Inst. 23727

NRC FORM 313 (1-84) 10 CFR 30, 32, 33, 34, 35 and 40

APPLICATION FOR MATERIAL LICENSE

U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB 3180-0120 Expires: 5-31-87

030-30701

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

PEDEFIAL AGENCIES FILE APPLICATIONS WITH:

U.S. NUCLEAR REGULATORY COMMISSION DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS WASHINGTON, DC 20666

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUBETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

U.S. NLICLEAR REGULATORY COMMISSION, REGION I NUCLEAR MATERIAL SECTION 8 631 PARK AVENUE KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAHOLINA, PUERTO RICO, SOUTI: CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IN MATERIA', RADIATION PROTECTION SECTION 101 MARIETTA STREET, SUITE 2900 ATLANTA, GA 30325 IF YOU ARE LOCATED IN:

ILLINDIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III MATERIALS LICENSING SECTION 799 ROOSEVELT ROAD GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, CKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV MATERIAL RADIATION PROTECTION SECTION 611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TX 78011

ALASKA, ARIZONA, CALIFORNIA, HAMAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V MATERIAL RADIATION PROTECTION SECTION 1450 MARIA LANE, SUITE 210 WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLFAR RIN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.	REGULATORY COMM: SSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL		
1. THIS IS AN APPLICATION FOR (Check appropriate Item)	2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip Code)		
X A. NEW LICENSE	Kansas City Testing Laboratory		
8. AMENDMENT TO LICENSE NUMBER	2012 W. 104th		
C. RENEWAL OF LICENSE NUMBER	P.O. Box 6323		
	Shawnee Mission, KS 66206		
3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.			
2012 W. 104th St., Shawnee Mission, KS 6620 9906-C E. 43rd St. South, Tulsa, OK 74146 Plus at temporary jobsites throughout the Un jurisdiction			
4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION	TELEPHONE NUMBER		
Andrew B. Wilson Radiation Safety Officer	(913) 648-2303		
SUBMIT ITEMS 5 THROUGH 11 ON 8% x 11" PAPER, THE TYPE AND SCOPE OF INFORMATIO	N TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.		
RADIOACTIVE MATERIAL Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time.	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.		
7. INDIVIDUALISI RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.	8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.		
9. FACILITIES AND EQUII REG4 LIC30 15-23727-01 PDR	10. RADIATION SAFETY PROGRAM.		
11. WASTE MANAGEMENT.	12. LICENSEE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY AMOUNT ENCLOSED \$ 230.00		
13 CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT BINDING UPON THE APPLICANT THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTISE TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CF TO ANY DEPART MENT OF AGENCY OF THE UNITED STATES ASTO ANY MATTER WITH	F THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS \$ 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN,		
SIGNATURE - CERTIFYING OFFICER TYPED/PRINTED NAME	TITLE DATE		
0			
Middlew B. Wilson Andrew B. Wilson	Radiation Safety Officer 7/21/88		
14. VOLUNTARY 14. VOLUNTARY 15. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors) 15. NUMBER OF EMPLOYEES (Total for entire facility excluding outside contractors) 15. NUMBER OF BEDS 15. NUMBER OF BED	d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION (Dallar and/or staff Yours) ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? (NRC regulations permit it to protect confidencial commercial or financial proprietary—information furnished to the agency in confidence) YES X NO		
FOR NRC	USE ONLY		
APP JULY 1 3P AMOUNT RECEIVED CHECK NUMBER	DATE 1		
\$230 39388 Recuir	17/25/88 7/26/88		

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

- 1. AUTHORITY: Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).
- PRINCIPAL PURPOSE(S): The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR
 Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of
 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment
 thereof.
- 3. ROUTINE USES: The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information incidents a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.
- 4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVID-ING INFORMATION: Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.
- 5. SYSTEM MANAGER(S) AND ADDRESS: U.S. Nuclear Regulatory Commission

Director, Division of Fuel Cycle and Material Safety Office of Nuclear Material Safety and Safeguards Washington, D.C. 20555

APPLICATION FOR MATERIAL LICENSE

ITEM 5 - RADIOACTIVE MATERIAL

RA	a. DIO ISOTOPE	b. FORM	C. TROXLER DRAWING NO.	d. MAX. AMOUNT
Α.	RADIUM 226/ BERYLLIUM		A-0100280	NO SINGLE SOURCE TO EXCEED 3.0
	DERTHETON	FORM		MILLIGRAMS
В.	CESIUM 137/ AMERICIUM 241		A-100281	NO SINGLE SOURCE TO EXCEED 10 MILLICURIES OF CESIUM 137, AND 50 MILLICURIES OF AMERICIUM 241
c.	CESIUM 137	SPECIAL	A-102112	NO SINGLE SOURCE TO EXCEED 10 MILLICURIES
D.	AMERICIUM 241/ BERYLLIUM	SPECIAL	A-102451	NO SINGLE SOURCE TO EXCEED 50 MILLICURIES

ITEM 6 - MATERIAL USE

- A. FOR USE IN A TROXLER MODEL 2401 PORTABLE MEASURING GAUGE
- B. FOR USE IN A TROXLER MODEL 2401 PORTABLE MEASURING GAUGE
- C. FOR USE IN A TROXLER MODEL 3411-B PORTABLE MEASURING GAUGE
- D. FOR USE IN A TROXLER MODEL 3411-B PORTABLE MEASURING GAUGE

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ITEM 7 - RADIATION SAFETY OFFICER

ANDREW B. WILSON HAS BEEN DESIGNATED AS THE COMPANY RADIATION SAFETY OFFICER. COPIES OF HIS GAUGE MANUFACTURER'S NUCLEAR GAUGE TRAINING CERTIFICATES ARE ATTACHED FOR YOUR REVIEW. THE DUTIES OF THE RADIATION SAFETY OFFICER ARE SPECIFIED IN ITEM 10.

ITEM 8 - TRAINING OF GAUGE USERS

EACH INDIVIDUAL THAT OPERATES A NUCLEAR GAUGE WILL HAVE COMPLETED A UNITED STATES NUCLEAR REGULATORY COMMISSION APPROVED NUCLEAR GAUGE TRAINING COURSE AS PROVIDED BY THE FOLLOWING COMPANIES:

TROXLER ELECTRONICS, INC.

HUMBOLDT SCIENTIFIC, INC.

CAMPBELL PACIFIC, INC.

NUCLEAR MEASUREMENT SERVICE INC.

EACH INDIVIDUAL WILL READ AND UNDERSTAND OUR RADIATION SAFETY PRO-CEDURES AND BE APPROVED BY OUR RADIATION SAFETY OFFICER. COPIES OF EACH INDIVIDUAL'S TRAINING CERTIFICATES WILL BE MAINTAINED ON FILE.

ITEM 9 - GAUGE STORAGE AREAS

I HAVE ATTACHED SKETCHES OF THE AREAS, WHERE THE GAUGES WILL BE STORED WHEN NOT IN USE.

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ITEM 10 - RADIATION SAFETY PROGRAM

- 1. RADIATION SAFETY OFFICER
 - A. ANDREW B. WILSON HAS BEEN DESIGNATED AS THE COMPANY RADIA-TION SAFETY OFFICER AND WILL ASSUME THE DUTIES AND RESPON-SIBILITIES THAT INCLUDE THE FOLLOWING:
 - 1. TO ENSURE THAT ALL TERMS AND CONDITIONS OF THE LICENSE ARE BEING MET AND THAT THE INFORMATION CONTAINED IN THE LICENSE IS UP-TO-DATE.
 - 2. TO ENSURE THAT THE EQUIPMENT HAS BEEN LEAK TESTED IN THE REQUIRED TIMELY MANNER AND THAT THE LEAK TEST IS PERFORMED IN THE MANNER PRESCRIBED BY THE EQUIPMENT MANUFACTURER.
 - 3. TO ENSURE THAT THE USE OF THE EQUIPMENT IS ONLY BY INDIVIDUALS THAT HAVE BEEN AUTHORIZED BY THE RADIATION SAFETY OFFICER AND THAT ALL USERS WEAR PERSONNEL MONITORING EQUIPMENT WHEN UTILIZING THE EQUIPMENT.
 - 4. TO MAINTAIN THE RECORDS AS REQUIRED BY THE LICENSE AND THE REGULATIONS. THESE RECORDS INCLUDE PERSONNEL EXPOSURE RECORDS, WHICH ARE MONITORED MONTHLY, LEAK TEST RECORDS AND TRAINING CERTIFICATES FOR ALL USERS.
 - 5. TO ENSURE THAT THE EQUIPMENT IS PROPERLY SECURED AGAINST UNAUTHORIZED REMOVAL AT ALL TIMES WHEN IT IS NOT IN USE.

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- 6. TO SERVE AS A POINT OF CONTACT AND GIVE ASSISTANCE IN CASE OF EMERGENCY SUCH AS EQUIPMENT DAMAGED IN THE FIELD OR THEFT AND TO NOTIFY THE PROPER AUTHORI-TIES IN CASE OF EMERGENCY.
- 7. TO ENSURE THAT ALL USERS HAVE READ AND UNDERSTAND THE RADIATION SAFETY OPERATING AND EMERGENCY PROCEDURES.

2. OPERATING PROCEDURES

A. TRANSPORTATION OF EQUIPMENT

- 1. ALL POSSIBLE MEANS SHALL BE PROVIDED TO ENSURE THAT
 THE EQUIPMENT IS FULLY SECURED IN THE TRANSPORTING
 VEHICLE AND THE EQUIPMENT IS AWAY FROM THE PASSENGER
 COMPARTMENT. WHEN TRANSPORTING IN AN ENCLOSED
 VEHICLE (CAR OR VAN), THE VEHICLE WILL BE LOCKED.
 WHEN TRANSPORTING IN AN OPEN BED VEHICLE, THE GAUGE
 IS SECURELY FASTENED AND LOCKED TO THE TRUCK BED.
- 2. THE GAUGE WILL BE TRANSPORTED IN THE TROXLER TRANS-PORTATION CASE IN COMPLIANCE WITH THE U.S. DEPART-MENT OF TRANSPORTATION REGULATIONS.
- 3. AT ALL TIMES DURING TRANSPORT, THE OPERATOR WILL HAVE A PROPERLY COMPLETED BILL OF LADING FOR EACH GAUGE.

B. UTILIZATION PROCEDURES

1. WHEN THE GAUGE IS IN THE FIELD, THE AUTHORIZED USER

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MAINTAINS CONTROL OVER THE GAUGE AT ALL TIMES. THE GAUGE IS NEVER LEFT UNATTENDED.

- 2. WHEN NOT MAKING MEASUREMENTS, THE GAUGE IS PLACED IN THE TRANSPORTATION CASE AND RETURNED TO ITS PERMANENT STORAGE AREA AS SOON AS POSSIBLE. THE GAUGE IS USED FOR ITS INTENDED PURPOSE ONLY. BY DOING SO, WE MAINTAIN ANY RADIATION EXPOSURE TO AS LOW AS REASONABLE ATTAINABLE.
- NEL MONITORING FILM BADGE THAT HAS BEEN ASSIGNED TO THEM.
 WHEN NOT USING THE EQUIPMENT, THE MONITORING DEVICE IS
 TO BE STORED IN THE RADIATION FREE AREA THAT HAS BEEN
 DESIGNATED IN THE OFFICE. BADGES WILL BE ANALIZED ON A
 MONTHLY BASIS.

C. MAINTENANCE AND LEAK TEST PROCEDURES

- PERIODIC MAINTENANCE WILL INCLUDE CLEANING THE GAUGE.
 DURING ANY MAINTENANCE, THE RADIATION SAFETY OFFICER
 WEARS THE PERSONNEL MONITORING DEVICE.
- 2. ANY MAINTENANCE WILL BE PERFORMED BY THE RADIATION SAFETY OFFICER WHICH REQUIRES TEMPORARY REMOVAL OF THE SOURCE FROM THE GAUGE. THIS PROCEDURE WILL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL REGULATIONS, IN A DESIGNATED AREA, WITH THE REQUIRED WARNING SIGNS, AND EQUIPMENT.
- 3. THE LEAK TEST IS PERFORMED USING THE TROXLER MODEL

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3800 LEAK TEST KIT. THE LEAK TEST IS PERFORMED USING THE MANUFACTURER'S INSTRUCTIONS. AGAIN, THE PERSONNEL MONITORING DEVICE IS EMPLOYED. GAUGES ARE LEAK TESTED AT INTERVALS NOT TO EXCEED SIX (6) MONTHS.

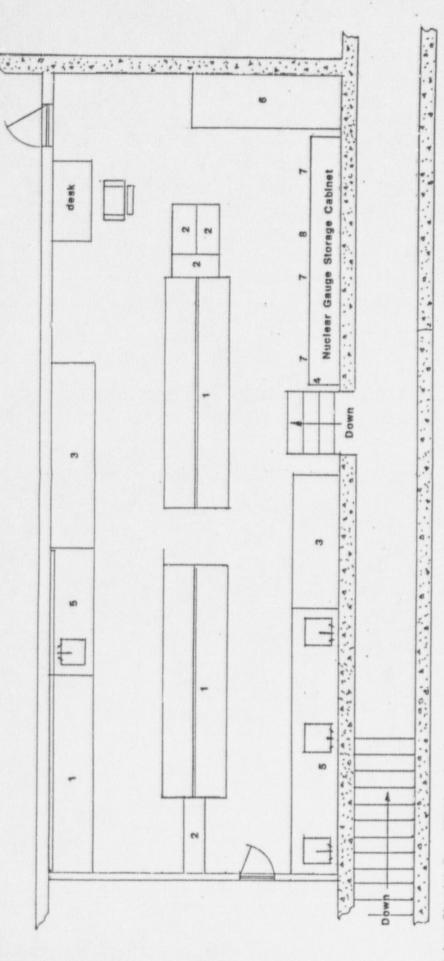
3. EMERGENCY PROCEDURES

- A. IN THE EVENT OF PHYSICAL DAMAGE TO A GAUGE, THE FOLLOWING WILL BE FURFORMED:
 - 1. IMMEDIATELY CORDON OFF AN AREA AROUND THE GAUGE. AN AREA RADIUS OF 15 FEET WILL BE SUFFICIENT.
 - 2. IF A VEHICLE IS INVOLVED, IT MUST BE STOPPED UNTIL THE EXTENT OF CONTAMINATION, IF ANY, CAN BE ESTABLISHED.
 - 3. A VISUAL INSPECTION OF THE GAUGE IS TO BE MADE TO DETERMINE IF THE SOURCE HOUSING AND/OR SHIELDING HAS BEEN DAMAGED.
 - 4. AT THE EARLIEST POSSIBLE TIME, WHEN THE SITUATION IS UNDER CONTROL, PERSONNEL MUST CONTACT ANDREW B. WILSON AT (913) 648-2303 TO DESCRIBE THE PRESENT CONDITIONS AND FOLLOW THE INSTRUCTIONS OF THE RADIATION SAFETY OFFICER.
- B. IN THE EVEN THE GAUGE IS LOST OR STOLEN, THE RADIATION SAFETY OFFICER AS LISTED ABOVE IN ITEM 3.A.4 IS NOTIFIED IMMEDIATELY.

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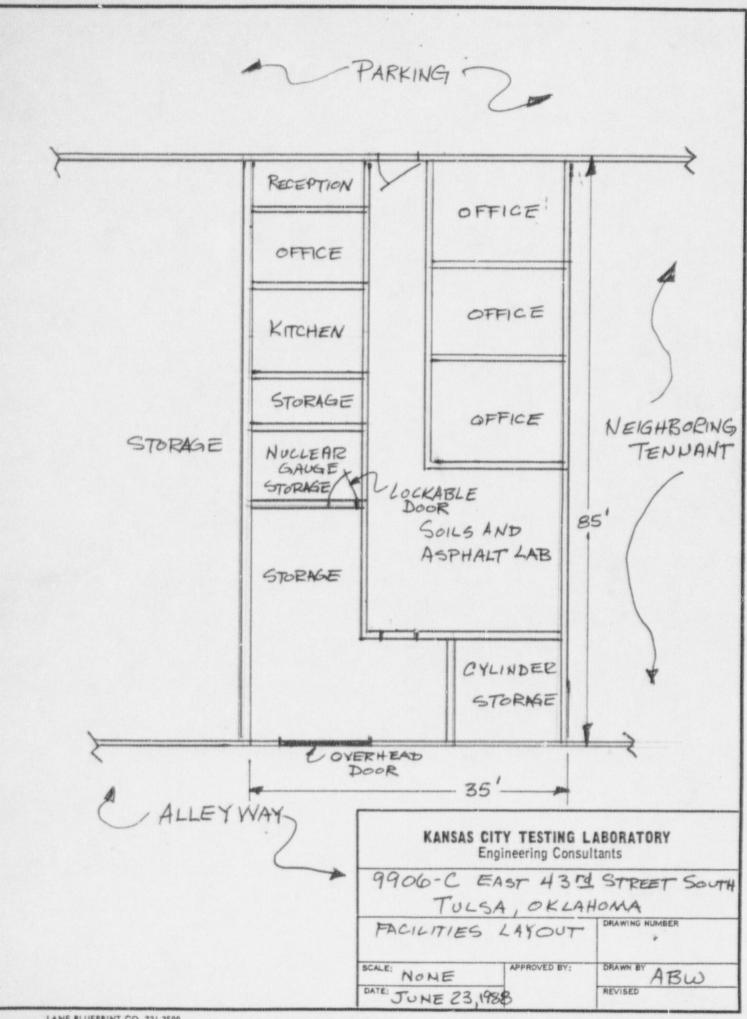
ITEM 11 - WASTE MANAGEMENT

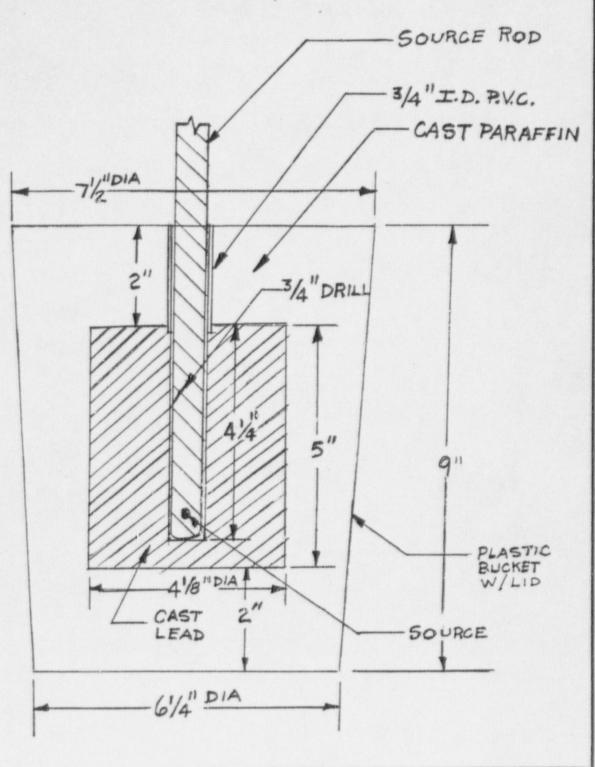
DISPOSAL OF THE GAUGE IS BY TRANSFER TO ANOTHER FACILITY SPECIFI-CALLY LICENSED FOR THE MATERIAL; OR RETURNED TO THE GAUGE MANUFACTURER. RECORDS OF TRANSFER ARE MAINTAINED ON FILE.



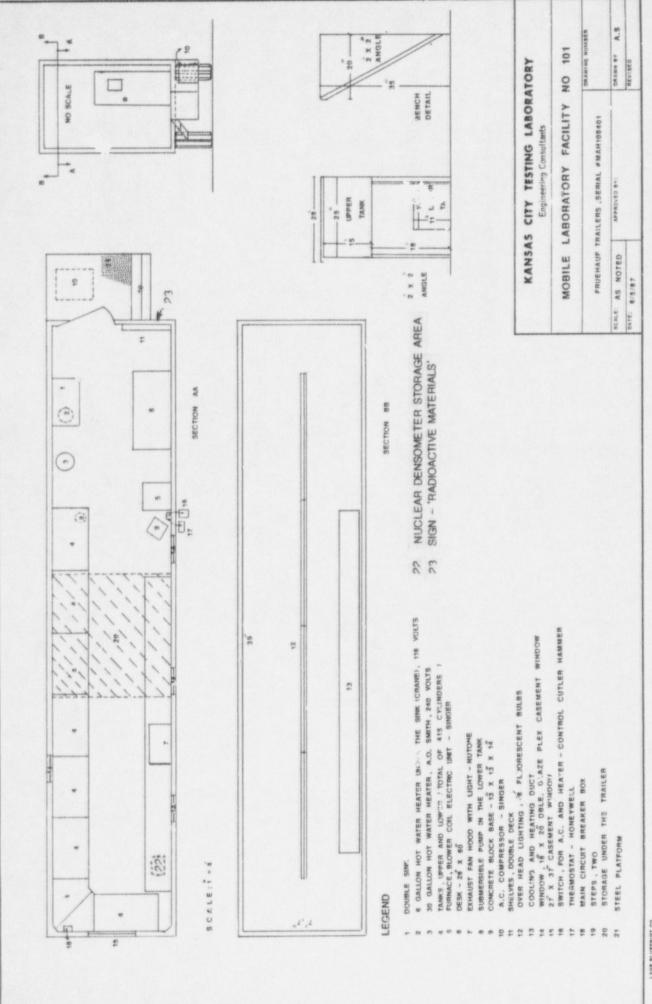
- 1. Low Chemiab Type Workbench 2. Metal Storage Cabinet
 - - 3. Fume Hood
- 4, 8"X16" "Caution Radiation Area" Sign
- 5. Sinks 6. Solitesting Workberch
- 7. 5"X6" "Caution Radioactive Materials" Decai
 - Kansas "Notice to Employees"

ATORY	RAGE	DELANTING INTRACER	BRADE OF A BW
KANSAS CITY TESTING LABORATORY Engineering Consultants	LAYOUT OF NUCLEAR SAUGE STORAGE AND MAINTENANCE AREA	2012 W. 104th, Leawood, Kansas	50.4E: 47 =4"-0" APPROVED BY:





KANSAS CITY TESTING LABORATORY Engineering Consultants SOURCE CONTAINMENT PIG TEMPORARY MAINT. STORAGE NUCLEAR SOIL DENSITY - DRAWING NUMBER MOISTURE GAUGES SCALE: HALF SIZE DATE: 11 FEB 88





B. WILSON ANDREW

10

KANSAS CITY TESTING LAB.

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC. NUCLEAR TESTING EQUIPMENT TRAINING COURSE FOR THE USE OF

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

Radiological Safety

- Principles and practices of radiation protection.
- Leak testing procedures.
- Mathematics and calculations basic to the use and measurement radioactivity. es is
 - Biological effects of radiation.
- Radioactivity measurement standardization and monitoring techniques and
 - Accident and incident procedures. instruments.
- Procedures for nuclear gauge storage and transportation.
 - General safety precautions,

Gauge Operation

Field application Gauge calibration

- Operating procedures Instrument theory
- dintenance 300

4/17/82

TROXLER W.F.

PRESIDENT

DATE

TROXLER ELECTRONIC LABORATORIES, INC

HEREBY CERTIFIES THAT

ANDREW WILSON

TESTING LABORATORIES KANSAS CITY

HAS SUCCESSFULLY COMPLETED THE TROXIER ELECTRONIC LABORATORIES, INC. TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT,

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

Radiological Safety

- Radioactivity measurement standardization Procedures for nuclear gauge storage Accident and incident procedures. and monitoring techniques and General safety precautions. and transportation. instruments. Principles and practices of radiation Mathematics and calculations basic to radioactivity. Biological effects of radiation. the use and measurement of Leak testing procedures. protection.
- Gauge Operation
- Field application Gauge calibration

Operating procedures Instrument theory

aintenance

16751

W. F. TROXLER

Safe handling of gages containing sealed radioactive sources. RADIOLOGICAL SAFETY AND GAGE USE TRAINING COURSE HUMBOLDT SCIENTIFIC, INC. TRAINING COURSE CERTIFICATION 4. Mathematics and calculations basic to radiological safety INSTRUCTOR 6. Actual gage use in testing of materials has successfully completed a This certifies that Andrew B. Wilson . Fundamentals, types, and basic units of radiation and radiation safety. DATE OF TRAINING November 18. covering the following subjects: