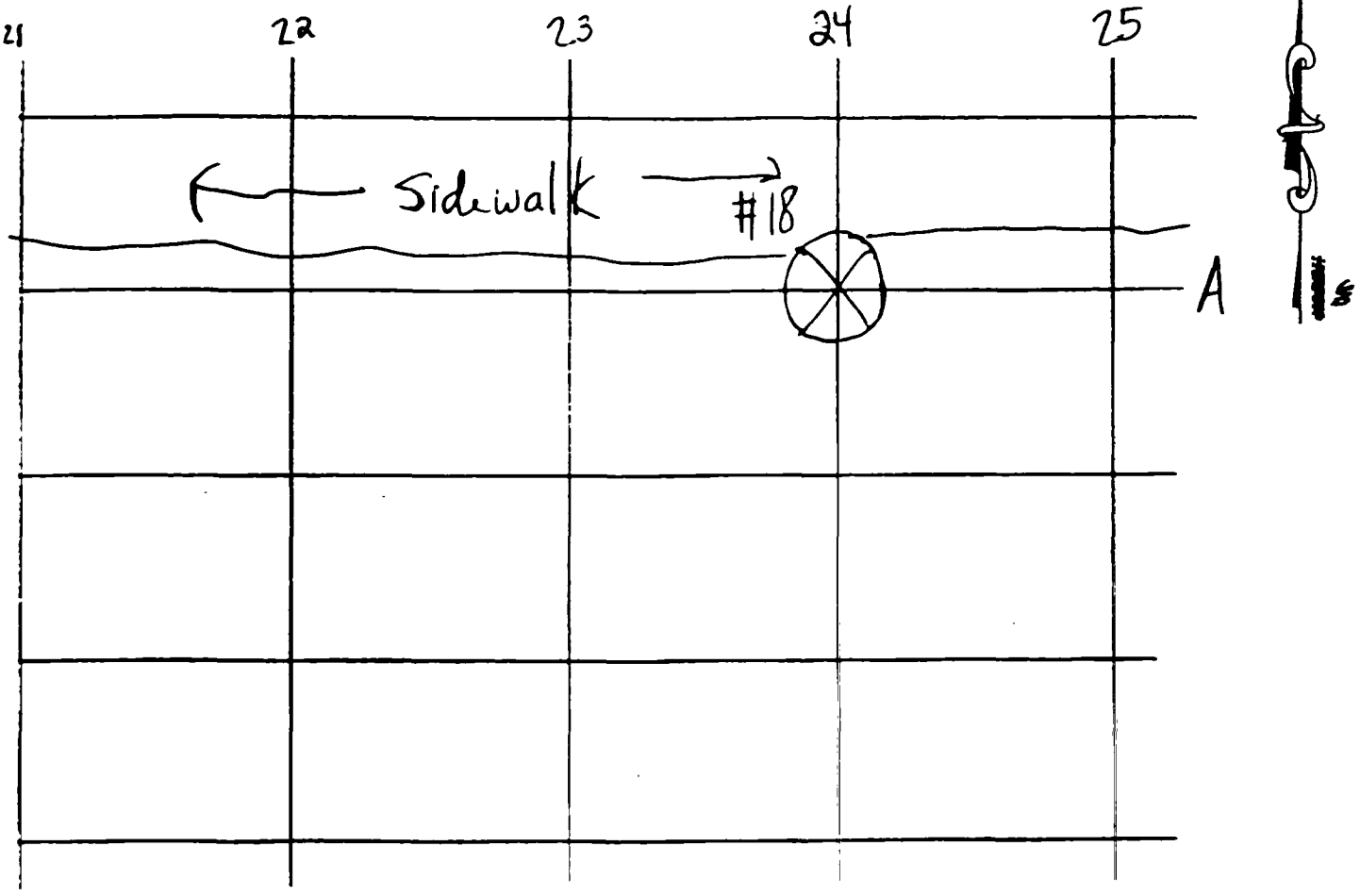
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/13/2000 TECHNICIAN: Jon M. Wheeler

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below Action Level JMW

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-6-00

TECHNICIAN: Brett Barton

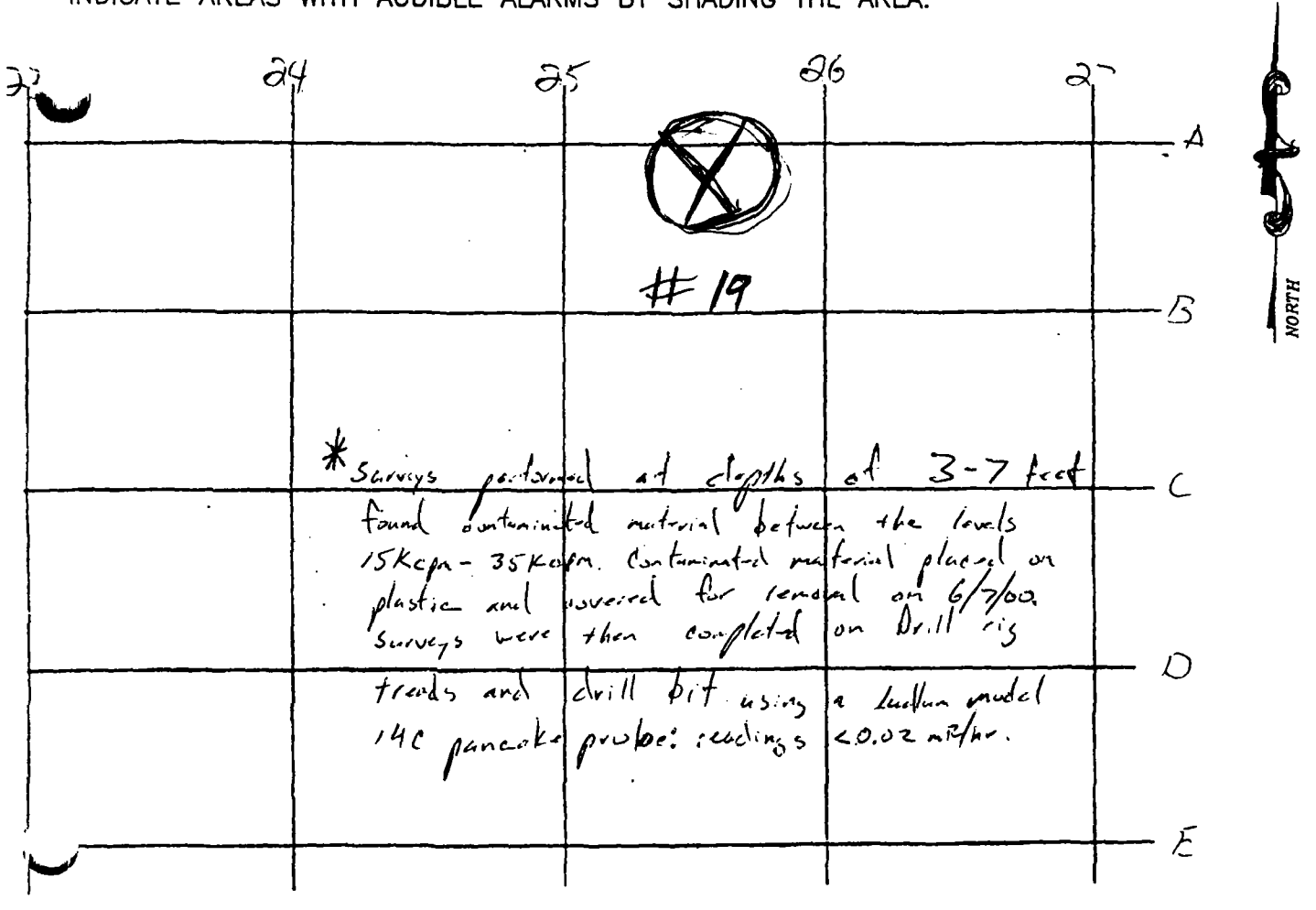
INST. MODEL: 2221 shielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



*Surveys performed at depths of 3-7 feet found contaminated material between the levels 15Kcpm - 35Kcpm. Contaminated material placed on plastic and covered for removal on 6/7/00. Surveys were then completed on Drill rig treads and drill bit using a Ludlum model 14C pancake probe: readings <0.02 mR/hr.

X:\PROJECTS\24418\[illegible]\
EXCAVATION-INVENTORY.dwg
07/31/2000 11:

OEB 3E

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/6/00

TECHNICIAN: Brett Barton

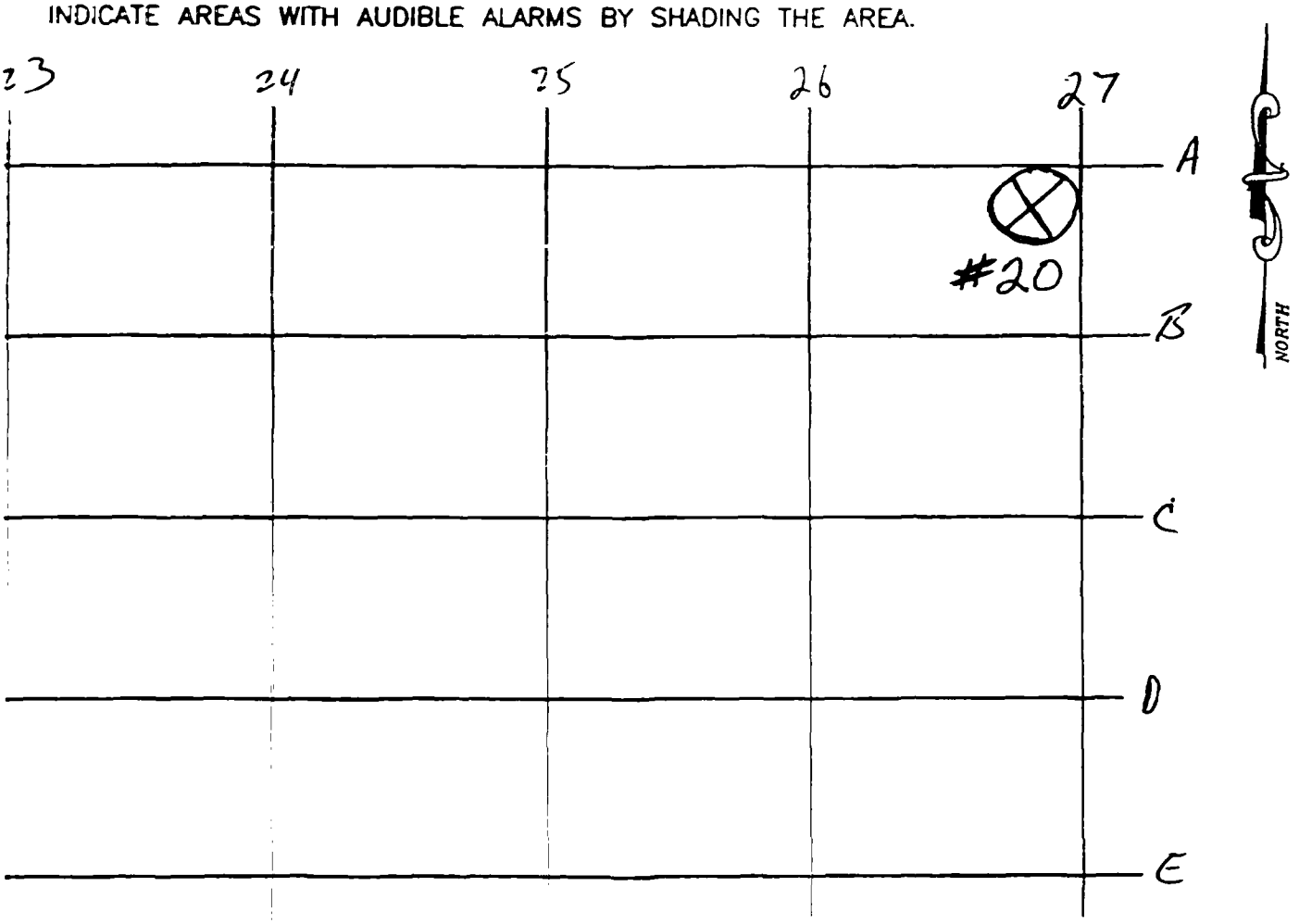
INST. MODEL: Ludlum 2221 (gate video)

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? 3/3/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action levels. BAB

\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

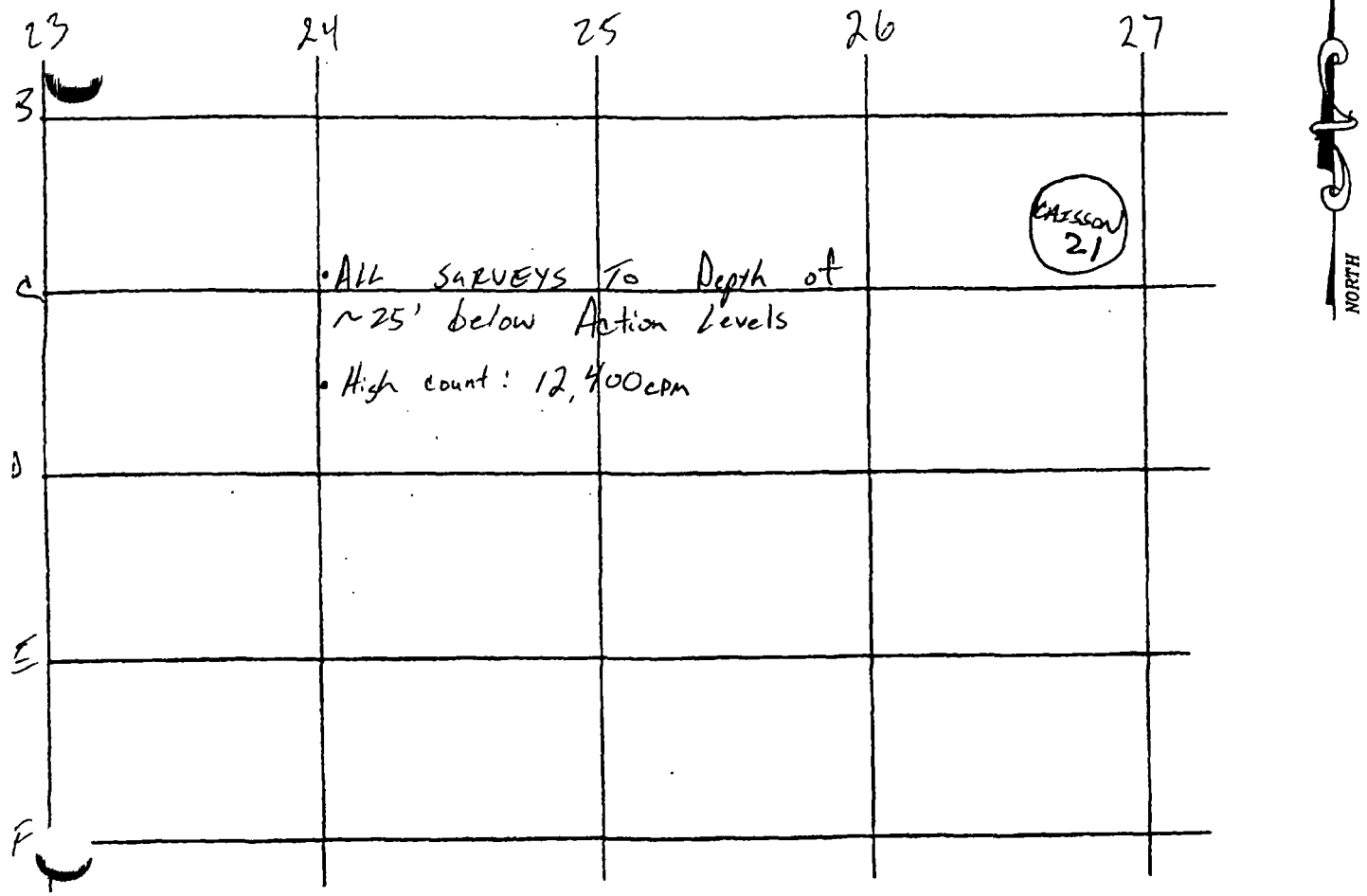
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/8/00 TECHNICIAN: BRENT BARTON

INST. MODEL: Ludlum 2221 UNSHIELDED SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Caisson survey

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

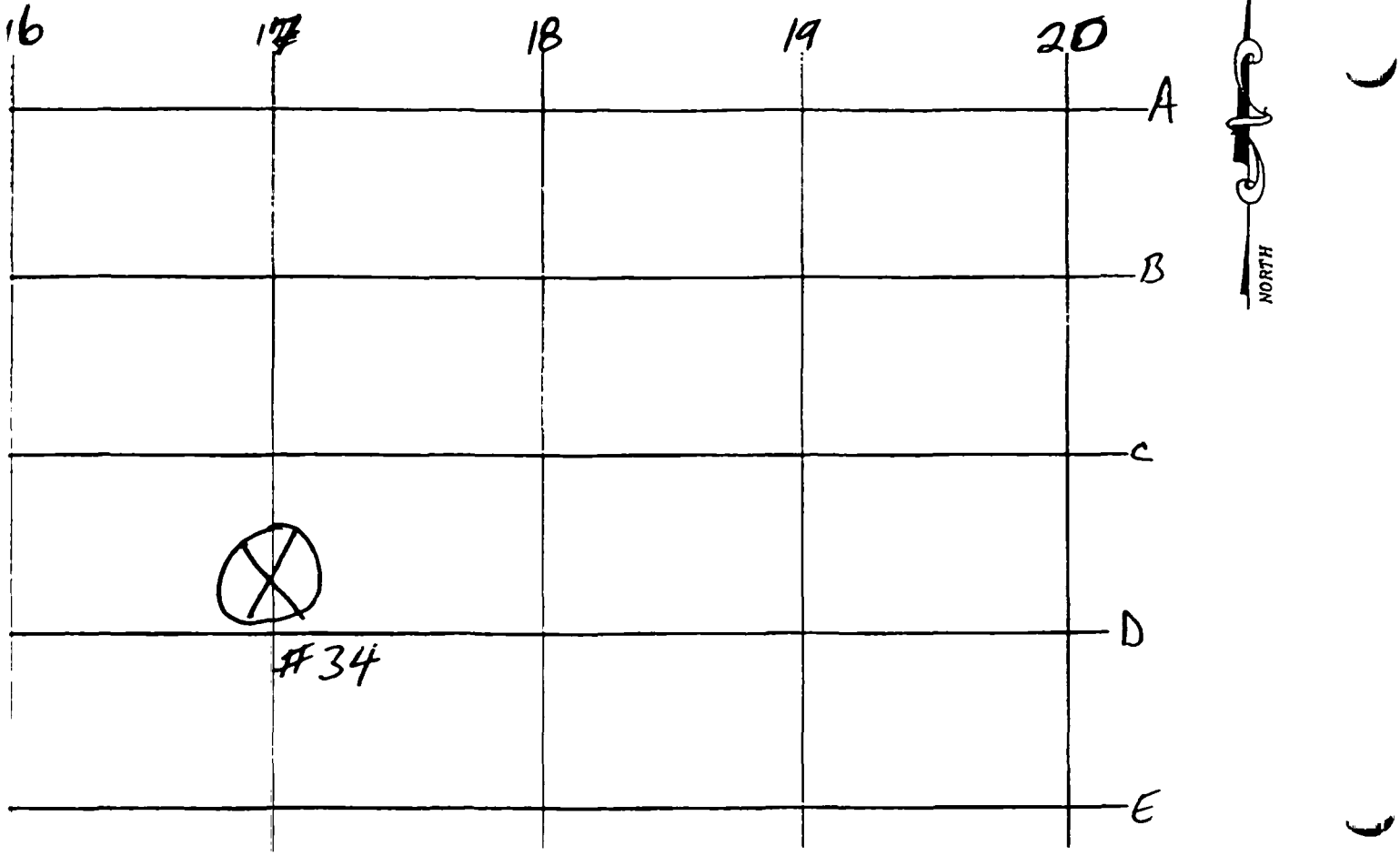
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/11/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2221 (cont. old) SERIAL NO.: 126496

INST. CALIBRATED (Y)N)? 3/7/00 LIFT ELEVATION: caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

Jim

A:\PROJECTS\24418\XK\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

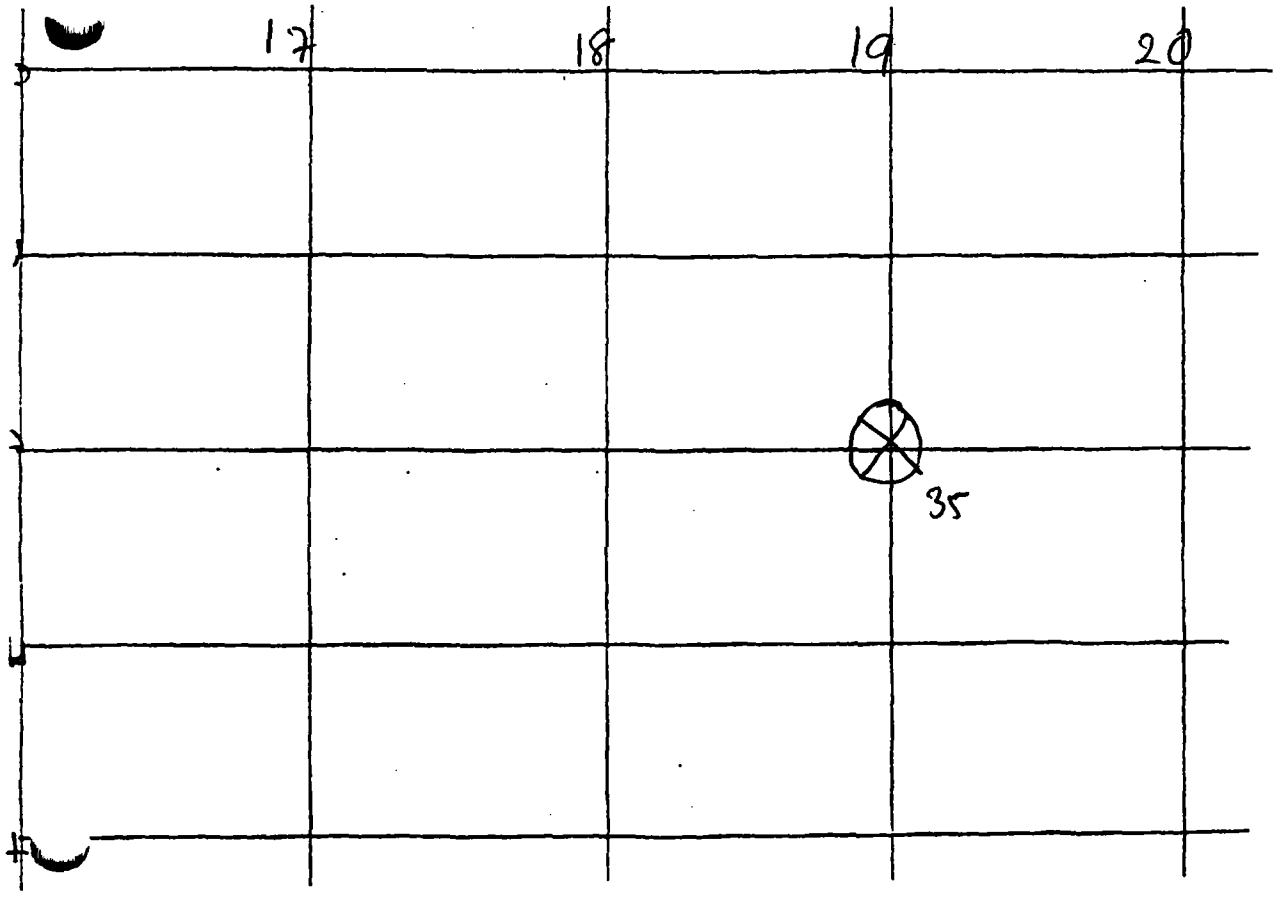
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/18/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlm 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

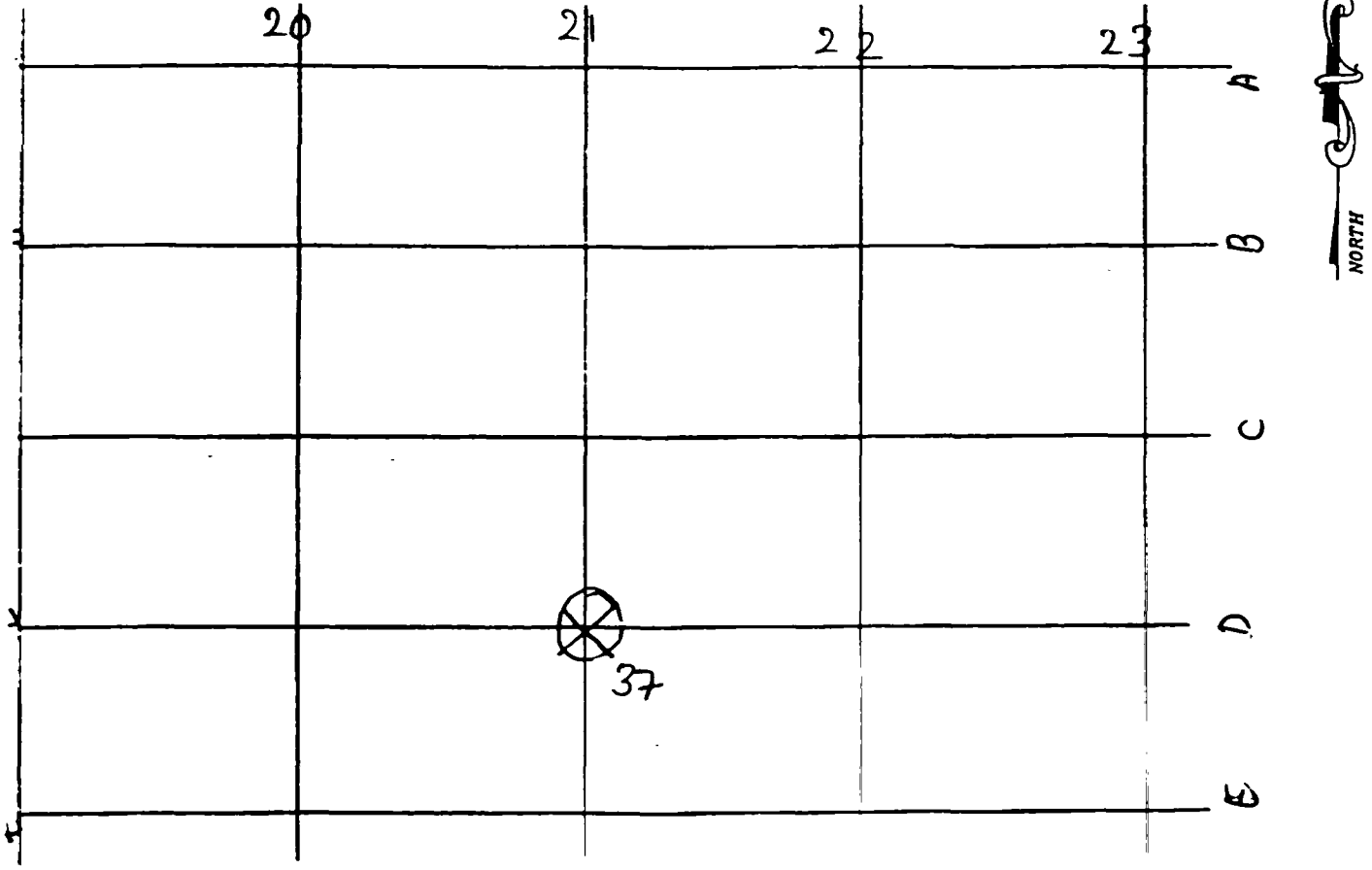
2 of 4

DATE: 05/17/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under action level

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/12/00

TECHNICIAN: S GEORGE

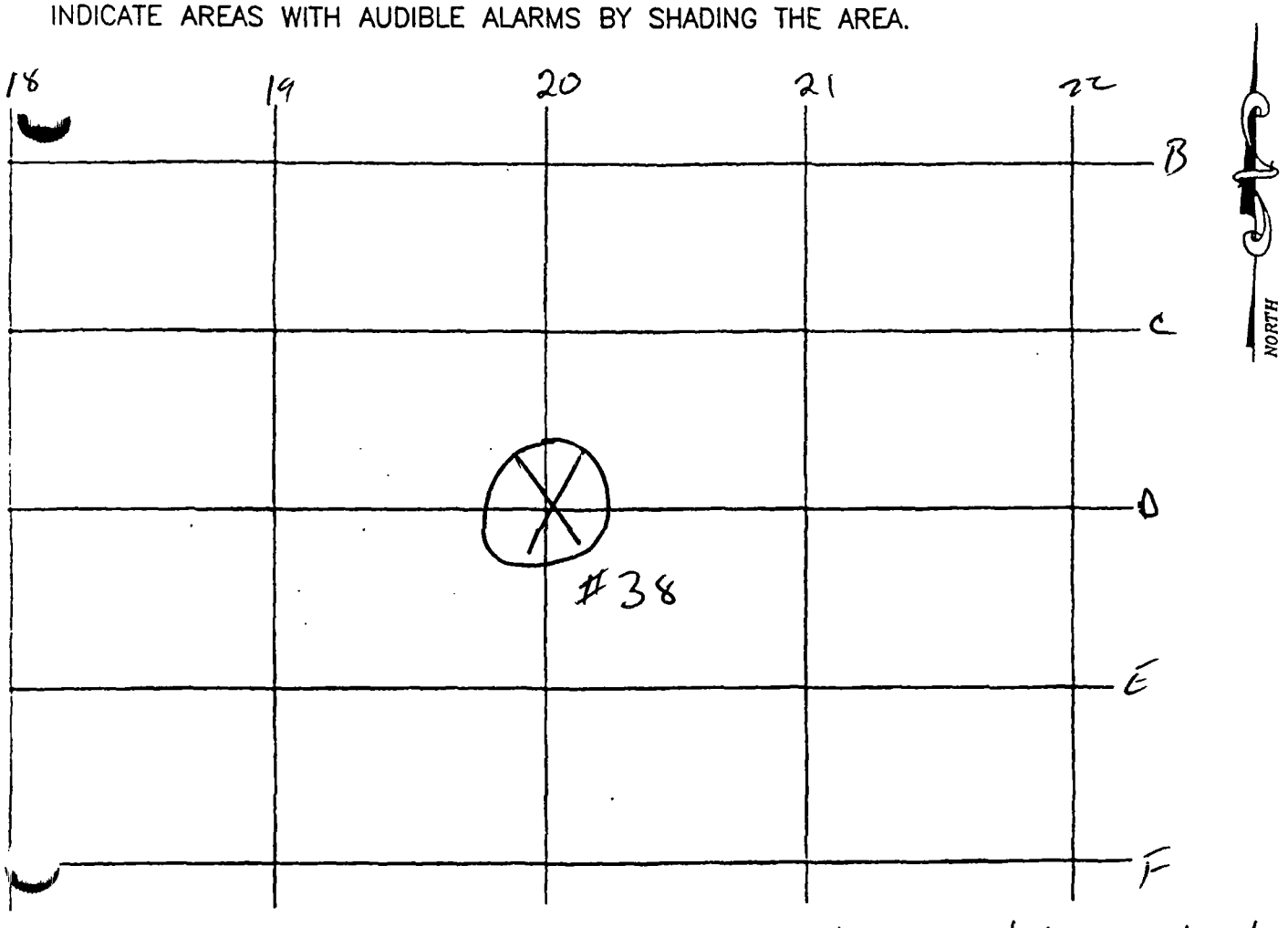
INST. MODEL: Ludlum 7221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

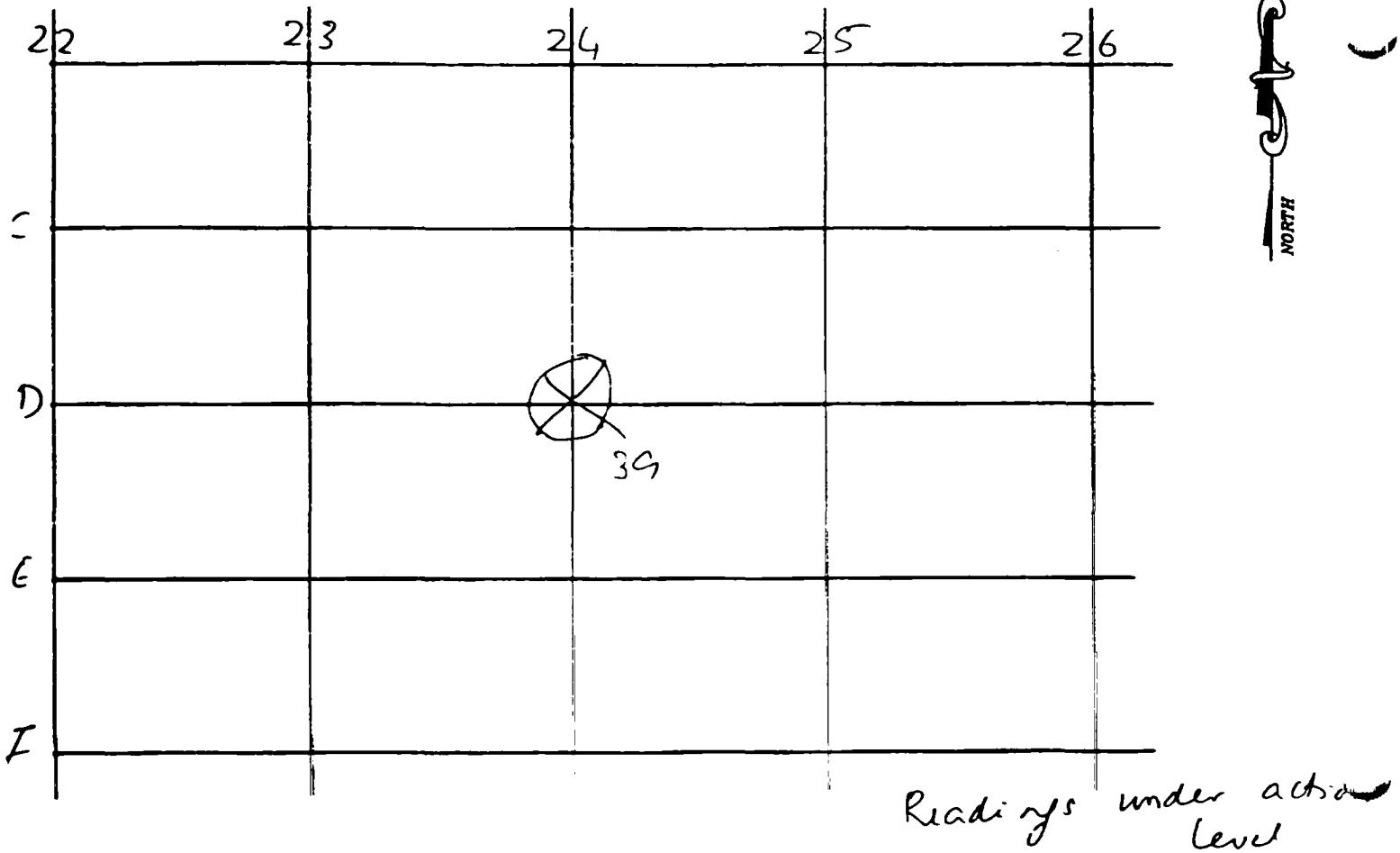
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 06/01/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlu 2221 washed SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants, Ltd.

River East Excavation Inventory

Sheet _____ of _____

Date: 5/9/08 Technician: BRENT BARTON

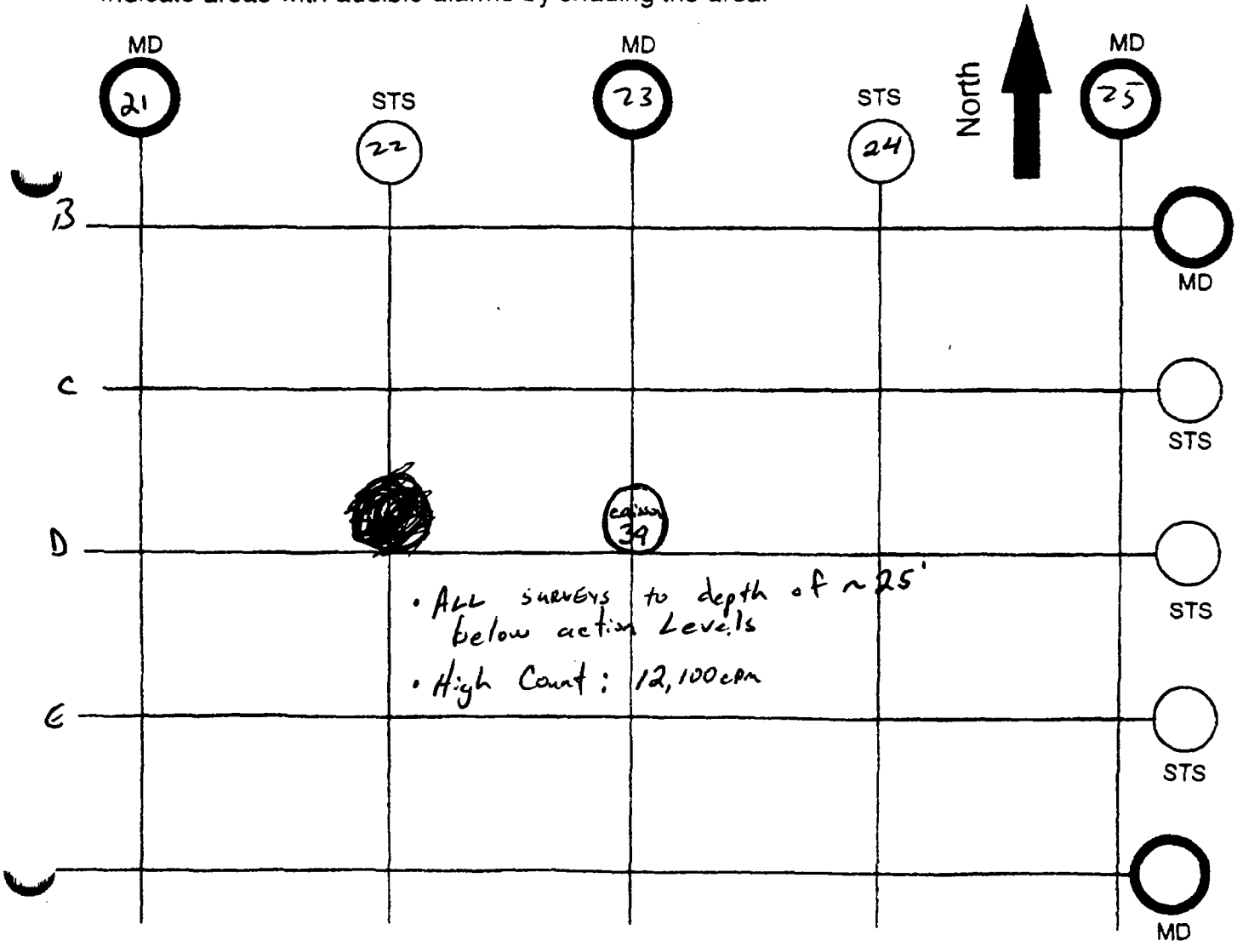
Inst. Model: Ludlum 2221 UNSHIELDED Serial No.: 126496

Inst. Calibrated (y)n)? 3/7/08 Lift Elevation: Grass

Write column lines in corresponding circles. Indicate excavated area with heavy line.

Intersecting lines require 30 second counts. Record counts at intersections in CPM.

Indicate areas with audible alarms by shading the area.



STS Consultants Ltd.

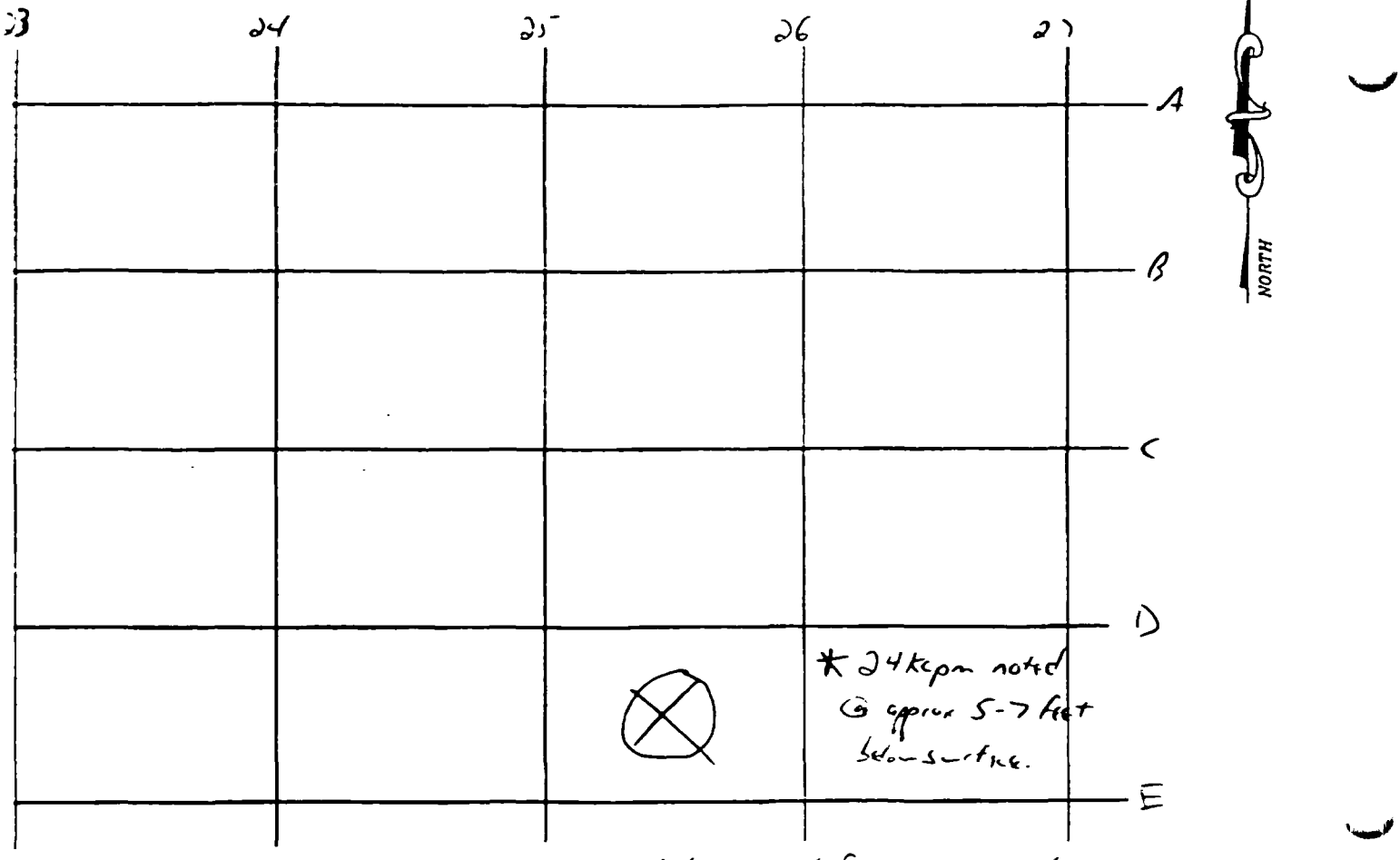
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 2/3/00 TECHNICIAN: Glen Huber

INST. MODEL: L-dL-2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: Carsson #40

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All material from caisson hole placed on plastic to be loaded as contaminated. GAH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/26/00

TECHNICIAN: BRETT BARON

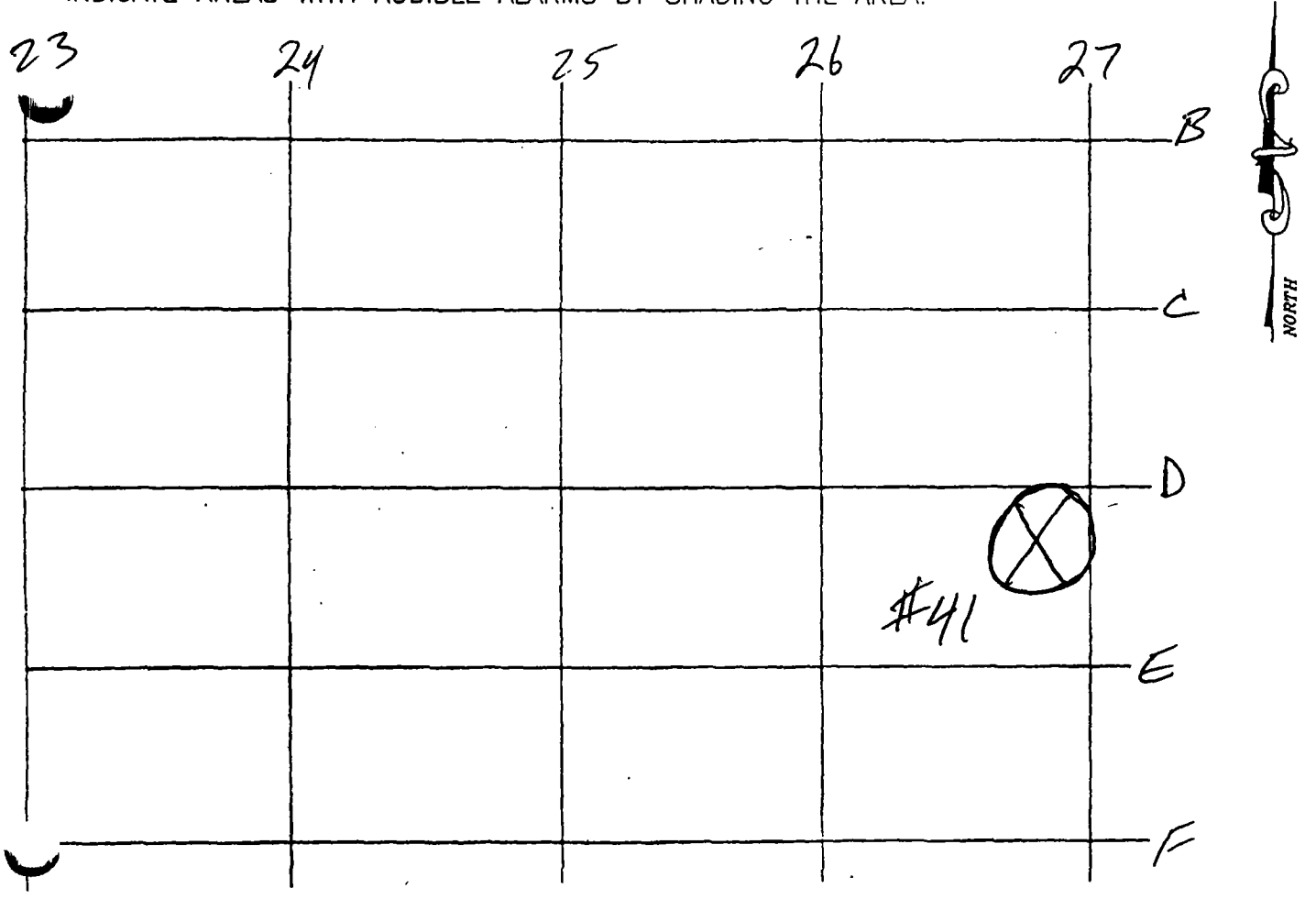
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/00

LIFT ELEVATION: Crisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL SURVEYS BELOW ACTION LEVELS -RAB

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

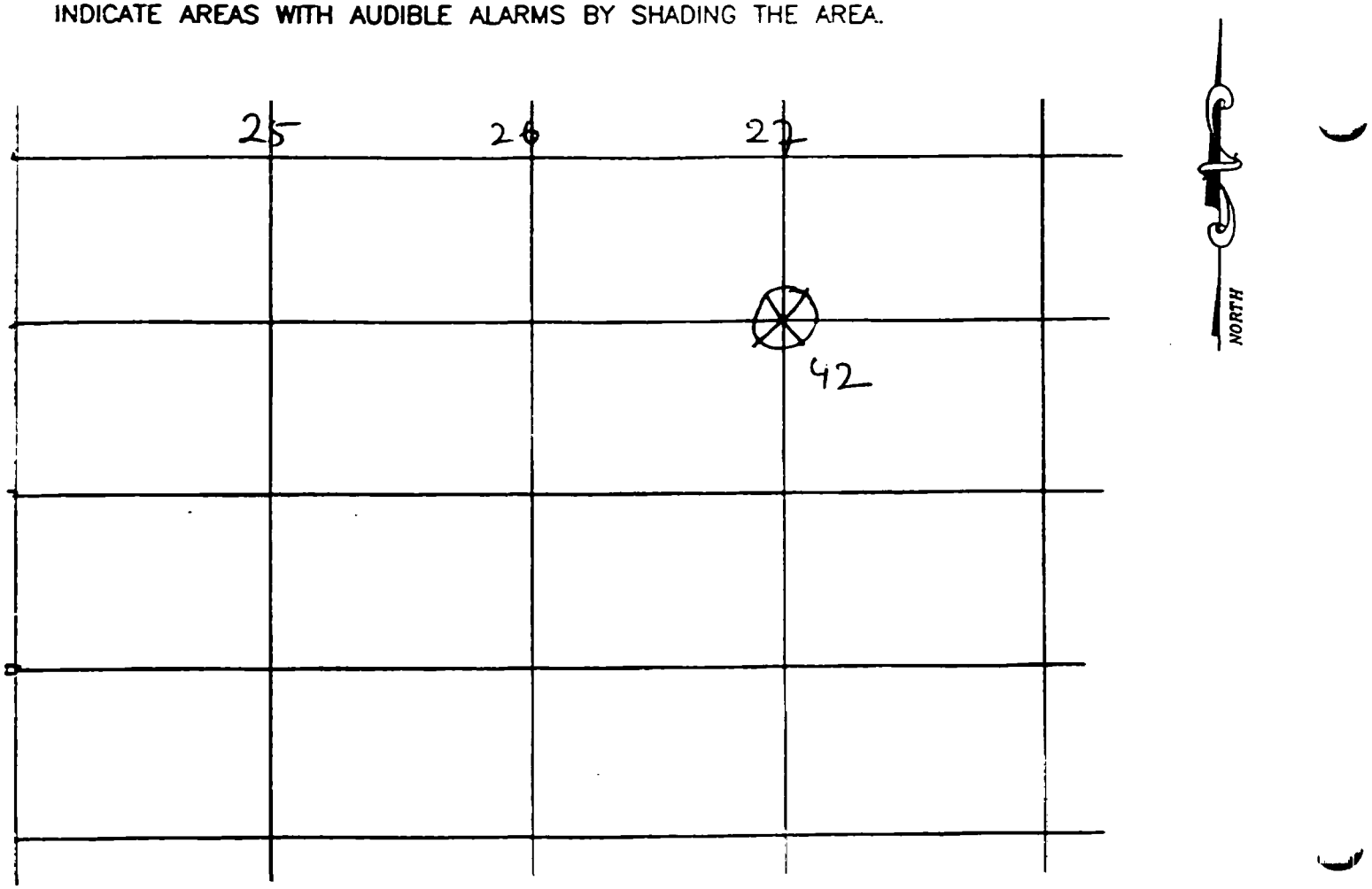
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/18/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2224 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings Under Action Level

S.M.

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

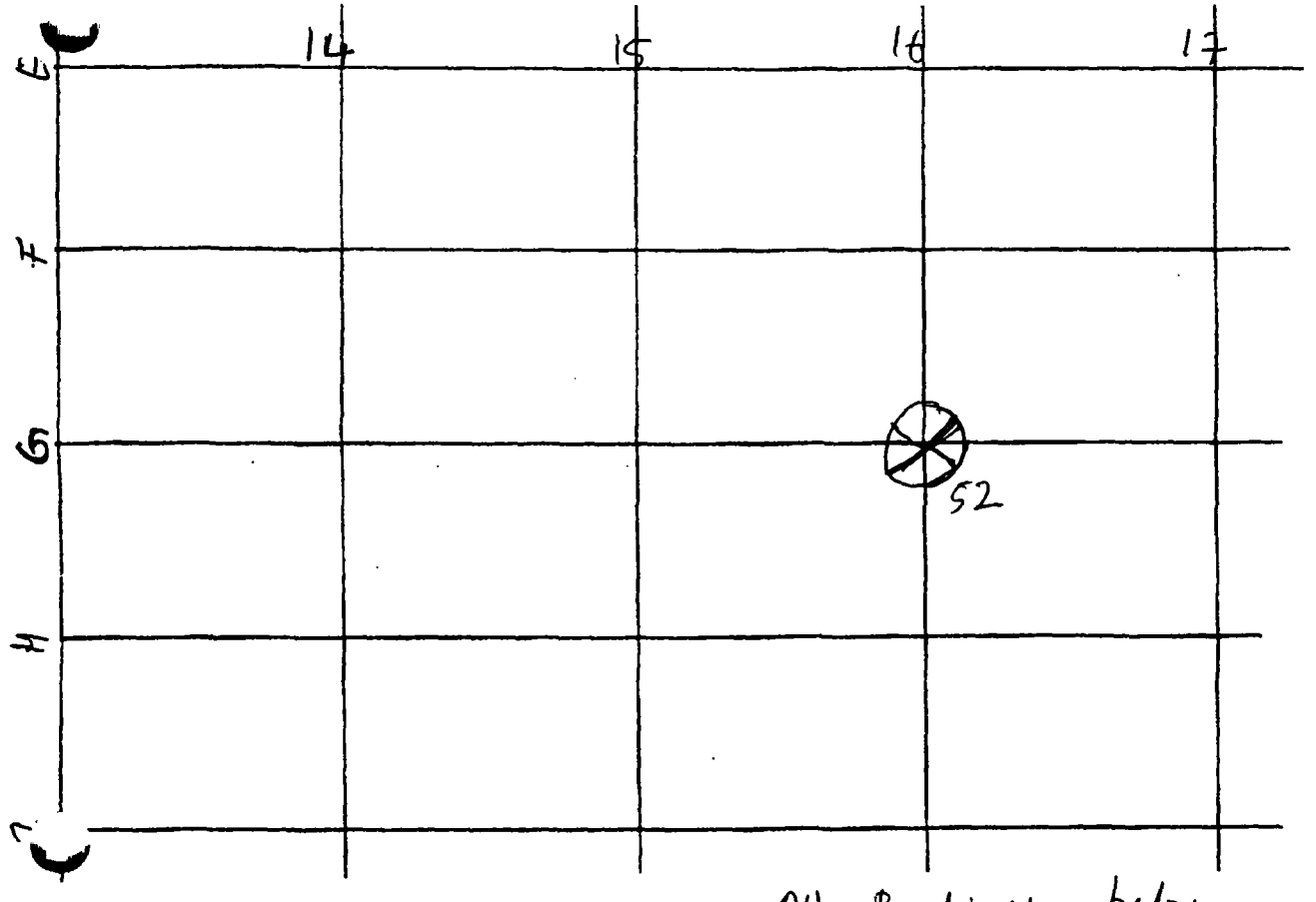
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/22/00 TECHNICIAN: S GEORGE

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below action level

bjn

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

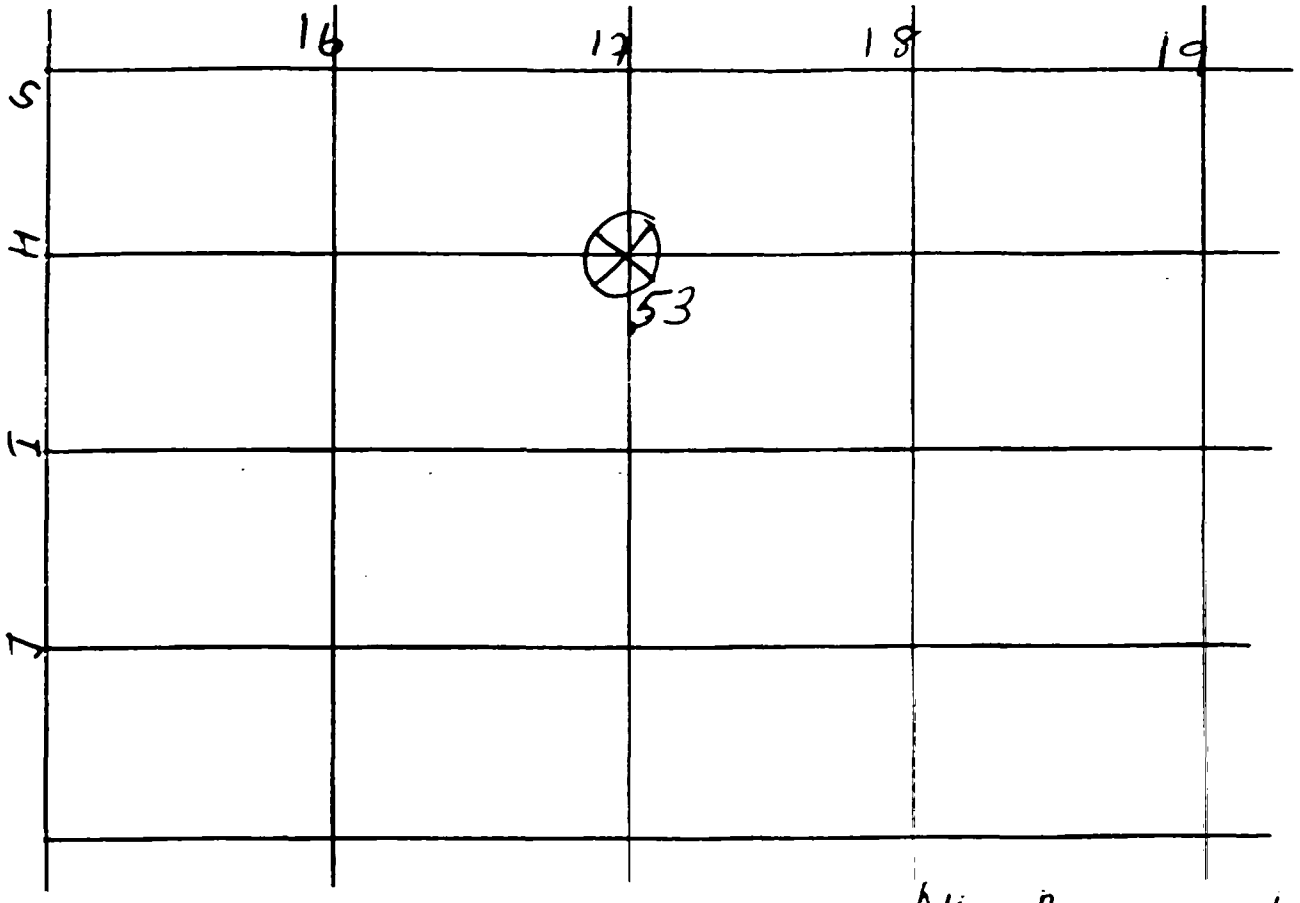
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 03/19/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below action level

X:\PROJECTS\24418\xx\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

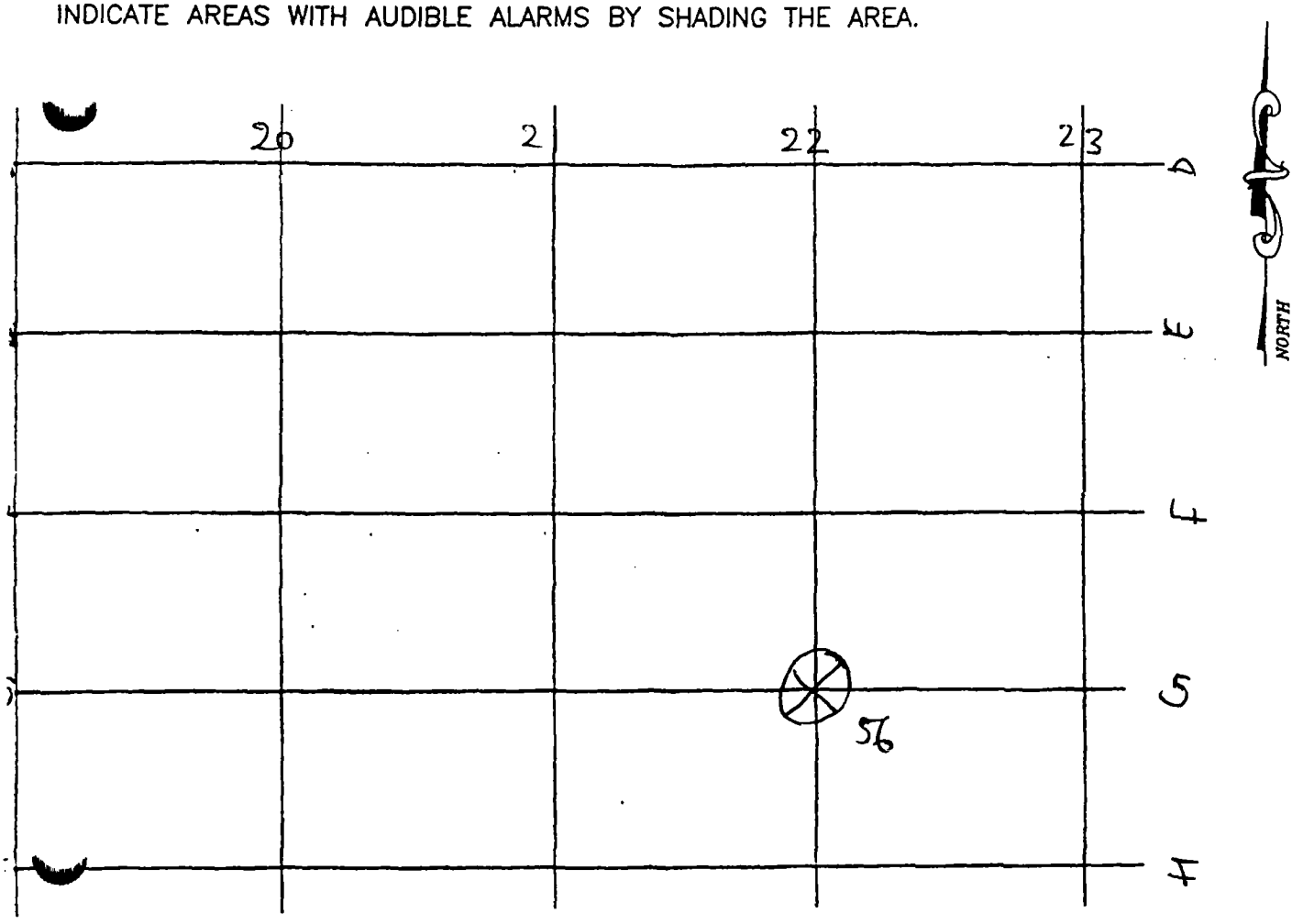
404

DATE: 05/17/00 TECHNICIAN: SGEORGE

INST. MODEL: Ludlum 2221 Unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

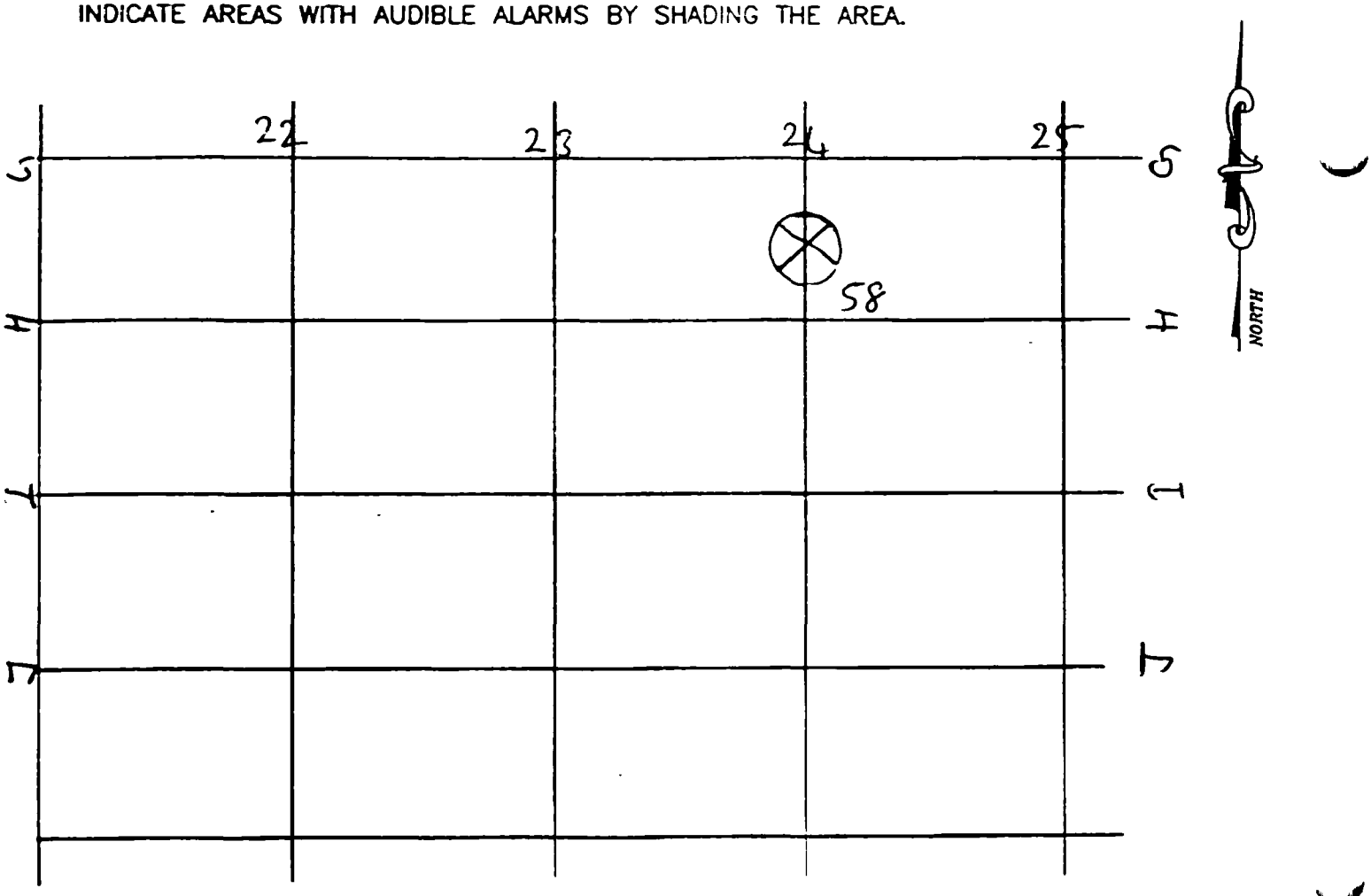
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/22/00 TECHNICIAN: S GEORGE

INST. MODEL: 2221 unshielded SERIAL NO.: 12 6496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings ~~outside~~ below cutoff level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/2/00

TECHNICIAN: Brett Barton

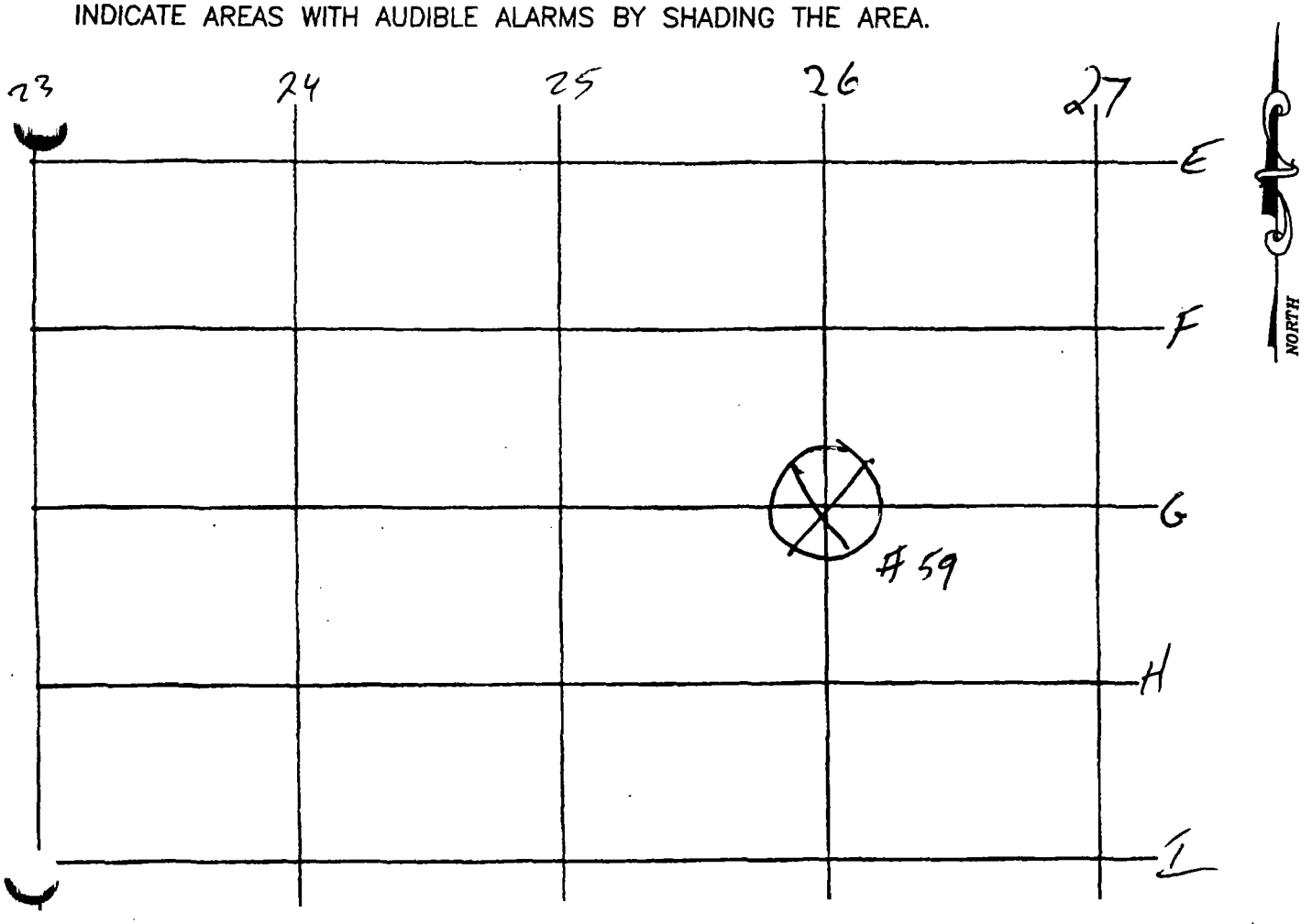
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? 3/3/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL READINGS BELOW Action Levels - BRETT

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

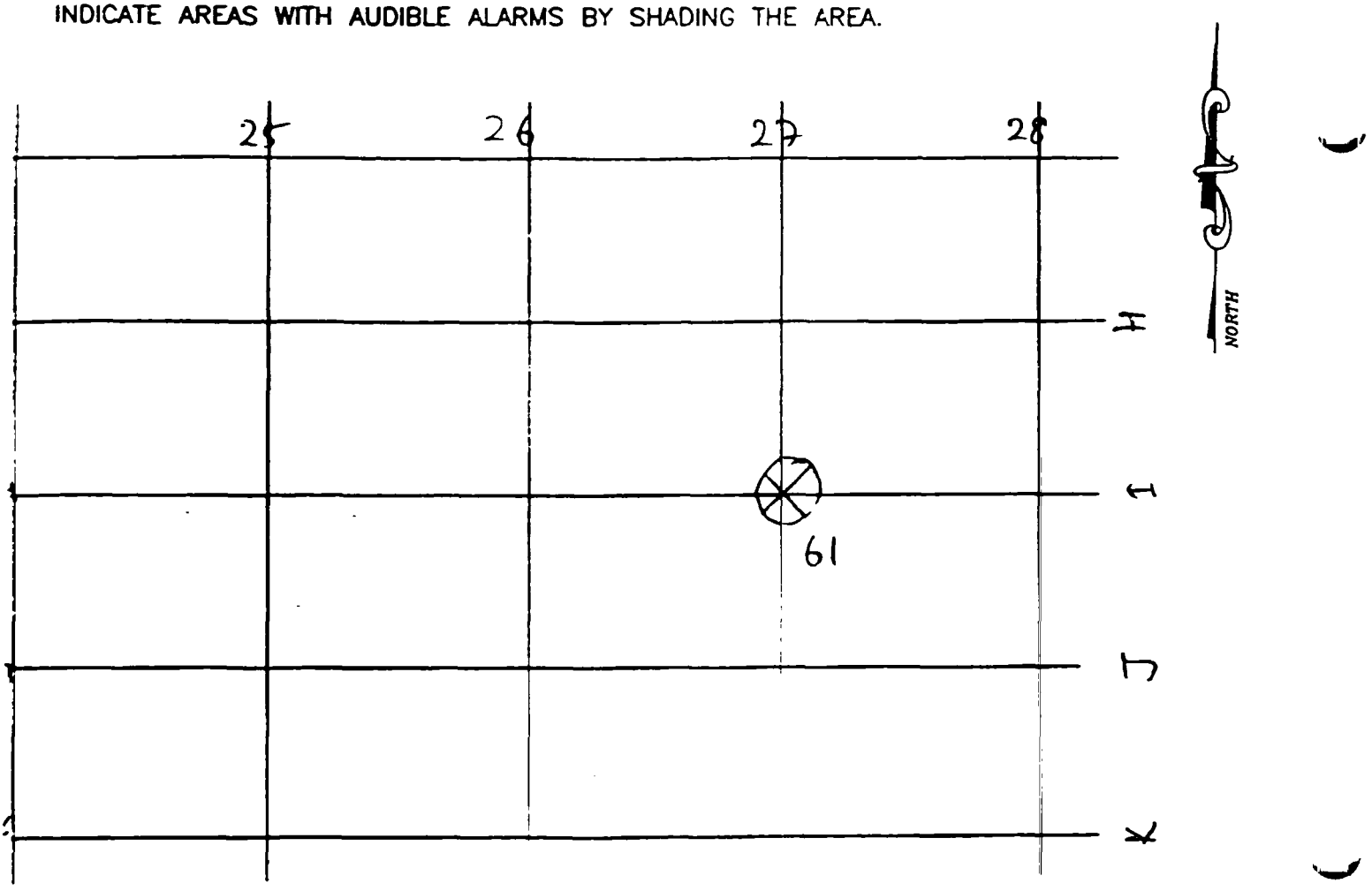
394

DATE: 05/17/00 TECHNICIAN: S. GEORGE

INST. MODEL: Ludlum 2221 w/shielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

Readings under action level

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/8/00

TECHNICIAN: BREA BARTON

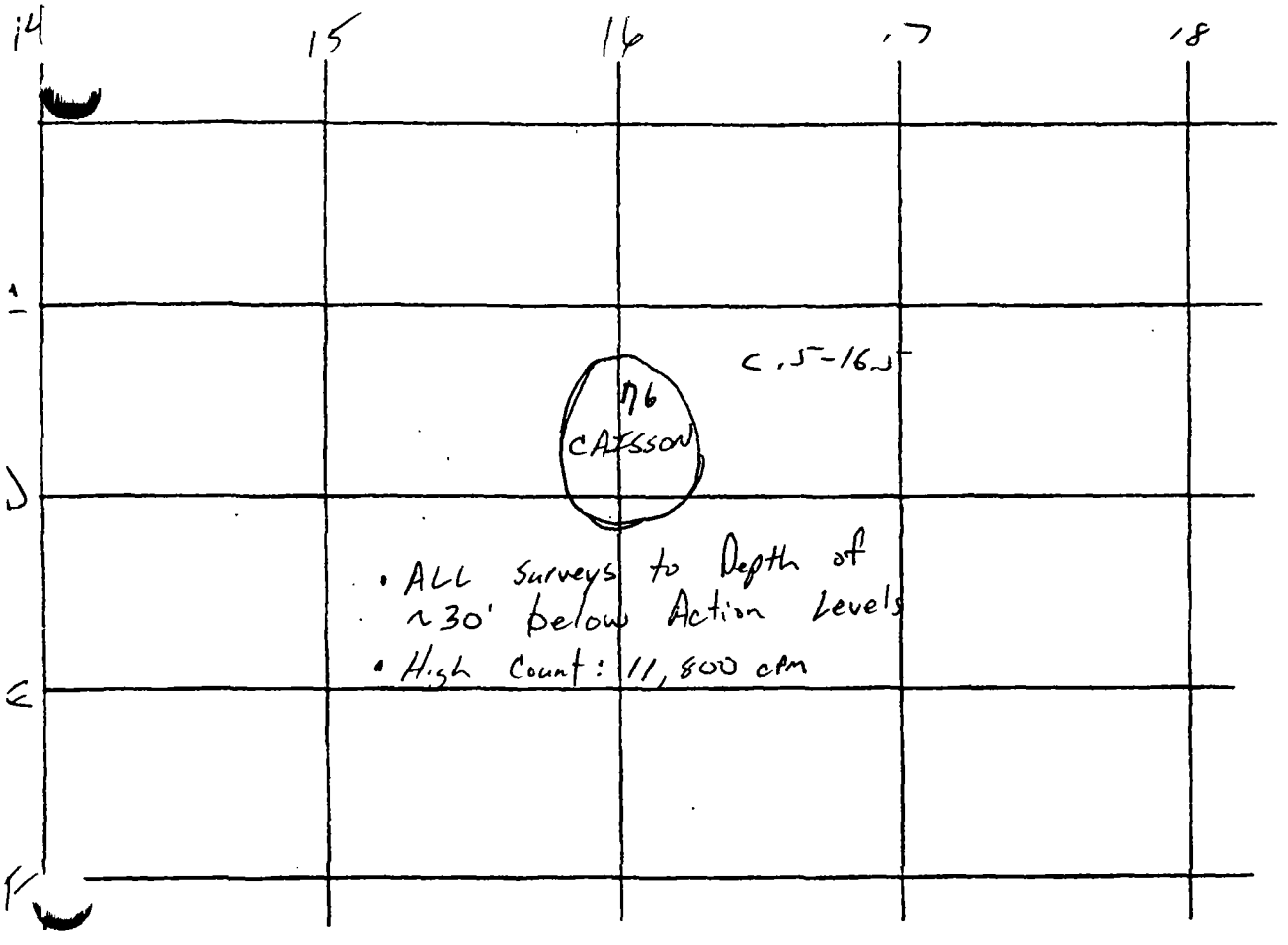
INST. MODEL: Ludlum 2221 UNSHIELDED

SERIAL NO.: 126 496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

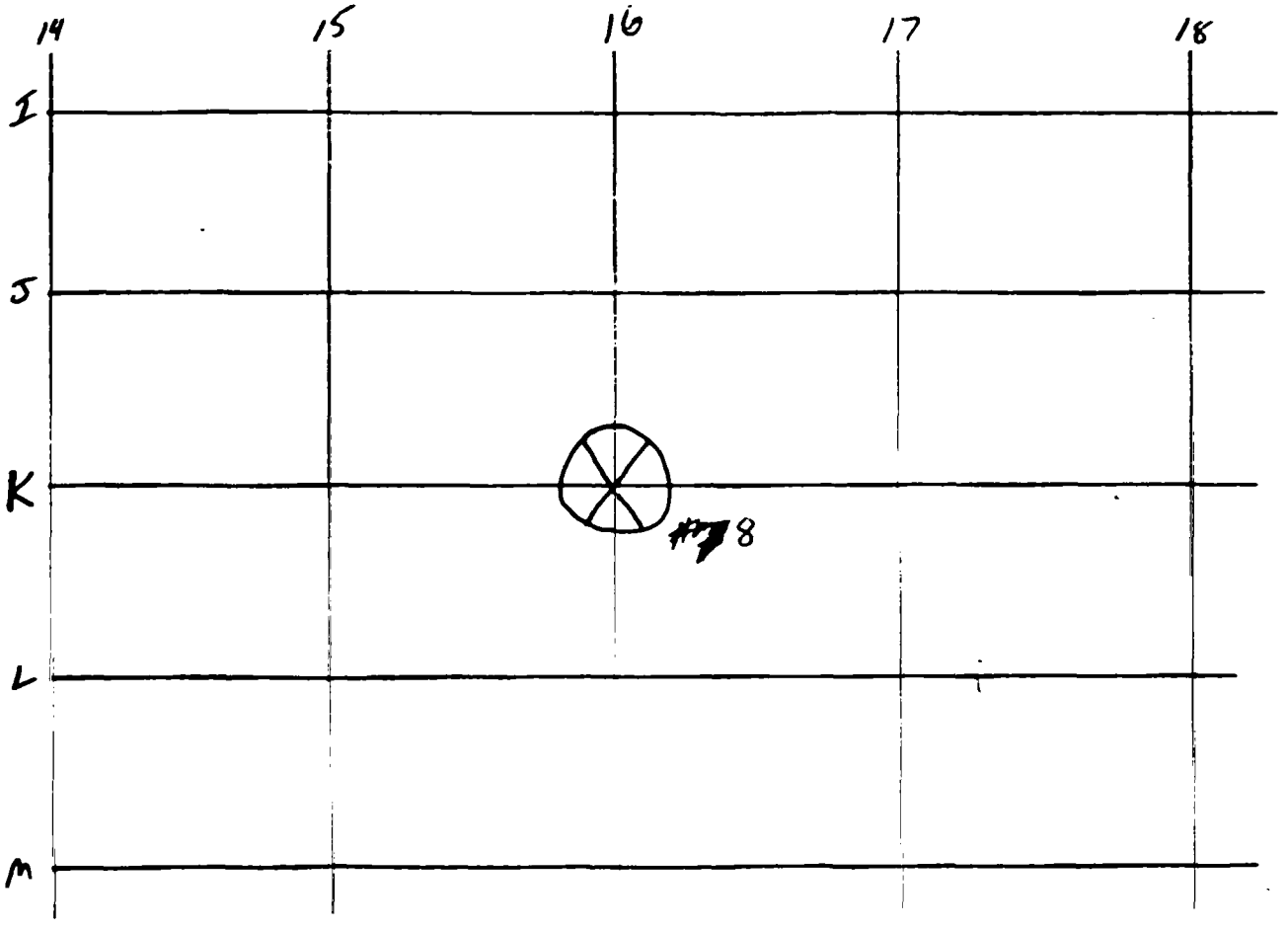
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/30/00 TECHNICIAN: BRETT BARTON

INST. MODEL: Ludlum 2221 w/ shield SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: CAISSON

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL SURVEYS BELOW ACTION LEVEL

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

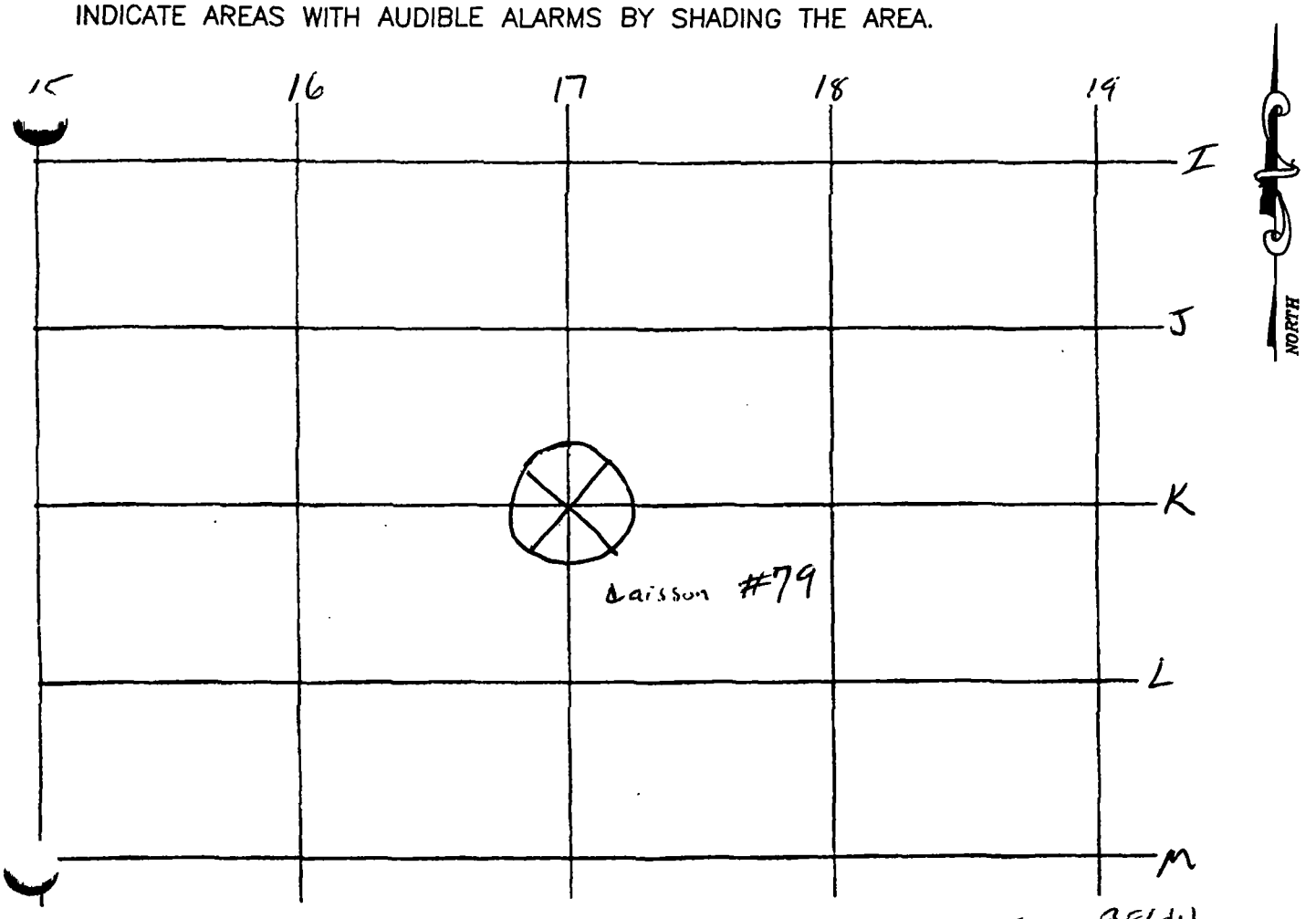
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/26/00 ~~unshielded~~ TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y)N)? 3/7/00 LIFT ELEVATION: caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



- ALL SURVEYS BELOW ACTION LEVELS

BRET

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

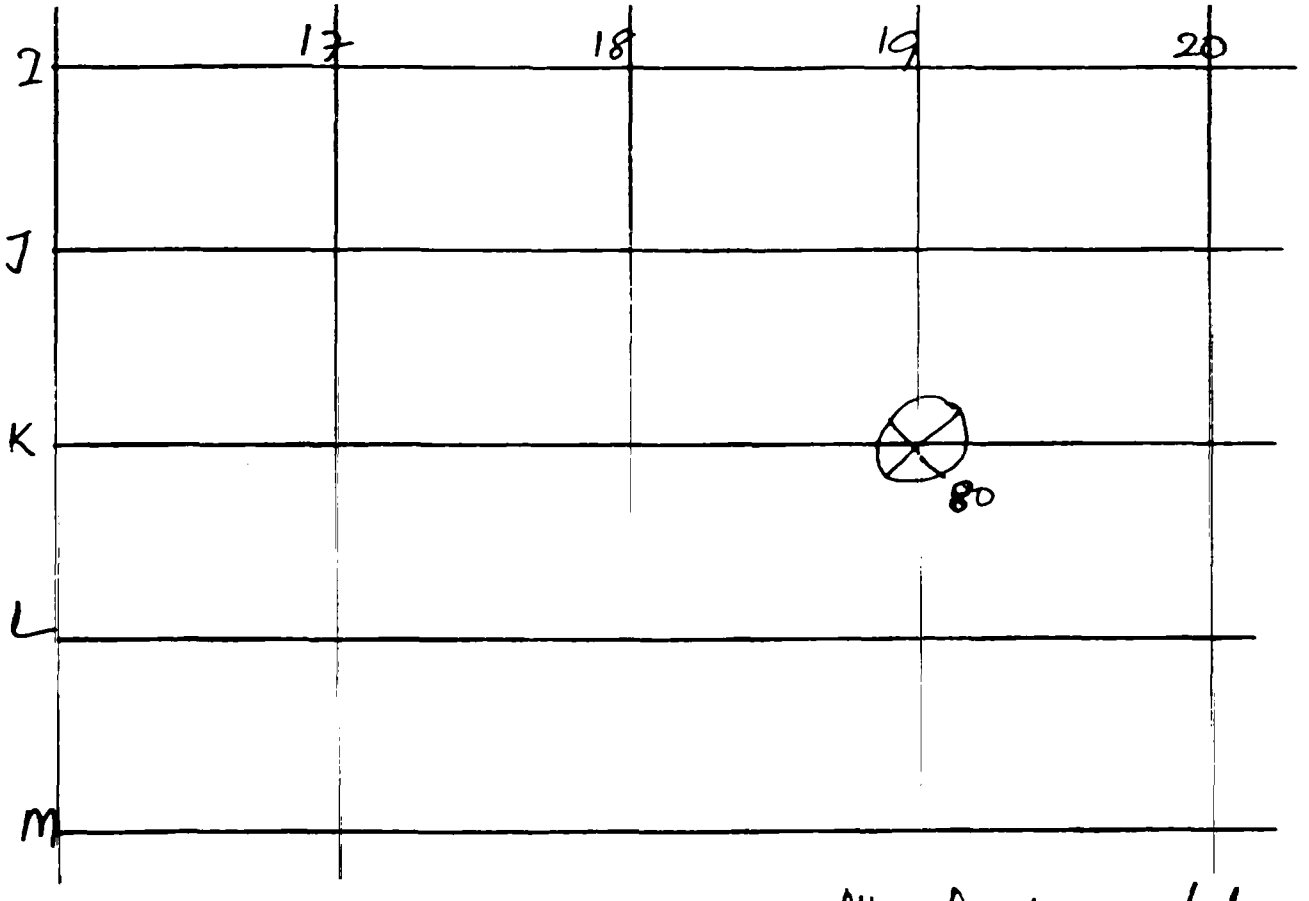
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/24/00 TECHNICIAN: S GEORGE

INST. MODEL: 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below action Level

tsp.

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

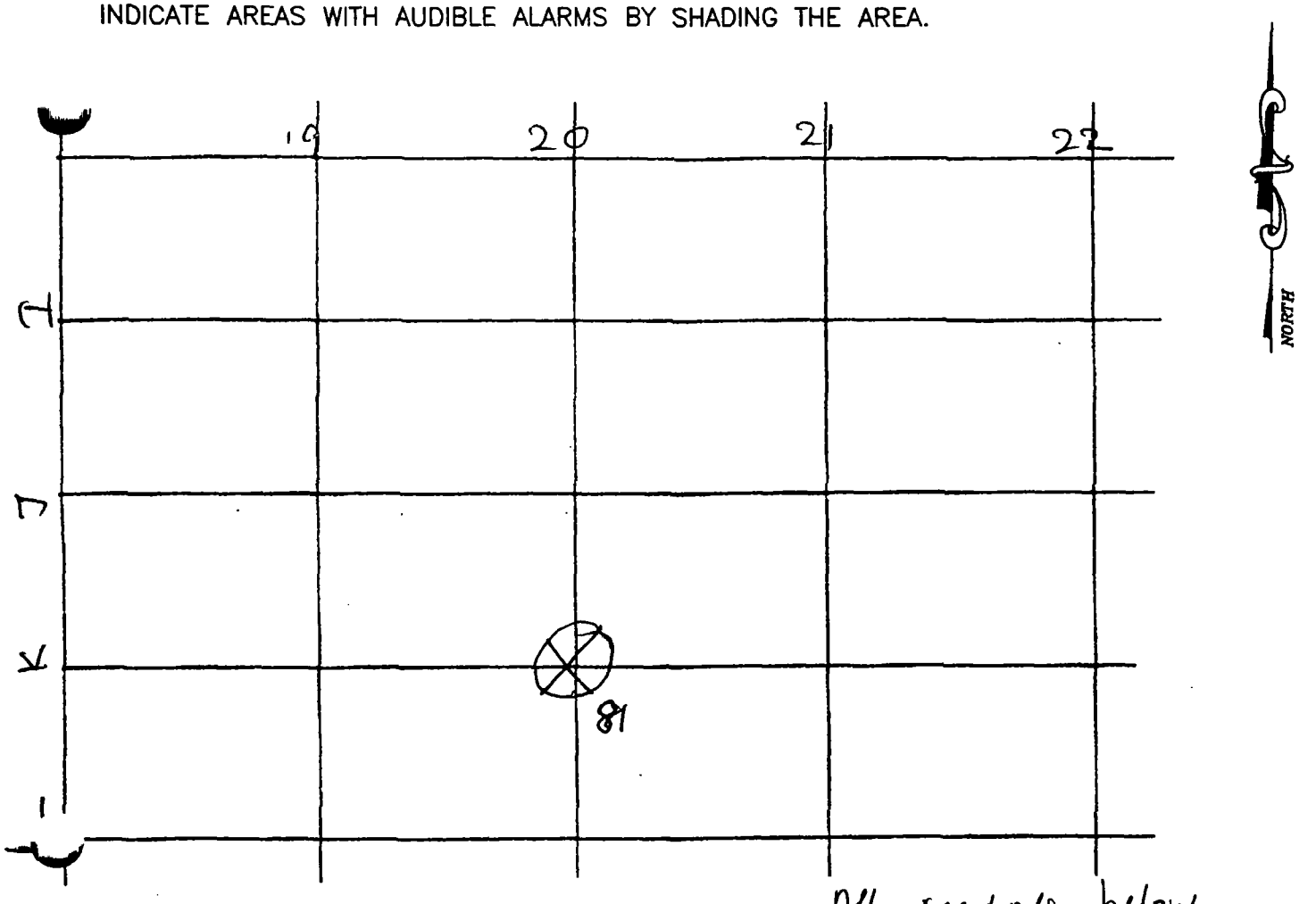
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/25/00 TECHNICIAN: SCHORK

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All readings below action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

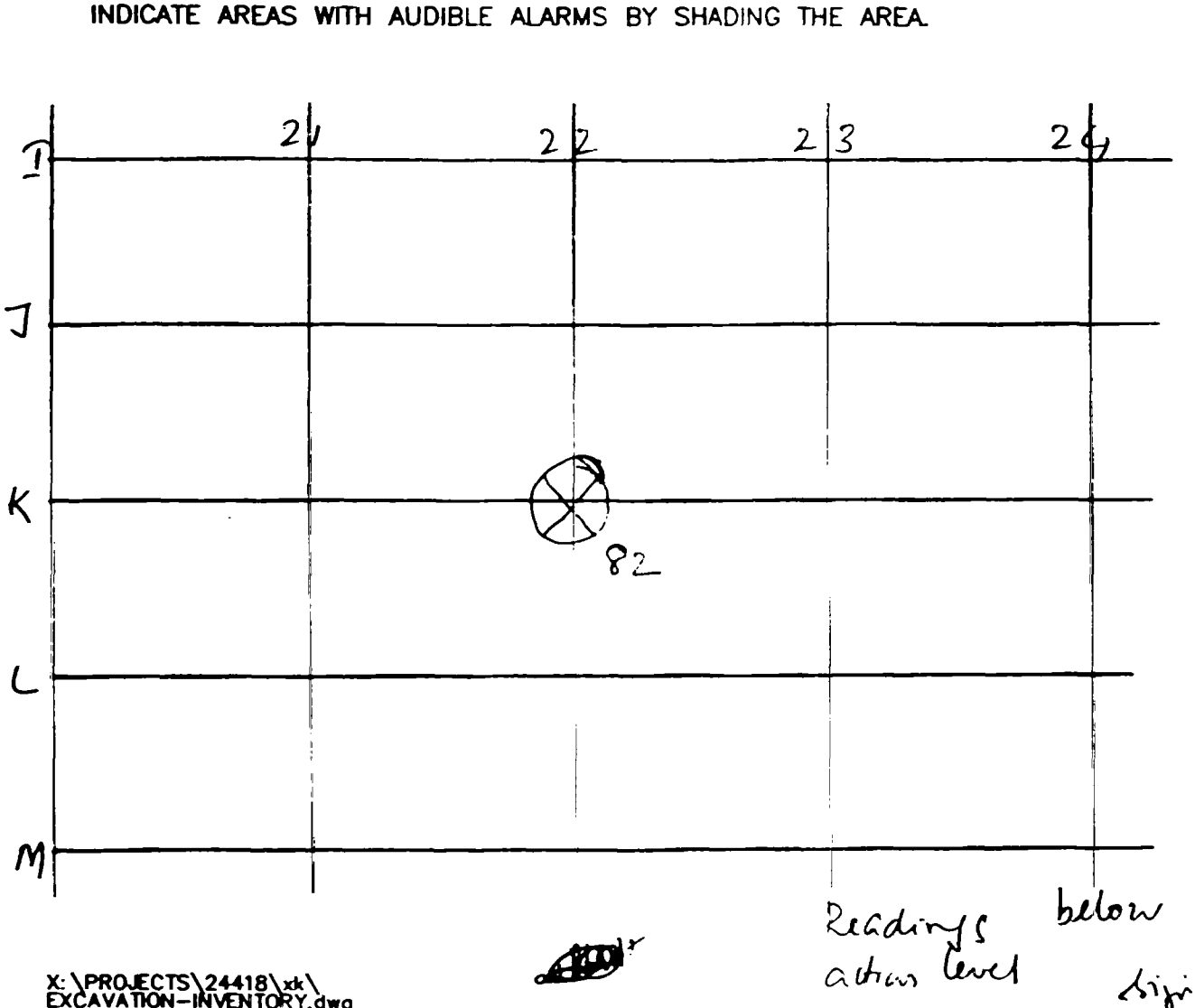
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 05/30/00 TECHNICIAN: SGEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below actual level

Sigi

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/29/00

TECHNICIAN: Glenn Huber

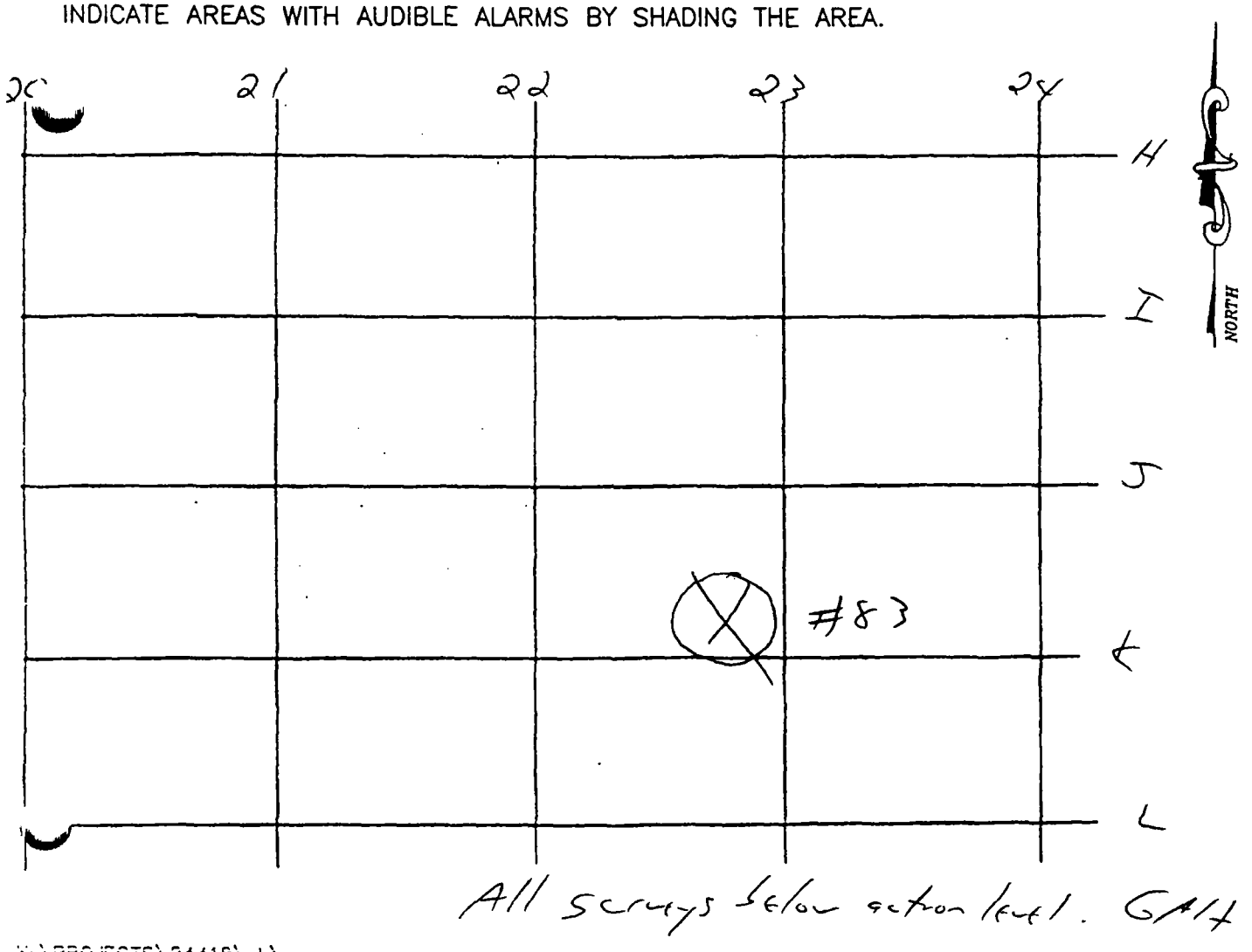
INST. MODEL: Ludlum 2221 unshielded

SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Carisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level. GAH

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/27/00

TECHNICIAN: Glenn Huber

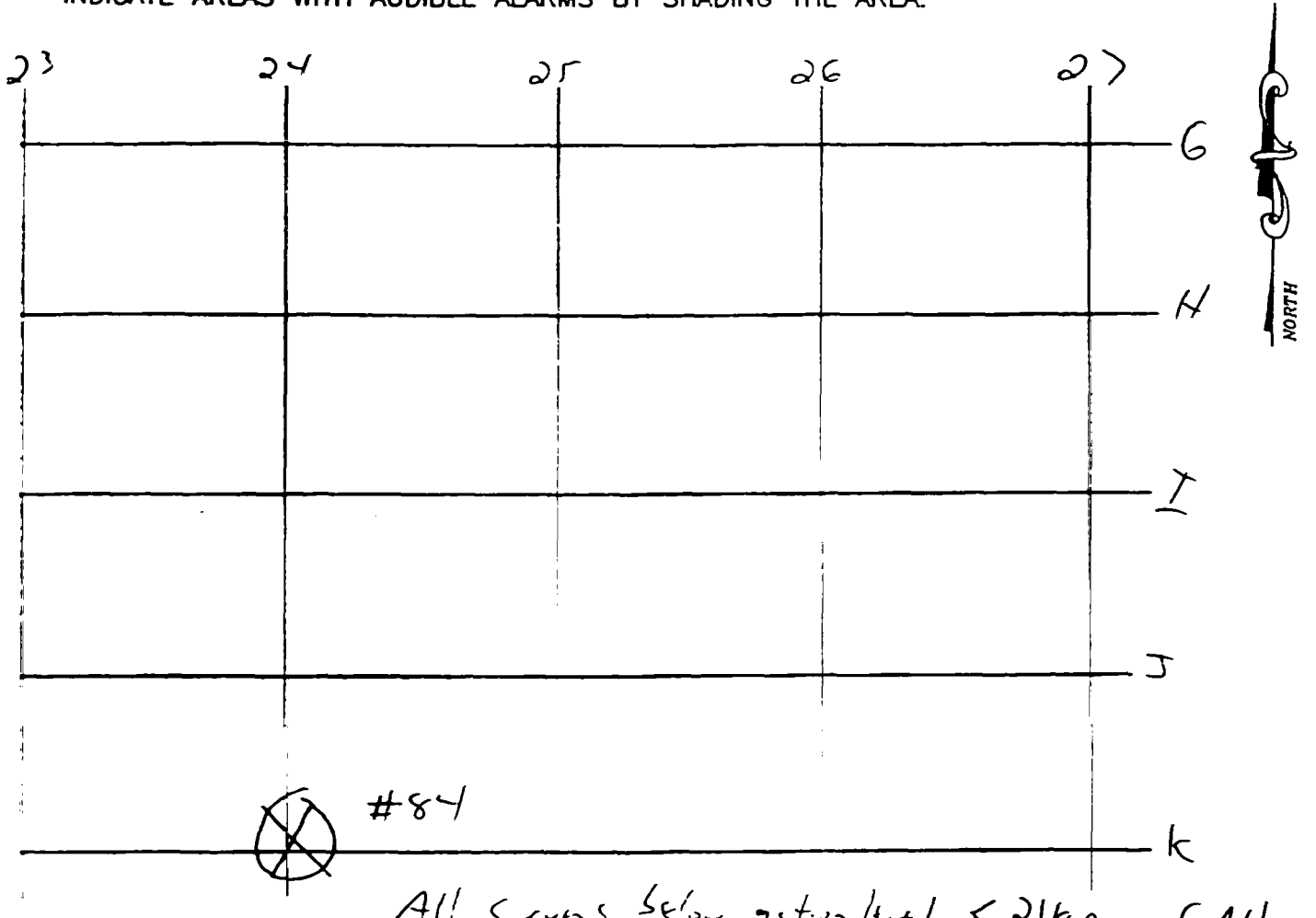
INST. MODEL: Ludlum 2221 unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level < 21kcp - GAH

\PROJECTS\24418\xk\
XCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/7/00

TECHNICIAN: Brett Barton

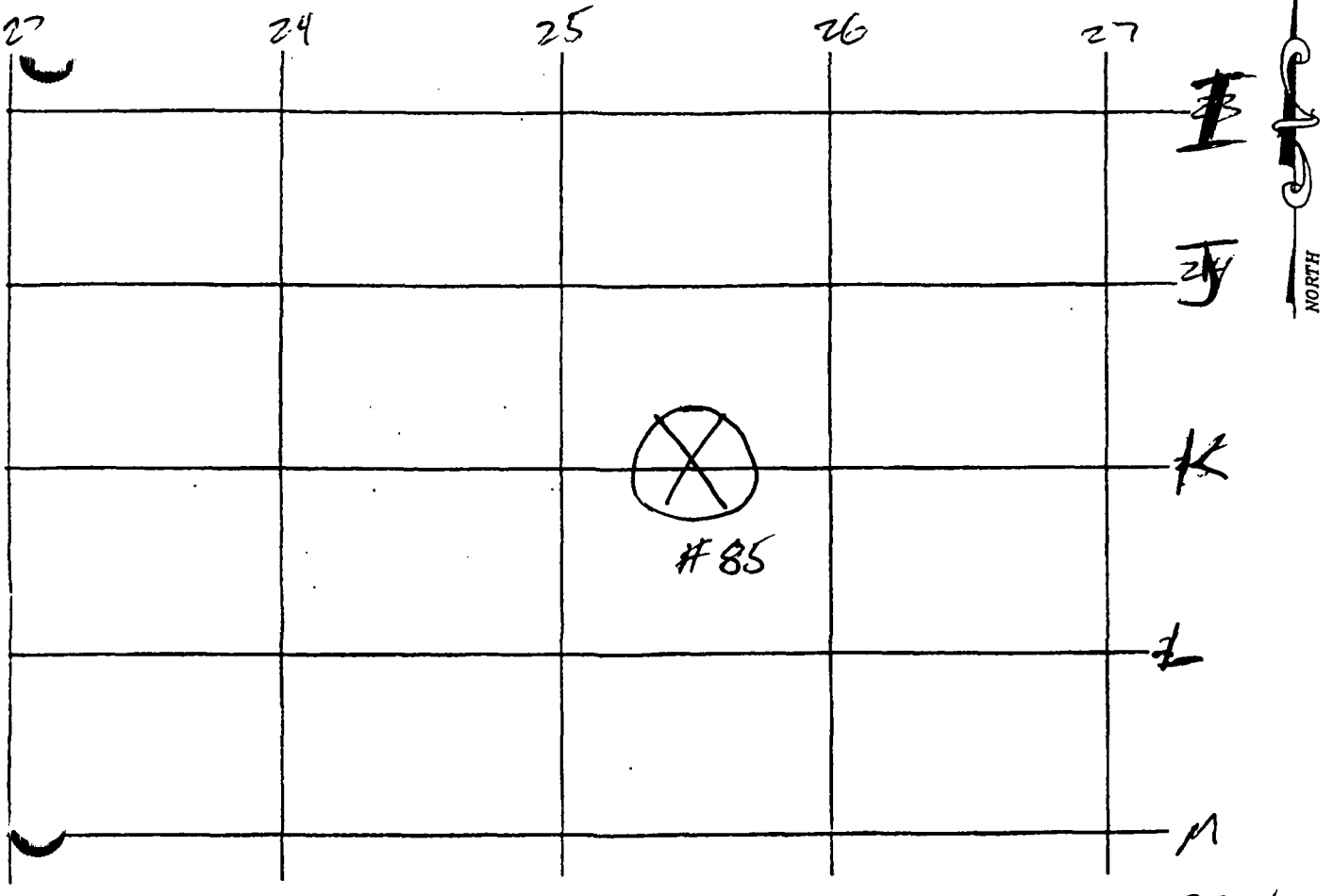
INST. MODEL: Ludlum 2221 unshielded

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL SURVEYS BELOW ACTION LEVELS - BAB

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

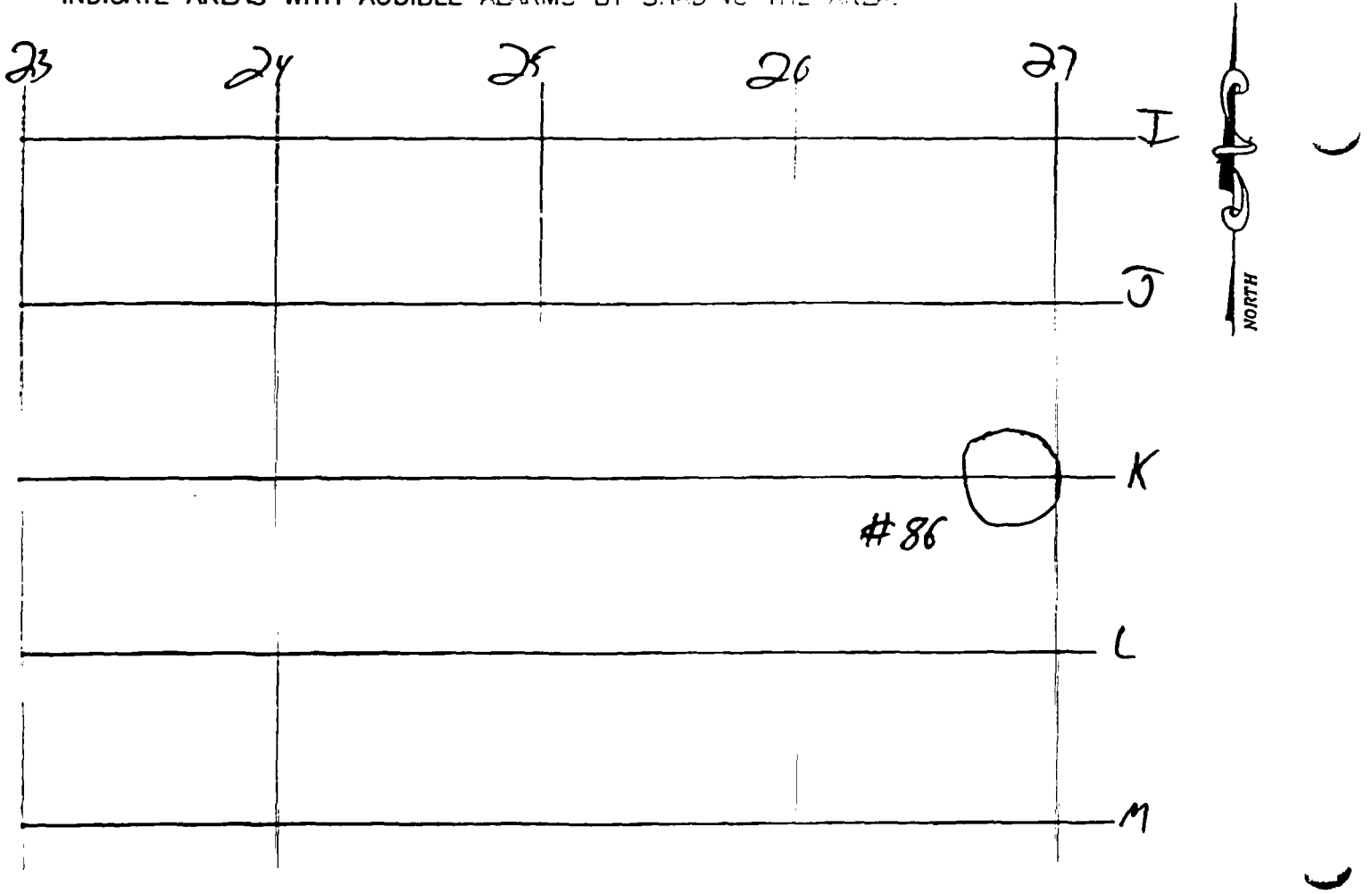
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-15-00 TECHNICIAN: Tristan Tims

INST. MODEL: 2221 unshielded SERIAL NO.: 127241

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

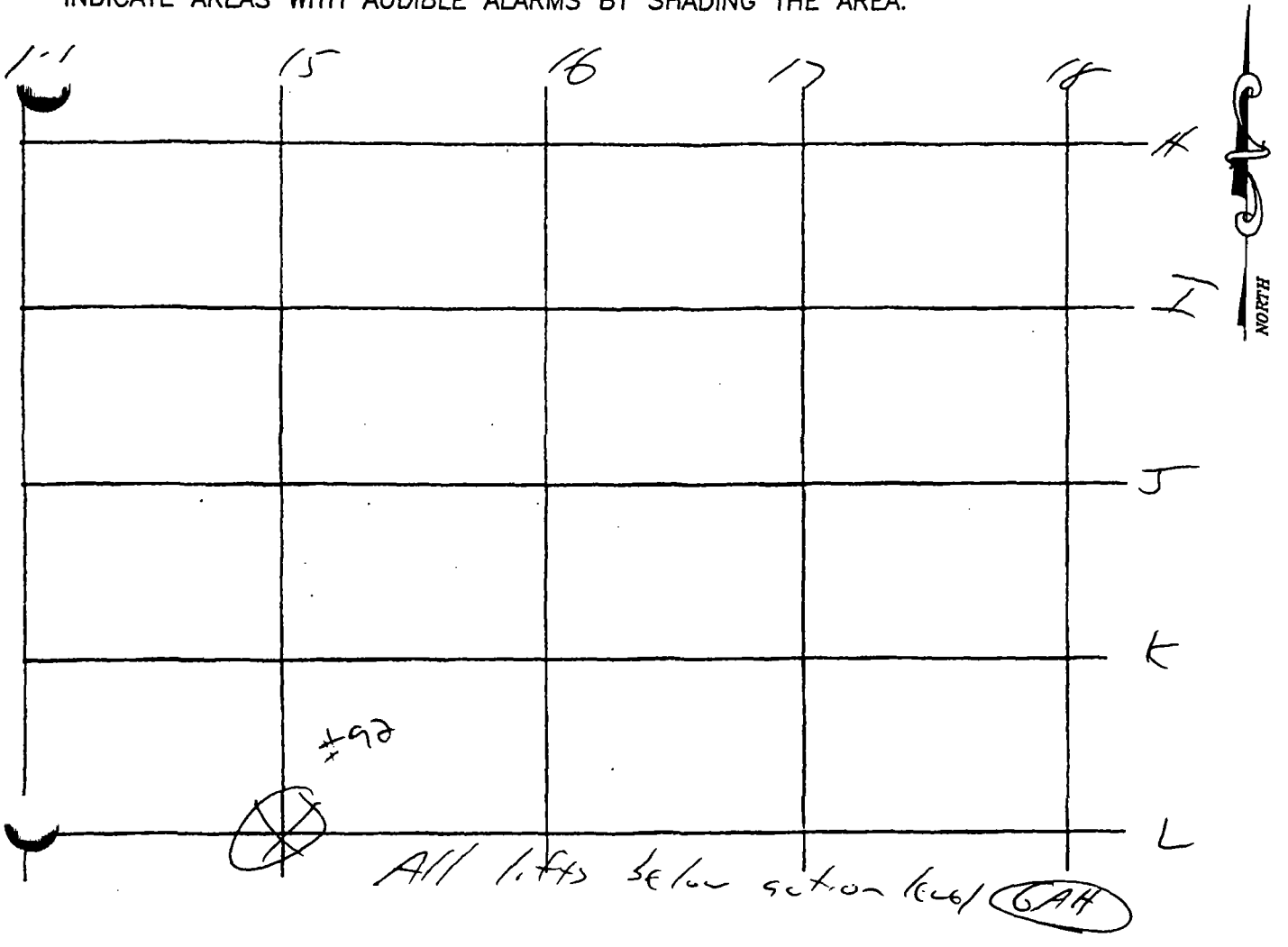
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/11/00 TECHNICIAN: G Hiss

INST. MODEL: 222 / unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: #92

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

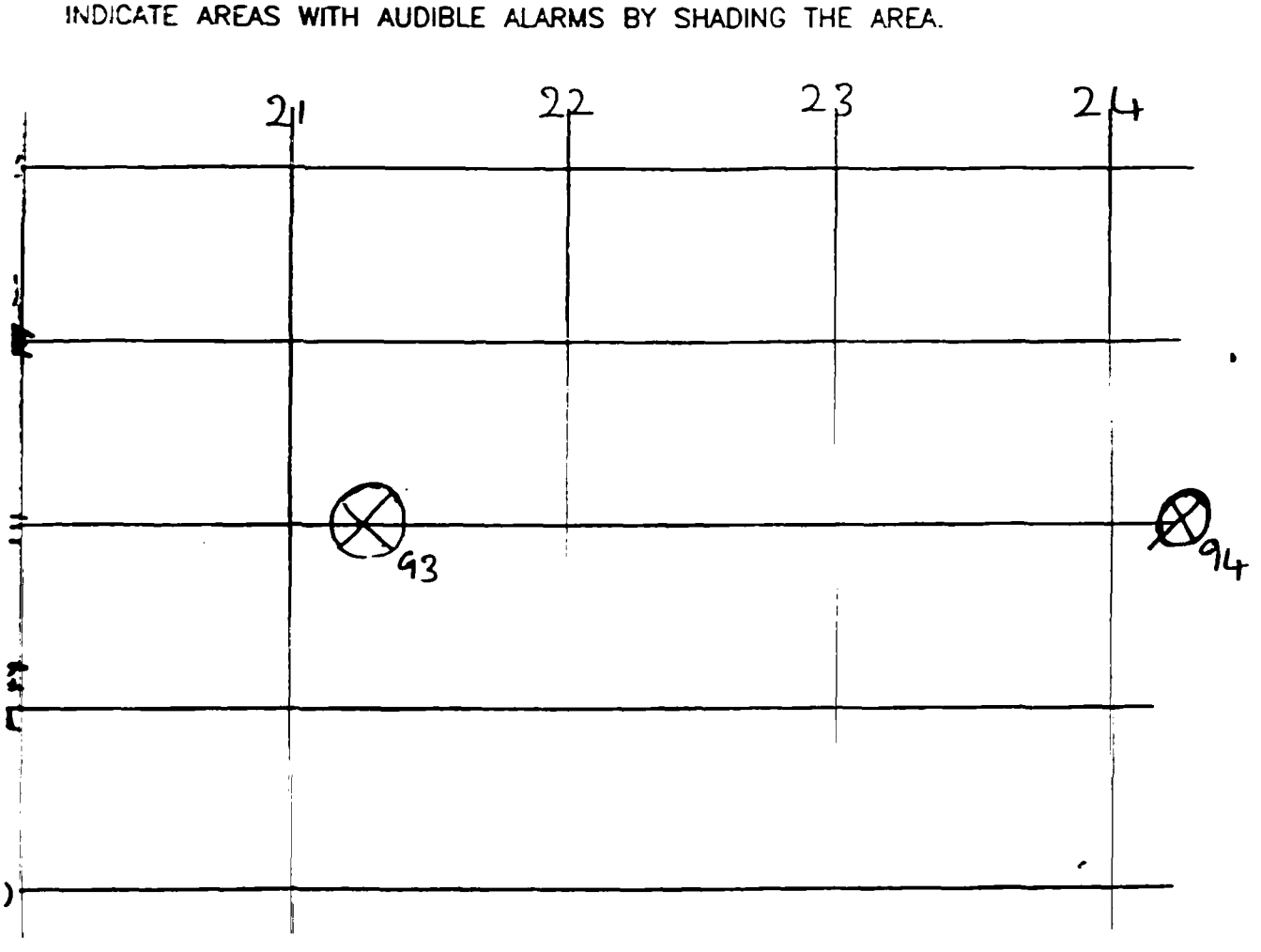
2 9 2

DATE: 5/ 16/00 TECHNICIAN: S. GEORGE

INST. MODEL: Ludlum 2221 (Combined) SERIAL NO.: 132864

INST. CALIBRATED (Y/N)? Yes LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings Under action level.

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

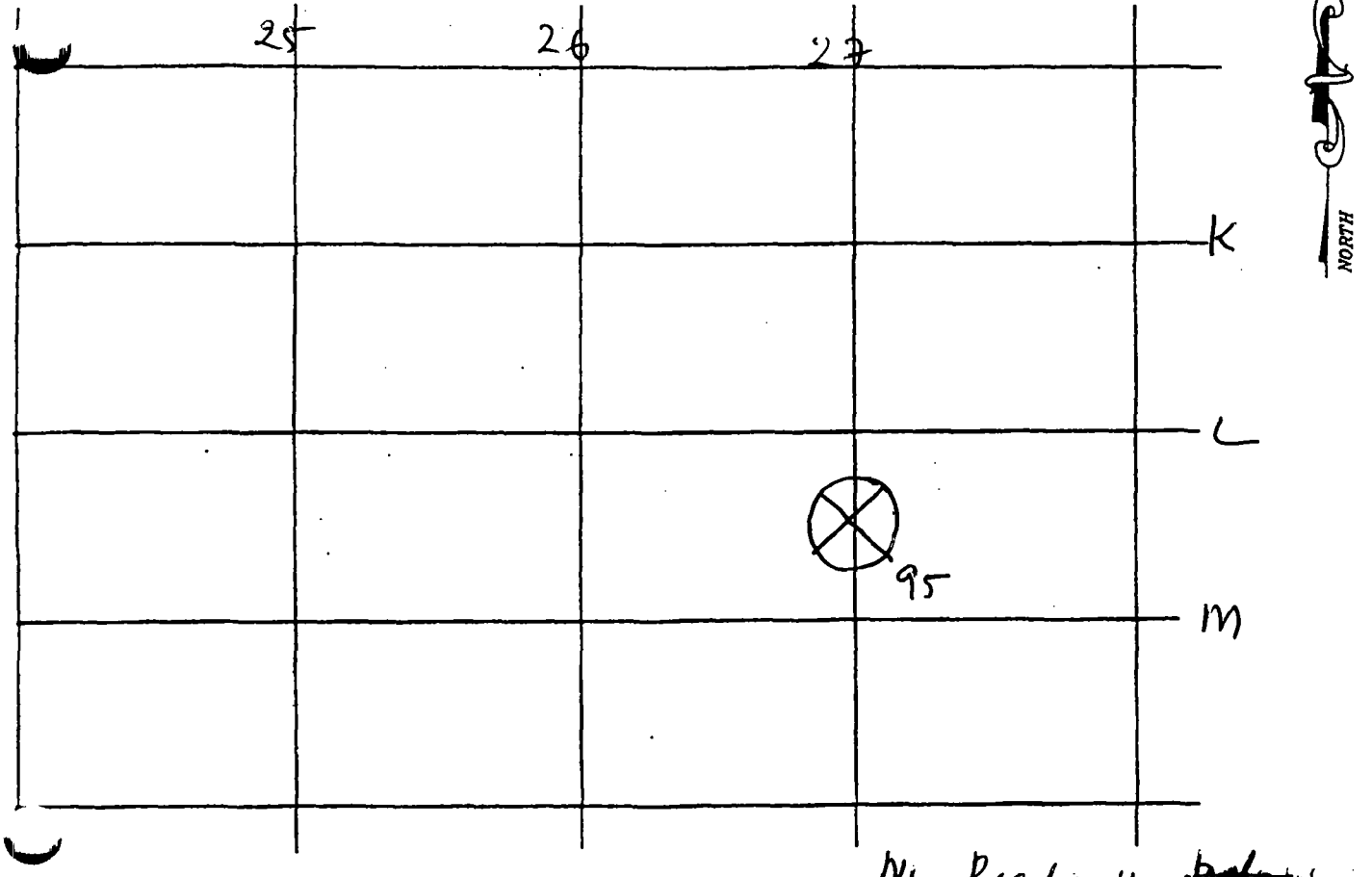
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/19/2000 TECHNICIAN: S. GEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Yes. LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings ~~Below~~ below action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

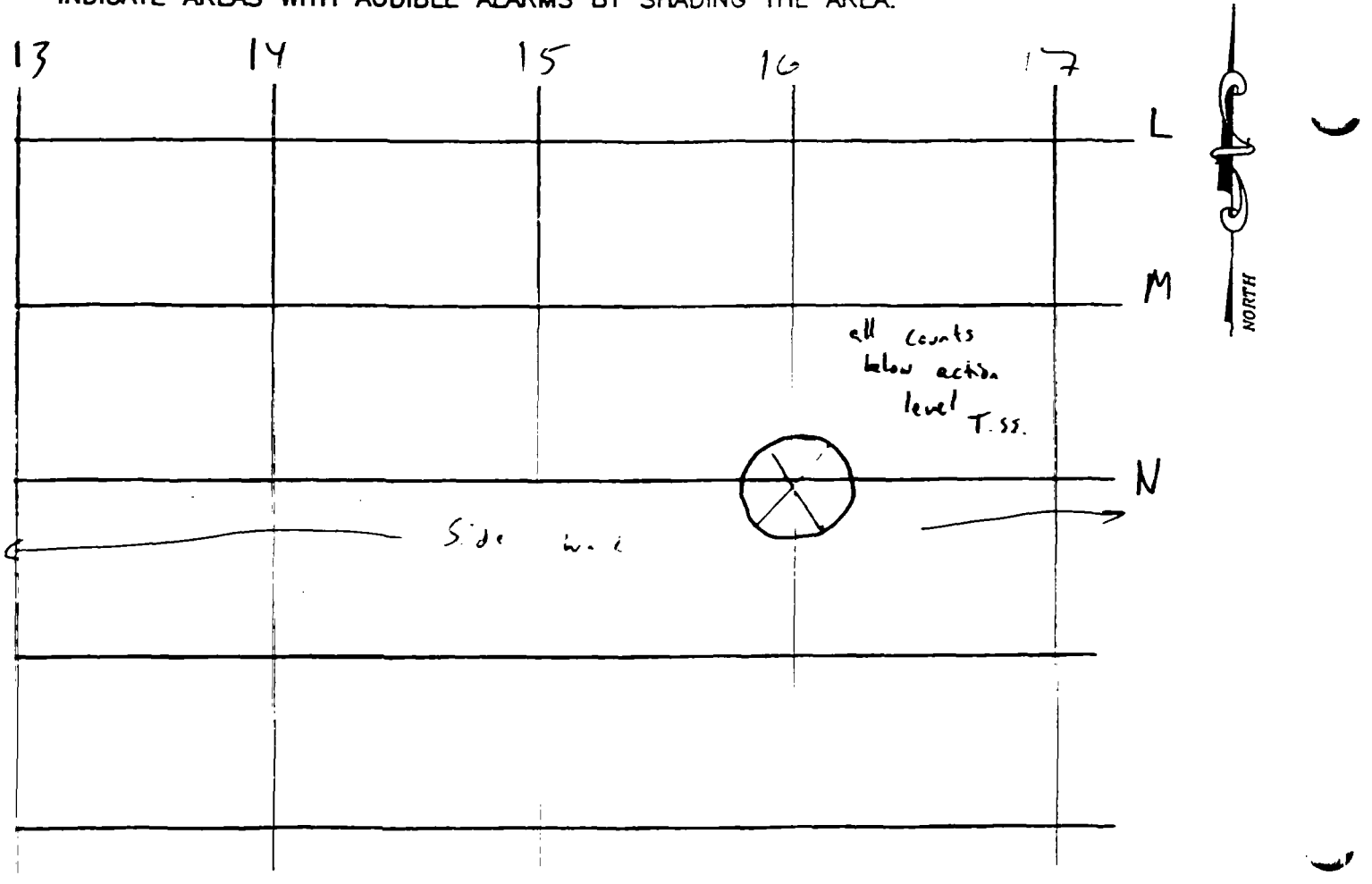
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/06/00 TECHNICIAN: Toby Shelman

INST. MODEL: 2221 unshielded Caisson ~~SERIAL~~ NO.: 10

INST. CALIBRATED (Y/N)? 03/07/00 ~~LIFT ELEVATION:~~ Serial # 12G496

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
07/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/14/00

TECHNICIAN: Toby Shewan

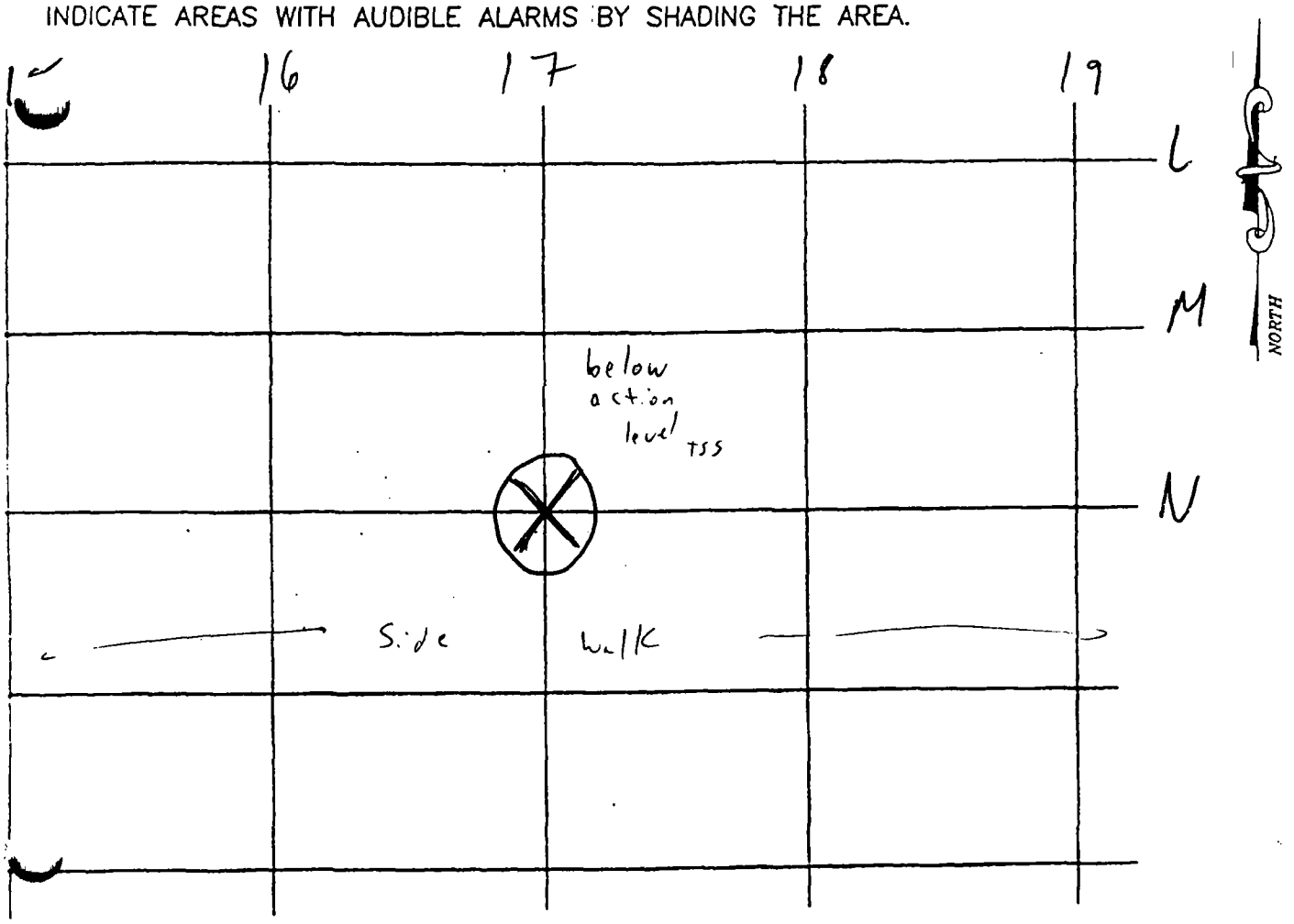
INST. MODEL: 2221 unshielded

SERIAL NO.: 18696

INST. CALIBRATED (Y/N)? 3/7/00

~~LIFT ELEVATION~~ Caisson #: 105

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

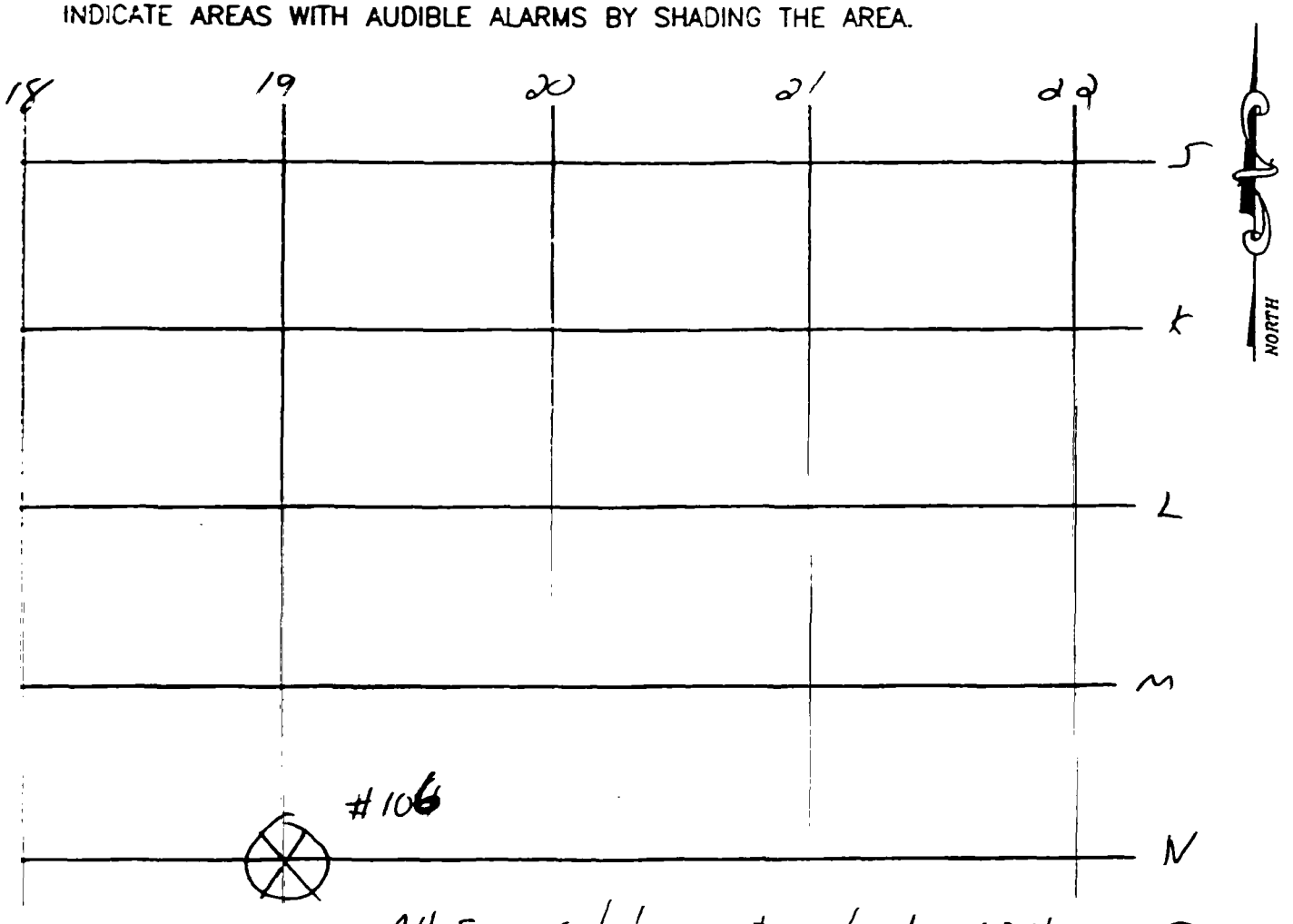
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/28/00 TECHNICIAN: Glen Huber

INST. MODEL: Ludlum 2221 with 44-10 SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: screw - #106

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below action level <2 kcpm GAH

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

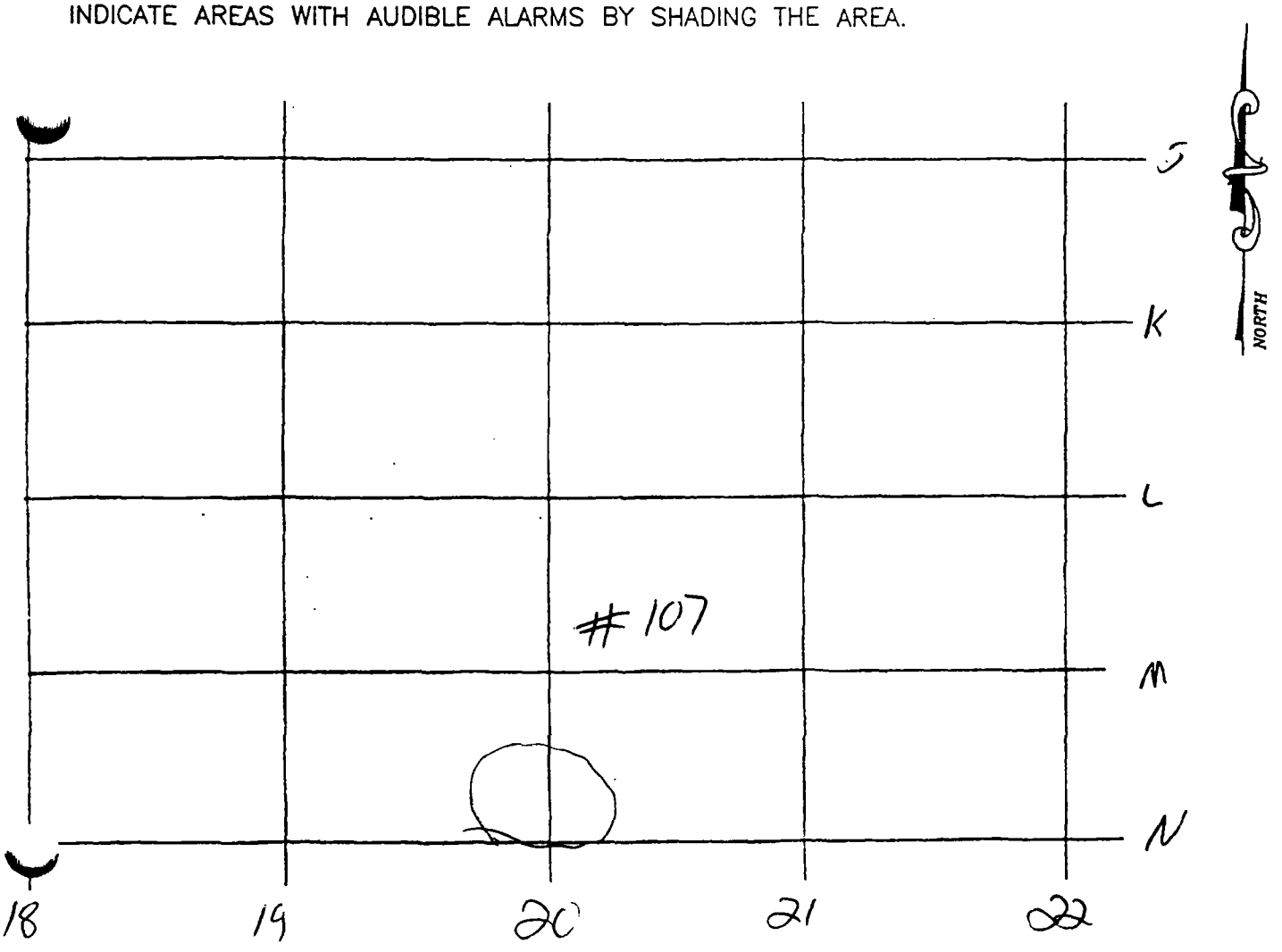
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6-14-00 TECHNICIAN: Tristan Timm

INST. MODEL: 2221 unshielded SERIAL NO.: 12724

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 07/~~10~~ 11/00

TECHNICIAN: Toby Shewon

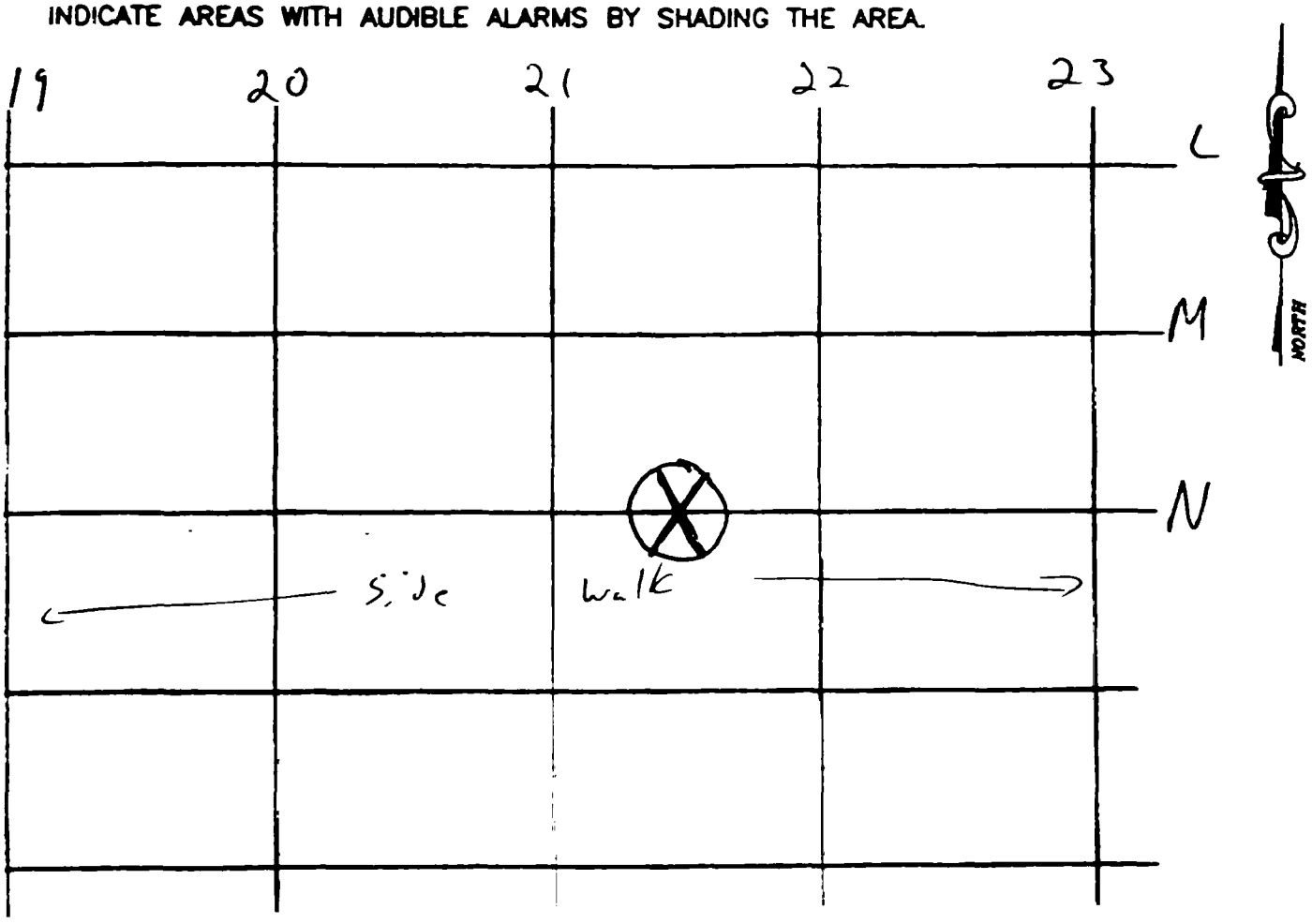
INST. MODEL: 2221 unshielded

~~SERIAL~~ NO.: 126496

INST. CALIBRATED (Y/N)? 3/07/00

~~LIFT ELEVATION:~~ 108
Caisson #

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



STS Consultants Ltd.

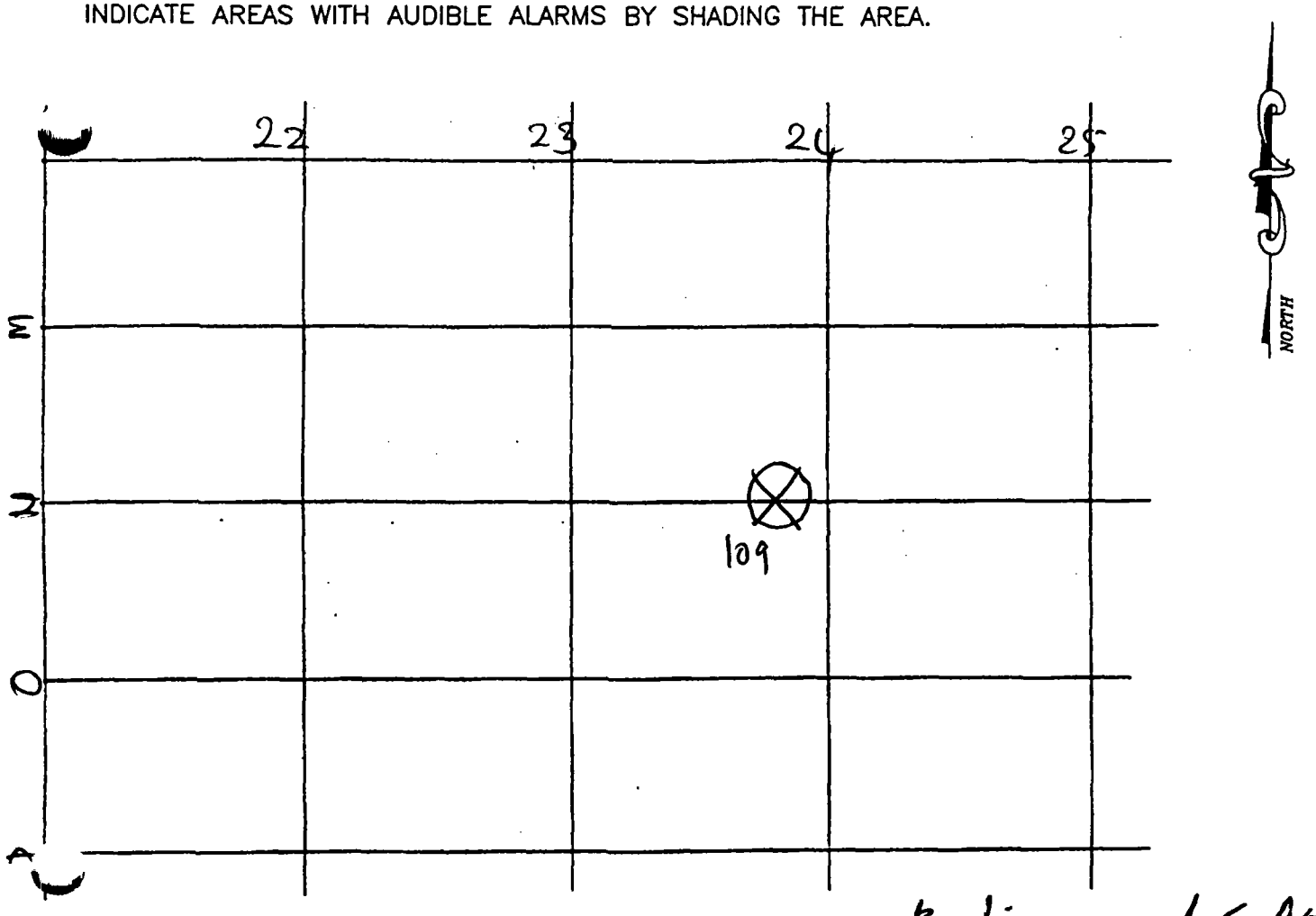
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/18/2000 TECHNICIAN: Joel Alvisedo

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/2001 LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings under Action Level JMA

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg
03/31/2000 11:

STS Consultants Ltd.

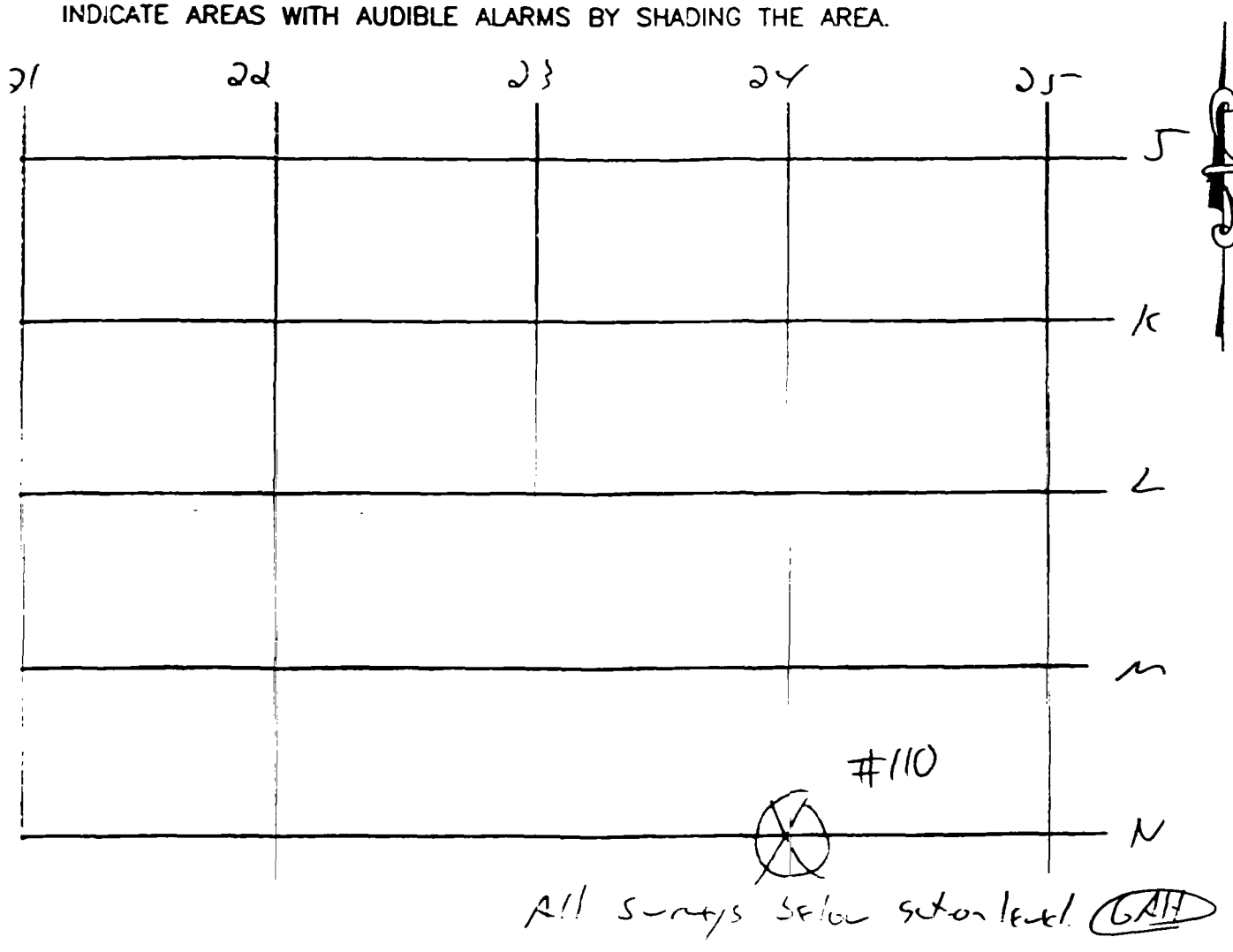
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/30/00 TECHNICIAN: Glen Hoss

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 123242

INST. CALIBRATED (Y/N)? Y LIFT ELEVATION: 5,350

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All surveys below detection level GAH

A:\PROJECTS\24418\xx\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

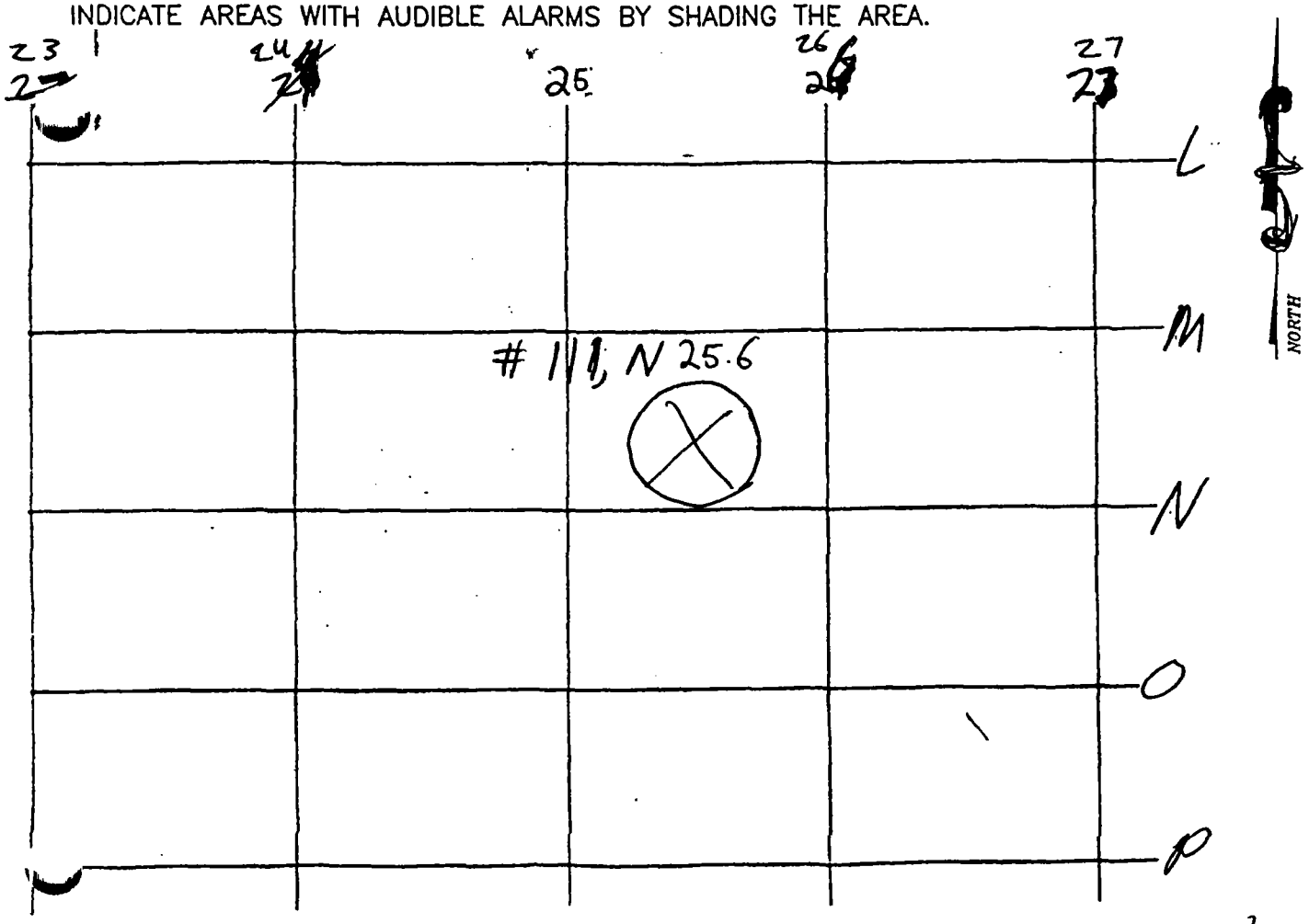
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/12/2000 TECHNICIAN: Jack M Almeida

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 127242

INST. CALIBRATED (Y/N)? _____ LIFT ELEVATION: Caisson

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings below Action Level TMO

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

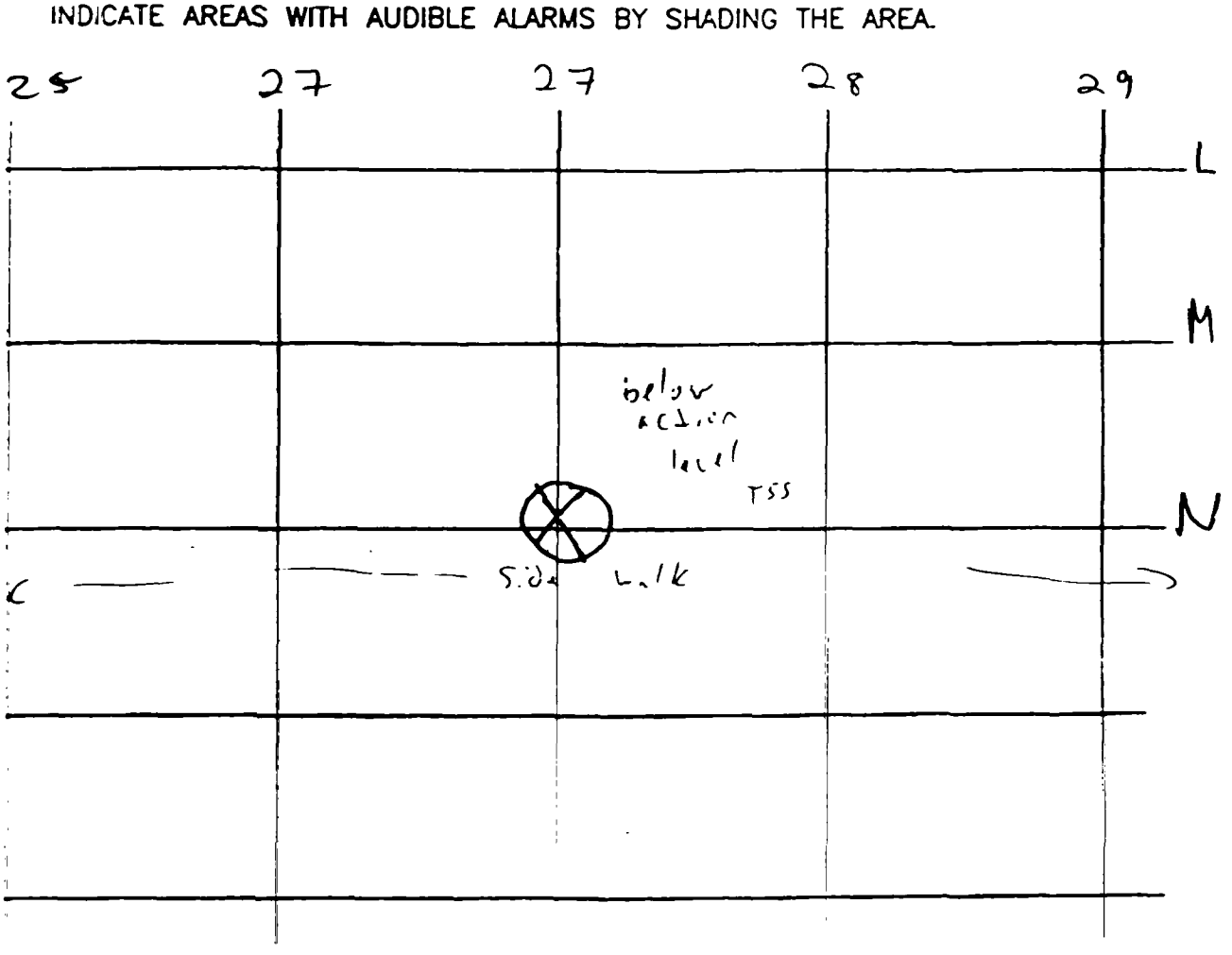
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 7/13/00 TECHNICIAN: Toby Sherman

INST. MODEL: 2221 Unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 ~~LIFT ELEVATION~~: 112 Caisson H

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



CAISSON SURVEYS

ILLINOIS STREET

STS Consultants Ltd.

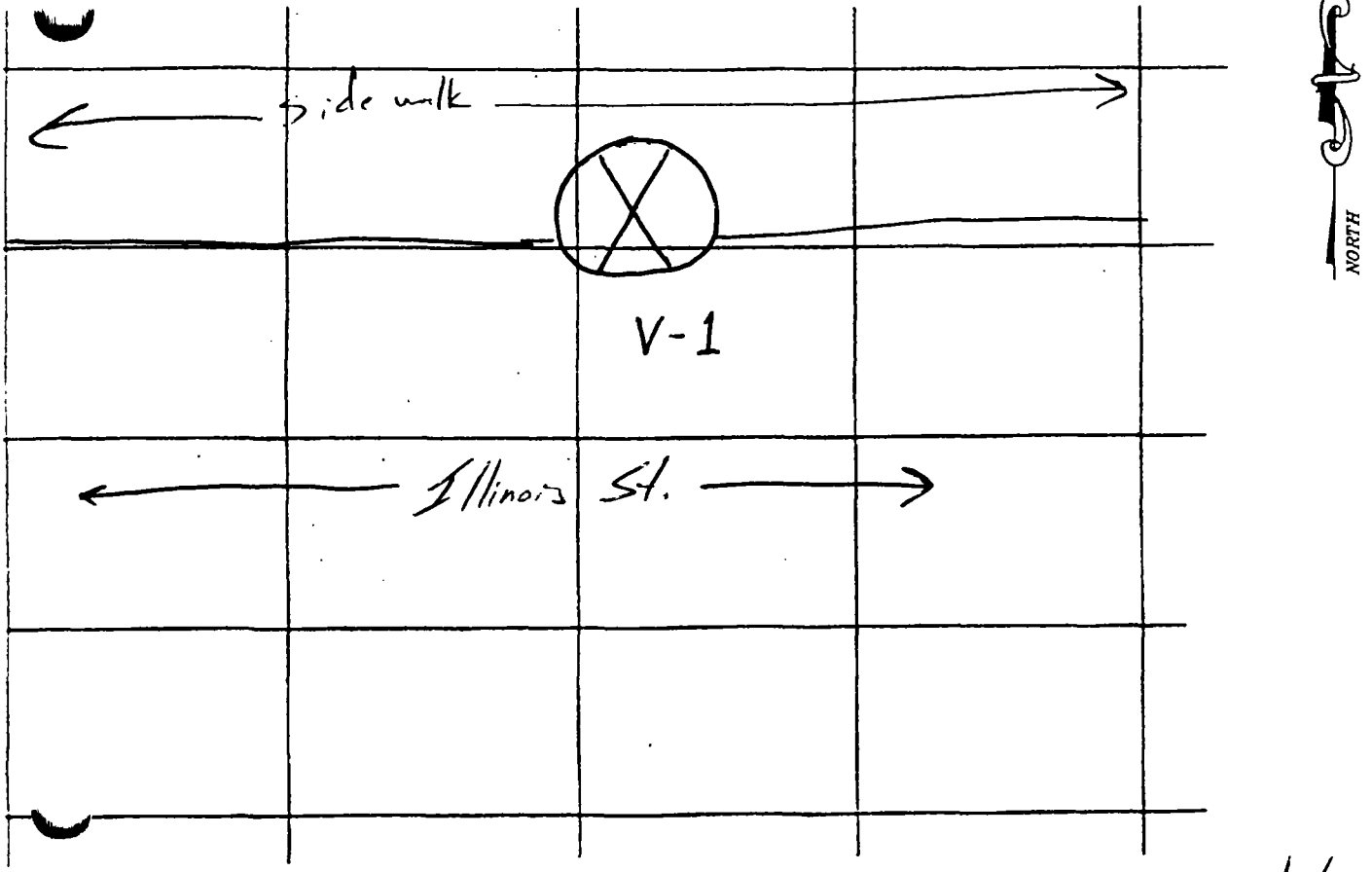
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 3/10/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



ALL surveys below action levels - BAB

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/11/00

TECHNICIAN: SGEORGE

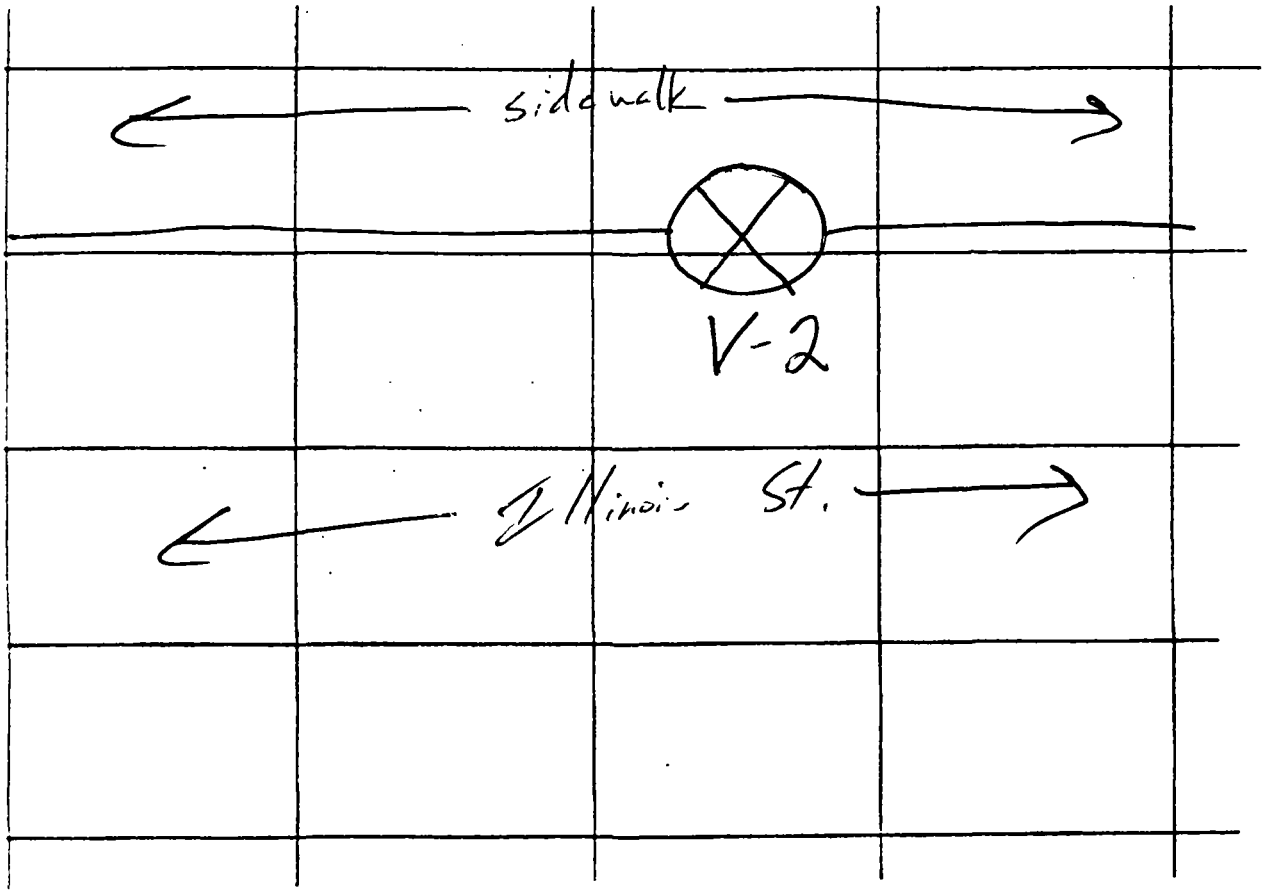
INST. MODEL: Ludlum 2221 (amphibious)

SERIAL NO.: 126496

INST. CALIBRATED (Y)N)? 3/7/00

LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

tjm

S:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

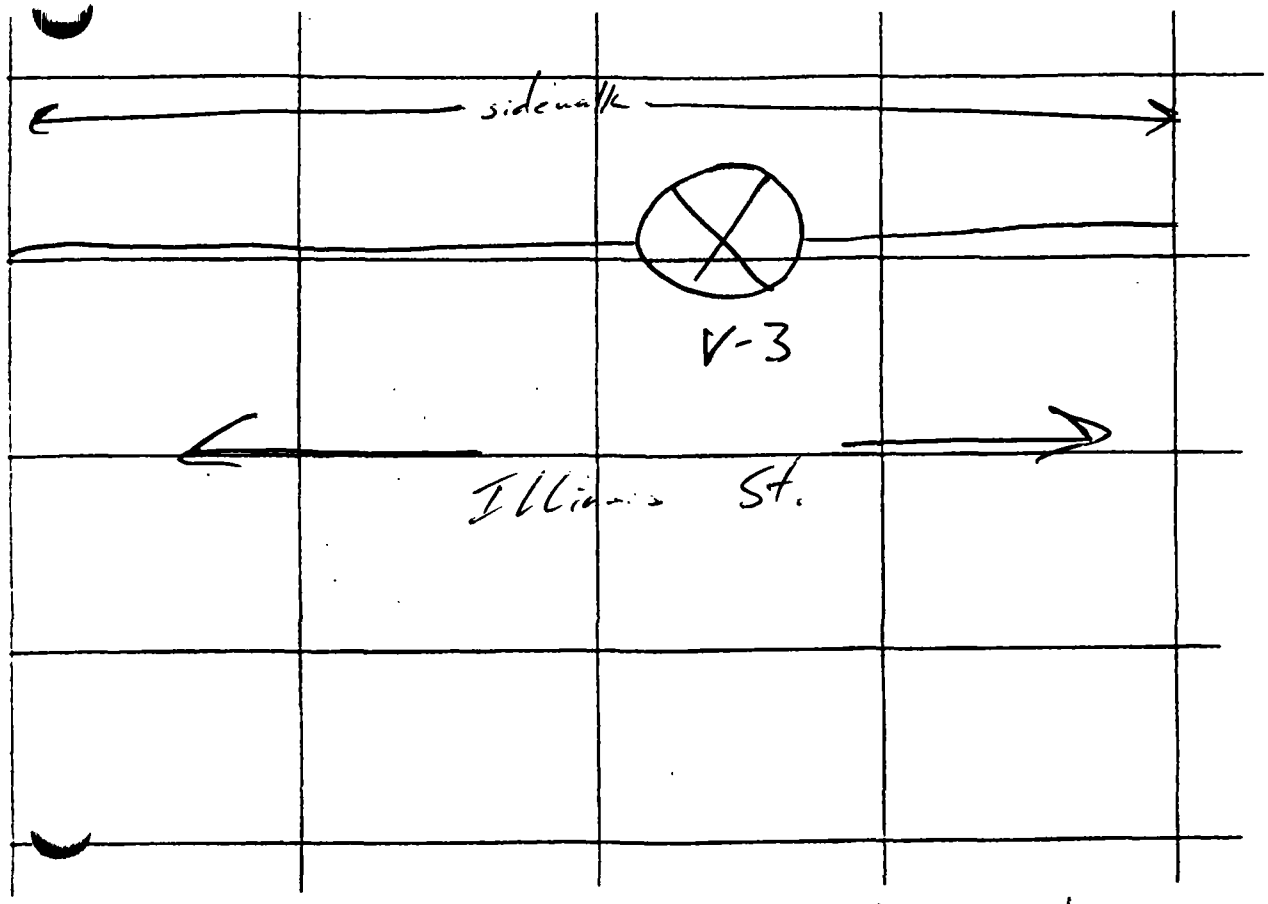
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/10/00 TECHNICIAN: S GEORGE

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 2/9/00 LIFT ELEVATION: Carson (Illinois St.

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below datum level

bjm

STS Consultants Ltd.

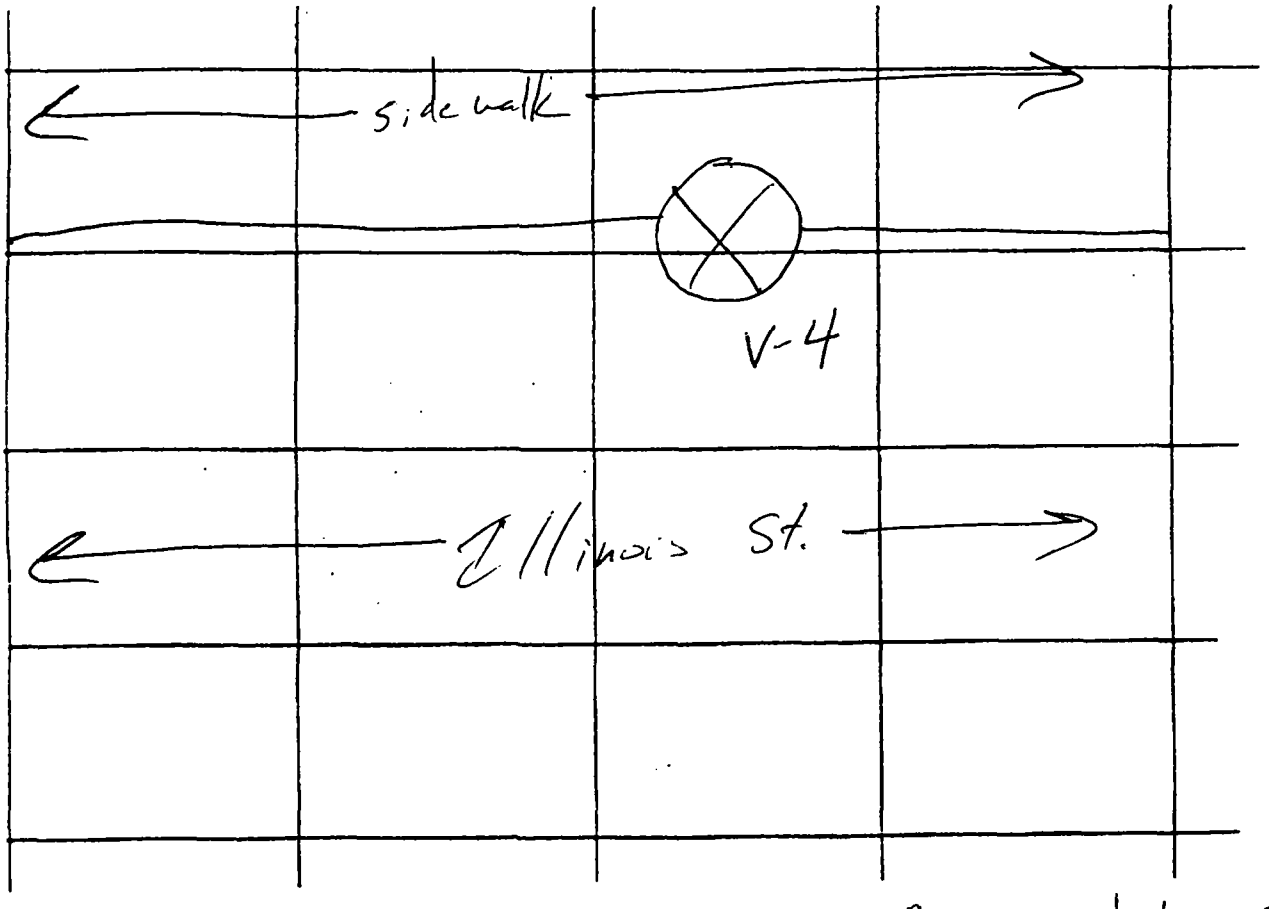
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/12/00 TECHNICIAN: SHEORAN

INST. MODEL: Ludlum 2221 unshielded SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: caisson (Illinois st.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below caisson level

Jim

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/11/00

TECHNICIAN: SGEORGE

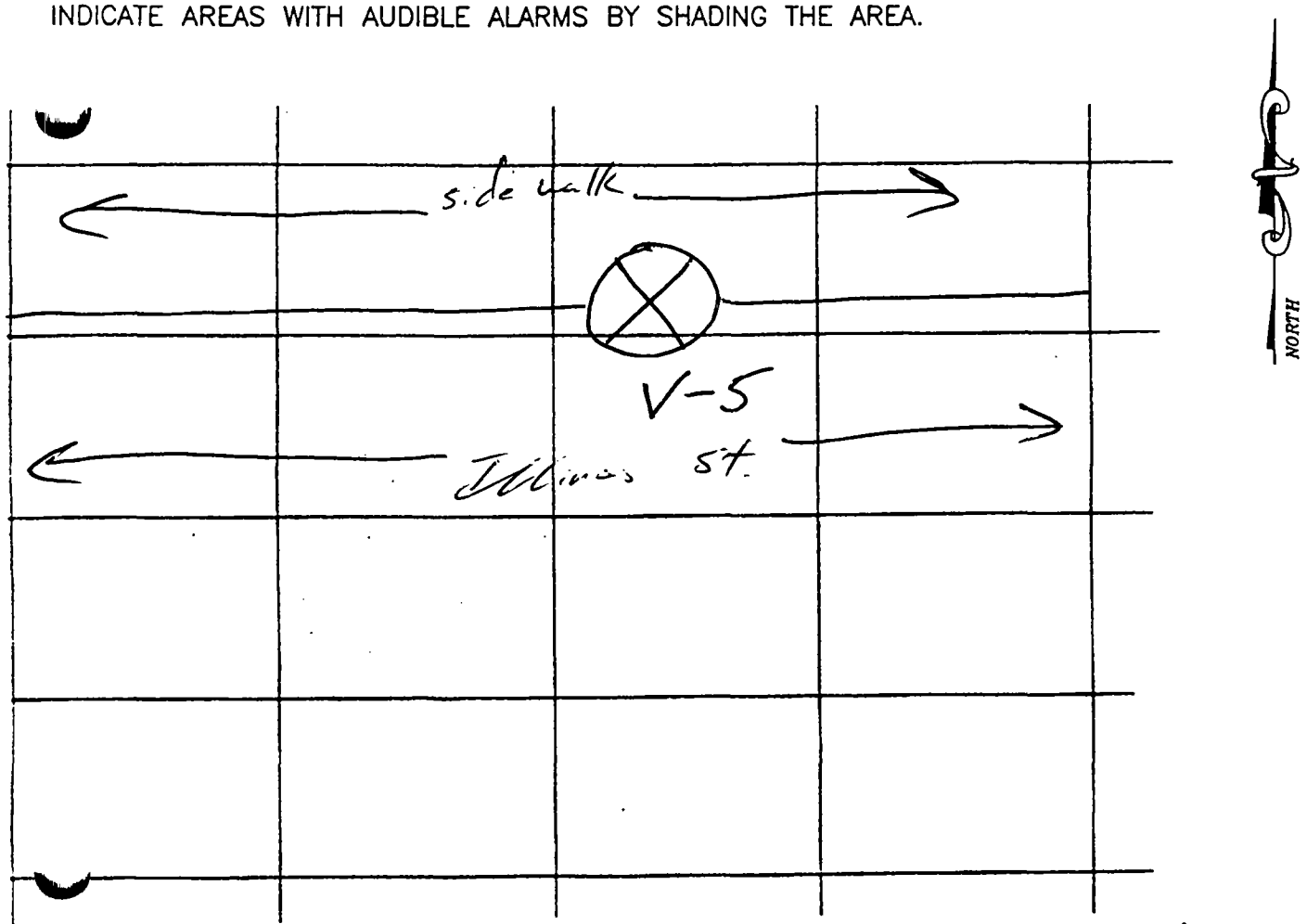
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126490

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

Sign

X:\PROJECTS\24418\xk\
EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 5/12/00

TECHNICIAN: S GEORGE

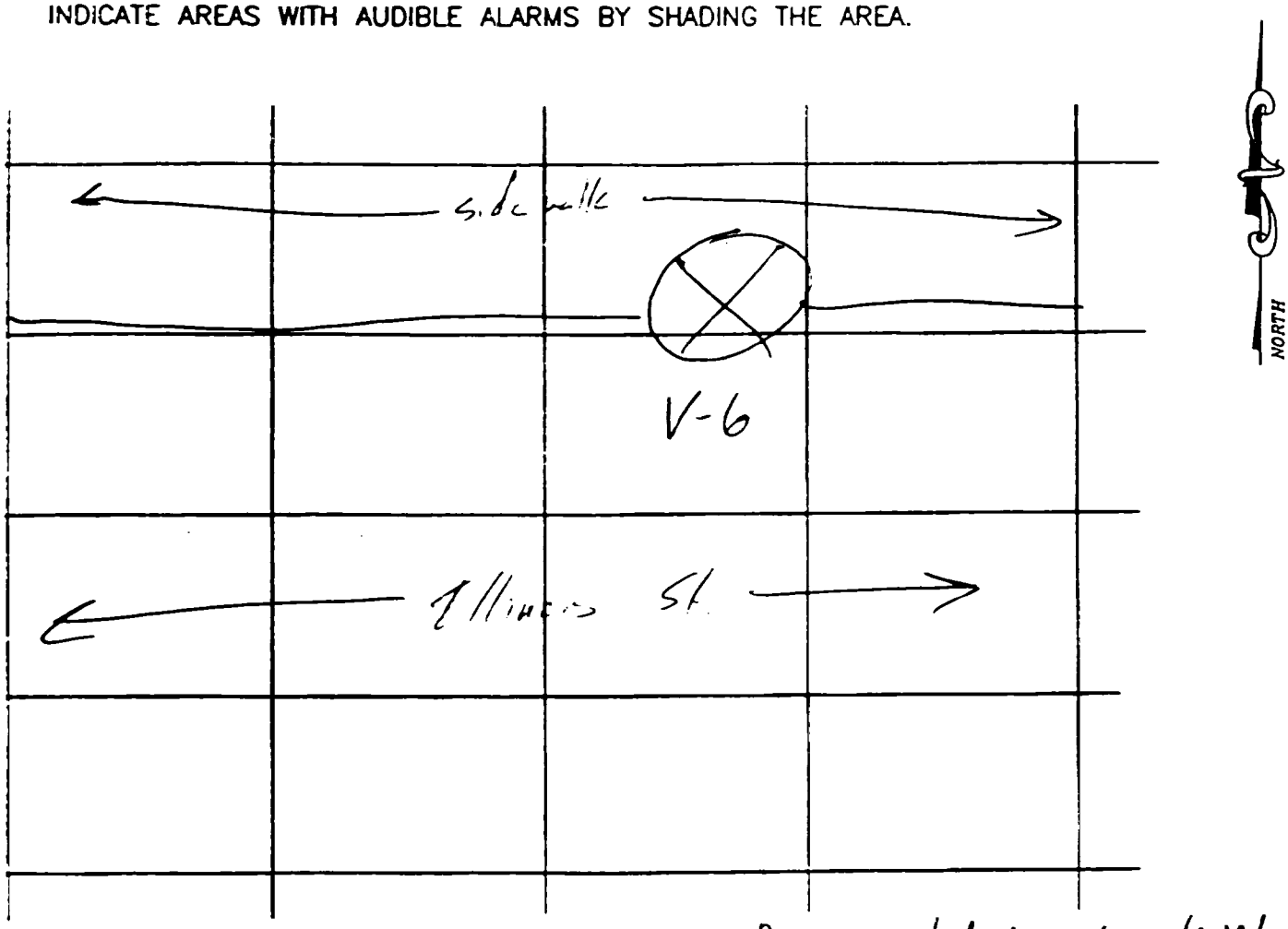
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00

LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



Readings below action level

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

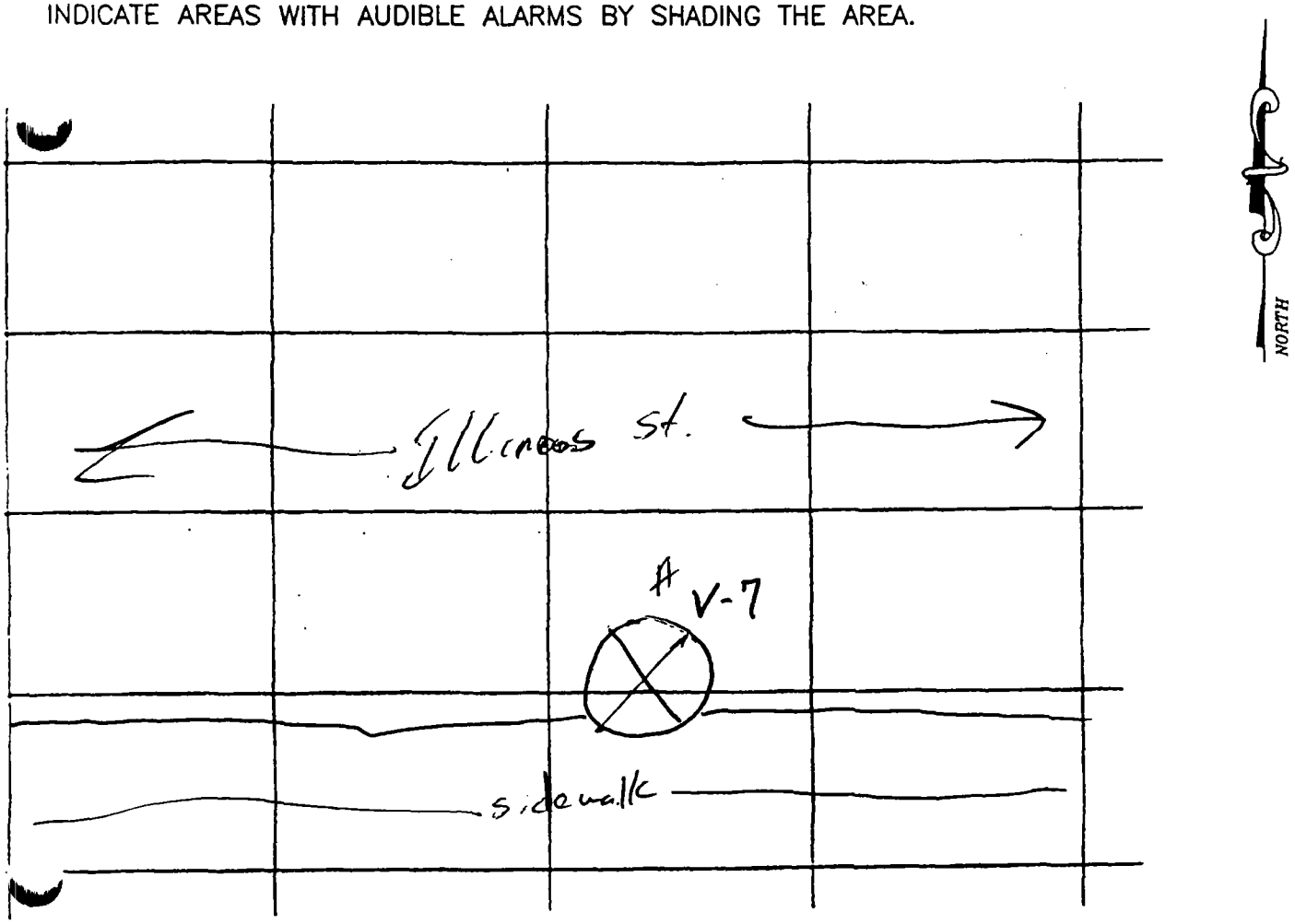
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/6/00 TECHNICIAN: Brett Barton

INST. MODEL: Ludlum 2221 (keyshielded) SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Carlson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

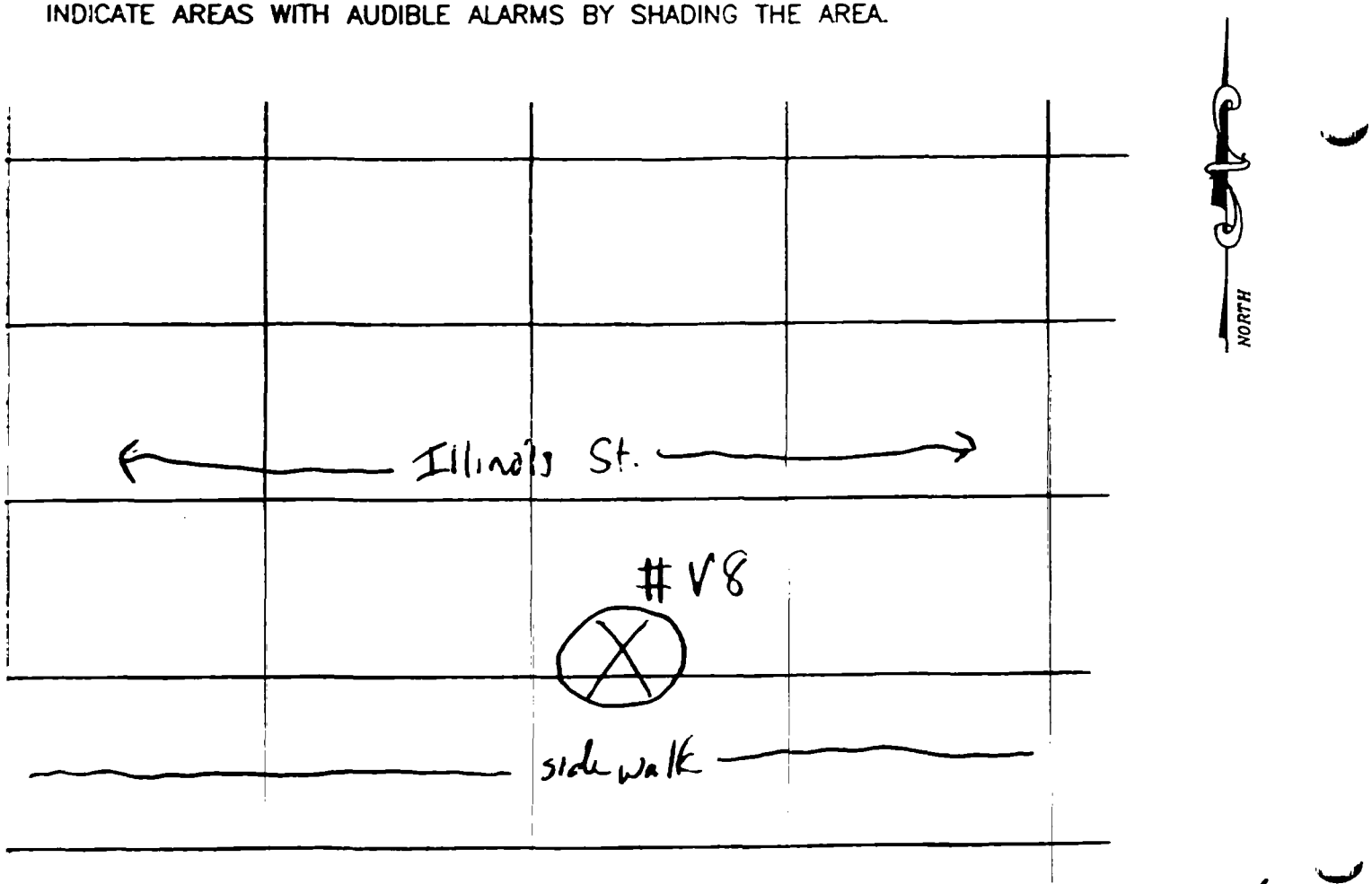
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/9/2000 TECHNICIAN: Joe M. Howell

INST. MODEL: Ludlum 2221 (unshielded) SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/2000 LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



all readings under Action level TNTC

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/9/2000

TECHNICIAN: Joel M. Bruce

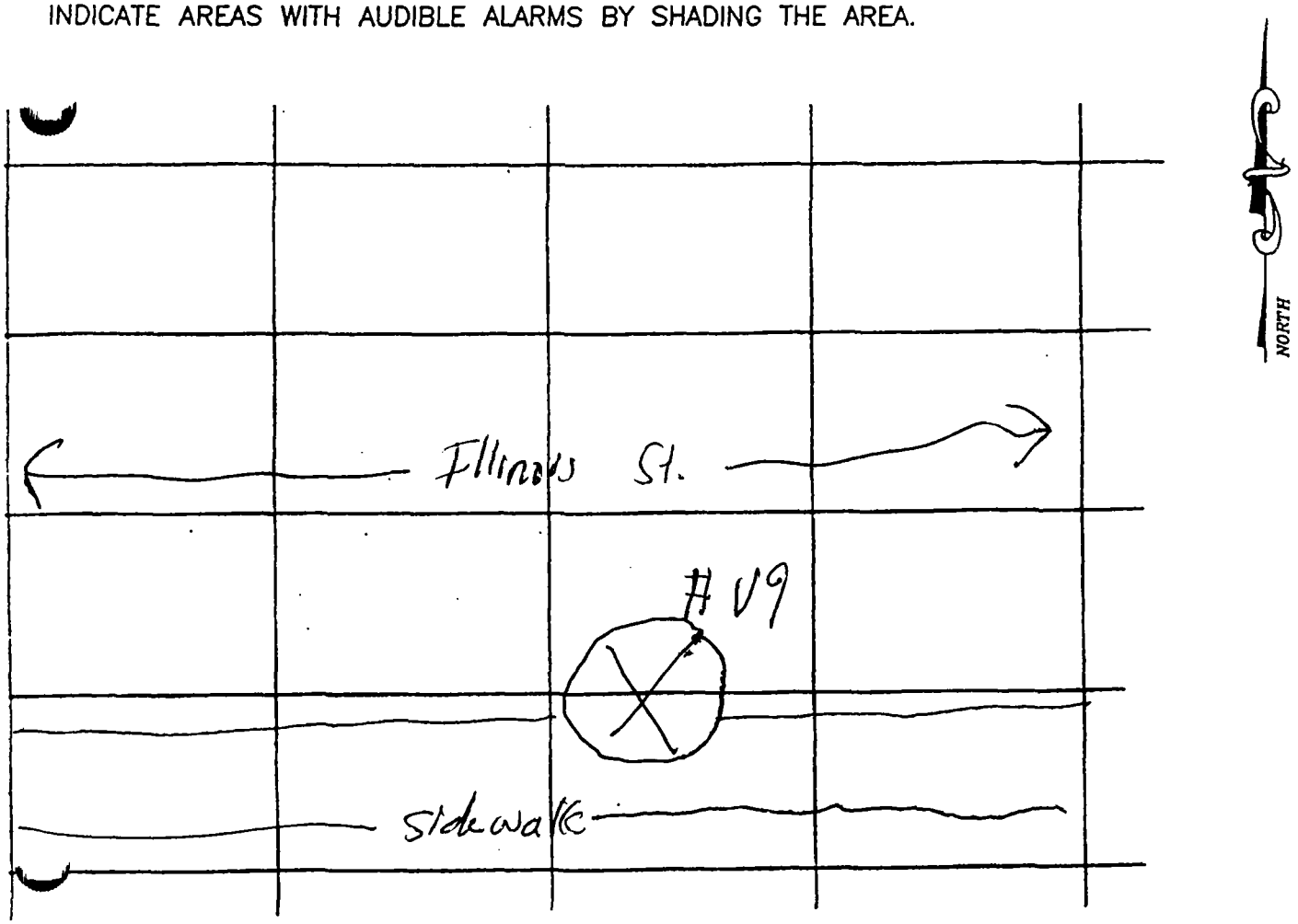
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y)/N)? 3/7/00

LIFT ELEVATION: Caisson (Illinois St.)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings under action level

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

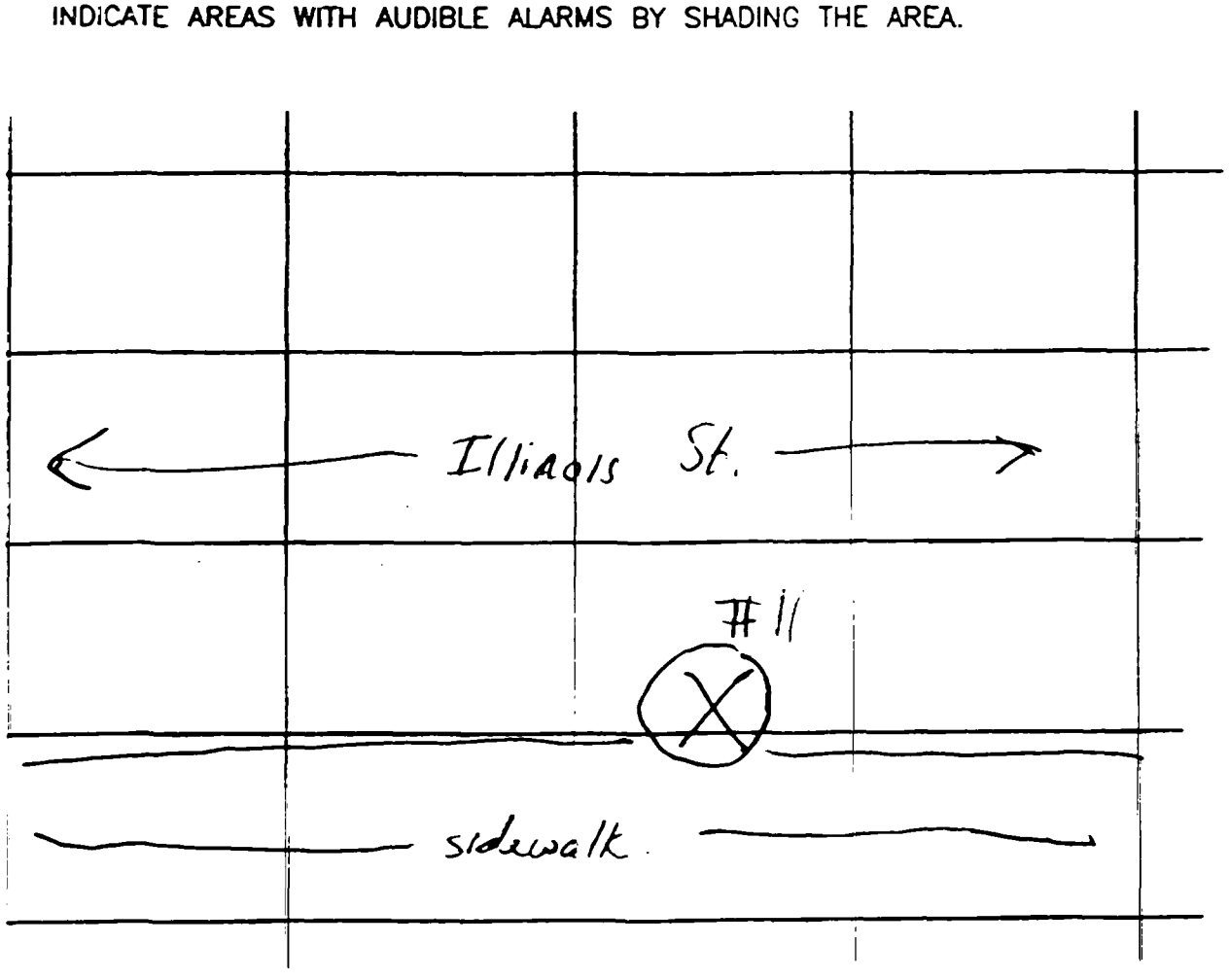
GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/9/2000 TECHNICIAN: Jack M. Ahlers

INST. MODEL: Ludlum 2221 (unshielded) SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/00 LIFT ELEVATION: Caisson / Illinois St.

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



All Readings under Action level TNTC

A:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

STS Consultants Ltd.

GRAND PIER EXCAVATION INVENTORY
24418-XK

DATE: 6/9/2000

TECHNICIAN: Joel M. Abraverter

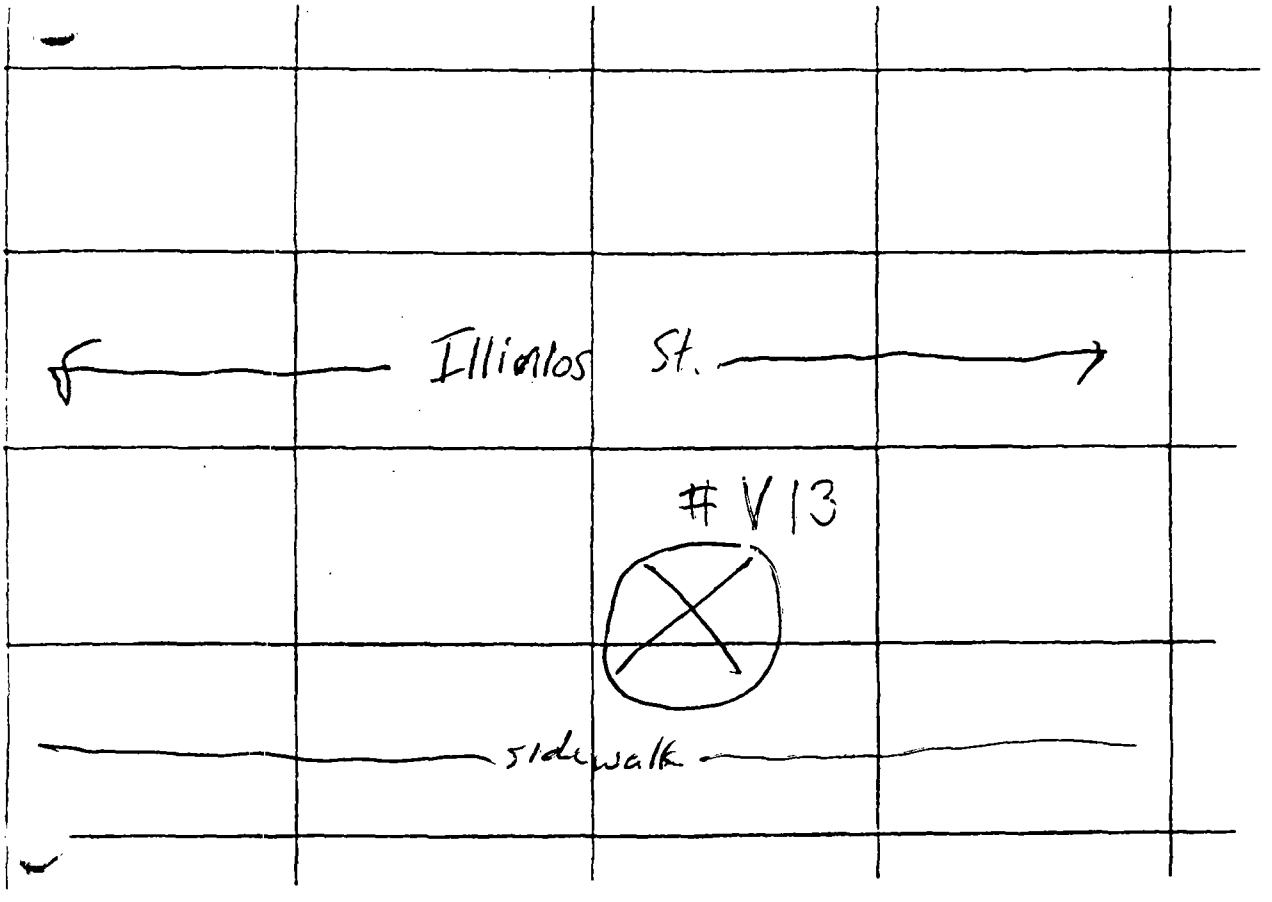
INST. MODEL: Ludlum 2221 (unshielded)

SERIAL NO.: 126496

INST. CALIBRATED (Y/N)? 3/7/2000

LIFT ELEVATION: Coisan (Illinois St)

WRITE COLUMN LINES IN CORRESPONDING CIRCLES. INDICATE EXCAVATED AREA WITH HEAVY LINE. INTERSECTING LINES REQUIRE 30 SECOND COUNTS. RECORD COUNTS AT INTERSECTION IN CPM. INDICATE AREAS WITH AUDIBLE ALARMS BY SHADING THE AREA.



all readings below action level ppm

X:\PROJECTS\24418\xk\EXCAVATION-INVENTORY.dwg

REMOVABLE CONTAMINATION SURVEYS

EQUIPMENT AND MISCELLANEOUS DEBRIS

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1009

DATE OF SURVEY: 4/28/00

NAME OF SURVEYOR: Brett Bruton

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.6 cpm **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 0.315 % **Serial:** 102770/113195

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 200 sq. cm
Concrete Excised from excision	1	0.02	0	0
zones	2	0.02	0	0
	3	0.02	1	1
	4	0.02	0	0
	5	0.03	0	0
	6	0.02	0	0

Are smears dpm/100 cm² or dpm/200 cm²

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: Special

DATE OF SURVEY: 5/2/00

NAME OF SURVEYOR: G. Huber

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: **mR/hr** **Model:**

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 315 **%** **Serial:** 102770 // 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 200 sq. cm
Inside of well when high results				
found after analysis (RSST well)				
first run: dry wipe - smear			0	0
first run: wet wipe q-tip #1			1	2
first run: wet wipe q-tip #2			0	0
second run: dry wipe - smear			1	2
second run: wet wipe q-tip #1			0	0
second run: wet wipe q-tip #2			0	0

S1145 - S1151 noted elevated readings > 7.1 pCi total Radi.
on imported material stockpile (backfill)

Fixed Th-232, Ra-226, + K-40 values added to sample activities regardless of sample weight 1g or 30g

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: L-Q 1010

DATE OF SURVEY: 5/3/06

NAME OF SURVEYOR: T. Timm

SURVEY METER IDENTIFICATION: N/A — **Mfg:** Ludlum

Background Reading: wipes only mR/hr — **Model:** 2221

Serial:

INSTRUMENT ID: — **Mfg:** Ludlum

Background Reading: 0.5 cpm — **Model:** 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % — **Serial:**

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Outside of A-12 Gate		N/A	1	1
Outside of A-12 Gate			0	0
Outside of N-24 Gate			0	0
Outside of N-24 Gate			1	1
Outside of J-1 Gate			1	1
Outside of J-1 Gate		↓	0	0

wipes taken outside of sites to ensure no cross contamination

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1011

DATE OF SURVEY: 5/5/00

NAME OF SURVEYOR: Glenn Huber / Brett Barton

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial: 114750

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.63 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 315 % Serial:

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Pile of concrete taken from	1	0.02	1	1
L-N / 17-20	2	0.02	2	4
currently placed @ M.5/21.5	3	0.02	1	1
	4	0.02	0	0
	5	0.02	1	1
	6	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1012

DATE OF SURVEY: 5/10/00

NAME OF SURVEYOR: Brett Barton

SURVEY METER IDENTIFICATION: **Mfg:** Ludlum

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial:

INSTRUMENT ID: **Mfg:** Ludlum

Background Reading: 0.6 **cpm** **Model:** 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 **%** **Serial:**

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
metal fuel tank removed				
from ground after powerwashing				
and two surveys				
Inside 1		0.02	1	1
Inside 2		0.02	0	0
Outside 1		0.02	0	0
Outside 2		0.02	1	1

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1013

DATE OF SURVEY: 5/19/00

NAME OF SURVEYOR: G. Hiser

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 **mR/hr** Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 053 **cpm** Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 **%** Serial: 102336 / 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Concrete pallet from excavation area MH-5	1	Stg	0	0
	2		0	0
	3		1	2
	4		0	0
	5		0	0
	6		2	5
	7		1	2
	8		0	0
	9		1	2
	10	✓	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1014

DATE OF SURVEY: 5/22/00

NAME OF SURVEYOR: Brett Barton

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.57 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:** 104#770/113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Inside of Underground Tank	1	0.02	0	0
after remediation	2	0.02	0	0
Outside of Underground Tank	1	0.03	2	5
	0	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 10.5

DATE OF SURVEY: 5/22/00

NAME OF SURVEYOR: Brett Bartz

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.57 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial: 102320 / 143193

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Auger Bits and casings 7'6" - 11'6"	1	0.02	1	1
removed by Recon Tech	2	0.02	1	1
	3	0.02	0	0
	4	0.02	1	1
	5	0.02	0	0
	6	0.02	2	5
	7	0.02	1	1
	8	0.02	0	0
	9	0.02	0	0
Recon drilling rig left track	1	0.02	1	1
right track	2	0.02	0	0
body	3	0.02	0	0
body	4	0.02	2	5

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1016

DATE OF SURVEY: 5/22/00

NAME OF SURVEYOR: Tristan Tinn

SURVEY METER IDENTIFICATION: **Mfg:** Ludlum

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg:** Ludlum

Background Reading: 0.57 cpm **Model:** 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % **Serial:** 102770/113195

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
remaining bottom layer of concrete	1	0.02	1	1
taken out of excavation area M/I-5	2	0.02	0	0
(small chunks)	3	0.02	0	0
	4	0.02	0	0
	5	0.02	2	5
	6	0.02	1	1
	7	0.02	1	1
	8	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1017

DATE OF SURVEY: 5/23/00

NAME OF SURVEYOR: Glen Huber

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.53 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial: 102770 / 13195

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per (100 sq. cm
Rexcon crane (not used on site,				
but it did travel thru it)				
left tread #1	1	0.02	0	0
left tread #2	2	0.02	1	1
right tread #1	3	0.02	0	0
right tread #2	4	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1018

DATE OF SURVEY: 5/31/00

NAME OF SURVEYOR: Brett Barton

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 cpm **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 365 % **Serial:** 102770 / 113195

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Asphalt stripped from Area A Northwest corner	1	0.02	0	0
	2	0.02	0	0
	3	0.02	1	2
	4	0.02	0	0
	5	0.02	2	5
	6	0.02	0	0
	7	0.02	1	2
	8	0.02	1	2
	9	0.02	0	0
	10	0.02	1	2

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1019

DATE OF SURVEY: 6/1/00

NAME OF SURVEYOR: Brett Barton / Sijo George

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.53 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial: 102770

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Asphalt chunks stripped from	1	0.02	0	0
Southwest side of Area B	2	0.02	0	0
(currently stockpiled @ M-(-1)	3	0.02	1	1
	4	0.02	0	0
	5	0.02	1	1
	6	0.02	1	1
	7	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1020

DATE OF SURVEY: 6/5/00

NAME OF SURVEYOR: B. Burton / S. George

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.57 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5% Serial: 102770

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Asphalt slabs removed from North side of Area A	1	0.02	0	0
	2	0.02	0	0
	3	0.02	1	1
	4	0.02	0	0
	5	0.02	0	0
	6	0.02	1	1
	7	0.02	0	0
	8	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1021

DATE OF SURVEY: 6/5/00

NAME OF SURVEYOR: Brett Barton / Sign George

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.57 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 315 % Serial:

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Asphalt slabs pulled up from	1	0.02	1	1
North-Central part of Area	2	0.02	0	0
A. Currently located @ G-9	3	0.02	0	0
after being transported.	4	0.02	1	1
	5	0.02	0	0
	6	0.02	1	1
	7	0.02	1	1
	8	0.02	1	1

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1022

DATE OF SURVEY: 6/7/00

NAME OF SURVEYOR: Brett Barton

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:**

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
EQ1022 Asphalt & concrete				
from Area A. (East Side)				
Pile currently located in Area B				
after it was moved.				
Asphalt 1		0.02	0	0
2		0.02	1	1
3		0.02	0	0
Concrete 1		0.02	0	0
2		0.02	0	0
3		0.02	1	6H ~~0~~ 1
4		0.02	2	5
5		0.02	1	1
6		0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1023

DATE OF SURVEY: 6/8/00

NAME OF SURVEYOR: Joel Ahrenstein / Brett Baker

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.6 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 315 % Serial:

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Piles of concrete slab and asphalt				
taken from south side of Area				
A.				
Asphalt 1		0.02	0	0
2		0.02	0	0
3		0.02	1	1
4		0.02	0	0
Concrete 1		0.02	1	1
2		0.02	2	4
3		0.02	2	4
4		0.02	0	0
5		0.02	1	1
6		0.02	0	0
7		0.02	0	0
8		0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1024

DATE OF SURVEY: 6/15/00

NAME OF SURVEYOR: Tristan Tim

SURVEY METER IDENTIFICATION: **Mfg:** Ludlum

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg:** Ludlum

Background Reading: 0.53 cpm **Model:** 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 %

Serial:

MDA: 27 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Yellow Drilling Rig (Reverse Circulation)				
left track	1	0.02	0	0
right track	2	0.02	1	1
drill head	3	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1025

DATE OF SURVEY: 6/19/00

NAME OF SURVEYOR: Tristan Tim

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.53 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial:

MDA: 27 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
~~Con~~ Oil Tank separated	1	0.02	0	0
into several pieces after	2	0.02	0	0
oil emptied (located @ A-17)	3	0.02	1	1
	4	0.02	1	1
	5	0.02	0	0
	6	0.02	1	1

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: 1026

DATE OF SURVEY: 6/21/00

NAME OF SURVEYOR: Tristan Tim

SURVEY METER IDENTIFICATION:

Mfg: Ludlum

Background Reading: 0.02 mR/hr

Model:

Serial:

INSTRUMENT ID:

Mfg: Ludlum

Background Reading: 0.57 cpm

Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 %

Serial:

MDA: 23 dpm

Description (attached sketch if needed) (*Area, equipment, vehicle, materials, etc.*)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Clean pieces of concrete	1	0.02	0	0
from J-18 excavation	2	0.02	1	1
	3	0.02	1	1
	4	0.02	0	0
	5	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1027

DATE OF SURVEY: 7/20/00

NAME OF SURVEYOR: Glenn Hater

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:**

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
metal casing removed from		0.02	0	0
caisson # 5 hole A-6		↓	1	1
(Contamination noted during				
soil survey, none found on				
casing)				

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1028

DATE OF SURVEY: 8/16/00

NAME OF SURVEYOR: Brett Barton / Glen Hyer

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.53 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 0.315% Serial: 102770

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Reucon Auger bits (assorted sizes)	1	0.02	1	2
* All auger-bell attachments surveyed	2	0.02	0	0
& wiped prior to Reucon removal	3	0.02	1	2
from site	4	0.02	1	2
	5	0.02	0	0
	6	0.02	0	0
	7	0.02	0	0
	8	0.02	1	2
	9	0.02	1	2
Note: Drill Rig tracks were also				
surveyed but not wiped				
due to the fact that it could				
not traveled through exclusion				
zones or contamination				

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1001

DATE OF SURVEY: 4/4/00

NAME OF SURVEYOR: Tristan Timm / Brett Barton

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial: 104792

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.8 ~1 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial: 102779 / 113195

MDA: 23 dpm Revcon Equip

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 200 sq. cm
Auger Bit 36"	1	0.02	1	0
Casing 36"	2		0	0
Casing 48"	3		1	0
Casing 34"	4		1	0
Auger Bit 24"	5		0	0
Bit/Case 36"	6		0	0
Bit/Case 42"	7		2	3
Case 41"	8		2	3
Case 42 long	9		0	0
Auger Bit 72"	10		0	0
Auger Bit 50"	11		1	0
Auger Bit 30"	12		0	0
Casing 28"	13		0	0
Auger Bit 42"	14		1	0
Auger Bit 78"	15		1	0
Bit 36"	16		1	0
Bit 54 short	17		0	0
Bit 48	18		0	0
Bit/Case 54"	19		2	3

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1002

DATE OF SURVEY: 4/4/00

NAME OF SURVEYOR: Tristan Tinn / Brett Barker

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 mR/hr **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.8 - 1 cpm **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 % **Serial:** 102579 / 113195

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 ~~200~~ sq. cm
Bit/Case 48	20	0.02	1	0
Bit/Case	21	↓	0	0
Large Bore 6'	22		0	0
Large Bore 5'6"	23		1	0
Bit 90" short	24		1	0
Bit 96" short	25		1	0
Casing 12'	26		0	0
Casing 5' x 15'	27		2	3

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1003

DATE OF SURVEY: 4/10/00

NAME OF SURVEYOR: Tristan Tran

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104192

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: ~~0~~ / **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 315 **%** **Serial:**

MDA: 23 **dpm** Recon Eq-p

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per ~~100~~ sq. cm
Edge Ceiling (1)	1	0.02	0	0
(2)	2	↓	0	0
small pipe	3	↓	1	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ004

DATE OF SURVEY: 4/12/00

NAME OF SURVEYOR: Joel Kramer

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 mR/hr **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 27 cpm 30~~~ 0.9cpm **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 % **Serial:** 102170

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per ~~100~~ 200 sq. cm
Concrete Chunks from A-B/18				
Exclusion Zone 1	1	0.02	0	0
2	2	0.02	1	0
3	3	0.02	0	0
4	4	0.02	0	0
5	5	0.02	2	3
6	6	0.02	1	0
7	7	0.02	0	0
8	8	0.02	1	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1005

DATE OF SURVEY: 4/25/06

NAME OF SURVEYOR: Joel Almeter

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104392

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.6 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:** 103779 / 113193

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)		Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Pile of 24 concrete blocks pulled from excavation (various sizes)	①	1		2	4
	②	2		0	0
** 12 exposed rebar ends	③	3		0	0
	④	4		0	0
PE #'s	⑤	5		1	1
ID Spent	⑥	6		0	0
	⑦	7		1	1
	⑧	8		0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1006

DATE OF SURVEY: 4/26/00

NAME OF SURVEYOR: Joel Albrecht

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 0.315% **Serial:** 102779 / 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 200 sq. cm
Additional Concrete Chunks from	1	0.02	0	0
Pile after they were spread out	2	0.02	0	0
& surveyed. Pile was originally	3	0.02	0	0
counted as 24 blocks, but more	4	0.02	0	0
have been added.	5	0.02	0	0
	6	0.02	1	2
	7	0.02	2	5
	8	0.02	0	0
	9	0.02	1	2
	10	0.02	0	0
	11	0.02	0	0
	12	0.02	0	0
	13	0.02	1	2
	14	0.02	0	0
	15	0.02	0	0
	16	0.02	1	2
	17	0.02	0	0
	18	0.02	0	0
	19	0.02	1	2
	20	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1007

DATE OF SURVEY: 4/27/00

NAME OF SURVEYOR: Brett Barton

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.57 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 0.315 **%** **Serial:** 102770 / 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Concrete rubble @ K-26	1	0.02	1	1
	2	0.02	0	0
	3	0.02	0	0
	4	0.02	1	1
Concrete rubble @ D-12.5	1		0	0
	2		0	0
	3		1	1
	4		0	0
	5		1	1

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1008

DATE OF SURVEY: 4/23/08

NAME OF SURVEYOR: Brett Baker

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial: 104792

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 057 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial:

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per / 100 sq. cm
Removing rubble at concrete	1	0.02	2	5
located @ G.5-9	2	0.02	1	1
	3	0.02	0	0
	4	0.02	0	0
	5	0.02	1	1
	6	0.02	0	0
	7	0.02	2	5
	8	0.02	0	0
	9	0.02	0	0
	10	0.02	0	0
	11	0.02		

OVERBURDEN STOCKPILE SAMPLING

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLIN

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Various

Date Sampled: 4/4/00, 4/10/00, 4/13/00

Number of Samples Required Per SOP 214: 6

PILE # : C-E/10-13

Est. Volume of Lift in Cubic Yards: 300

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1010	3.02				
S-1011	3.06				
S-1012	3.53				
S-1030	8.32				
S-1031	7.11				
S-1032	6.92				
S-1040	5.44				
S-1041	4.81				
S-1042	4.64				
S-1043QC		6.45	1.71	0.855	
Number of Samples (n)	9			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	2.53
Average (Mean of the sample population) (X bar)	5.33				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	2.38	
U_α **(True Mean)** = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**6.80**	*"t" value 1.86*
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	7.59		
Mean + 3 S_{dup} =	12.9	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	-2.3	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: RKP 4/14/00

Name/date

RKP 6.2-1

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/98

Excavation Area: Various

Date Sampled: 4/13/00

PILE # : B-D/26-27

Est. Volume of Lift in Cubic Yards: 100

Number of Samples Required Per SOP 214: 6

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1033	3.86 –				
S-1034	3.78 –				
S-1035	2.15 –				
S-1036	3.89 –				
S-1037	3.56 –				
S-1038	3.75 –				
S-1039QC		4.22	1.71	0.855	
Number of Samples (n)	6			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.09
Average (Mean of the sample population) (X bar)	3.50				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP 214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.67	
U_a (True Mean) = (X bar) + (t * (S_1/sqrt(n)))	4.05	*"t" value* 2.015
Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6		
Release Criteria	7.1	
U_a < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	3.26		
Mean + 3 S_{dup} =	6.8	QC < (Mean + 3S_{dup})?	O.K.
Mean - 3 S_{dup} =	0.2	QC > (Mean - 3S_{dup})?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: R.L.G. Bygren 4/14/00

Name/date

RKP 6.2-1

Huber

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Various

Date Sampled: 4/24/00, 4/25/00

Number of Samples Required Per SOP 214: 3

PILE # : C-E/10-13

Est. Volume of LIR in Cubic Yards: 25

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_0 Std. Dev. for the analyses of the duplicate sample	$S_{d,p}$ Std. Dev. of the duplicate sampling & measurement
S-1087	4.61				
S-1088	4.02				
S-1089	5.50				
S-1094	6.36				
S-1095	6.71				
S-1096	3.20				
S-1097	6.04				
S-1098	3.98				
S-1091OC		4.68	1.95	0.975	
Number of Samples (n)	8			$S_{d,p} = \text{sqrt}(S_1^2 + S_2^2) =$	1.96
Average (Mean of the sample population) (X bar)	5.30				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12		
Standard Deviation of sample population (S_x)	1.70	
U_c (True Mean) = (X bar) + (t * (S_x/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypothesis (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	6.44	"t" value 1.895
Release Criteria	7.1	
U_c < Release Criteria?	SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214	

Check if QC Sample Dup. is within 3 Standard Deviations (3 $S_{d,p}$) of the mean of the sample population, per SOP 214, paragraph 12.1			
3 x $S_{d,p}$ =	5.88		
Mean + 3 $S_{d,p}$ =	11.2	QC < (Mean + 3$S_{d,p}$)?	O.K.
Mean - 3 $S_{d,p}$ =	-0.6	QC > (Mean - 3$S_{d,p}$)?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: Mark S. Boyce 4/28/00

Name/date

APR-28-2000 14:19 STS Consultants, Ltd. 847 279 2500 P.01/02

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area C near Illinois St.

Date Sampled: 5/5/00

PILE # : M-19 Gravel

Est. Volume of Lift in Cubic Yards: 25

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1191	4.36				
S-1192	3.40				
S-1193	4.56				
S-1194	4.16				
S-1198	4.00				
S-1199	4.03				
S-1200	2.39				
S-1201QC		2.84	1.18	0.59	
Number of Samples (n)	7			$S_{dup} = \sqrt{(S_1^2 + S_2^2)}$ =	0.94
Average (Mean of the sample population) (X bar)	3.84				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP 214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.74	
U_u (True Mean) = (X bar) + (t * (S_1/sqrt(n)))	4.38	*"t" value* 1.943
Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6		
Release Criteria	7.1	
U_u < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	2.83		
Mean + 3 S_{dup} =	6.7	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	1.0	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: Mel G. Bys

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B near Illinois St.

Date Sampled: 5/10/00

Number of Samples Required Per SOP 214: 3

PILE # : M-7 OB

Est. Volume of Lift in Cubic Yards: 50

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1215	4.52				
S-1216	4.77				
S-1217	5.28				
S-1218	4.97				
S-1219	4.41				
S-1220	4.48				
S-1221QC		5.03	1.08	0.54	
Number of Samples (n)	6			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	0.64
Average (Mean of the sample population) (X bar)	4.74				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.34	
U_α **(True Mean)** = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**5.02**	*"t" value 2.015*
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	1.91		
Mean + 3 S_{dup} =	6.6	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	2.8	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

Very close

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B near Illinois St.

Date Sampled: 5/10/00

PILE # : M-5 OB **Est. Volume of Lift in Cubic Yards:** 50

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup Tot Rad in pCi/g	E lab uncertainty	S_2 Std Dev for the analyses of the duplicate sample	S_{dup} Std Dev of the duplicate sampling & measurement
S-1222	8 41				
S-1223	5 09				
S-1224	6 34				
S-1225	5 44				
S-1226	5 10				
S-1227	2 43				
S-1228QC		2 04	1 67	0 835	

Number of Samples (n) 6

S_{dup} = sqrt ($S_1^2 + S_2^2$) = 2 12

Average (Mean of the sample population) (X bar) 5 47

Average of samples is <7 1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6 12

Standard Deviation of sample population (S_1) 1 95

"t" value 2 015

U_{tt} (True Mean) = (X bar) + (t * (S_1/sqrt(n))) 7.07

Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No KMS-102, Attachment 10 6

Release Criteria 7 1

U_{tt} < Release Criteria? **SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**

Check if QC Sample Dup is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12 1

3 x S_{dup} = 6 35

Mean + 3 S_{dup} = 11 8 **QC < (Mean + 3S_{dup})?** O.K.

Mean - 3 S_{dup} = -0 9 **QC > (Mean - 3S_{dup})?** O.K.

APPROVED: FIELD TEAM LEADER:

APPROVED: PROJECT MANAGER: Rhd G. Byggren

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B near Illinois St.

Date Sampled: 5/11/00

Number of Samples Required Per SOP 214: 3

PILE # : M-4 OB

Est. Volume of Lift in Cubic Yards: 30

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1229	5.08				
S-1230	4.94				
S-1231	6.26				
S-1232	4.70				
S-1233	3.55				
S-1234	1.68				
S-1235QC		2.24	1.06	0.53	
Number of Samples (n)	6			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.66
Average (Mean of the sample population) (X bar)	4.37				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	1.58	
U_α (True Mean) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**5.66**	*"t" value 2.015*
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	4.99		
Mean + 3 S_{dup} =	9.4	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	-0.6	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B near Illinois St.

Date Sampled: 5/12/00

PILE # : M-3 OB

Est. Volume of Lift in Cubic Yards: 30

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1254	2.32				
S-1255	1.93				
S-1256	1.93				
S-1257	2.36				
S-1258	7.03				
S-1260	5.74				
S-1261	2.95				
S-1262QC		3.77	1.27	0.635	
Number of Samples (n)	7			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	2.15
Average (Mean of the sample population) (X bar)	3.47				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	2.06	
U_s (True Mean) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	4.98	*"t" value* 1.943
Release Criteria	7.1	
U_s < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	6.46		
Mean + 3 S_{dup} =	9.9	QC < (Mean + 3S_{dup})?	O.K.
Mean - 3 S_{dup} =	-3.0	QC > (Mean - 3S_{dup})?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B near Illinois St.

Date Sampled: 5/16/00

Number of Samples Required Per SOP 214: 3

PILE # : M-2 OB

Est. Volume of Lift in Cubic Yards: 35

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-1320	3.69				
S-1321	1.37				
S-1322	2.08				
S-1323	1.07				
S-1324	1.47				
S-1325	1.44				
S-1326QC		1.72	0.87	0.435	
Number of Samples (n)	6			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.05
Average (Mean of the sample population) (X bar)	1.85				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12		
Standard Deviation of sample population (S_1)	0.96	
U_α (True Mean) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	2.64	*"t" value* 2.015
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1			
3 x S_{dup} =	3.16		
Mean + 3 S_{dup} =	5.0	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	-1.3	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area C- East End

Date Sampled: 7/12/00

Number of Samples Required Per SOP 214: 3

PILE # : D.5-25.5 OB

Est. Volume of Lift in Cubic Yards: 30

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot Rad in pCi/g	E lab uncertainty	S_1 Std Dev. for the analyses of the duplicate sample	S_{dup} Std Dev. of the duplicate sampling & measurement
S-1856	2.44				
S-1857	3.28				
S-1858	2.34				
S-1859	1.55				
S-1860	1.79				
S-1861	3.34				
S-1862QC		3.81	0.94	0.47	
Number of Samples (n)	6		$S_{dup} = \sqrt{(S_1^2 + S_2^2)} =$		0.88
Average (Mean of the sample population) (X bar)	2.46				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.74	
U_u (True Mean) = (X bar) + (t * (S_1/sqrt(n)))	3.07	*"t" value* 2.015
Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6		
Release Criteria	7.1	
U_u < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	2.63		
Mean + 3 S_{dup} =	5.1	QC < (Mean + 3S_{dup})?	O.K.
Mean - 3 S_{dup} =	-0.2	QC > (Mean - 3S_{dup})?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B- North End

Date Sampled: 8/18/00

PILE # : A - (5) OB 1

Est. Volume of Lift in Cubic Yards: 30

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-2096	4.67				
S-2097	2.09				
S-2098	3.19				
S-2099	3.14				
S-2100	3.32				
S-2101QC		2.54	1.28	0.64	
Number of Samples (n)	5			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.12
Average (Mean of the sample population) (X bar)	3.28				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12		
Standard Deviation of sample population (S_1)	0.92	
U_α (**True Mean**) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**4.16**	*"t" value 2.132*
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1			
3 x S_{dup} =	3.36		
Mean + 3 S_{dup} =	6.6	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	-0.1	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B- North End

Date Sampled: 8/18/00

PILE # : A - (4) OB 1

Est. Volume of Lift in Cubic Yards: 30

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_1 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-2108	2.61				
S-2109	2.41				
S-2110	2.75				
S-2111	4.25				
S-2112	3.08				
S-2113QC		2.86	1.04	0.52	
Number of Samples (n)	5			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	0.90
Average (Mean of the sample population) (X bar)	3.02				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.73	
U_u (True Mean) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	3.72	*"t" value* 2.132
Release Criteria	7.1	
U_u < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	2.69		
Mean + 3 S_{dup} =	5.7	QC < (Mean + 3S_{dup})?	O.K.
Mean - 3 S_{dup} =	0.3	QC > (Mean - 3S_{dup})?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area C - Center

Date Sampled: 8/25/00

PILE # : I - (21) OB #1

Est. Volume of Lift in Cubic Yards: 200

Number of Samples Required Per SOP 214: 6

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-2181	2.97				
S-2182	0.57				
S-2183	2.74				
S-2184	3.25				
S-2185	2.65				
S-2186	3.11				
S-2187	3.54				
S-2188	2.72				
S-2189	2.71				
S-2190QC		2.39	1.12	0.56	
Number of Samples (n)	9			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.02
Average (Mean of the sample population) (X bar)	2.70				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.85	
U_α (**True Mean**) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**3.22**	*"t" value 1.86*
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	3.06		
Mean + 3 S_{dup} =	5.8	**QC < (Mean + 3S_{dup})?**	**O.K.**
Mean - 3 S_{dup} =	-0.4	**QC > (Mean - 3S_{dup})?**	**O.K.**

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area 8 - East

Date Sampled: 8/31/00

PILE # :H - (11) OB #1

Est. Volume of Lift in Cubic Yards: 50

Number of Samples Required Per SOP 214: 3

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_1 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-2258	5.51				
S-2259	5.20				
S-2260	4.80				
S-2261	3.96				
S-2262	5.39				
S-2263QC		4.16	1.27	0.835	
Number of Samples (n)	5			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	0.90
Average (Mean of the sample population) (X bar)	4.99				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.64	
U_α (True Mean) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	5.60	"t" value 2.132
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	2.70		
Mean + 3 S_{dup} =	7.7	QC < (Mean + 3S_{dup})?	O.K.
Mean - 3 S_{dup} =	2.3	QC > (Mean - 3S_{dup})?	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

GRAND PIER CENTER - OVERBURDEN STOCKPILE SAMPLING

OVERBURDEN SOIL

Using USEPA approved procedure SOP 214, Reference:Scoping and Planning Documents for Excavation and Restoration Activities at the Lindsay Light II Site, Chicago, IL, 10/23/96

Excavation Area: Area B - East

Date Sampled: 9/1/00

Number of Samples Required Per SOP 214: 3

PILE # :J.5 - (9.5) OB #1

Est. Volume of Lift in Cubic Yards: 50

Sample #	Total Radium in pCi/g	QC Sample Dup. Tot. Rad. in pCi/g	E lab uncertainty	S_2 Std. Dev. for the analyses of the duplicate sample	S_{dup} Std. Dev. of the duplicate sampling & measurement
S-2291	4.37				
S-2292	5.14				
S-2293	5.53				
S-2294	4.47				
S-2295	6.27				
S-2296QC		4.31	1.57	0.785	
Number of Samples (n)	5			$S_{dup} = \text{sqrt}(S_1^2 + S_2^2) =$	1.11
Average (Mean of the sample population) (X bar)	5.16				

Average of samples is <7.1 pCi/g, Proceed with Confidence Level Check described in SOP-214, Paragraph 6.12

Standard Deviation of sample population (S_1)	0.79	
U_α (**True Mean**) = (X bar) + (t * (S_1/sqrt(n))) *Where "t" is a statistic used for small sample tests of hypotheses (the Student Distribution), from SOP No. KMS-102, Attachment 10.6*	**5.91**	*"t" value* 2.132
Release Criteria	7.1	
U_α < Release Criteria?	**SAMPLES TESTED MEET 95% CONFIDENCE LEVEL - LIFT IS RADIOLOGICALLY ACCEPTABLE FOR USE AS ONSITE BACKFILL PER SOP-214**	

Check if QC Sample Dup. is within 3 Standard Deviations (3 S_{dup}) of the mean of the sample population, per SOP 214, paragraph 12.1

3 x S_{dup} =	3.33		
Mean + 3 S_{dup} =	8.5	**QC < (Mean + 3S_{dup})?**	O.K.
Mean - 3 S_{dup} =	1.8	**QC > (Mean - 3S_{dup})?**	O.K.

APPROVED: FIELD TEAM LEADER: _____

APPROVED: PROJECT MANAGER: _____

Name/date

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ001

DATE OF SURVEY: 4/4/00

NAME OF SURVEYOR: Tristan Timm / Brett Barker

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 48 ~1 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 3/5 **%** **Serial:** 102379 / 113195

MDA: 23 **dpm** Revcon Equip

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 300 sq. cm
Auger Bit 36"	1	0.02	1	0
Casing 36"	2		0	0
Casing 48"	3		1	0
Casing 34"	4		1	0
Auger Bit 24"	5		0	0
Bit/Csse 36"	6		0	0
Bit/Csse 42"	7		2	3
Csse 41"	8		2	3
Csse 42 long	9		0	0
Auger Bit 72"	10		0	0
Auger Bit 50"	11		1	0
Auger Bit 30"	12		0	0
Casing 28"	13		0	0
Auger Bit 42"	14		1	0
Auger Bit 78"	15		1	0
Bit 36"	16		1	0
Bit 54 short	17		0	0
Bit 48	18		0	0
Bit/Csse 54"	19		2	3

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1002

DATE OF SURVEY: 4/4/00

NAME OF SURVEYOR: Tristan Tr[illegible] / Brett B[illegible]

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104792

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.8-1 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:** 102779 / 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Bit/Case 48	20	0.02	1	0
Bit/Case	21		0	0
Large Bore 6'	22		0	0
Large Bore 5'6"	23		1	0
Bit 90" Short	24		1	0
Bit 96" Short	25		1	0
Casing 12'	26		0	0
Casing 5'x15'	27		2	3

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1003

DATE OF SURVEY: 4/10/00

NAME OF SURVEYOR: Tristan Tim

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial: 104192

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: ~~0~~ / **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 315 **%** **Serial:**

MDA: 23 **dpm** Revcon Equip

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per ~~100~~ 200 sq. cm
Edge Casing (1)	1	0.02	0	0
(2)	2	↓	0	0
Small pipe	3	↓	1	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ 1015

DATE OF SURVEY: 5/22/00

NAME OF SURVEYOR: Brett Bartz

SURVEY METER IDENTIFICATION: **Mfg:** Ludlum

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg:** Ludlum

Background Reading: 0.57 cpm **Model:** 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % **Serial:** 102930/#3175

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Auger Bits and scraps total ~11 lb	1	0.02	1	1
removed by Recon Tech	2	0.02	1	1
	3	0.02	0	0
	4	0.02	1	1
	5	0.02	0	0
	6	0.02	2	5
	7	0.02	1	1
	8	0.02	0	0
	9	0.02	0	0
Recon drilling rig — left track	1	0.02	1	1
right track	2	0.02	0	0
body	3	0.02	0	0
body	4	0.02	2	5

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1017

DATE OF SURVEY: 5/23/00

NAME OF SURVEYOR: Glenn Huber

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 **mR/hr** **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 **cpm** **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 31.5 **%** **Serial:** 102770 / 113195

MDA: 23 **dpm**

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per (100 sq. cm
Rerun crane (not used on site,				
but it did travel thru it)				
left tread #1	1	0.02	0	0
left tread #2	2	0.02	1	1
right tread #1	3	0.02	0	0
right tread #2	4	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1024

DATE OF SURVEY: 6/15/00

NAME OF SURVEYOR: Tristan Tim

SURVEY METER IDENTIFICATION: Mfg: Ludlum

Background Reading: 0.02 mR/hr Model: 3

Serial:

INSTRUMENT ID: Mfg: Ludlum

Background Reading: 0.53 cpm Model: 2200 (scaler) / 43-10 (alpha)

Efficiency: 31.5 % Serial:

MDA: 27 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Yellow Drilling Rig (Rescan subcontractor)				
left tread	1	0.02	0	0
right tread	2	0.02	1	1
drill head	3	0.02	0	0

RADIATION SURVEY FORM

Grand Pier Project – Chicago, IL

SURVEY REFERENCE #: EQ1028

DATE OF SURVEY: 8/16/00

NAME OF SURVEYOR: Brett Barton / Glenn Haber

SURVEY METER IDENTIFICATION: **Mfg: Ludlum**

Background Reading: 0.02 mR/hr **Model:** 3

Serial:

INSTRUMENT ID: **Mfg: Ludlum**

Background Reading: 0.53 cpm **Model: 2200 (scaler) / 43-10 (alpha)**

Efficiency: 0.315% **Serial:** 102770

MDA: 23 dpm

Description (attached sketch if needed) (Area, equipment, vehicle, materials, etc.)	Item #	Gross mR/hr	Gross cpm	dpm per 100 sq. cm
Reucon Auger bits (assorted sizes)	1	0.02	1	2
* All non-bell attachments surveyed	2	0.02	0	0
& wiped prior to Reucon removal	3	0.02	1	2
from site	4	0.02	1	2
	5	0.02	0	0
	6	0.02	0	0
	7	0.02	0	0
	8	0.02	1	2
	9	0.02	1	2
Note: Drill Rig treads were also				
surveyed. Not wiped				
due to the fact that it had				
not traveled through exclusion				
zones or contamination				

ATTACHMENT L

LANDAUER EXPOSURE REPORTS (PERSONNEL RADIATION EXPOSURE)

?and Pier Project - STS Consultants, Inc
?mm Badge Reports

April 2000

Number	Name	returned?
99001	Glenn Huber	x
99002	Brett Batron	x
99003	Tristan Timm	x
99004	Rich Berggreen	x
99005	Dumas Guerrier	x
99006	John Runge	x
99007	Luis Medina	x
99008	Randall Renford	x
99009	Mike Smit	x
99010	Joel Ahrweiler	lost
99011	Mark Placek	x
99012	Jose Rodriguez	x
99013	Al Heffernan	x
99014	unused	n/a
99015	unused	n/a
99016	unused	n/a
99017	unused	n/a
99018	unused	n/a
99019	unused	n/a
99020	unused	n/a

May 2000

Number	Name	returned?
99021	Glenn Huber	lost
99022	Brett Batron	x
99023	Tristan Timm	lost
99024	Rich Berggreen	x
99025	Dumas Guerrier	x
99026	John Runge	x
99027	Luis Medina	lost
99028	Randall Renford	x
99029	Mike Smit	x
99030	Joel Ahrweiler	x
99031	Mark Placek	x
99032	unused	n/a
99033	Al Heffernan	lost
99034	Jim Ezell	x
99035	Chris Fitzgerald	lost
99036	Rudy Guzman	x
99037	Bill Grusecki	lost
99038	Mike Brefeld	x
99039	Siju George	x
99040	unused	n/a

June 2000

Number	Name	returned?
99041	Glenn Huber	x
99042	Brett Batron	x
99043	Tristan Timm	quit
99044	Rich Berggreen	x
99045	Dumas Guerrier	x
99046	John Runge	quit
99047	Luis Medina	x
99048	Randall Renford	quit
99049	Mike Smit	x
99050	Joel Ahrweiler	x
99051	Mark Placek	x
99052	Stephen Babiarz	lost
99053	Mike Husar	lost
99054	Jim Ezell	x
99055	Chris Fitzgerald	x
99056	Rudy Guzman	x
99057	Bill Grusecki	quit
99058	Mike Brefeld	quit
99059	Siju George	quit
99060	Toby Shewan	x

July 2000

Number	Name	returned?
99001	Glenn Huber	x
99002	Brett Batron	x
99003	unused	n/a
99004	Rich Berggreen	x
99005	Dumas Guerrier	x
99006	unused	n/a
99007	Luis Medina	x
99008	unused	n/a
99009	Mike Smit	lost
99010	Joel Ahrweiler	x
99011	Mark Placek	x
99012	unused	n/a
99013	unused	n/a
99014	unused	n/a
99015	unused	n/a
99016	unused	n/a
99017	unused	n/a
99018	unused	n/a
99019	unused	n/a
99020	Toby Shewan	x

why so many ELD reports lost? - mostly HPs

ust 2000

mber	Name	returned?
99021	Glenn Huber	x
99022	Brett Batron	x
99023	unused	n/a
99024	Rich Berggreen	x
99025	Dumas Guerrier	x
99026	unused	n/a
99027	Luis Medina	lost
99028	unused	n/a
99029	Mike Smit	x
99030	Joel Ahrweiler	x
99031	Mark Placek	x
99032	unused	n/a
99033	unused	n/a
99034	unused	n/a
99035	unused	n/a
99036	unused	n/a
99037	unused	n/a
99038	unused	n/a
99039	unused	n/a
99040	Toby Shewan	lost

September 2000

Number	Name	returned?
99061	Glenn Huber	x
99062	Brett Batron	x
99063	unused	n/a
99064	Rich Berggreen	x
99065	Dumas Guerrier	x
99066	unused	n/a
99067	Luis Medina	x
99068	unused	n/a
99069	Mike Smit	x
99070	Joel Ahrweiler	x
99071	unused	n/a
99072	unused	n/a
99073	unused	n/a
99074	unused	n/a
99075	unused	n/a
99076	unused	n/a
99077	unused	n/a
99078	unused	n/a
99079	unused	n/a
99080	Toby Shewan	x

October 2000

nber	Name	returned?
99081	Glenn Huber	x
99082	Brett Batron	x
99083	unused	n/a
99084	Rich Berggreen	x
99085	Dumas Guerrier	x
99086	not issued	x
99087	Luis Medina	x
99088	not issued	x
99089	Mike Smit	x
99090	Joel Ahrweiler	x
99091	Mark Placek	x
99092	Beverly Gravel	
99093	Beverly Gravel	
99094	Beverly Gravel	
99095	Beverly Gravel	
99096	Beverly Gravel	
99097	Beverly Gravel	
99098	unused	
99099	unused	
99100	Toby Shewan	x- no bkg

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627		0013980473	06/06/00	05/18/00	12	1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
[illegible]					04/01/00				QTR 2			2000						
00000	CONTROL	P	CNTRL		M	M	M										1	01/95
[illegible]		P	OWHBDY		M	M	M						NOTOTAL				1	
99002		P	OWHBDY		M	M	M						NOTOTAL				1	
[illegible]		P	OWHBDY		M	M	M						NOTOTAL				1	
99004		P	OWHBDY		M	M	M						NOTOTAL				1	
[illegible]		P	OWHBDY		M	M	M						NOTOTAL				1	
99006		P	OWHBDY		M	M	M						NOTOTAL				1	
[illegible]		P	OWHBDY		M	M	M						NOTOTAL				1	12/92
99008		P	OWHBDY		M	M	M						NOTOTAL				1	
[illegible]		P	OWHBDY		M	M	M						NOTOTAL				1	
99013		P	OWHBDY		M	M	M						NOTOTAL				1	
[illegible]		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99015		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
[illegible]		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99017		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
[illegible]		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: VK

1 - PR 6988 - RPT130 - N1 - 13973

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627		0013980473	06/06/00	05/18/00	12	2

** LAST PAGE **

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
[illegible]					04/01/00				QTR 2			2000						
99019		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99020		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: VK 1 - PR 6988 - RPT130 - N1 - 13973

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN . HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627		0013989011	06/09/00	05/18/00	15	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	QTR 2	[illegible]	[illegible]	2000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
99009		P	OWHBDY	P	M	1	1						NOTUTAL				1	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: VG 1 - PR 6991 - RPT130 - N1 - 13911

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627	NL1	0018580487	07/17/00	07/03/00	9	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
								QTR 2			2000							
00NL1	CONTROL	P	CNTRL		M	M	M										2	10/78
													NOTOTAL				1	
99024		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99026		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99029		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99031		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99034		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99038		P	OWHBDY		M	M	M						NOTOTAL				1	
													NOTOTAL					
99040		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM — QUALITY CONTROL RELEASE: P — 1 - PR 7016 - RPT130 - N1 - 18587

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627	NL1	0023480610	08/28/00	08/21/00	5	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					05/01/00				QTR 2			2000						
99033		P	(WHBDY	*P	20	20	20						NOTOTAL				1	

no control subtracted

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: VK

1 - PR 7046 - RPT130 - N1 - 23410

* - NO CONTROL SUBTRACTED

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627	NL1	0020980304	08/08/00	07/27/00	8	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					08/01/00				QTR 2			2000						
00NL1	CONTROL	P	CNTRL		M	M	M										4	10/78
99041		P	CWHBDY		M	M	M						NOTOTAL				1	
99042		P	CWHBDY		M	M	M						NOTOTAL				1	
99044		P	CWHBDY		M	M	M						NOTOTAL				1	
99045		P	CWHBDY		M	M	M						NOTOTAL				1	
99047		P	CWHBDY		M	M	M						NOTOTAL				1	
99049		P	CWHBDY		M	M	M						NOTOTAL				1	
99050		P	CWHBDY		M	M	M						NOTOTAL				1	
99051		P	CWHBDY		M	M	M						NOTOTAL				1	
99054		P	CWHBDY		M	M	M						NOTOTAL				1	
99055		P	CWHBDY		M	M	M						NOTOTAL				1	
99056		P	CWHBDY		M	M	M						NOTOTAL				1	
99060		P	CWHBDY		M	M	M						NOTOTAL				1	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE GK 1 - PR 7032 - RPT130 - N1 - 20904

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627		0023480610	08/28/00	08/21/00	5	1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					07/01/00			QTR 3			2000							
00000	CONTROL	P	CNTRL		M	M	M										2	01/95
99001		P	OWHBDY		M	M	M						NOTOTAL				2	
99002		P	OWHBDY		M	M	M						NOTOTAL				2	
99003		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99004		P	OWHBDY		M	M	M						NOTOTAL				2	
99005		P	OWHBDY		M	M	M						NOTOTAL				2	
99006		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99007		P	OWHBDY		M	M	M						NOTOTAL				2	12/92
99008		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99010		P	OWHBDY		M	M	M						NOTOTAL				1	
99011		P	OWHBDY		M	M	M						NOTOTAL				2	
99012		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99013		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99014		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99015		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE VK

1 - PR 7046 - RPT130 - N1 - 23410

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

RADIATION DOSIMETRY REPORT

luxel®

** LAST PAGE **

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
67627		0023480610	08/28/00	08/21/00	5	2

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					07/01/00			QTR 3				2000						
99016		P	CWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99017		P	CWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99018		P	CWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99019		P	CWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99020		P	CWHBDY		M	M	M						NOTOTAL				2	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: VK

1 - PR 7046 - RPT130 - N1 - 23410

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627		0025980787	09/22/00	09/15/00	5	1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					08/01/00				QTR 3			2000						
00000	CONTROL	P	CNTRL		M	M	M										3	01/95
99021		P	OWHBDY		M	M	M						NOTOTAL				1	
99022		P	OWHBDY		M	M	M						NOTOTAL				2	
99023		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99024		P	OWHBDY		M	M	M						NOTOTAL				2	
99025		P	OWHBDY		M	M	M						NOTOTAL				2	
99026		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99028		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99029		P	OWHBDY		M	M	M						NOTOTAL				2	
99030		P	OWHBDY		M	M	M						NOTOTAL				2	
99031		P	OWHBDY		M	M	M						NOTOTAL				2	
99032		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99033		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99034		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99035		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM — QUALITY CONTROL RELEASE P — 1 - PR 7064 - RPT130 - N1 - 25987

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATN STAN HUBER
200 N CEDAR ROAD
APT 8
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

RADIATION DOSIMETRY REPORT

luxel®

ACCOUNT NO	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627		0025980787	09/22/00	09/15/00	5	2

** LAST PAGE **

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					08/01/00				QTR 3			2000						
99036		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99037		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99038		P	OWHBDY										NOTOTAL				2	
			NOTE		UNUSED													
99039		P	OWHBDY										NOTOTAL					
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM QUALITY CONTROL RELEASE P 1 - PR 7064 - RPT130 - N1 - 25987

Accredited by the National Institute of Standards and Technology through NVLAP *

STAN A HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LA. .DAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

RADIATION DOSIMETRY REPORT

luxel®

ACCOUNT NO	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627	NL1	0030080100	11/07/00	10/26/00	8	1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					**09/01/00**				**QTR 3**			**2000**						
00NL1	CONTROL	P	CNTRL		M	M	M										8	10/78
99061		P	OWHBDY		M	M	M						NOTOTAL				1	
99062		P	OWHBDY		M	M	M						NOTOTAL				1	
99063		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99064		P	OWHBDY		M	M	M						NOTOTAL				1	
99065		P	OWHBDY		M	M	M						NOTOTAL				1	
99066		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99067		P	OWHBDY		M	M	M						NOTOTAL				1	
99068		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99069		P	OWHBDY		M	M	M						NOTOTAL				1	
99070		P	OWHBDY		M	M	M						NOTOTAL				1	
99071		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99072		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99073		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99074		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													

M: MINIMAL REPORTING SERVICE OF 1 MREM — QUALITY CONTROL RELEASE IYF — 1 - PR 7096 - RPT130 - N1 - 30000

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

RADIATION DOSIMETRY REPORT

luxel®

** LAST PAGE **

ACCOUNT NO	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627	NL1	0030080100	11/07/00	10/26/00	8	2

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					**09/01/00**				**QTR 3**			**2000**						
99075		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99076		**P**	**OWHBDY**										**NOTOTAL**				**1**	
			NOTE		**UNUSED**													
99077		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99078		**P**	**OWHBDY**										**NOTOTAL**				**1**	
			NOTE		**UNUSED**													
99079		P	OWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99080		**P**	**OWHBDY**		**M**	**M**	**M**						**NOTOTAL**				**1**	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: IYF 1 - PR 7096 - RPT130 - N1 - 30000

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN A HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LA. DAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627	NL1	0033282273	12/08/00	11/27/00	9	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	USE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					10/01/00				QTR 4			2000						
00NL1	CONTROL	P	CNTRL		M	M	M										9	10/78
99081		P	DWHBDY		M	M	M						NOTOTAL				1	
99082		P	DWHBDY		M	M	M						NOTOTAL				1	
99083		P	DWHBDY										NOTOTAL				1	
			NOTE		UNUSED													
99084		P	DWHBDY		M	M	M						NOTOTAL				1	
99085		P	DWHBDY		M	M	M						NOTOTAL				1	
99086		P	DWHBDY		M	M	M						NOTOTAL				1	
99087		P	DWHBDY		M	M	M						NOTOTAL				1	
99088		P	DWHBDY		M	M	M						NOTOTAL				1	
99089		P	DWHBDY	P	M	1	2						NOTOTAL				1	
99090		P	DWHBDY	P	M	M	1						NOTOTAL				1	
99091		P	DWHBDY	P	M	1	2						NOTOTAL				1	
99092		P	DWHBDY		M	M	M						NOTOTAL				1	
99093		P	DWHBDY		M	M	M						NOTOTAL				1	
99095		P	DWHBDY		M	M	M						NOTOTAL				1	
99096		P	DWHBDY		M	M	M						NOTOTAL				1	
99097		P	DWHBDY		M	M	M						NOTOTAL				1	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE VK 1 - PR 7117 - RPT130 - N1 - 33273

Accredited by the National Institute of Standards and Technology through NVLAP*

STAN . HUBER CON INC
ATTN STAN HUBER
200 N CEDAR ROAD
NEW LENOX IL 60451

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016
www.landauerinc.com

luxel®

RADIATION DOSIMETRY REPORT

ACCOUNT NO.	SERIES CODE	ANALYTICAL WORK ORDER	REPORT DATE	DOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO
67627	NL1	0033981533	12/18/00	12/04/00	10	1 OF 1

PARTICIPANT NUMBER	NAME / ID NUMBER / BIRTH DATE / SEX	DOSIMETER	JSE	RADIATION QUALITY	DOSE EQUIVALENT (MREM) FOR PERIODS SHOWN BELOW: DEEP DDE	EYE LDE	SHALLOW SDE	QUARTERLY ACCUMULATED DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	YEAR TO DATE DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	LIFETIME DOSE EQUIVALENT (MREM): DEEP DDE	EYE LDE	SHALLOW SDE	RECORDS FOR YEAR	INCEPTION DATE (MM/YY)
FOR MONITORING PERIOD:					10/01/00				QTR 4			2000						
99100		P	CWHBDY	*P	14	15	15						NOTOTAL				1	

M: MINIMAL REPORTING SERVICE OF 1 MREM

QUALITY CONTROL RELEASE: DEM 1 - PR 7123 - RPT130 - N1 - 33933

* - NO CONTROL SUBTRACTED

How This Member Was Born?

Accredited by the National Institute of Standards and Technology through NVLAP*

ATTACHMENT M

EXCAVATION SPOIL DISPOSAL SITES

Excavation Spoil Disposal Sites

Material	Number of Loads	Disposal Site
Mixed Fill	20	Haak, Munster, Indiana
Mixed Fill	148	Beverly Gravel, Elgin, Illinois
Asphalt	5	Palumbo, Romeoville, Illinois
Asphalt	37	Reliable, Chicago, Illinois
Concrete	47	Vanek, Chicago, Illinois
UST Soil	2	CID, Calumet City, Illinois