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June 15, 2010

DNMS

Lizette Roldan, Ph.D.
Health Physicist
United States Nuclear Regulatory Commission, Region IV
612 East Lamar Blvd, Suite 400
Arlington, Texas 76011-4125
Ph: (817)-276-6596

Subject: Termination of License-Control Number 472652

Dear Ms. Roldan,

We are requesting to terminate the Nuclear Regulator Commission License 25-29355-01. The radioactive materials in question have been transferred to our Utah Office. Qal-Tec Associates LLC took temporary custody of the Nuclear Density Gauge in December of 2009. They performed all of the necessary calibrations and leak tests at that time. The gauge was then transferred to the PEC Utah office, where Derek Anderson, PEC Utah's RSO) signed for the gauge.

You had requested information concerning the Project Engineering Consultants, Ltd Utah license. I have attached a copy of their license for your review.

The proof of the transport and receipt of the gauge to the Utah licensee are also included as well as the most recent calibrations and leak test results for the Nuclear Density Gauge pertaining license 25-29355-01.

Thank you;

Project Engineering Consultants, Ltd.

Andrew Kimmel, EIT. Radiation Safety Officer

Fred J. Ostler, P.E

Northwest Regional Manager

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF RADIATION CONTROL RADIOACTIVE MATERIAL LICENSE

		LICENSEE)	3		License Number UT 1800498
1.	Name	Project Engineering	Con	sultants))**			**************************************
2.	Address	8819 South Redwood West Jordan, Utah 84		· ·)))**			Expiration Date June 30, 2012 ***********************************
:	***	******	***	*******) ***			License Category - 3-1 ********
6.	Radioactiv	ve material (element number)	7.	Chemical and/or physical	for	m	8	Maximum quantity licensee may possess at any one time
Α.	Cesium-13	37	Α.	Sealed Source(s) registered pursuant to R313-22-210 equivalent U.S. Nuclear Regulatory Commission of Agreement State regulation	or a	ın	A	Not to exceed 333 megabecquerels (9 mCi) per source
3.	Americium	n-241	В.	Sealed Neutron Source(s) registered pursuant to R313-22-210 or an equiva U.S. Nuclear Regulatory Commission or Agreemen regulation			В	Not to exceed 1.63 gigabecquerels (44 mCi) per source
**	*****	*******	***	********	**	***	**:	*********

9. AUTHORIZED USE

A. & B. Sealed source(s) contained in compatible portable gauging devices (registered pursuant to R313-22-210 or an equivalent U.S. Nuclear Regulatory Commission or Agreement State regulation) for measuring properties of materials.

CONDITIONS

- 10. Licensed material shall be used only at 552 West 8360 South, West Jordan, Utah and at temporary jobsites of the licensee anywhere in the State of Utah where the Division maintains jurisdiction.
- 11. The licensee shall comply with the provisions of R313-18, "Notices, Instructions and Reports to Workers, by Licensees or Registrants--Inspections," and R313-15, "Standards for Protection Against Radiation."

UTAH DIVISION OF RADIATION CONTROL RADIOACTIVE MATERIAL LICENSE SUPPLEMENTARY SHEET

License # UT 1800498

- 12. Licensed material shall be used by, or under the supervision and in the physical presence of, the Radiation Safety Officer or individuals who have been trained in the licensee's standard operating and emergency procedures and have satisfactorily completed at least one of the following:
 - A. The device manufacturer's training course for safe use and handling of portable gauging devices containing licensed material; or
 - B. A portable gauge training program conducted in accordance with the provisions of a specific license issued by the Executive Secretary, an Agreement State or U.S. Nuclear Regulatory Commission.
- 13. The Radiation Safety Officer for the activities authorized by this license is Derek Anderson.
- 14. 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 the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by equivalent regulations of 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 the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by equivalent regulations of an Agreement State prior to the transfer, a sealed source received from another person shall not be put into use until tested.
 - 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 3 years without being tested for leakage and/or contamination.
 - D. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 μCi) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 μCi) or more of removable contamination, a report shall be filed with the Executive Secretary in accordance with R313-15-1208, and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Utah Radiation Control Rules. The report shall be filed within 5 days of the date the leak test result is known with the Division of Radiation Control, P.O. Box 144850, Salt Lake City, Utah 84114-4850. The report shall specify the source involved, the test results, and corrective action taken.
 - E. 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 Executive Secretary, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such services. Alternatively, tests for leakage and/or contamination, including sample collection and analysis, may be performed by other persons specifically licensed by the Executive Secretary, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform such services.

UTAH DIVISION OF RADIATION CONTROL RADIOACTIVE MATERIAL LICENSE SUPPLEMENTARY SHEET

License # UT 1800498

- F. Records of leak test results shall be kept in units of becquerels or microcuries and shall be maintained for inspection by representatives of the Executive Secretary.
- 15. 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 licensed by the Executive Secretary, an Agreement State, or the U.S. Nuclear Regulatory Commission to perform such service.
- 16. The licensee shall conduct a physical inventory every six months to account for all devices received and possessed under the license. The records of the inventories shall be maintained for three years from the date of the inventory for inspection by the Division, and shall include the quantities and kinds of radioactive material, manufacturer's name and model numbers, location of the devices, and the date of the inventory.
- 17. Each portable gauging device 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. A. The licensee shall perform any cleaning or routine maintenance of a portable gauging device in accordance with manufacturer's recommendations and instructions. Routine maintenance is maintenance that does not require the source or source rod to be detached from the gauge.
 - B. 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 by other persons specifically licensed by the Executive Secretary, an Agreement State, or the U.S. Nuclear Regulatory Commission to perform such services.
- 19. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of R313-19-100 "Transportation."
- 20. The licensee shall notify the Executive Secretary in writing when the licensee decides to permanently discontinue activities involving materials authorized under the license and shall report the disposition of licensed material to the Executive Secretary.
- 21. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in R313-22-35(4) for establishing decommissioning financial assurance.
- 22. Except as specifically provided otherwise by 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 Utah Radiation Control Rules shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the rules.

UTAH DIVISION OF RADIATION CONTROL RADIOACTIVE MATERIAL LICENSE SUPPLEMENTARY SHEET

License # <u>UT 1800498</u>

- A. Application dated August 15, 2006 [LA# 239-2006]
- B. Letter dated May 17, 2007 [LA# 239-2006]
- C. Facsimile transmittal dated May 17, 2007 (received May 21, 2007) [LA# 239-2006]
- D. Facsimile transmittal dated May 22, 2007 [LA# 239-2006]

UTAH RADIATION CONTROL BOARD

Date June 5, 2007

Dane L. Finerfrock, Executive Secretary

3998 Commerce Circle Idaho Falls, Idaho 83401 Ph: 208 523-5557

Fax: 208 524-8470



NUCLEAR DENSITY GAUGE SERVICE REQUEST

Please complete sections 1 - 4, sign and return this form with your Gauge.

		I: CUS	TOMER &	LICENSE	INFORM	AHUN			
Contact:	Jeremy Rob	bins Andr	en Kimme	<u>√</u> P.O. ‡	# if :required_				
Phone:	208-466-719	90		- Contract C	Fax:	208-466-	7168		
License #:				Expi	iration Date:				
Company Name:	Project Engi	neering Con	sultants, Ltd	<u>l.</u>	Bill To:		T-14		
Return Shipping	3818 E. Nev	vby St. Suite	101						
Address:		83687							
			2: GAUG	E INFORM	ATION				
Gauge Make, Model & Serial #:		1035		Current Leak	r Teet Data:				12/01/09
Services Needed:			Std. Calibrat		Clean Lube	LeakTes	st 🔲	Repair / Chec	
Please list repairs needed and / or operational problems in detail:			harright a scornin new the latterine access						
			3: AU	THORIZATI	ON				····
Temporary cust	ody of above liste	d Nuclear Densi		by granted to - Qal-7		LLC.	NRC	Liscense # 11-2	7610-01
Authorized By: Title:		The same of the sa	1 Rec 09	ReceivedBy: Date:	Out!	Ja-		ec 2009	
		4: R	ETURN S	HIPPING					
Prepaid & Bill	□ co	D	Custo	omers Account#					
Motor Frieght		F	edEx 🔲 1Da	ay 🔲 2Day	3Day			ther drop of	
			RET	URN RECE	IPT	<u> </u>	((all for	Intó
Received By:	C	ustody of above	listed Nuclear De	ensity Gauge is return Released By:	med to above	isted Custon	ner.		
or Carrier & PRO#	Lansy	toderce	<u>~</u>	Date:				-26-10	
			BILL	OF LADI	NG				
Carrier:	Qal-Tek Associa	ates			Destination: C	al-Tek Ass	ociates		البحصوص
	3998 Commerce				_	998 Comme			
	Idaho Falls, ID 8		N OF MATE	RIALS, PACK		laho Falls, I		(INC	
				PE A PACKAG					
	c	s-137 0.3 to	0.37 GBa (8	3 - 10 mCi) and	d Am-241:E	3e 1.48 G	Ba (40m)	Ci)	1
			E - YELLOV					/	ŀ
l				EX = 0.1 TO 0.	.5				ļ
			TYPE A PA						
L	<u> E</u>	mergency R	esponse T	ELEPHONE (2	208) 523-5	557 , (20	8) 749-24	114	

This is to certify that the above named materials are properly classified, described, packaged, marked and labled, and are in proper condition for transportation according to the applicable regulations of the U.S. DOT.

Certificate of Calibration

3998 Commerce Circle Idaho Falls, Idaho 83401 Ph: 888 523-5557 www.galtek.com



Customer: Project Engineering Consultants, Ltd.

Address: 3818 E. Newby St. Suite 101

Phone: 208-466-7190

Att.: Andrew Kimmel

City: Nampa

Calibration Location:

Idaho

State: ID

83687

Zip:

Serial Number: 1035

Mfg: Troxler

Model: 3450

Ref. #: S1835-09

Calibration Date: 19-Dec-2009

Calibration /Ver.

19-Dec-2010

Due Date:

3450 Thin Lift Mode Nuclear Density Gauge 3 Block Calibration

		As F	ound Rea		Received Condit	ion: In	In Tolerance		
	Wet Density	Magnesium	Error	Wet Density	Mag / Al	Error	Wet Density	Aluminum	Error
Thickness	PCF	Std. PCF	PCF	PCF	Std, PCF	PCF	PCF	Std, PCF	PCF
1	109.9	109.8	0.1332	136.9	136.2	0.6653	161.8	160.6	1.2102
2	110.9	109.8	1.1332	135.4	136.2	-0.835	161.4	160.6	0.8102
2.5	109.4	109.8	-0.367	135.2	136.2	-1.035	161.2	160.6	0.6102
3	109.8	109.8	0.0332	135.8	136.2	-0.435	161.3	160.6	0.7102
4	109.4	109.8	-0.367	135.6	136.2	-0.635	160.9	160.6	0.3102

As Left Readings Returned Condition: In Tolerance Wet Density Magnesium Error Aluminum Wet Density Mag / Al Error Wet Density Error **Thickness PCF** Std. PCF PCF **PCF** Std. PCF PCF PCF Std, PCF PCF 109.2 109.8 -0.567135.7 136.2 -0.535160.4 160.6 -0.19 2 110.3 109.8 0.5332 136.9 136.2 0.6653 161.5 0.9102 160.6 2.5 110.1 109.8 0.3332 137 136.2 0.7653 160.8 0.2102 160.6 3 110.6 109.8 0.8332 137.2 136.2 0.9652 1607 160.6 1446.4 4 110 109.8 0.2332 136.9 136.2 0.6653 160.8 160.6 0.2102

Out of tolerance readings are bold / italized.

As Found Tolerance = +/-2 PCF As Left Tolerance = +/-

PCF

Measurement Uncertainty,

137 lb/ft3

0.5 lb/ft3 0.1 lb/ft3

U = 2uC

169 lb/ft3

Calibration Proceedure: CP-PRO-601

1.32 lb/ft3

Gauge Calibration Information System 1 Counts

	System i Counts	System 2 Counts
Standard Count =	7344	2253
Mag Bock Counts =	19134	4345
Mag/Al Bock Counts =	16938	3190
Al Block Counts =	14164	2302

Gauge Coeficients

A1	-0.194117116	P1	0.880862
B1	-0.012489332	Q1	1.494503
C1	-3.373942774	R1	0.00799
A2	6.655009442	P2	1.1259721
B2	0.007062543	Q2	1.170781
C2	1.099187864	R2	0.003545

Calibration Standard Blocks used -

	SN.	Mfg.	Date	Den
Magnesium	30-MAG	Humboldt	3/28/06	111.1
Mag/Al	30-MAG/AL	Humboldt	3/28/06	137.75
Aluminum	10-AL	Humboldt	3/28/06	169.22
Poly	30-POLY	Humboldt	11/13/07	31,04

Service Technician:

Date of service:

12/19/09

Results relate only to item calibrated. Uncertainty of measurement was estimated at the 95% confidence level, (k=2). This Certificate of Calibration shall not be reproduced except in full, without the written approval of Qal-Tek Associates

meets or exceeds the requirements set forth in the following documents: ANSI / NGSL Z540-1 1994 and ISO / IEC 17025.

19-Dec-2009

Page 2 of 2

S/N 1035

Certificate of Calibration

3998 Commerce Circle Idaho Falis, Idaho 83401 Ph: 888 523-5557 www.qaltek.com



Customer: Project Engineering Consultants, Ltd.

Address: 3818 E. Newby St. Suite 101

Phone: 208-466-7190

19-Dec-09

Serial Number: 1035

Calibration

Att.: Andrew Kimmel

Calibration Location:

Idaho

City: Nampa

ID State:

83687 Zip:

19-Dec-10

Model: 3450 Mfg: Troxler Ref. #: S1835-09

Calibration /Ver. 3450 Soil Mode Nuclear Density Gauge 3 Block Calibration Due Date:

Date: As Found Readings Received Condition: In Tolerance Wet Density Wet Density Magnesium Error Mag / Al Error Wet Density Aluminum Error PCF Depth-Counts **PCF** Std. PCF **PCF** Counts PCF Std, PCF **PCF** Counts **PCF** Std, PCF BS 4387 109 109.8 -0.667 3210 133.4 134.2 -0.768 2308 163.7 163.1 0.5719 2 8110 110 109.8 0.0332 5460 133.5 134.2 -0.668 3478 162.9 -0.228 163.1 109 28156 19946 4 36797 109.8 -0.667 133.1 134.2 -1.069 162.5 163.1 -0.628 6 25837 110 109.8 -0.067 18198 133.2 134.2 -0.969 11624 162.7 163.1 -0.428 110 8 16412 109.8 0.1332 10585 133.7 134.2 -0.469 6233 162.7 163.1 -0.428 10 110 6009 -0.228 9923 109.8 -0.067 133.7 134.2 -0.469 3519 162.9 163.1 12 6024 109 3614 133.9 -0.268 2355 162.2 109.8 -0.367 134.2 163.1 -0.928 Moist. Den. Poly Magnesium Error Moist. Den. Error High M. Std. Counts PCF Low M. Std. PCF Counts PCF PCF

Moisture 35 0 0 687 31.1 31.04 0.06

		As Le	Returned Condition	n: 1	: In Tolerance				
Depth-	Wet Density PCF	Magnesium Std. PCF	Error PCF	Wet Density PCF	Mag / Al Std, PCF	Error PCF	Wet Density PCF	Aluminum Std, PCF	Error PCF
BS	110	109.8	0.2	134.8	134.2	0.6	163.8	163.1	0.7
2	110.3	109.8	0.5	134.1	134.2	-0.1	163.2	163.1	0.1
4	109.7	109.8	-0.1	134.6	134.2	0.4	163.2	163.1	0.1
6	109.7	109.8	-0.1	134.4	134.2	0.2	163	163.1	-0.1
8	109.7	109.8	-0.1	134.6	134.2	0.4	163.4	163.1	0.3
10	109.8	109.8	0.0	134.2	134.2	0.0	163	163.1	-0.1
12	109.3	109.8	-0.5	134.2	134.2	0.0	163.4	163.1	0.3
	Moist. Den. PCF	Magnesium Low Moist, Std.	Error PCF	Moist. Den. PCF	Poly High Moist.Std	Error PCF			
Moisture	-0.24	T 0	-0.24	30.5	31.04	-0.54	7		

Out of tolerance readings are bold / italized. As Found Tolerance = +/-2 PCF As Left Tolerance = +/-**PCF**

Gauge Coefficients

		_			
Depth-	Α	B * 1000	С		Moisture
BS	2.21686	1.02216	-0.08786	E	0.02919
				F	1.09370
2	5.42690	1.08750	-0.04790		
				Sys 1	Density Standard
4	12.28373	0.52208	1.04946		7344
				Sys 2	Density Standard
6	11.81760	0.75549	0.42326		2253
				Mo	isture Standard
8	11.97396	1.09085	0.03921		1199
6	12.47437	1.47208	-0.10238		
12	14.44935	1.94271	-0.15657		

Results relate only to item calibrated. Uncertainty of measurement was estimated at the 95% confidence level, (k=2).

This Certificate of Calibration shall not be reproduced except in full, without the written approval of Qai-Tek Associates

All reference standards used are traceable to NIST. Qal-Tek Associates maintains a quality system (Quality Assurance Management Plan) that meets or exceeds the requirements set forth in the following documents: ANSI / NGSL Z540-1 1994 and ISO / IEC 17025.



www.galtek.com

Qal-Tek Associates 3998 Commerce Circle

Idaho Falls, Idaho 83401 Ph: (208) 523-5557 3217 W Hampden

Englewood, CO 80110 Ph: (303) 319-2022

Fax: (208) 524-8470

SEALED RADIOACTIVE SOURCE LEAK TEST REPORT

Company: Project Engineering Consultants, Ltd.

8000 Anderson Square

Austin, Texas 78757

Ph: (512) 407-9252

Street: 3818 E. Newby St. Suite 101

City/St/Zip: Nampa, ID 83687

Phone: 208-466-7190

Fax:

Acct#:

LT Frequency:

101538

Date

Ref#:

W0310-09

Months

TEST INSTRUMENT

Mfg'r.:	NE Bicron	Model:	Electra	Serial #:	K148-469	Cal. Date:	10/19/09
MDA:	<0.005 µCi	a efficiency:	>25%	β efficiency:	>33%	Det. Type:	ZnS (Ag)

Qal-Tek Associates certify the above instrument has been calibrated using radioactive standards traceable to NIST, or traceable to calibration facilities for other ISO members, or have been derived from acceptable values of natural/physical constraints, or have been derived by ratio tye of calibration techniques. Accuracy of the principal radiation calibration sources used is greater than or equal to the required accuracy of the equipment being calibrated. The Qal-Tek Associates calibration system conforms to ANSI N323-1997. All calibrations are performed in accordance with the Qal-Tek Associates Quality Assurance Management Program (QAMP) by QP-PRO-001, which is available by written request.

LEAK TEST RESULTS

Mfg'r	Model#	Inst. Serial #	Isotope	Activity	net a	CPM	net b/g	CPM	pass/fail
Troxler	0.450	1035	AM241	40 mCi	•		g)	pass
	3450		Cs137	8 mCi			g)	pass

Instrument Technician