

## MATERIALS LICENSE

Amendment No. 08

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

301945

Licensee		In accordance with the letter dated October 9, 1996	
1. Cliffs Mining Services Company		3. License Number 22-13873-01 is amended in its entirety as follows:	
2. P.O. Box 278 Hibbing, MN 55746		4. Expiration Date April 30, 2004	
		5. Docket or Reference No. 030-05057	
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License	
A. Cesium-137	A. Sealed source (Texas Nuclear Model No. 570-57157C)	A. One source not to exceed 500 millicuries	
B. Cesium-137	B. Sealed source (Texas Nuclear Model No. 696894)	B. One source not to exceed 20 millicuries	
C. Plutonium-238	C. Sealed source (Texas Nuclear Model No. HMC-C-1049)	C. One source not to exceed 0.5 grams	
D. Americium-241	D. Sealed source (Texas Nuclear Model No. AMT312)	D. One source not to exceed 50 nanocuries	
9. Authorized Use:			
A. To be used in Texas Nuclear Model 5191 source holder for density measurements.			
B. To be used in Texas Nuclear Model 5201 source holder for density measurements.			
C. and D. To be used in Texas Nuclear Neutron Analytical Lab Analyzer Model NALA for samples analysis.			

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## CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 1600 West 5th Avenue, Hibbing, Minnesota.

11. The Radiation Safety Officer for this license is Gary A. Maki.

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C PDR

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

22-13873-01

Docket or Reference Number

030-05057

Amendment No. 08

12. Licensed material shall be used by, or under the supervision of, Gary A. Maki or Robert C. Ives.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- E. The licensee is authorized to collect leak test samples for analysis by Health Physics Associates of Lenhartsville, Pennsylvania. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.
16. Installation, initial radiation survey, relocation, or removal from service of devices containing sealed sources shall be performed by Gary A. Maki or by persons specifically licensed by the Commission or an Agreement State to perform such services. Maintenance and repair of devices and installation, replacement, and disposal of sealed sources shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services.

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

22-13873-01

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17. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the Commission or an Agreement State.
18. The licensee shall operate each gauge within the manufacturer's specified temperature and/or environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
19. The licensee shall assure that the shutter mechanism is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify as appropriate its "lock-out" procedures whenever a new gauge is obtained to incorporate the device manufacturer's recommendations.
20. Each gauge shall be tested for the proper operation of the on-off mechanism and indicator, if any, at no longer than 6-month intervals or at such longer intervals as specified by the manufacturer and approved by NRC.
21. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - A. Application dated June 9, 1993 (with attachments, excluding Item 10.4); and
  - B. Letters dated March 23, 1994 (with attachments, excluding Items 10.2, 10.4 and attachment D), April 7, 1994 (with attachments) and October 9, 1996 (with attachments).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

10/24/96

By

Michael F. Webb

Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LFMS USE)  
INFORMATION FROM LTS

Program Code: 03120  
Status Code: 0  
Fee Category: 3P  
Exp. Date: 20040430  
Fee Comments:  
Decon Fin Assur Req'd: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: CLIFFS MINING SERVICES COMPANY  
Received Date: 961015  
Docket No: 3005057  
Control No.: 301945  
License No.: 22-13873-01  
Action Type: Amendment

2. FEE ATTACHED

Amount: 550  
Check No.: 005929

3. COMMENTS

Signed  
Date

D. Hersey  
10-16-96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: 3P (10) 550

2. Correct Fee Paid. Application may be processed for:

Amendment  
Renewal  
License

3. OTHER

Signed  
Date

SC  
10/22/96

Log	OCT 9 711
Remitter	
Check No.	5929
Amount	550 (300) <del>550</del>
Fee Category	3P 10 <del>AmD</del>
Type of Fee	AmD
Date Check Rec'd	10/21/96
Date Completed	10/22/96
By	SC

1996 OCT 21 AM 11:41





# Cliffs Mining Services Company

Subsidiary of Cleveland-Cliffs Inc  
Research & Development

October 9, 1996

U. S. Nuclear Regulatory Commission  
Region III  
Material Licensing Section  
801 Warrenville Road  
Lisle, IL 60532-4351

Ref: Radioactive Materials License No. 22-13873-01  
Request for Amendment

Gentlemen:

The purpose of this letter and attachments is to request an amendment to NRC License No. 22-13873-01 to accomplish the following:

- A. Delete Items 6, 7, 8, and 9 B & C. The Ohmart device and the Accuray device authorized under these items have been transferred to an authorized, properly licensed recipient.
- B. Add to the license one (1) each Texas Nuclear Model 5201 source head containing 20 millicuries of Cs-137, Texas Nuclear Capsule Model 696894, to be used for density measurement. This device is eligible for three year leak test intervals and all other conditions of the existing license apply.
- C. Add to the license one (1) Texas Nuclear Neutron Analytical Lab Analyzer (NALA) containing 7.85 Curies (approximately 0.5 grams) of Pu-238-BE, Texas Nuclear Drawing HMC-C-1049, and a 50 nanocurie Am-241 source, Texas Nuclear Drawing AmT312, used for internal stabilization of the electronics.

This system will be used in a laboratory setting to provide elemental analysis needed for process control. A sketch is enclosed showing the laboratory and the proposed location of the NALA system.

These NALA systems have been widely distributed throughout the world for thirty years, and have proven to be very effective, efficient and safe way to perform product elemental analysis. Their distribution is authorized by Registry of Radioactive Sealed Sources and Devices Safety Evaluation of Device, number TX634D135U, copy enclosed for your convenience. As can be seen from this registry sheet, installation can safely be accomplished by the licensee, and no in-depth radiation safety training is required to possess and safely use this system.

RECEIVED

OCT 15 1996

REGION III

1

*Pm: 10-10-96*

OCT 15 1996

*301945*

The radioactive material will be used by, or under the supervision of, Gary A. Maki or Robert C. Ives as authorized in our license.

Radiation levels around the system are very low. No operator, or individual frequenting the area, is likely to receive an exposure to radiation approaching 500 millirem/year; therefore, personnel monitoring should not be required.

The NALA will be leak tested at intervals not to exceed six months using a mailable leak test kit provided by a vendor licensed and authorized to perform this service. Samples will be collected following vendor instructions, and returned to the vendor for analysis and issuance of leak test certificates.

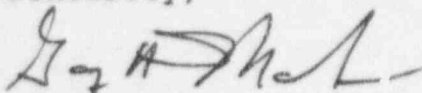
Installation of the system will be performed by the licensee. We have been provided with a drawing showing both the expected neutron and gamma exposure rates outside the NALA tank. After setting in place, these readings will be verified and documented.

All other conditions of the license as currently written will remain the same.

We are enclosing a copy of a flyer describing the NALA system and its uses in more detail. Also, it gives a good pictorial view of the system. We hope you will find this useful.

We believe this information is sufficient for its intended purpose. However, if you have any questions, please feel free to give me a call. Enclosed is our check in the amount of \$550.00 to cover the amendment fee and add category 1C to our license.

Sincerely,



Gary A. Maki  
Radiation Safety Officer

GAM/smh

Enclosures:    Registry Sheet  
                  Copy of Brochure  
                  Check for \$550.00  
                  Sketch of Proposed Location of NALA System

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES  
SAFETY EVALUATION OF DEVICE

NO.: TX634D135U

DATE: May 1981

PAGE 1 OF 4

DEVICE TYPE: Neutron Activation Analyzer

MODEL: NALA

MANUFACTURER/DISTRIBUTOR: Texas Nuclear  
P.O. Box 9267  
Austin, TX 78766

MANUFACTURER/DISTRIBUTOR:

SEALED SOURCE MODEL DESIGNATION: Tex. Nuc. HMC-C-1049, AMT312 (Custom Sources)

ISOTOPE: Plutonium-238-Be  
Americium-241

MAXIMUM ACTIVITY: 50 curies  
50.0 nanocuries

LEAK TEST FREQUENCY: 6 months

PRINCIPAL USE: General Neutron Source Applications

CUSTOM DEVICE: ☐ YES ☒ NO

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES  
SAFETY EVALUATION OF DEVICE

NO.: TX634D135U

DATE: May 1981

PAGE 2 OF 4

DEVICE TYPE: Neutron Activation Analyzer

DESCRIPTION:

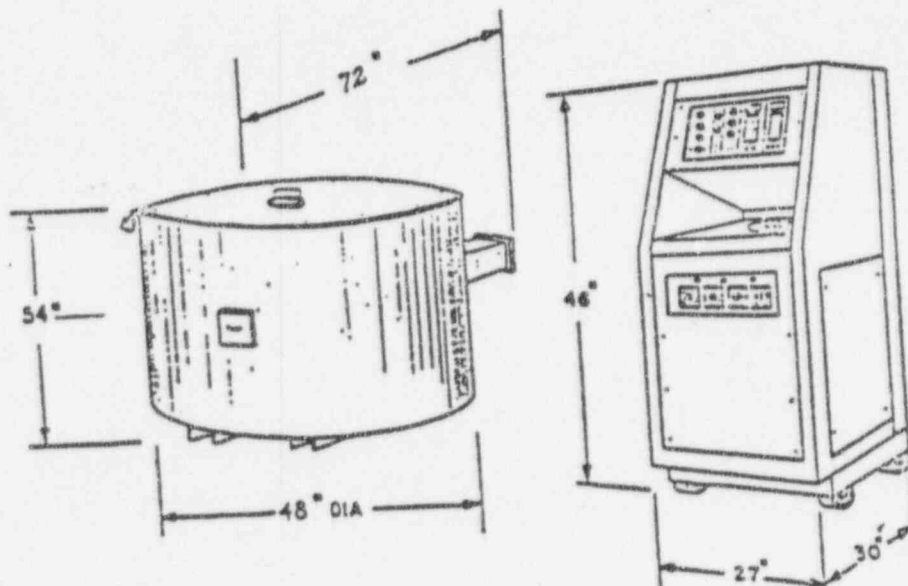
The NALA batch analyzer consists of two main components, the source-holder shield and the electronics cabinet. The source-holder is composed of  $^{238}\text{Pu}$ -Be neutron source, sample positioner, and personnel shielding. The electronics cabinet contains a NaI (Tl) detector that is gain stabilized with a small  $\text{Am-241}$  source, power supplies, signal handling modules, and control circuits.

The NALA is manually operated by placing a single sample to be analyzed in the irradiator using a positioning slide. Activation occurs for a pre-determined period of time and the operator is signaled when activation is complete. The sample is then transferred manually to the detector for measurement of the induced radioactivity.

LABELING:

The NALA is labeled with the CAUTION - RADIOACTIVE MATERIAL, Model Number, serial number, isotope, amount, DO NOT REMOVE, and the conventional radiation symbol.

DIAGRAM:





REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES  
SAFETY EVALUATION OF DEVICE

NO.: TX634D135U

DATE: May 1981

PAGE 3 OF 4

DEVICE TYPE: Neutron Activation Analyzer

CONDITIONS OF NORMAL USE:

The NALA is used in a laboratory environment for neutron activation analysis. The NALA is shipped as a completely assembled system. The unit serves as its own shipping container for Type A shipments and has been tested at temperatures of 0° to 185°F. The unit is shipped without its water shielding, so it must be added after installation.

QUALITY ASSURANCE AND CONTROL:

Prior to shipment the water shield is filled and drained twice to test its integrity. The unit is surveyed on all surfaces with and without the water shielding. (The water shield does not have a drain so water must be removed by pumping it out.)

EXTERNAL RADIATION LEVELS:

Radiation levels outside the shield are less than 2.0 mrem/hour at the surface with water shielding and less than 5.7 mrem/hour without the water shielding. There is no reason to believe that personnel operating the system under normal conditions of usage will receive whole-body exposures approaching 0.50 rem/year. Activation on the order of minutes will produce nanocuries levels of isotopes in the sample. Small activities combined with short half-lives and handling times of less than five (5) seconds together mean minimal extremity exposures and no significant hazard associated with temporary storage and routine disposal.

LIMITATIONS AND/OR OTHER CONSIDERATIONS OF USE:

The user can safely receive and install the device. Installation consists of setting the unit in place, filling the irradiator with water, attaching the interconnect cable, and plugging in the power cord. The manufacturer can supply service personnel to perform the final radiation survey, check out the unit, and inspect and insure that there was no internal damage during shipment. There is no need for in-depth radiation safety training for the licensee to possess and use this device since it is a totally self-contained system, simple to install and operate, and the source is inaccessible. The manufacturer provides instruction manuals and operational training at the time of installation.

The source in its protective enclosure should be leak tested at least once every six months. Leak test service can be provided by the manufacturer with a mailable leak test kit. This kit requires no disassembly of the unit.

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES  
SAFETY EVALUATION OF DEVICE

PAGE 4 OF 4

NO.: TX634D135U

DATE: May 1981

DEVICE TYPE: Neutron Activation Analyzer

SAFETY ANALYSIS SUMMARY:

Under severe accident conditions, like fire or explosion, the source will remain in the source holder. The source is physically retained with a steel gasket, screw-mounted onto a lead shield; and this assembly is secured by an aluminum base plate. The source holder is entirely contained in a shielded, WEP filled, gasket sealed container. In use this container is surrounded by water. In a fire or explosion, it is extremely unlikely that the source would suffer any appreciable damage. Failure of the source inside the shield would change the optimized irradiation geometry and this would immediately be reflected in the system response.

REFERENCES:

This device has been licensed as a custom device for many years and has had no radiation problems arise thus far. Letters with enclosures from Texas Nuclear dated March 23, 1981 and May 1, 1981.

Dated: May 5, 1981

Reviewed By: /s/  
Floyd R. Hamiter

Dated: May 5, 1981

Concurrence: /s/  
Joseph S. Gorell

ISSUING AGENCY:

Texas Department of Health

# NALA 1 Neutron Analytical-Lab Analyzer

## Technical Specifications

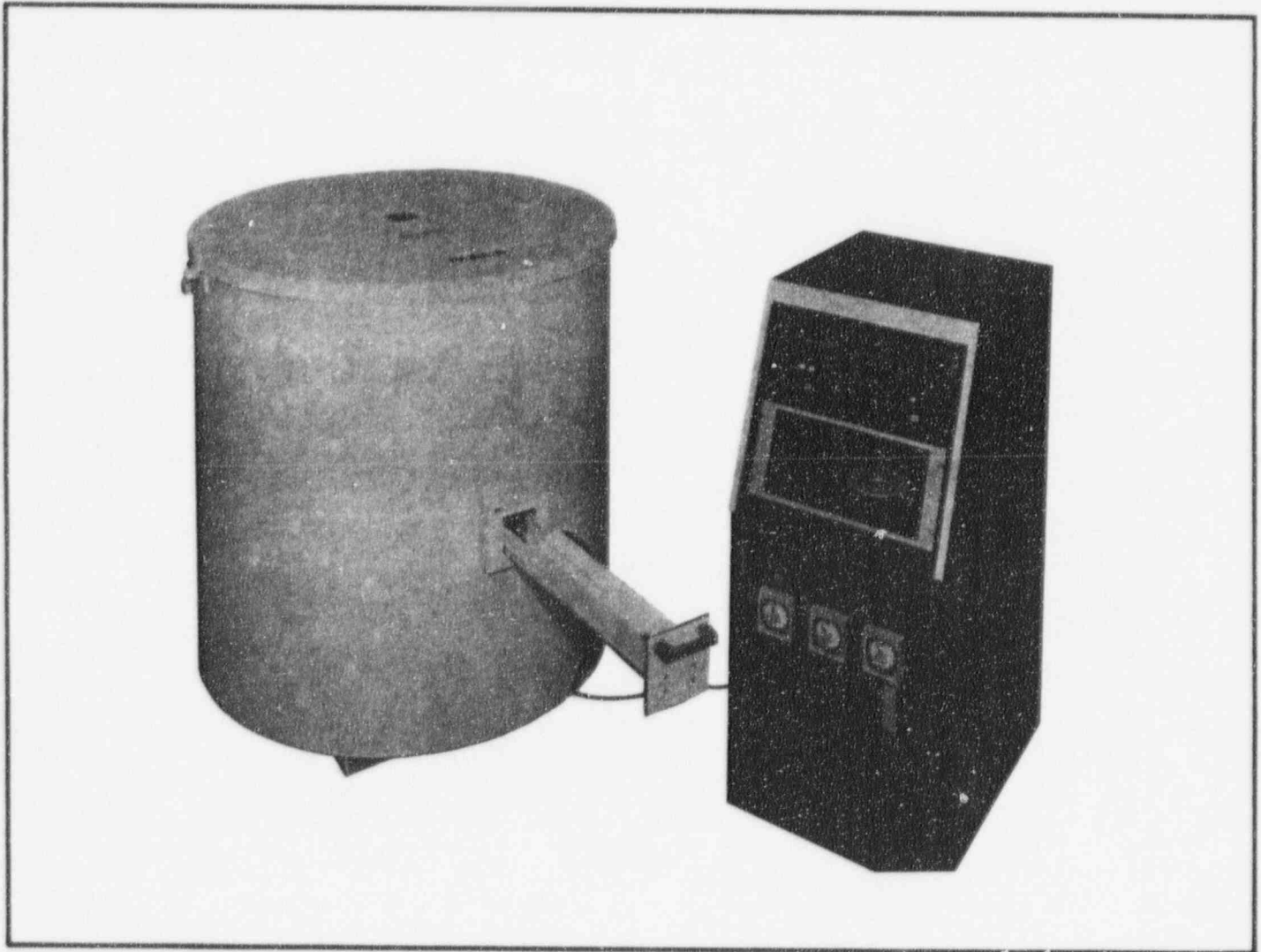


Figure 1

### FAST, ACCURATE ELEMENTAL ANALYSIS

- Analysis time typically under 10 minutes
  - Accuracy comparable to wet chemistry
  - Minimal sample preparation
  - Low cost per analysis
  - Simple to operate
- Accuracy unaffected by sample particle size
  - Modular, solid-state circuitry
  - Variable sample size accepted
  - Neutron source maintenance-free
  - Easy to install

## INTRODUCTION

The NALA System is a new approach to the problem of elemental analysis needed for process control. Present techniques, for example wet chemistry, when used for elements such as Si, F and Al, are time consuming, complex procedures which require a skilled analyst. Generally these results are history and of little benefit in real time control of the process. NALA was designed to overcome these drawbacks; it is simple to operate, and provides quick accurate elemental analysis.

## PRINCIPLE OF OPERATION

The NALA System is based on the technique of activation analysis. When a sample is exposed to neutrons, it becomes slightly radioactive, (i.e., is activated) through certain nuclear reactions which occur between the sample nuclei and the bombarding neutrons. The activated sample returns to a stable form by emitting characteristic radiation with a known rate of decay. This radiation is quantitatively measured and is used to determine the mass of the activated element in the bombarded sample.

The activation technique offers the advantages of speed and convenience found in automatic x-ray systems but performs the analysis with minimal sample preparation. Particle size is not critical and may range from fine powder to coarse granular materials. Activation analysis is especially suited for low atomic number elements such as fluorine and silicon. The deep penetration of the neutrons and the resulting gamma radiation permit the use of rugged sample containers and detector windows, eliminating many of the maintenance problems associated with other analytical techniques.

## APPLICATION

Some of the more important elements that can be measured by NALA are:

Aluminum	Fluorine	Phosphorus
Barium	Indium	Silicon
Bromine	Iodine	Sodium
Chromium	Iron	Vanadium
Gold	Manganese	Rare Earths

Accuracy and speed of analysis depend upon the physical form of the material, other compounds in the matrix, and the range of concentration. Consult factory for details concerning your specific application.

## GENERAL SPECIFICATIONS

**Sample Size:** Normally 100 to 200 gms. Smaller or greater amounts can be used depending upon the application.

**Analysis Time:** Depends on application and accuracy required. For maximum efficiency, it is possible to count one sample while another is in the irradiator.

**Accuracy:** Sample size, source output, analysis time, etc. influence the accuracy obtainable with the system. Typical results are:

ELEMENT AND MATRIX	ANALYSIS TIME	CONCENTRATION $\pm$ ACCURACY*
Si in Iron Ore	5 min	$4.0 \pm 0.10$
F in Fluorspar Ore	6 min	$15.0 \pm 0.22$
Si in $\text{CaF}_2$ Concentrate	20 min	$1.0 \pm 0.05$
F in Glass Frit	6 min	$5.0 \pm 0.11$
Al in Aluminum Oxide	7 min	$15.0 \pm 0.40$
Na in Aluminum Silicate	20 min	$7.0 \pm 0.16$

\*Based on counting statistics at the 1 $\sigma$  level.

**Size:** Irradiator 48" in diameter and 48" high. Counter console 27" x 30" x 46".

**Weight:** Irradiator 1800 pounds without water; 4300 pounds with water. Counter console 450 pounds.

**Radiation Source:**  $^{238}\text{Pu}$ -Be or  $^{241}\text{Am}$ -Be, doubly encapsulated in a heliarc welded stainless steel capsule. Half-life:  $^{238}\text{Pu}$  - 86.4 years.  $^{241}\text{Am}$  - 458 years.

**Surface Radiation:** Radiation levels around the irradiator are much lower than the maximum permissible recommended by the regulatory agencies. NALA design meets safety requirements of the National Regulatory Commission and the State Licensing Agencies.

**Utility Requirements:** Stable operation of electronics requires 103-129 VAC, 47-65 Hz. Power consumption is less than 500 watts. Operation recommended in normal laboratory environment.

**Installation:** Systems are normally shipped completely assembled. Installation consists of setting the units in place, filling the irradiator with water, attaching the interconnect cable and plugging in the 120 VAC power cord.

## SYSTEM OPERATION

Use of the NALA System is extremely simple. The ease of operation is most evident when the NALA analysis procedure is compared to wet chemistry techniques. The chemical determination of elemental concentration is generally complex and requires several hours of work by a skilled chemist. Irrespective of the method employed, individual

analysts can differ because of minor variations in techniques. NALA minimizes the chance of human error by automatically controlling the irradiation, transfer and count times, and will stop the analysis if the cycle is interrupted.

To determine the percent concentration of a particular element in a sample requires a simple three step procedure.

### STEP 1 — SAMPLE PREPARATION

A representative sample of material, dried or of known moisture content, is passed through a 20 mesh screen to break-up major clumps. Next, about 100 to 200 grams is packed into a constant volume sample container and weighed. Liquid, powdered or granular materials can be used.

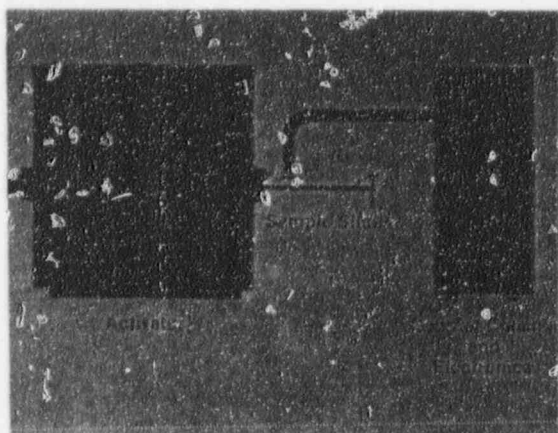


Figure 2

### STEP 2 — SAMPLE IRRADIATION

The container is placed into a slide which carries it directly over the neutron source. The length of the irradiation period depends on the element desired; e.g. one minute for fluorine and five minutes for silicon. A buzzer signals the operator when the irradiation period is over so the sample can be transferred to the counter.

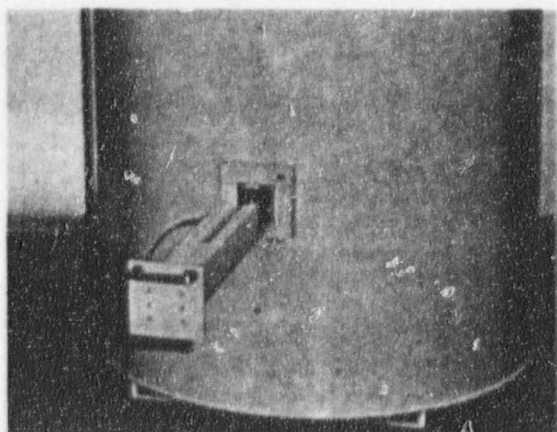


Figure 3

### STEP 3 — SAMPLE COUNTING

The induced activity of the sample is measured for a predetermined count time, again depending upon the element to be measured. Count time for fluorine is thirty seconds; five minutes for silicon. The elemental concentration is then obtained by correlating the activity counted with a linear calibration curve after adjusting for sample weight.



Figure 4



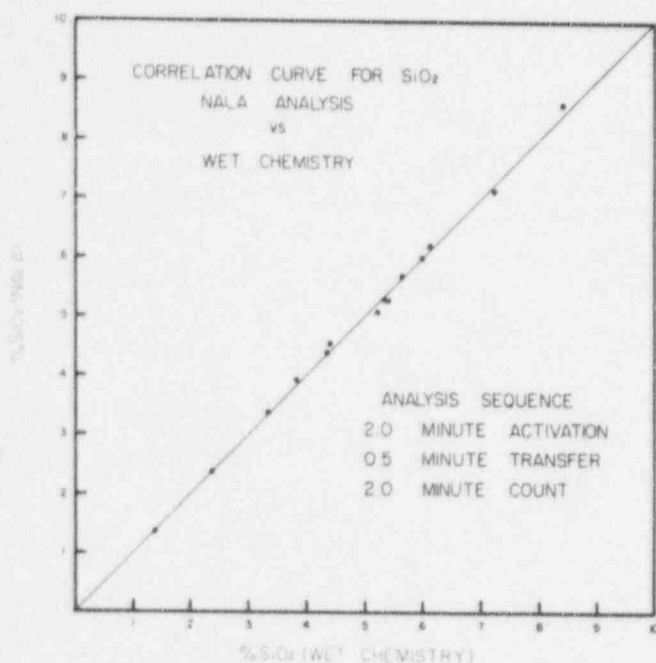
Box 9267  
Austin, Texas 78766 USA  
Telephone (512) 836-0801  
Telex 77-6413

For additional information, contact:

or Factory

## PERFORMANCE

The NALA System has been extensively tested both in the laboratory and under field conditions. System capability is very broad and for this reason each application is studied individually in order to satisfy the customer's particular needs. The following examples illustrate NALA's performance in two specific applications.



EXAMPLE OF NALA  $\text{SiO}_2$  DETERMINATION COMPARED TO WET CHEMISTRY RESULTS

Figure 5

### Silica in Iron Ore

A correlation curve measured for  $\text{SiO}_2$  in an iron ore matrix is shown in Figure 5. Approximately 200 gms of sample were used with an analysis sequence of two minute activation, one-half minute transfer, and two minute count. The agreement between the NALA results and wet chemistry is excellent. The standard deviation over the range of 1.39%  $\text{SiO}_2$  to 8.4%  $\text{SiO}_2$  is  $\pm 0.11\%$   $\text{SiO}_2$ . System precision, for repeated measurements on identical samples, is  $\pm 0.07\%$   $\text{SiO}_2$  for a sample with nominal 4% silica concentration. These results are typical of many samples measured from widely separated iron ore deposits.

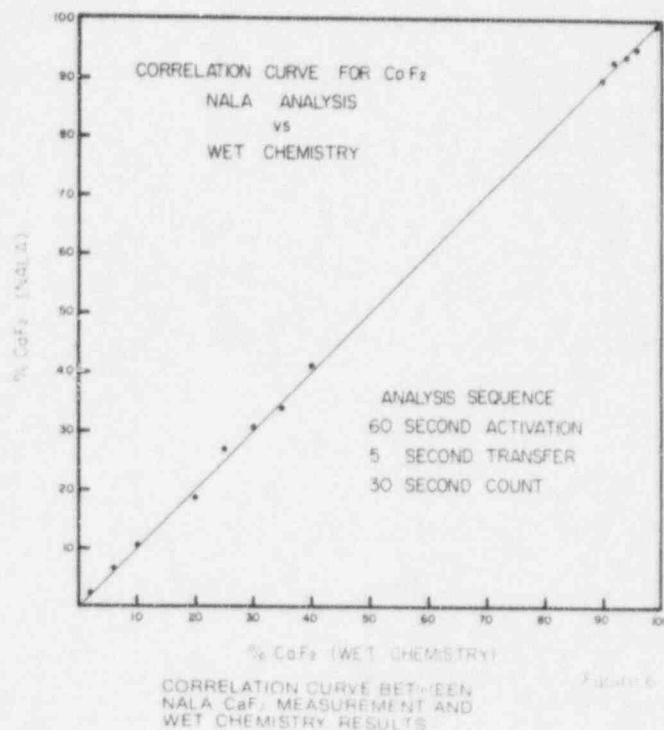


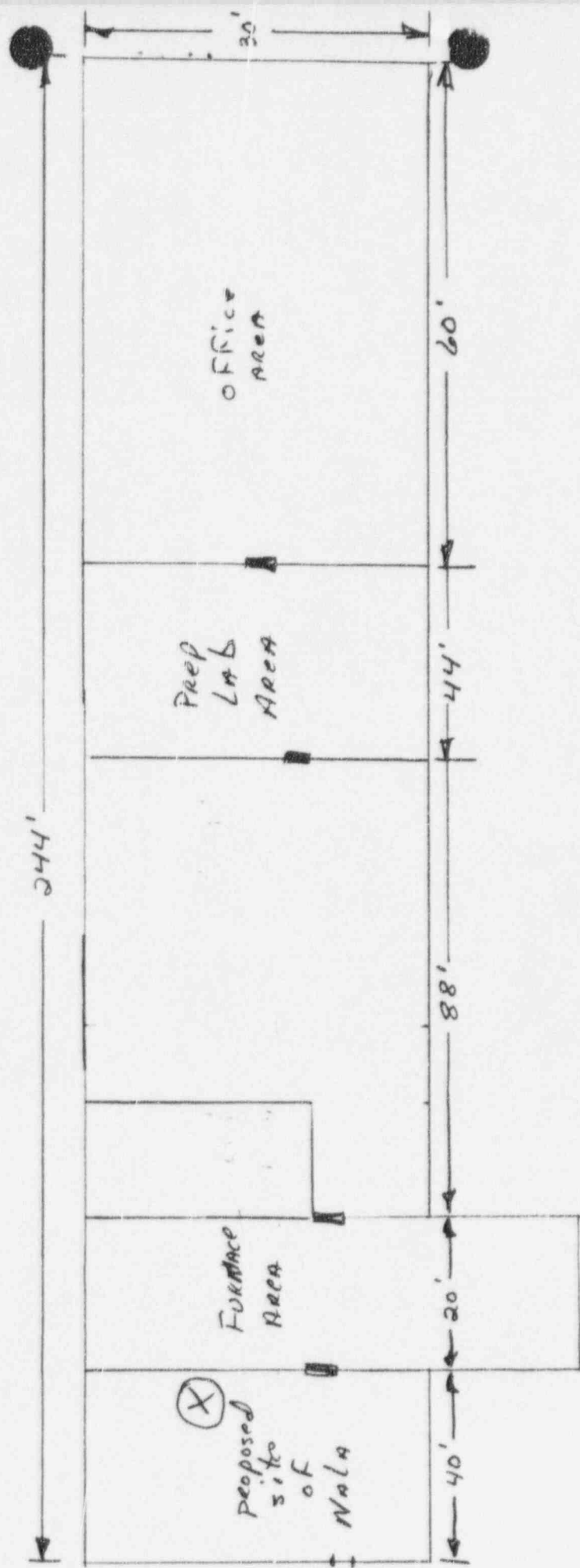
Figure 6

### Fluorine in Mill Products

The results of the measurement of  $\text{CaF}_2$  are plotted in Figure 6. The sample size was approximately 100 gms and the analysis sequence used was sixty second activation, five second transfer and thirty second count. The results are the average of five measurements on each sample. Total analysis time was five and one half minutes per sample because one sample was counted while another was in the irradiator. The standard deviation over the range of 2% to 99.5%  $\text{CaF}_2$  is  $\pm 0.96\%$ . System precision for repeated analysis of the same sample is  $\pm 0.44\%$   $\text{CaF}_2$  for a sample with nominal 30%  $\text{CaF}_2$  concentration.

Other fluorine applications studied include the measurement of aluminum fluoride concentrate and the analysis of glass frit. Similar results were obtained in these matrix materials since changes in the chemical composition have a negligible effect on analytical accuracy. Density corrections may be required however, if the suite of samples analyzed cover a wide range in density.

# Cliffs Research Lab Office and Lab Areas



OCT 28 1996

Gary A. Maki  
Radiation Safety Officer  
Cliffs Mining Services Company  
P.O. Box 278  
Hibbing, MN 55746

Dear Mr. Maki:

Enclosed is Amendment No. 08 to your NRC Material License No. 22-13873-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
  - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
  - b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.
4. Request and obtain a license amendment before you:
  - a. Change Radiation Safety Officers;

301945

- b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
  - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
  - d. Change ownership of your organization.
5. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,

Original Signed By  
Michael F. Weber  
Nuclear Materials Licensing Branch

License No.: 22-13873-01

Docket No.: 030-05057

Enclosure: Amendment No. 08

DOCUMENT NAME: M:\03005057.CL6

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	DNMS/RIII	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	MWEBER:jaw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DATE	10/24/96	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OFFICIAL RECORD COPY

CLIFFS MINING SERVICES COMPANY-MINNESOTA  
RESEARCH & DEVELOPMENT  
P. O. BOX 278  
HIBBING, MINNESOTA 55746

FACSIMILE MACHINE COVER SHEET

DATE: 10/24/96

TO: Mike Weber - U.S. Nuclear Reg. Com.

FAX #: 630-515-1259

FROM: GARY A. MAKI

SUBJECT: \_\_\_\_\_

TOTAL PAGES, INCLUDING THIS SHEET: 11

=====

REMARKS:

Thanks for your help, Mike!

Gary Maki

We are transmitting from a Pitney Bowes 9500, 218-262-7783. If you do not receive all of the pages, please call 218-262-7760.



Mike Weber

FAX# 630 515-1259

U. S. Nuclear Regulatory Commission  
Region III  
Material Licensing Section  
801 Warrenville Road  
Lisle, IL 60532-4351

Ref: Radioactive Materials License No. 22-13873-01  
Request For Amendment

4

PURCHASE ORDER REPRINT C - DO NOT MAIL PAGE 1

CLIFFS MINING COMPANY		P.C. NO. PP616406-0000-00	REL SUPP 04/17/96	DATE
SHIP TO: CLIFFS MINING SERVICES COMPANY RESEARCH LABORATORY 1600 W. 5TH AVENUE PO BOX 278 HIBBING MN 55746		INVOICE TO: CLIFFS MINING SERVICES COMPANY ACCOUNTS PAYABLE P. O. BOX 278 HIBBING, MINNESOTA 55746		
RADIATION TECHNOLOGY INC P O BOX 27637 AUSTIN TX 78755  1-512-346-7608		V0952700	BUYER: MARK J. SARTORI, SENIOR BUYER PHONE #: 218-262-5917 FAX #: 218-262-6817	
DATE REQUIRED 05/15/96	SHIP VIA MOST ECONOMICAL WAY	F.O.B. SHIPPING POINT	TERMS NET 30	
<b>PACKING SLIP AND INVOICE MUST SHOW PURCHASE ORDER NUMBER AND MATERIAL</b>				
LINE	QUANTITY	U/M	MATERIAL	UNIT PRICE
1	1	EA	<p>DISPOSAL OF TWO NUCLEAR DENSITY GAUGE SOURCES. DESCRIPTION OF SOURCES AS FOLLOWS:</p> <p>#1. SEALED SOURCE (OHMART CORP. MODEL #A-2102 OR A-2104). SOURCE = CESIUM 137, NOT TO EXCEED 150 MILLICURIES. RECEIVED JUNE 30, 1969.</p> <p>#2. SEALED SOURCE (ACCURAY MODEL #S-863). SOURCE = STONTIUM 90, NOT TO EXCEED 1000 MILLICURIES.</p> <p>REASON FOR DISPOSAL: BOTH UNITS ARE OUTDATED AND PARTS CANNOT BE FOUND TO KEEP THEM IN USE.</p> <p>SCOPE OF WORK: TO TRANSFER DEVICES CONTAINING RADIOACTIVE MATERIAL FROM CLIFFS MINING COMPANY RESEARCH CENTER TO RADIATION TECHNOLOGY, INC. (RTI) AS AUTHORIZED BY TEXAS LICENSE L04633. RTI WILL PROVIDE SHIPPING CRATES IN ADVANCE AND WILL OVERSEE THE PACKAGING AND LABELING FOR TRANSPORT WHEN RTI IS IN THE AREA DURING THE MONTH OF MAY 1996. RTI WILL ARRANGE FOR COMMON CARRIER PICKUP, PREPAY ALL SHIPPING CHARGES AND ADD TO INVOICE AT COST.</p> <p>TITLE TO THE RADIOACTIVE MATERIAL AND FORMAL ACKNOWLEDGMENT DOCUMENTING TRANSFER OF THE MATERIAL WILL OCCUR UPON RECEIPT AT RTI FACILITY IN ODESSA, TX.</p> <p>TRANSFER FEES: 1 EA. OHMART DEVICE W/150 MCI CS-137 \$550.00 1 EA. ACCURAY DEVICE W/1000 MCI SR-90 \$1,275.00</p> <p>EXPENSES: TO INCLUDE PRO-RATED TRAVEL TIME, ON SITE TIME, PER DIEM, MILEAGE AND ALL NECESSARY EQUIPMENT \$1,280.00</p> <p>ESTIMATED SHIPPING COSTS: \$550.00</p> <p>MAKI SCOTT/COBURN</p>	\$3,655.0000 /EA

ATTENTION: PRICES SHOWN ON THIS ORDER ARE CONSIDERED FIRM. INVOICES WITH PRICES OTHER THAN THOSE SHOWN WILL NOT BE ACCEPTED. IF NOT IN AGREEMENT, PLEASE CONTACT OUR PURCHASING DEPARTMENT IMMEDIATELY FOR PERMISSION TO CHANGE.

PLEASE SUPPLY PURCHASE ORDER ITEMS SUBJECT TO THE TERMS AND CONDITIONS ON THE BACK HEREOF OR PREVIOUSLY SENT UNDER SEPARATE COVER.

## PURCHASE ORDER

REPRINT

- DO NOT MAIL PAGE

2

CLIFFS MINING COMPANY

P. O. NO.

REL. SUPP.

DATE

PP616406-0000-00

04/17/96

SHIP TO:

INVOICE TO:

CLIFFS MINING SERVICES COMPANY  
RESEARCH LABORATORY  
1600 W. 5TH AVENUE  
PO BOX 278  
HIBBING MN 55746

CLIFFS MINING SERVICES COMPANY  
ACCOUNTS PAYABLE  
P. O. BOX 278  
HIBBING, MINNESOTA 55746

RADIATION TECHNOLOGY INC  
P O BOX 27637  
AUSTIN TX 78755

V0952700

BUYER:

MARK J. SARTORI, SENIOR BUYER  
PHONE #: 218-262-5917  
FAX #: 218-262-6817

DATE RECEIVED

SHIP VIA

F.O.B.

TERMS

05/15/96

MOST ECONOMICAL WAY

SHIPPING POINT

NET 30

PACKING SLIP AND INVOICE MUST SHOW PURCHASE ORDER NUMBER AND MATERIAL

LINE	QUANTITY	U/M	MATERIAL	UNIT PRICE
1				
TOTAL:				\$3,655.00
GOODS FURNISHED MUST BE OF UNITED STATES OR CANADIAN ORIGIN UNLESS OTHERWISE AGREED TO IN ADVANCE BY BUYER. TO BE SO NOTED ON ALL SHIPPING/BILLING DOCUMENTS.				
QUOTE NUMBER: CMC041296 / D.BYRAN / 04/12/96				

ATTENTION: PRICES SHOWN ON THIS ORDER ARE CONSIDERED FIRM. INVOICES WITH PRICES OTHER THAN THOSE SHOWN  
WILL NOT BE ACCEPTED. IF NOT IN AGREEMENT, PLEASE CONTACT OUR PURCHASING DEPARTMENT IMMEDIATELY FOR  
PERMISSION TO CHANGE.

PLEASE SUPPLY PURCHASE ORDER ITEMS SUBJECT TO THE TERMS AND CONDITIONS ON THE BACK HEREOF OR PREVIOUSLY  
SENT UNDER SEPARATE COVER.

**QUAST**

P.O. BOX 7 • WINNETT, MINNESOTA 55389

STRAIGHT BILL OF LADING  
ORIGINAL NOT NEGOTIABLE

QUAST TRANSFER, INC.

109-1012005



FREIGHT COPY

SHIPPER NO.

PURCHASE ORDER NO.

DATE

6/3/96

FROM: (SHIPPER)		TO: (CONSIGNEE)	
STREET		STREET	
CITY, STATE		CITY, STATE	
ZIP CODE		ZIP CODE	
ROUTE		VEHICLE NO.	
BILL TO NAME	STREET OR BOX #	CITY	STATE
		ZIP CODE	

NO. PIECES SHIPPED	HM	DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS	NMFC (ITEM NO.)	CLASS	WEIGHT (SUBJECT TO CORR.)	RATE	CHARGES (CARRIER USE ONLY)
1	X	<del>Radioactive Material</del> Special Form, N.O.S. 7 402974			352		
Emergency Response # 512-346-7608							

REMARKS:	<input type="checkbox"/> CO. CHECK <input type="checkbox"/> OK FOR C.O.D.	C.O.D. FEE <input type="checkbox"/> PREPAID <input type="checkbox"/> COLLECT	<b>C O D</b> AMT: \$	TOTAL CHARGES \$
ADDRESS NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____	Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the shipper the shipper shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.			FREIGHT CHARGES ARE <input type="checkbox"/> PREPAID <input checked="" type="checkbox"/> COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above is apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and delivered as indicated above which said carrier agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above named materials are properly classified, described, marked, and labeled and are in proper condition for transport according to the applicable regulations of the Department of Transportation.		CARRIER	
SHIPPER	Cliffs	PER	Quast
DATE	6/3/96	TIME	13:00
PIECES	1 crate	TLR #	

1

*Yellow Freight Took This*

## SHIPPER'S DECLARATION FOR DANGEROUS GOODS

NATURE AND QUANTITY OF DANGEROUS GOODS				PACKAGE		
CONTENTS	CLASS	FORM	ACTIVITY	CATEGORY	TRANSPORT INDEX	TYPE
PROPER SHIPPING NAME UN NUMBER RADIOISOTOPE	CLASS OR DIVISION	EITHER CHEMICAL FORM PLUS GAS/ LIQUID/SOLID OR SPECIAL FORM OR SPECIAL ENCAPSULATION	NUMBER OF CURIES, OR MILLI- CURIES	I - WHITE or II - YELLOW or III - YELLOW LABEL	FOR YELLOW LABEL CATEGORIES ONLY	INDUSTRIAL or TYPE A or TYPE B
<i>RADIOACTIVE Material, Special Form UN 2974</i>						
<i>CS-137</i>	<i>7</i>	<i>Special Form</i>	<i>150MB</i>	<i>yellow II</i>	<i>0.13</i>	<i>A</i>

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

## ADDITIONAL INFORMATION REQUIRED FOR FISSILE MATERIALS ONLY

EXEMPTED FROM THE ADDITIONAL REQUIREMENTS FOR FISSILE MATERIALS	NOT EXEMPTED
NAMES PLUS QUANTITY IN GRAMS, OR CONCENTRATION OR ENRICHMENT IN U235	FISSILE CLASS I <input type="checkbox"/>
	FISSILE CLASS II <input type="checkbox"/>
	FISSILE CLASS III <input type="checkbox"/>

Additional certificates obtained by the shipper when necessary

Special Form Encapsulation Certificate(s) ☐Certificate(s) for Large Radioactive Source ☐Type B Packaging Certificate(s) ☐Government Approvals/Permits ☐Certificate(s) for Fissile Material ☐

## REMARKS

Shipper:

Emergency Telephone: (512) 345-0585

Radiation Technology, Inc.

P.O. Box 27637

Austin, Texas 78755

Telephone: (512) 346-7608

Fax: (512) 795-8718

*W. L. H. Smith*

Authorized Signature

Date



Source W. H. H.

## SHIPPER'S DECLARATION FOR DANGEROUS GOODS

NATURE AND QUANTITY OF DANGEROUS GOODS				PACKAGE		
CONTENTS	CLASS	FORM	ACTIVITY	CATEGORY	TRANSPORT INDEX	TYPE
PROPER SHIPPING NAME UN NUMBER RADIONUCLIDE	CLASS OR DIVISION	EITHER CHEMICAL FORM PLUS GAS/ LIQUID/SOLID OR SPECIAL FORM, OR SPECIAL ENCAPSULATION	NUMBER OF CURIES OR MILLI- CURIES	I WHITE OR II -- YELLOW OR III -- YELLOW LABEL	FOR YELLOW LABEL CATEGORIES ONLY	INDUSTRIAL OR TYPE OR TYPE
RADIOACTIVE MATERIAL N.O.S. UN 2982 RQ SR-90	7	Solid	1000mCi	Yellow II	0.3	A

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

## ADDITIONAL INFORMATION REQUIRED FOR FISSILE MATERIALS ONLY

EXEMPTED FROM THE ADDITIONAL REQUIREMENTS FOR FISSILE MATERIALS	NOT EXEMPTED
NAMES, PLUS QUANTITY IN GRAMS, OR CONCENTRATION OR ENRICHMENT IN U235	FISSILE CLASS I <input type="checkbox"/>
	FISSILE CLASS II <input type="checkbox"/>
	FISSILE CLASS III <input type="checkbox"/>

Additional certificates obtained by the shipper when necessary

Special Form Encapsulation Certificate(s) ☐Certificate(s) for Large Radioactive Source ☐Type 'B' Packaging Certificate(s) ☐Government Approvals/Permits ☐Certificate(s) for Fissile Material ☐

REMARKS:

Shipper:

Radiation Technology, Inc.

P.O. Box 27637

Austin, Texas 78755

Telephone: (512) 346-7608

Fax: (512) 795-8718

Emergency Telephone (512) 345-0555

Authorized Signature

Date

## SOURCE DISPOSITION FORM

DATE 5/30/96  
MANUFACTURER IN  
MODEL NO. DH-3 SERIAL NO. 5-6  
ISOTOPE SR-90 ACTIVITY 1000 mCi  
SOURCE SERIAL NUMBER 5-863  
CUSTOMER Cliffs Mining Company  
LOCATION Hibbing, MN  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST 20.0027 uCi  
ASSAY DATE 7-69

\*\*\*\*\*  
SOURCE DISPOSITION FORM

DATE 5/30/96  
MANUFACTURER Dhmart  
MODEL NO. HM-8 SERIAL NO. 60744  
ISOTOPE Cs-137 ACTIVITY 150 mCi  
SOURCE SERIAL NUMBER \_\_\_\_\_  
CUSTOMER Cliffs Mining Company  
LOCATION Hibbing, MN  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST 20.0032 uCi  
ASSAY DATE 8-69

\*\*\*\*\*  
SOURCE DISPOSITION FORM

DATE \_\_\_\_\_  
MANUFACTURER \_\_\_\_\_  
MODEL NO. \_\_\_\_\_ SERIAL NO. \_\_\_\_\_  
ISOTOPE \_\_\_\_\_ ACTIVITY \_\_\_\_\_  
SOURCE SERIAL NUMBER \_\_\_\_\_  
CUSTOMER \_\_\_\_\_  
LOCATION \_\_\_\_\_  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST \_\_\_\_\_  
ASSAY DATE \_\_\_\_\_

## SOURCE DISPOSITION FORM

DATE 5/30/96  
MANUFACTURER IN  
MODEL NO. DH-3 SERIAL NO. 5-6  
ISOTOPE SR-90 ACTIVITY 1000 mCi  
SOURCE SERIAL NUMBER 5-863  
CUSTOMER Cliffs Mining Company  
LOCATION Hibbing, MN  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST 40.8027 uCi  
ASSAY DATE 7-69

\*\*\*\*\*  
SOURCE DISPOSITION FORM

DATE 5/30/96  
MANUFACTURER Ohmarte  
MODEL NO. HM-8 SERIAL NO. 60774  
ISOTOPE Cs-137 ACTIVITY 150 mCi  
SOURCE SERIAL NUMBER \_\_\_\_\_  
CUSTOMER Cliffs Mining Company  
LOCATION Hibbing, MN  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST 40.0032 uCi  
ASSAY DATE 8-69

\*\*\*\*\*  
SOURCE DISPOSITION FORM

DATE \_\_\_\_\_  
MANUFACTURER \_\_\_\_\_  
MODEL NO. \_\_\_\_\_ SERIAL NO. \_\_\_\_\_  
ISOTOPE \_\_\_\_\_ ACTIVITY \_\_\_\_\_  
SOURCE SERIAL NUMBER \_\_\_\_\_  
CUSTOMER \_\_\_\_\_  
LOCATION \_\_\_\_\_  
COMMENTS \_\_\_\_\_

UNLOADED BY \_\_\_\_\_  
RECORD BY \_\_\_\_\_  
DISPOSED \_\_\_\_\_  
RECYCLED \_\_\_\_\_  
FIG NO. \_\_\_\_\_  
LEAK TEST \_\_\_\_\_  
ASSAY DATE \_\_\_\_\_

## LEAK TEST CERTIFICATE

Company Cliffs Mining CompanyDevice Manufacturer IN  
Device Model No. DH-3  
Device Serial No. S-6  
Source Serial No. S863  
Isotope SR-90 Activity 1Ci

## Measuring Instrument

Model TN 2652  
Serial RT 110  
Cal. Date 3/25/95Shutter Operation OK ☒ N/ALeak Test Type RT-001  
☒ Negative Positive 0.0027uCiBackground 0.02 mR/hLicense No. LO 4633W. Hendrich 5/30/96  
Signature Date  
Radiation Technology, Inc.  
P. O. Box 27637  
Austin, TX 78755

## LEAK TEST CERTIFICATE

Company Cliffs Mining CompanyDevice Manufacturer Ohmavt  
Device Model No. HM-8  
Device Serial No. 60744  
Source Serial No.   
Isotope Co-137 Activity 150mCi

## Measuring Instrument

Model TN 2652  
Serial RT 110  
Cal. Date 3/25/95Shutter Operation OK ☒ N/ALeak Test Type RT-001  
☒ Negative Positive 0.0052uCiBackground 0.02 mR/hLicense No. LO 4633W. Hendrich 5/30/96  
Signature Date  
Radiation Technology, Inc.  
P. O. Box 27637  
Austin, TX 78755

## LEAK TEST CERTIFICATE

Company Cliffs Mining Company

Device Manufacturer IN  
Device Model No. DH-3  
Device Serial No. S-6  
Source Serial No. S863  
Isotope SR-90 Activity 1Ci

Measuring Instrument  
Model TN 2652  
Serial RT 110  
Cal Date 3/25/95

Shutter Operation OK ☒ N/A

Leak Test Type RT-001  
☒ Negative Positive 0.0027uCi

Background 0.02 mR/h

License No. LO 4633

Signature W. Hendrich Date 5/30/96  
Radiation Technology, Inc.  
P. O. Box 27637  
Austin, TX 78755

## LEAK TEST CERTIFICATE

Company Cliffs Mining Company

Device Manufacturer Ohmavt  
Device Model No. HM-8  
Device Serial No. 60744  
Source Serial No.   
Isotope Co-157 Activity 150mCi

Measuring Instrument  
Model TN 2652  
Serial RT 110  
Cal Date 3/25/95

Shutter Operation OK ☒ N/A

Leak Test Type RT-001  
☒ Negative Positive 0.0027uCi

Background 0.02 mR/h

License No. LO 4633

Signature W. Hendrich Date 5/30/96  
Radiation Technology, Inc.  
P. O. Box 27637  
Austin, TX 78755





UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION III  
801 WARRENVILLE ROAD  
LISLE, ILLINOIS 60532-4351

October 22, 1996

Gary A. Maki  
Radiation Safety Officer  
Cliffs Mining Services Company  
P. O. Box 278  
Hibbing, MN 55746

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE  
(Letter Dated 10/09/96)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

☐ New License                      ☒ Amendment                      ☐ Renewal  
☐ Termination                      ☐ Auth User (Amendment not required)  
☐ Other \_\_\_\_\_

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is routine (see 1-3 below, as applicable).

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 301945  
License No. 22-13873-01