



# GEOLABS, INC.

Geotechnical Engineering and Drilling Services

May 7, 2013



Nuclear Materials Licensing Section  
U.S. Nuclear Regulatory Commission, Region IV  
612 East Lamar Boulevard, Suite 400  
Arlington, Texas 76011-4125

Re: Amendment to Radioactive Material License No. 53-23231-01

I would like to request an amendment to the above referenced license to authorize Geolabs, Inc. to add three additional InstroTek, Inc. Model 3500 Xplorer nuclear moisture/density gauges to our current inventory and one Troxler Model 3400 Series portable gauge.

I would also like to add a storage facility to our current locations at:  
100 Rapozo Crossing Road Lihue, Hawaii 96766 (island of Kauai)

If you need additional information, please contact me or email me at [lab@geolabs.net](mailto:lab@geolabs.net)

Sincerely,

Steven Asato,  
Radiation Safety Officer

Enclosure: Copy of Materials License – Amendment No. 15

**PUBLIC**

- Immediate Release  
 Normal Release

**NON-PUBLIC**

- Highly Sensitive Security Related  
 Moderately Sensitive Internal  
 Other

Reviewer: JAC

Date: 6/4/13

**MATERIALS LICENSE**

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.

<p>Licensee</p> <p>1. Geolabs, Inc.</p> <p>2. 2006 Kalihi Street Honolulu, Hawaii 96819</p>	<p>In accordance with letter dated October 7, 2011</p> <p>3. License number 53-23231-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date August 31, 2020</p> <p>5. Docket No. 030-20393 Reference No.</p>
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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 sources (AEA Technology/QSA, Inc., Model No. CDCW556; or Isotope Products Laboratories Model No. HEG-137)	A. 9 millicuries per source and 135 millicuries total
B. Americium-241:Be	B. Sealed neutron sources (AEA Technology/QSA, Inc., Model No. AMNV.997; or Isotope Products Laboratories Model Nos. AM1.NO2, 3021 or 3027)	B. 44 millicuries per source and 660 millicuries total
C. Cesium-137	C. Sealed sources (AEA Technology/QSA, Inc., Model No. CDC.805; or Isotope Products Laboratories Model No. HEG-137)	C. 11 millicuries per source and 44 millicuries total
D. Americium-241:Be	D. Sealed neutron sources (AEA Technology/QSA, Inc., Model No. AMNV.997; or Isotope Products Laboratories Model Nos. AM1.NO2)	D. 44 millicuries per source and 176 millicuries total



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
53-23231-01

Docket or Reference Number  
030-20393

Amendment No. 15

9. Authorized use:

- A. and B. To be used in Troxler Electronic Laboratories, Model 3400 Series portable gauging devices for measuring physical properties of materials.
- C. and D. To be used in InstroTek Inc., Model 3500 Xplorer portable gauging devices for measuring physical properties of materials.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at:

- A. 2006 Kalihi Street, Honolulu, Hawaii (island of Oahu),  
 B. 74-5039 B Queen Kaahumanu Highway, Kona, Hawaii (island of Hawaii),  
 C. 780 Alua Street, Wailuku, Maui, Hawaii (island of Maui), and  
 D. Temporary job sites anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

11. Licensed materials may be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated April 16, 2010.
12. The Radiation Safety Officer (RSO) for this license is Steven K. Asato.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested and the test results received.
- C. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for use or transferred to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.



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- D. The leak test shall be capable of detecting the presence of 0.005 microcuries (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcuries (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(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 IV, 612 East Lamar Blvd., Suite 400, Arlington, Texas 76011-4125, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.
- E. Tests for leakage and/or contamination shall be performed by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples but not perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
- F. Records of leak tests results shall be kept in units of microcuries and shall be maintained for 3 years.
14. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee except as specifically authorized.
15. The licensee shall conduct a physical inventory every 6 months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
16. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Certificates of Registration issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State.
17. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage or when not under the direct surveillance of an authorized user.
18. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
19. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."



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20. A. If the licensee uses unshielded sealed sources extended more than 3 feet below the surface, the licensee shall use surface casing that extends from the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface. If it is not feasible to extend the casing 12 inches above the surface, the licensee shall implement procedures to ensure that the cased hole is free of obstruction before making measurements.
- B. If a sealed source or a probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U.S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent. Notification and reporting requirements should be made to the NRC Emergency Operations Center at 301-816-5100.
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 April 16, 2010 (ML10-540241)
- B. Letter dated April 19, 2010 (ML10-540241)



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date November 21, 2011

By

  
Roberto J. Torres, Senior Health Physicist  
Nuclear Materials Safety Branch B  
Region IV  
Arlington, Texas 76011-4125



**GEOLABS, INC.**

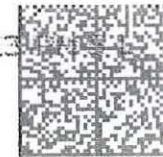
*Geotechnical Engineering and Drilling Services*

2006 Kalihi Street • Honolulu, Hawaii 96819

580870

HONOLULU HI 967

07 MAY 2013

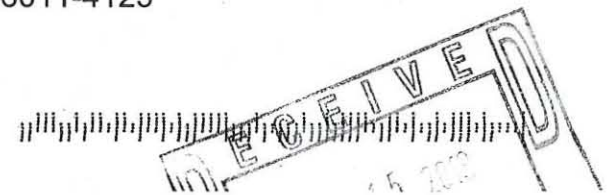


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Nuclear Materials Licensing Section  
U.S. Nuclear Regulatory Commission, Region  
IV  
612 East Lamar Boulevard, Suite 400  
Arlington, Texas 76011-4125

76011412500





DATE  
06/07/2013

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE

GEOLABS, Inc.  
ATTN: Steven Asato  
Radiation Safety Officer  
2006 Kalihi Street  
Honolulu, HI 96819

LICENSE NUMBER

53-23231-01

MAIL CONTROL NUMBER

580870

LICENSING AND/OR TECHNICAL REVIEWER

cmurnahan

This is to acknowledge the receipt of your:

LETTER and/or  APPLICATION      DATED: 05/07/2013

The initial processing, which included an administrative review, has been performed.

AMENDMENT    TERMINATION    NEW LICENSE    RENEWAL

- There were no administrative omissions identified during our initial review.
- This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.
- Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER**. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV  
U. S. Nuclear Regulatory Commission  
DNMS/NMSB - B  
1600 E. Lamar Blvd.  
Arlington, TX 76011-4511  
(817) 200-1103 or (817) 200-1140



BETWEEN:

Accounts Receivable/Payable  
and  
Regional Licensing Branches

[ FOR ARPB USE ]  
INFORMATION FROM WBL

Program Code: 03121  
Status Code: Pending Amendment  
Fee Category: 3P  
Exp. Date: 11/30/2010  
Fee Comments:  
Decom Fin Assur Req: N

### License Fee Worksheet - License Fee Transmittal

#### A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: GEOLABS, INC.  
Received Date: 05/15/2013  
Docket Number: 3020393  
Mail Control Number: 580870  
License Number: 53-23231-01  
Action Type: Amendment

2. FEE ATTACHED

Amount: \_\_\_\_\_

Check No.: \_\_\_\_\_

3. COMMENTS

Signed:

*Celeste Murnahan*

Date:

5-21-13

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

1. Fee Category and Amount: \_\_\_\_\_

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

Amendment: \_\_\_\_\_

Renewal: \_\_\_\_\_

License: \_\_\_\_\_

3. OTHER \_\_\_\_\_

\_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_