BREITLING
1884

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US Nuclear Regulatory Commission
ATTN: Division of Nuclear Material Safety
2100 Renaissance Blvd, Suite 100
King Of Prussia, PA 19406

Re: Request to terminate repair license No. 06-23863-01 03034689

To whom it may concern,

Breitling USA would like to submit a request to terminate our license number 06-23863-01. We have been compliant with this license since its inception and during this time we have phased out the use of tritium in the manufacturing process as well as during the repair of our watches. Over the past two years and ten months we have received zero watch for repair at our facility that contain hands or faces painted with tritium. From this point forward we have no reason to believe this will change and therefore we would like to terminate our repair license.

In accordance with correspondences we have had with Mrs. Elizabeth Ullrich, in order to terminate our license we have had all remaining Tritium painted parts disposed of by Pro-Teck and have confirmation that our waste contractor, Chase Environmental Group, Inc, has delivered our last remaining waste to Alaron Corporation in Wampum Pennsylvania for further processing. We have completed form 314 with all of the necessary information needed and we are also providing the quarterly reports from the past three years of our facilities, which were performed by Energysolutions LLC. These reports clearly state that we have been in complete compliance with all of the requirements of the surveys and that our facilities are clean and can be released, as per Mrs. Ullrich's email.

Please find along with this letter the before mentioned quarterly reports from 2012, 2013 and 2014. If you require any further information please let us know and we would be happy to provide that to you.

Best Regards,

Colin Simmons,
After Sales Service Representative, Breitling USA

C.C. Sebastien Amstutz, Vice President Breitling U.S.A.

C.C. Elizabeth Ullrich, Senior Health Physicist, US NRC Region 1 Office

5889725
NMSS/RGN1 MATERIALS-002

Rec'd in LAT 09/25/2015

BREITLING USA

BREITLING U.S.A. INC. · HANGAR 7 · 206 DANBURY ROAD · WILTON, CT 06897 · PHONE (203) 762 11 80 · TELEFAX (203) 762 11 78

NRC FORM 314
(02-2014)
10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(k)(5)(1)(1)

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF DISPOSITION OF MATERIALS

APPROVED BY OMB: NO. 3150-0028 EXPIRES: 02/28/2017

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
Breitling U.S.A. Inc. Hanger 7 206 Danbury Road Wilton, CT 06897	06-23863-01	030-34689
	LICENSE EXPIRATION DATE: September 30, 2018	

A. LICENSE STATUS (Check the appropriate box)

☐ This license has expired. ☑ This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

☐ 1. No radioactive materials have ever been procured or possessed by the licensee under this license.

☑ 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.

☐ a. Transfer of radioactive materials to the licensee listed below:

☐ b. Disposal of radioactive materials:

☐ 1. Directly by the licensee:

☐ 2. By licensed disposal site:

☑ 3. By waste contractor:

Chase Environmental Group, Inc.
11450 Watterson Court, Louisville, KY 40299

☐ c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

☑ 1. A radiation survey was conducted by the licensee. The survey confirms:

☑ a. the absence of licensed radioactive materials

☐ b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.

☑ 2. A copy of the radiation survey results:

☑ a. is attached; or ☐ b. is not attached (Provide explanation); or ☐ c. was forwarded to NRC on: _____ Date

☐ 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and

☐ a. The results of the latest leak test are attached; and/or ☐ b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE *(Include Area Code)*	E-MAIL ADDRESS
Colin B. Simmons	After Sales Service Representative	203-762-1180	Colin.simmons@breitlingusa.com

Mail all future correspondence regarding this license to:

Breitling U.S.A. Inc., Hanger 7, 206 Danbury Rd, Wilton Ct 06897

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
Colin Simmons, After Sales Service Representative	Colin Simmons	9/22/2015

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

5.0 REFERENCES

5.1 Scientech, LLC. *"Breitling U.S.A., Inc. Radiation Protection Program"*, Document No. 82A9415, Revision 5. August 2003.

5.2 International Commission on Radiological Protection, *"Limits for Intakes of Radionuclides by Workers"*, ICRP Publication 30, Pergamum Press, Oxford, July 1978.

SUMMARY OF LICENSE COMPLIANCE ASSESSMENT

1.0 ORGANIZATION AND SCOPE OF PROGRAM

1.1 ***Criteria:*** *Breitling, U.S.A.'s Radiation Protection Program (the Program) requires the Radiation Safety Officer (RSO) to manage the Program on a day-to-day basis. A Management Oversight process is required to ensure that the Program is administered properly.*

Assessment: Willie Yee is currently the Breitling Radiation Safety Officer. Energy*Solutions* has been contracted to provide technical oversight of the Program. Any changes that affect the Program are reviewed and approved by the RSO.

Conclusion: Breitling has met the Program requirement to have a RSO that is qualified to implement the Program. Management oversight is sufficient to provide Breitling U.S.A.'s staff with adequate resources and authority to administer the Program.

1.2 ***Criteria:*** *10 CFR 33.13 requires a licensee to provide sufficient support for implementation of the Program, including an administrative system in place to implement policies and procedures.*

Assessment: Energy*Solutions*, LLC provides the Breitling RSO with sufficient support for implementation of the Program including technical support, preparation of plans and procedures, conducting quarterly surveys and, at the request of the RSO, employee refresher training.

Conclusion: Breitling has met the NRC requirements to provide sufficient support for implementation of the Program.

2.0 TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

2.1 ***Criteria:*** *The Program requires that all personnel working in the Restricted Area have adequate radiological training commensurate with their job duties.*

Assessment: There have been two watch repair employees hired in 2012 (Da Silva, J. and Laxton, E.).

Conclusion: Breitling has met the Program requirement to provide radiation safety training for all radiation workers.

2.2 ***Criteria:*** *The Program requires the refresher training for all radiation workers.*

Assessment: The Breitling RSO provided refresher training for twenty two employees during 2012.

Conclusion: Breitling has met the Program requirement to provide refresher training for all radiation workers.

2.3 ***Criteria:*** *As required in 10 CFR 20, workers must be instructed on the NRC policy that female workers voluntarily inform the employee, in writing, of a pregnancy.*

Assessment: Based on a review of the employee training records, training included discussion of a female's right to inform Breitling, in writing, of her pregnancy.

Conclusion: Breitling has met the NRC requirement to instruct workers on this NRC policy.

3.0 INTERNAL AUDITS, REVIEWS OR INSPECTIONS

3.1 Criteria: ***10 CFR 20.1101(c) requires a licensee to review the Radiation Protection Program (RPP) content and implementation at least annually.***

Assessment: Inspections were conducted on March 21, 2012, June 11, 2012, September 14, 2012 and November 21, 2012 by Energy*Solutions*. Additionally, the Radiation Protection Plan was evaluated for adequacy by Energy*Solutions* personnel.

Conclusion: Breitling has met the NRC requirement for an annual audit and program adequacy and compliance for the year 2012.

4.0 FACILITIES

4.1 ***Criteria:*** *The Program requires Breitling to secure all tritium-containing material from unauthorized removal or access while in storage and control and maintain constant surveillance over materials that are in active use according to the requirements of 10 CFR 20.1801 and 20.1802. When not in use, tritium-containing materials are stored in locked storage cabinets or in locked rooms.*

Assessment: Approximately half of the second floor is dedicated to the repair of watches and is maintained as a Radioactive Materials Area (Restricted Area). Breitling maintains watch parts in one safe and one vault found at the facility. Areas of licensed materials receipt, use and storage are adequately secured with access cards and locked doors to prevent unauthorized access or removal. No periods of open access to the Restricted Area, the second floor safe, or first floor vault were observed during the four quarterly assessments during 2012.

Conclusion: Breitling has met the Program requirement for security of licensed materials.

4.2 ***Criteria:*** *Section 4.0 of the Program discusses the radiological controls required at the Breitling facility for protecting health and minimizing danger to property.*

Assessment: Housekeeping practices are well maintained throughout the Breitling facility. Work stations are wiped daily with cleaning towels that are stored in 30 gallon open top metal barrels, locked in a separate closet in the Restricted Area. The RSO maintains control over the closet access key. Samples are taken during quarterly surveys and analyzed prior to disposal. No prohibited materials, e.g., food, beverages, application of make-up were observed in the Restricted Area. The Restricted Area is well defined with radiation labels and postings. Throughout the Breitling facility, "Caution Radioactive Material(s)" signs are posted on the doors of the Restricted Area. Multi-layer disposable adhesive threshold step-off pads are used both inside and outside the Restricted Area to reduce any spread of contamination to areas other than the Restricted Area. Deceased watches are allowed only in the Restricted Area.

Conclusion: Breitling has met Program requirement to provide engineering controls adequate to protect health and minimize danger to life or property. Housekeeping practices are well maintained throughout the Breitling facility.

5.0 MATERIAL USE, CONTROL AND TRANSFER

5.1 ***Criteria:*** *Item 6 of the Breitling licenses details the radionuclide type (hydrogen-3), physical form (Radium Chemia PS 362 luminous paint) and quantity (200 curies) that may be possessed at any one time.*

Assessment: Type, physical form and quantities of hydrogen-3 (tritium) used at Breitling are within the scope of the licenses. Energy*Solutions* personnel have reviewed the reduction of tritium-bearing watch parts in the physical inventory, as required by Item 13 of License 06-23863-01 to ensure that Breitling U.S.A.'s quantity of tritium is within the scope of the license. The current inventory indicates that there is approximately 500 mCi of potential tritium-bearing parts in the waste on site.

Conclusion: Breitling has met the license requirement to use the radionuclide type, chemical form, and quantities that are within the scope of the licenses.

5.2 ***Criteria:*** *10 CFR 32.14 requires a licensee to maintain records of transfer of material and report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, a description or identification of the type of each product; the total quantity of the radionuclide; and the number of units of each type of product transferred during the reporting period. The licensee is required to file the report after five years of filing the preceding report or after filing an application for renewal of the license under Part 30.37. The licensee is required to maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.*

Assessment: There have been no transfers of material since 05/15/2007, other than repair and return of consumer products. The RSO or Breitling management will report material transfers to the NRC as required.

Conclusion: Breitling meets the NRC requirements to maintain receipt, transfer and disposal records.

6.0 INVENTORIES

6.1 ***Criteria:*** *Item 13 of the Breitling License 06-23863-01 requires Breitling to conduct a physical inventory every six months to account for all watches received and possessed under the license.*

Assessment: There are no tritium-bearing parts or watches at the licensed facility, other than those being repaired. Any tritium-bearing watches sent to the licensee facility for repair have the tritium-bearing parts removed and replaced with non-tritium bearing components. The tritium-bearing parts are tracked in the waste inventory. This inventory also includes parts that may not be tritium-bearing but are placed in the waste as a conservative measure. The inventory of the waste was verified in February 2012 and December of 2012. The current inventory indicates that there are approximately 898 watch hands and 508 watch faces that are potential tritium-bearing parts. All of these parts are now part of the waste stream. The estimated total activity on site at the end of 2012 was 500 mCi of tritium. This is approximately 0.25% of the license limit.

Conclusion: Breitling has met the license requirement to conduct a physical inventory every six months to account for all watches received and possessed under the license.

7.0 RADIOLOGICAL MONITORING

7.1 ***Criteria:*** *The program requires quantitative loose contamination surveys to be performed in the Restricted Area and quantitative loose and fixed contamination surveys to be performed in Unrestricted Areas at a frequency of not less than four quarterly surveys per year.*

Assessment: As part of the Breitling quarterly survey program, Energy*Solutions* performed four quarterly surveys of the Restricted and Unrestricted Areas for contamination in 2012. Pre-designed maps with predetermined survey point locations were used to analyze the spread of contamination over time. If any survey location was contaminated near or above the facility limits, the Breitling RSO had the area decontaminated. Subsequent quarterly surveys have confirmed the effectiveness of the Breitling RSO's control of radioactive material. Air samples were collected in the Restricted Area for quantitative tritium analysis.

Conclusion: Breitling has met the Program requirement to perform quarterly surveys.

7.2 ***Criteria:*** *The Program requires quantitative air sampling to be performed in the decasing area annually.*

Assessment: Air samples were collected in November and December of 2012 in the Restricted Area using two distilled water filled impingers. Sampling was performed for over six hours during high repair volume working hours. The sampling location was selected adjacent to the watchmaker work station known to have the highest loose contamination from previous quarterly surveys. Background measurements were obtained at the Energy*Solutions* facility in Danbury, CT. The Energy*Solutions* Danbury office is an Unaffected Area. Results of 2012 air sampling show airborne tritium levels well below $1/10^{th}$ of the DAC. $1/10^{th}$ DAC values are documented as follows:

Total DAC Fraction – 2012

November 2012 $\frac{1}{10}$ *DAC Fraction* = $3.190E-04$

December 2012 $\frac{1}{10}$ *DAC Fraction* = $1.394E-04$

$3.190E-04 + 1.394E-04 = 4.584\ E-04$

Conclusion: Breitling has met the Program requirement to perform annual air sampling and the tritium-air concentration fraction is substantially below $^{1}/_{10}$ DAC.

DAC Determination

Air Sampling & DAC Values – November 2012

Impingers (Qty.–2) Total Volumes – Background = 1.0 Liter

Air Sampler Flow Rate (LPM) = 3.11

Total Sampler Time (Background – Minutes) = 360

Total Volume (Background) = 360 *minutes* × 3.11 *LPM* = 1119.6 *Liters*

Analytical Results by LSC (Teledyne – Brown Report# L53257)

Sample# – L53258–1 (Background) = 4.02E+01 *pCi/Liter*; *MDC* – 1.56E+02 *pCi/Liter*

$$\frac{4.02E+01\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 4.02E-05\ \mu Ci/L$$

$$\left[\frac{\left(\frac{4.02E-05\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 4.5E-05\ \mu Ci/L}{(1119.6\ Liters \times 1000\ ml/L)} = 3.98952E-11\ \mu Ci/ml\right]_{BACKGROND}$$

Impingers (Qty.–2) Total Volumes – Air Sample = 1.0 Liter

Air Sampler Flow Rate (LPM) = 3.11

Total Sampler Time (AIr Sample – Minutes) = 360

Total Volume (Air Sample) = 360 *minutes* × 3.11 *LPM* = 1119.6 *Liters*

Analytical Results by LSC (Teledyne – Brown Report# L53258)

Sample# – L53258–2 (Air Sample) = 6.83E+02 *pCi/Liter*; *MDC* – 1.59E+02 *pCi/Liter*

$$\frac{6.83E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 6.83E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{6.83E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 7.59E-04\ \mu Ci/L}{(1119.6\ Liters \times 1000\ ml/L)} = 6.77821E-10\ \mu Ci/ml\right]_{SAMPLE}$$

$$[(6.77821E-10\ \mu Ci/ml) - (3.98952E-11)] = 6.37926E-10\ \mu Ci/ml$$

DAC Fraction 10CFR20, Appendix B

2.0E–05 μCi/ml × 0.1 = 2.0E–06 μCi/ml (10% *of DAC*)

$$\frac{6.37926E-10\ \mu Ci/ml}{2.0E-06\ \mu Ci/ml} = 3.190E-04\ Fraction\ of\ 10\%\ DAC_{NOVEMBER}$$

Air Sampling & DAC Values – December 2012

Impingers (Qty.–2) Total Volumes – Background = 1.0 Liter

Air Sampler Flow Rate (LPM) = 3.11

Total Sampler Time (Background – Minutes) = 360

Total Volume (Background) = 360 *minutes* × 3.11 *LPM* = 1119.6 *Liters*

Analytical Results by LSC (Teledyne – Brown Report# L53257)

Sample# – L53257 – 1 (Background) = 1.01E + 02 *pCI/Liter; MDC* – 1.68E + 02 *pCi/Liter*

$$\frac{1.01E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 1.01E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{1.01E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 1.12E-04\ \mu Ci/L}{(1119.6\ Liters \times 1000\ ml/L)} = 1.00234E-10\ \mu Ci/ml\right]_{BACKGROND}$$

Impingers (Qty.–2) Total Volumes – Air Sample = 1.0 Liter

Air Sampler Flow Rate (LPM) = 3.11

Total Sampler Time (AIr Sample – Minutes) = 360

Total Volume (Air Sample) = 360 *minutes* × 3.11 *LPM* = 1119.6 *Liters*

Analytical Results by LSC (Teledyne – Brown Report# L53258)

Sample# – L53257 – 2 (Air Sample) = 3.82E + 02 *pCI/Liter; MDC* – 1.67E + 02 *pCi/Liter*

$$\frac{3.82E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 3.82E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{3.82E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 4.24E-04\ \mu Ci/L}{(1119.6\ Liters \times 1000\ ml/L)} = 3.79104E-10\ \mu Ci/ml\right]_{SAMPLE}$$

$$[(3.79104E-10\ \mu Ci/ml) - (1.00234E-10)] = 2.7887E-10\ \mu Ci/ml$$

DAC Fraction 10CFR20, Appendix B

2.0E – 05 *μCi/ml* × 0.1 = 2.0E – 06 *μCi/ml* (10% *of DAC*)

$$\frac{2.7887E-10\ \mu Ci/ml}{2.0E-06\ \mu Ci/ml} = 1.394\ E-04\ Fraction\ of\ 10\%\ DAC_{DECEMBER}$$

8.0 RADIOACTIVE WASTE MANAGEMENT

8.1 ***Criteria:*** *The Program requires an interim storage area for radioactive waste.*

Assessment: Currently, Breitling U.S.A., stores any radioactive waste in drums located in a locked closet of the Restricted Area. The waste is picked up and disposed of by a waste broker [currently Radiac Research Corp.] An estimate and characterization (10CFR§61.55 & 49CFR§173.436) of the current radioactive waste is as follows:

Total Estimated Waste (Step – off Pads)

24" × 36" = 5,574 cm^2 *each SoP (Step – off Pad)*

52 *SoP's* × 2 / *week* = 104 / *annum* × 5,574 cm^2 = 579,715 cm^2

2008 – 2012 *average decayed waste activity* = $872\ {}^{dpm}/_{100\,cm^2}$

$8.72\ {}^{dpm}/_{cm^2} \times 579{,}715\,cm^2 = 5.055E+06\ {}^{dpm}/_{annum}$

$5.055E+06\ {}^{dpm}/_{annum} \times 4.5045E-07\ {}^{\mu Ci}/_{dpm} = 2.277\ {}^{\mu Ci}/_{annum}$

$2.277\ {}^{\mu Ci}/_{annum} \times 5\ years = 11.385\ \mu Ci$ *from Step – off Pads*

Total Estimated Waste (Wipes)

Average work area = 48" × 48" = 14,864 cm^2

Total work areas = 21 × 14,864 cm^2 = 312,154 cm^2

260 *days* × 312,154 cm^2 = $8.11E+07\ {}^{cm^2}/_{annum}$

$8.11E+07\ {}^{cm^2}/_{annum} \times 5\ years = 4.058E+08\ cm^2$

Average decayed loose $\ {}^{dpm_{tritium}}/_{100\,cm^2}(2008-2012) = 532\ {}^{dpm}/_{100\,cm^2}$

$5.32\ {}^{dpm}/_{cm^2} \times 4.058E+08\ cm^2 = 2.159E+09\ dpm$

$2.159E+09\ dpm \times 4.5045E-07\ {}^{\mu Ci}/_{dpm} = 972.458\ \mu Ci$ *from wipes*

STEP – OFF PAD & WIPE WASTE = 0.984 *mCi*

Total Estimated Watch Parts in Waste

Decayed to 12/31/1990. *Per RSO, no new tritiated parts were produced after the early* 1980's.

Watch Parts

2008–193
2009–109
2010–91
2011–68
2012–47
508 *watch faces / dials*

2008–166
2009–207
2010–207
2011–152
2012–166
898 *watch hands*

On–hand estimated tritiated watch dials = 508 @ 1.5 *mCi* A_o *each*; $A_{decayed}$ = 217.049 *mCi*
On–hand estimated tritiated watch hands = 898 @ 1.1 *mCi* A_o *each*; $A_{decayed}$ = 281.366 *mCi*

Total estimated tritiated watch parts = 498.415 *mCi*

The total "On-hand" waste at Breitling is 499.399 mCi. As Breitling has no inventory of tritiated watch parts for repair or production, the waste inventory is also the facility inventory.

Waste Class & Transport

Volume 30 *gallon drum* = 4.01 *cu. ft.* = 1.14*E*+05 *cc*

density of paper = 0.8 $^{gms.}/_{cc}$

Watch Hands = 2.0 *cm*−*l* × 0.2 *cm*−*w*×0.1 *cm*−*th* = 0.04*cc* = 7.833*E*+03 $^{\mu Ci}/_{cc} \geq 40\ ^{\mu Ci}/_{cc}$ *CLASS A Waste*

Watch Faces = 4.0 *cm*−*dia*, 0.1*cm*−*th* = 1.26 *cc* = 3.400*E*+02 $^{\mu Ci}/_{cc} \geq 40\ ^{\mu Ci}/_{cc}$ *CLASS A Waste*

density of brass = 8.0 $^{gms.}/_{cc}$

Estimated weight of watch parts =

898 *hands* × 8.0 $^{gms.}/_{cc}$ × 0.01*cc* = 71.84 *grams*

508 *faces* × 8.0 $^{gms.}/_{cc}$ × 1.26 *cc* = 5120.64 *grams*

Watch Parts = 5192.48 *grams* = 11.45 *lbs or* 5.724 *lbs/drum*

Estimated weight of 95% *paper filled drum* = 39.15 *lbs.*−*DAW*

39.15 + 5.724 = 44.874 *lbs. or* 2.035*E*+04 *grams*

$$\frac{0.984\ mCi + 498.415\ mCi}{2\ drums} = 249.7\ mCi = 0.2497\ Ci$$

$$\frac{0.2497\ Ci}{2.035E+04} = 1.2E-05\ {}^{Ci}/_{gm.}$$

$$\frac{2.497E-01\ Ci}{2.7E-02} = 9.2482 \geq 1.0 [49CFR§173.436] = not\ Exempt\ USDOT$$

$$\frac{1.2E-05\ {}^{Ci}/_{gm.}}{2.7E-05\ {}^{Ci}/_{gm}} = 0.4554 \leq 1.0\ [49CFR§173.436] = Exempt\ USDOT$$

Conclusion: Breitling has met the Program requirement to manage Low Level Radioactive Waste.

9.0 RADIATION PROTECTION

9.1 ***Criteria:*** *According to 10 CFR 20.1101, each licensee will develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part. Each licensee will maintain records of the program, including the provisions of the program; and audits and other reviews of program content and implementation.*

Assessment: The Program is commensurate with the scope and extent of licensed activities and sufficient to ensure NRC compliance.

Conclusion: Breitling has met the Program requirement to develop, document and implement a radiation protection program and retain all applicable records.

9.2 ***Criteria:*** *10 CFR 20.1101(b) requires that licensees use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as reasonably achievable (ALARA). Licensees are required to address and document ALARA considerations in all aspects of their programs, including established administrative action levels and monitoring programs.*

Assessment: ALARA concepts, discussed in detail throughout the RPP, address the requirement to perform quarterly surveys that adhere to administrative action levels, wear protective clothing, wash hands prior to leaving the Restricted Area, wipe down tools, floors and work areas and lock the Restricted Area when not in use.

Conclusion: Breitling has met the NRC requirements to implement ALARA policies.

9.3 ***Criteria:*** *As a minimum, the Program requires lab coats to be donned upon entering the Watchmaker Room and must be removed upon exiting the Watchmaker Room.*

Assessment: The PPE used at Breitling, consisting of cotton lab coats and surgeons gloves, when necessary, is adequate for the work activities performed at Breitling. Workers were observed using their lab coats in the Restricted Area and doffing them prior to exit from the Restricted Area.

Conclusion: Breitling has met the RPP requirement to minimize levels of contamination by requiring employees to wear PPE when working with tritium.

9.4 ***Criteria:*** *According to 10 CFR §20.2104, licensees must obtain current year occupational radiation dose for each individual who is likely to receive in a year, an occupational dose requiring monitoring pursuant to 10 CFR 20.1502.*

Assessment: 10CFR §20.2104 was amended in December 2007. It is no longer necessary to obtain cumulative occupational dose UNLESS the worker is going to receive a planned special exposure per SECY-07-0162. No Breitling employee has ever been required to receive a planned special exposure. With the substantial reduction in the inventory, there would be little or no chance for a Breitling worker to receive a dose in excess of the "Occupational Dose Limits" described in § 20.1201.

Conclusion: Breitling has met the requirement to obtain records of *current year occupational radiation dose for each individ*ual, if applicable.

9.5 ***Criteria:*** *The Program requires tritium urinalysis bioassay (in vitro) sampling, which will include a baseline urinalysis bioassay sample, prior to working in the Restricted Area.*

Assessment: Breitling maintained a tritium bioassay program for all workers in the Restricted Area. Aside from a baseline urinalysis bioassay sample, samples are collected annually from every worker. NRC Form 5 has been used to document the bioassay program.

Conclusion: Breitling has met the Program requirement to perform tritium urinalysis bioassay (in vitro) sampling.

9.6 ***Criteria:*** *The Program requires records of radiation surveys, instrument calibrations, dosimetry, incident reports or unusual event reports, inventory records, disposal of licensed materials and decontamination/remediation activities to be retained by the RSO for the life of the license. Radiation worker training records are maintained for two years. Records of receipt and transfer of all licensed material are maintained for as long as the material is possessed until 3 years after transfer.*

Assessment: License compliance assessment records were reviewed. Records have been well maintained, by the RSO or Breitling's radiation safety consultant, since issuance of the license.

Conclusion: Breitling has met the Program requirements for good record keeping and storing of documents.

10.0 NOTIFICATION AND REPORTS

Criteria: *The Program requires that records of radiation doses be maintained for all individuals for whom personnel monitoring are required. As required in 10 CFR 19.13(a), radiation exposure data and the results of any measurements, analysis and calculations of radioactive material deposited or retained in the body must be reported to the individual.*

Assessment: Radiation dose records are maintained on a NRC Form 5. A record of each radiation worker's employee's dose is provided to them. Breitling also provides all individuals in the tritium bioassay program with copies of NRC Form 5 listing their radiation dose for the year.

Conclusion: Breitling has met the Program requirement to maintain dose records and report the results to the employees.

11.0 POSTING AND LABELING

11.1 ***Criteria:*** *The Program requires that* the Restricted Area be posted with a conspicuous sign(s) bearing the radiation symbol and the words "CAUTION - RADIOACTIVE MATERIALS."

Assessment: Work areas are well defined with radiation labels and postings. Throughout the Breitling facility, "Caution, Radiation Materials" signs are posted on the doors of the Restricted Area.

Conclusion: Breitling has met the Program requirement to properly post the Restricted Area.

11.2 ***Criteria:*** *10 CFR 19.11 requires each licensee to prominently post NRC Form 3, "Notice to Employees," (5 – 2005).*

Assessment: Posting of NRC Form 3 can be found in the employee Break Room on the first floor.

Conclusion: Breitling has met the NRC requirement to post NRC Form 3.

12.0 OTHER OBSERVATIONS

12.1 Decasing Activities and Inventory - 2012

The following information reflects decasing activities conducted in association with watch repairs for the calendar year 2012. The total number of watches decased during 2012 was 8,144. The most watches decased by a single worker was 1,222 watches. This value includes all watches without regard to whether the watch contained tritium-bearing parts. This value is approximately 27.2% of the annual limit of 4,500 tritium-bearing watches for a single watchmaker specified in the Breitling Radiation Protection Program[1].

In conjunction with the decasing summary, an inventory of estimated activity on-hand was conducted based upon the total number of watches stored in the vault and the total number of watches repaired during 2012. Watches now being manufactured by Breitling do not use tritium luminescent radiochemicals. In 2012, there were no watches with tritium-bearing radiochemicals. Each watch could potentially contain 3.1 millicuries. There are no parts bearing tritium for repair or replacement in stock. The total inventory on hand at any time during 2012 was zero.

12.2 Lab Coat Surveys - 2012

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveys the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on a liquid scintillation counter. Results indicate that annual total activity found on the lab coats at 10% removal efficiency is approximately 3.768*E-02* µCi. If all of the activity were released into the sewer, an average monthly release concentration would be 6.528*E-14* µCi/ml. This is well below the monthly average concentrations of activity of 1.0E-02 µCi/ml of 10CFR§20, Appendix B – Table 3[2]. The worst release concentration for an incidental release would be ~2.862*E-09* µCi/ml/minute. This is well below 1.0E-03 µCi/ml effluent water concentration of 10CFR§20, Appendix B – Table 2. Therefore lab coats did not require decontamination prior to laundering. The water flow data obtained from the Aquarion Water Company for the Danbury Road, Wilton area near Breitling suggests that the dilution factor used in the Radiation Protection Program may be conservative.
The total flow was tested at 2,262 gallons per minute, or 3.7E+08 liters per month. Breitling is well within the limits of 10CFR20, Appendix B Tables 2 and 3.

[1] 82A9415, Rev.5, §4.3
[2] 10CFR§20, Appendix B, Tables 2 & 3, Hydrogen, verified 04/02/2013

Effluence Monitoring - 2012

1st Quarter Lab Coat Results = −51 *dpm*
2nd Quarter Lab Coat Results = 6028 *dpm*
3rd Quarter Lab Coat Results = 2139 *dpm*
4th Quarter Lab Coat Results = 198 *dpm*

$$\textit{Total Activity} = \frac{8365\ dpm}{0.1\ \textit{Removal Efficiency}} = 83{,}651\ dpm$$

$$83{,}651\ dpm \times 4.5045E-07\ \mu Ci/dpm = 3.768E-02\ \mu Ci$$

$$\textit{Water Fluence}\ (@20\ psi) = 3748\ gpm = 13168.5\ lpm = 1.316E+07\ ml/min.$$

$$ml/month = 30.4375\ days/mo. \times 24\ hours \times 60\ minutes = 43830\ minutes$$

$$43830\ minutes \times 1.316E+07\ ml/min. = 5.772E+11\ ml/month$$

$$\frac{3.768E-02\ \mu Ci}{1.316E+07\ ml/min} = 2.862E-09\ \mu Ci/ml\ per\ minute$$

$$\frac{3.768E-02\ \mu Ci}{5.772E+11\ ml/month} = 6.528E-14\ \mu Ci/ml$$

10CFR20, Appendix B Table 3 Limit – Release to Sanitary Sewer
$T_2O = 1.00E-02\ \mu Ci/ml$ – *monthly average*

$$\frac{6.528E-14\ \mu Ci/ml}{1.00E-02\ \mu Ci/ml} = 6.528E-12\ \textit{monthly average fraction}$$

Table 3 Limit fraction (f) = $6.528E-12$

10CFR20, Appendix B Table 2 Limit – Effluent $\mu Ci/mL$ *– Water*
$T_2O = 1.00E-03\ \mu Ci/ml$

$$\frac{2.862E-09\ \mu Ci/ml/min.}{1.00E-03\ \mu Ci/ml/min} = 2.862E-06$$

Table 2 Limit fraction (f) = $2.862E-06$

12.3 Radioactive Waste Estimate & Surveys - 2012

Bags containing rags, step-off pads and disposable paper towels were sampled directly by removing swatches for liquid scintillation counting for contamination. Radioactive waste material counting results showed the highest concentration was 2,702 dpm/100 cm². This is below the Restricted Area action level of 100,000 dpm/100 cm². The estimated amount of radioactive waste in the two disposal/transportation containers is ~500 mCi. The radioactive waste containers had ~964 dpm/100 cm² removable contamination on its surface during quarterly surveys. The barrel will be decontaminated by the Breitling and broker staff prior to removal for disposal.

12.4 Records

Attached are:

- Laboratory analyses used to determine the DAC fraction,
- Copies of the USNRC Form 5's for 2012,
- Notification to individual workers of annual dose (see Appendix G).

12.5 Conclusions

Based upon the observations made during the four quarterly inspections, the annual program review, the dose assessments, and reviews of the Radiation Protection and Radiation training protocols, Breitling, U.S.A. has been in compliance with the requirements of the Licenses 06-23863-01 and 06-23863-02E.

The information depicted in Appendix E – "Trends" indicates that the levels of loose contamination have been decreasing over the last four years. The collective annual dose for Breitling U.S.A. has been decreasing in a linear manner with the declining inventory of watches that contain tritium-based luminous paint.

During the review of this report, the EnergySolutions Certified Health Physicist suggested the following:

1. Timely bioassay sampling,
2. More frequent or staggered bioassay sampling,
3. Time and volume data for the bioassay sampling.

These will be discussed with the Breitling RSO.

APPENDIX A

FIRST QUARTER 2012 SURVEY DATA

ENERGYSOLUTIONS

FIRST QUARTER 2012 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The First Quarter 2012 survey was performed on March 21, 2012. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

101 samples (77 locations and 24 lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are included in this report, (see Attachment 1).

In the Unrestricted Area, the highest removable result was in the south hallway southwest on the second floor near the Watchmaker Room. The reading was 264 dpm/100 cm^2 with a wet swipe.

In the Restricted area the highest removable result was 5,422 dpm/100 cm^2 on the workstation near the south door. No remedial action was required in the restricted areas per Table 1. The RSO was contacted with the results for wipe down of the workstation.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 1,338 dpm/100 cm^2 and the outside of a drum had 1,138 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 7,282 dpm/100 cm^2.

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (24 filter samples) indicate that the levels found on the lab coats were below the restrictive area limit provided in Table 1. The highest activity found was 4 dpm/100 cm^2 (Lab Coat #474) thus not requiring decontamination prior to laundering.

Observation

1. Lab Coat Sample number 19 was missing for analysis by the contract laboratory.

2. The EnergySolutions Certified Health Physicist (CHP) has recommended that urine bioassay samples be taken at staggered times during the year. This will be recommended to the Breitling RSO.

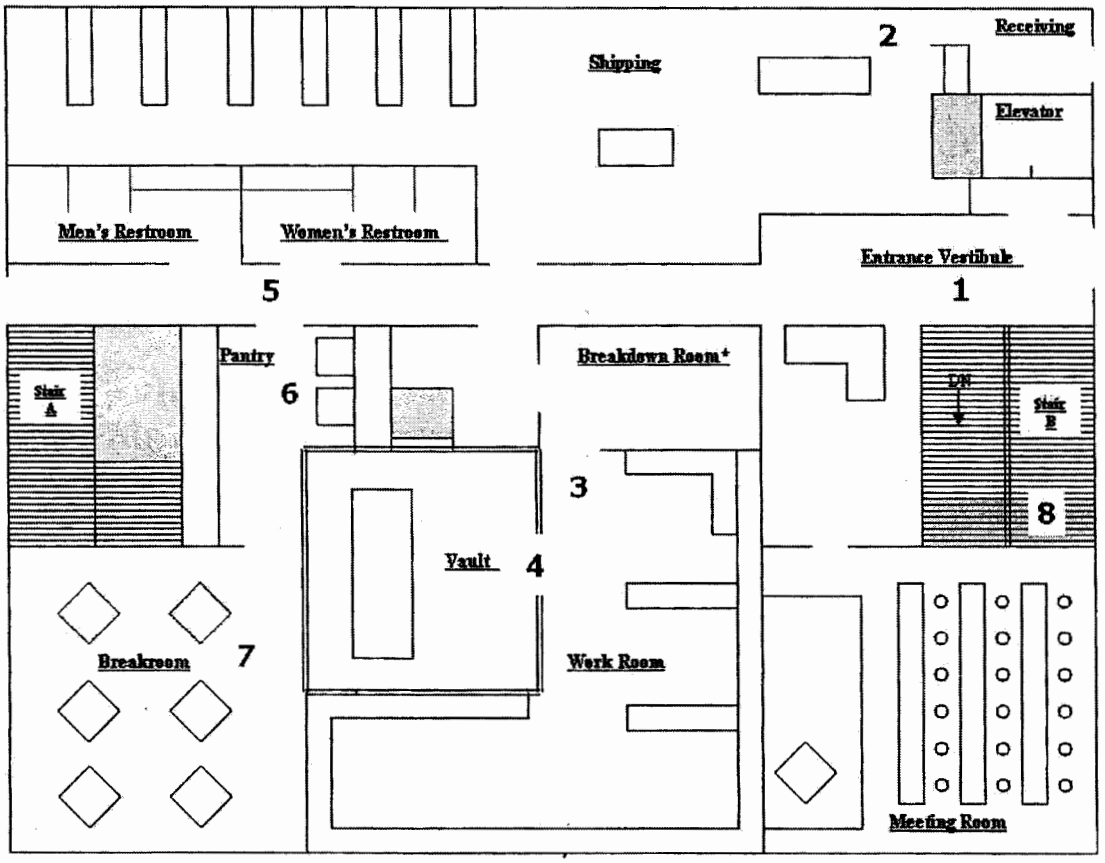
3. The EnergySolutions CHP has recommended that air samples be taken more frequently during the year. This will be recommended to the Breitling RSO.

Conclusion

Based on the First Quarter 2012 survey, Breitling has maintained compliance with the Radiation Protection Manual.

Breitling USA, Inc.
Floor Plan: First Floor

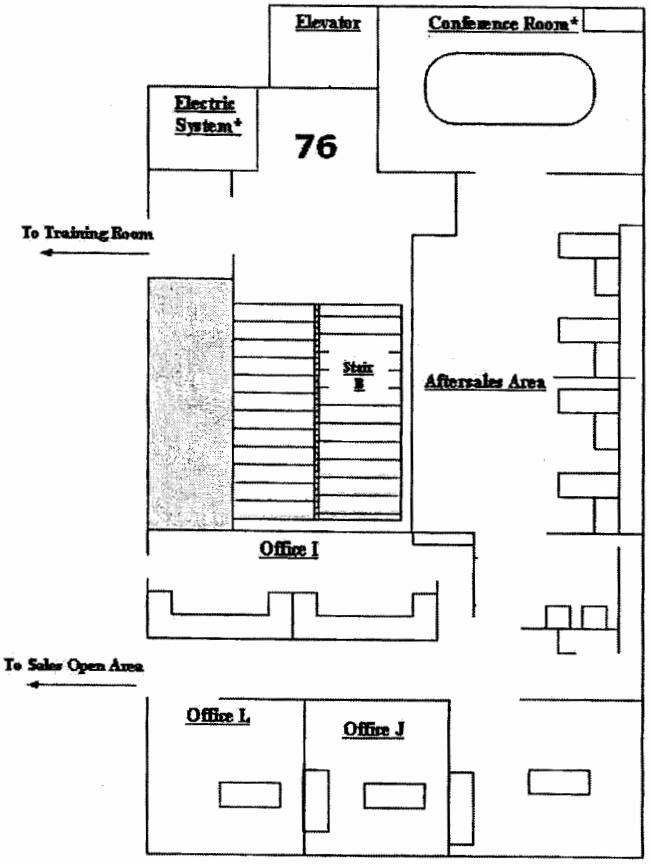
FIRST FLOOR - 2012



BKGD. 100

Not drawn to scale

Breitling USA, Inc.
Floor Plan: Second Floor - Aftersales Area



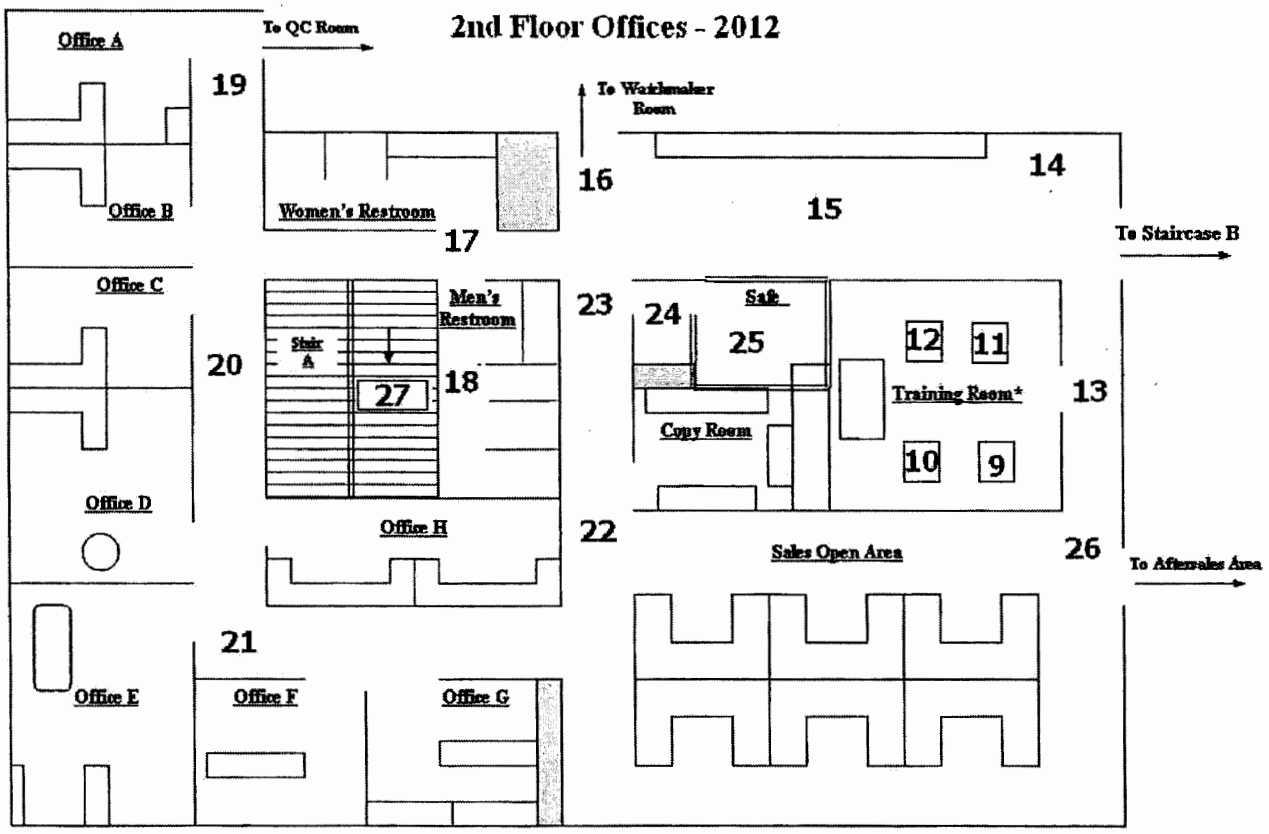
2nd Floor - Sales - 2012

Not drawn to scale

Breitling USA, Inc.

Floor Plan: Second Floor - Office Areas

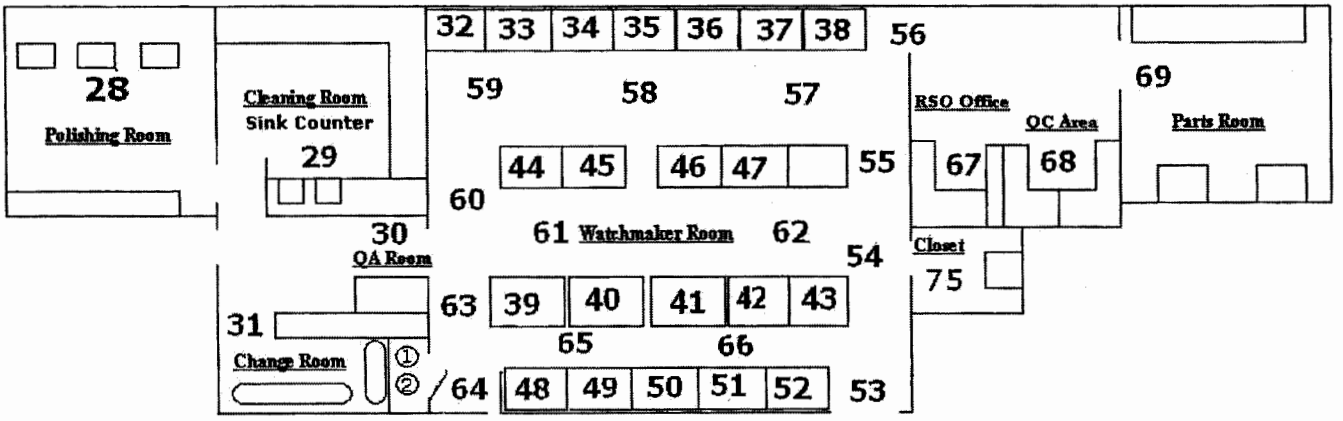
Removable Measurement Sample Locations



Not drawn to scale

Breitling USA, Inc.
Floor Plan: Restricted Areas

2nd Floor Watchmaker Rooms - 2012



70 - Radwaste Closet Floor
71 - Radwaste Barrel #1
72 - Radwaste Barrel #2
73 - Radwaste Material
74 - Radwaste Material

Not drawn to scale

ENERGYSOLUTIONS

ATTACHMENT 1

1st QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 1st QTR Survey 2012
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	15	Entrance Vestibule	L45317-001
002	U	-3	Floor - Shipping Area	L45317-002
003	U	-10	1st Floor Work Room Floor	L45317-003
004	U	-8	1st Floor Vault Floor - North	L45317-004
005	U	16	Hallway - Outside Rest Rooms	L45317-005
006	U	14	Pantry Vending Machine - Floor	L45317-006
007	U	-4	Break Room Floor	L45317-007
008	U	7	Stairway B Floor	L45317-008
009	U	27	Training Room Work Station-Southwest	L45317-009
010	U	11	Training Room Work Station-Northwest	L45317-010
011	U	142	Training Room Work Station-Southeast	L45317-011
012	U	6	Training Room Work Station-Northeast	L45317-012
013	U	-8	Training Room Threshold Floor	L45317-013
014	U	264	Hallway Near Entrance Door-2nd Floor South	L45317-014
015	U	101	Hallway Outside Watchmaker's Room	L45317-015
016	U	-7	Hallway Outside Watchmaker's Room	L45317-016
017	U	-6	Floor Outside Women's Restroom	L45317-017
018	U	-6	Floor In Men's Rest Room	L45317-018
019	U	-1	Office A Hallway Floor	L45317-019
020	U	-9	Office C Hallway Floor	L45317-020
021	U	-10	Office F Hallway Floor	L45317-021
022	U	-3	2nd Floor - Outside Copy Room	L45317-022
023	U	-5	2nd Floor Hallway Floor @ Safe	L45317-023
024	U	-14	2nd Floor Safe Vestibule	L45317-024
025	U	-6	2nd Floor Safe Floor	L45317-025
026	U	-8	Sales Open Area Floor	L45317-026
027	U	36	Stairway A 2nd Floor	L45317-027
028	R	21	Polishing Room Workstation	L45317-028
029	R	77	Cleaning Room - Sink Counter	L45317-029
030	R	64	QA Area Floor	L45317-030
031	R	378	Change Room Floor	L45317-031
032	R	14	Watchmaker Workstation	L45317-032
033	R	44	Watchmaker Workstation	L45317-033
034	R	-6	Watchmaker Workstation	L45317-034
035	R	21	Watchmaker Workstation	L45317-035
036	R	0	Watchmaker Workstation	L45317-036
037	R	-16	Watchmaker Workstation	L45317-037

ENERGYSOLUTIONS

Survey Point	Type	f, corrected dpm/100 cm²	Location	Lab Sample ID
038	R	-1	Watchmaker Workstation	L45317-038
039	R	8	Watchmaker Workstation	L45317-039
040	R	210	Watchmaker Workstation	L45317-040
041	R	1,350	Watchmaker Workstation	L45317-041
042	R	208	Watchmaker Workstation	L45317-042
043	R	200	Watchmaker Workstation	L45317-043
044	R	460	Watchmaker Workstation	L45317-044
045	R	65	Watchmaker Workstation	L45317-045
046	R	15	Watchmaker Workstation	L45317-046
047	R	196	Watchmaker Workstation	L45317-047
048	R	47	Watchmaker Workstation	L45317-048
049	R	72	Watchmaker Workstation	L45317-049
050	R	912	Watchmaker Workstation	L45317-050
051	R	922	Watchmaker Workstation	L45317-051
052	R	5,422	Watchmaker Workstation	L45317-052
053	R	1,292	Watchmaker Room Entrance Door-South	L45317-053
054	R	216	Watchmaker Room Floor - South	L45317-054
055	R	956	Watchmaker Room Floor - South	L45317-055
056	R	54	Watchmaker Room Floor - South	L45317-056
057	R	204	Watchmaker Room Floor - East	L45317-057
058	R	164	Watchmaker Room Floor - East	L45317-058
059	R	49	Watchmaker Room Floor - East	L45317-059
060	R	47	Watchmaker Room Floor - Norh	L45317-060
061	R	71	Watchmaker Room Floor - Norh	L45317-061
062	R	34	Watchmaker Room Floor - South	L45317-062
063	R	117	Watchmaker Room Floor - Norh	L45317-063
064	R	188	Watchmaker Room Entrance Door-North	L45317-064
065	R	98	Watchmaker Room Floor - West	L45317-065
066	R	167	Watchmaker Room Floor - West	L45317-066
067	R	61	RSO Workstation Floor	L45317-067
068	R	1,406	QC Area Floor	L45317-068
069	R	59	Parts Room	L45317-069
070	R	1,338	RadWaste Closet Floor	L45317-070
071	R	1,138	RadWaste Barrel #01	L45317-071
072	R	804	RadWaste Barrel #02	L45317-072
073	R	6,842	RadWaste Material (Step-off pads, etc)	L45317-073
074	R	7,282	RadWaste Material (Step-off pads, etc)	L45317-074
075	R	266	Parts Closet	L45317-075
076	U	23	Elevator Vestibule 2nd Floor	L45317-076
100	**U**	**18.00**	**Background Sample**	**L45317-100**

Completed by: **Stewart R Smith** Date: 4/12/2012

Reviewed By: DAN SLYWKA Date: 4/10/2013

The following areas should be decontaminated, if found to be tritium.

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	1	Lab Coat #601	L41692-1
2	R	-4	Lab Coat #602	L41692-2
3	R	-1	Lab Coat #604	L41692-3
4	R	-9	Lab Coat #605	L41692-4
5	R	-2	Lab Coat #608	L41692-5
6	R	-3	Lab Coat #616	L41692-6
7	R	0	Lab Coat #620	L41692-7
8	R	-3	Lab Coat #631	L41692-8
9	R	1	Lab Coat #630/RE	L41692-9
10	R	-3	Lab Coat #575	L41692-10
11	R	-5	Lab Coat #576	L41692-11
12	R	-3	Lab Coat "JA"	L41692-12
13	R	-3	Lab Coat "MF"	L41692-13
14	R	-4	Lab Coat #470	L41692-14
15	R	-2	Lab Coat #473	L41692-15
16	R	4	Lab Coat #474	L41692-16
17	R	1	Lab Coat #632	L41692-17
18	R	-2	Lab Coat #450	L41692-18
19	R	Missing Sample	Lab Coat #635	L41692-19
20	R	-3	Lab Coat #573	L41692-20
21	R	-3	Lab Coat #619	L41692-21
22	R	-2	Lab Coat #622	L41692-22
23	R	-7	Lab Coat #634	L41692-23
24	R	2	Lab Coat #611	L41692-24
25	R	-2	Lab Coat #614	L41692-25

Completed by: **Stewart R Smith** Date: 4/24/2012

Reviewed By: DAN SLYWKA Date: 4/10/2013

The following coats require decontamination action: None

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

04/11/2012

LIMS #:	L49843
Project ID#:	EN010-3BIOCT-07
Received:	03/27/2012
Delivery Date:	04/26/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L49843-1	LAB COAT ID #601
2	L49843-2	LAB COAT ID #602
3	L49843-3	LAB COAT ID #604
4	L49843-4	LAB COAT ID #605
5	L49843-5	LAB COAT ID #608
6	L49843-6	LAB COAT ID #616
7	L49843-7	LAB COAT ID #620
8	L49843-8	LAB COAT ID #631

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L49843-9	LAB COAT ID #630
10	L49843-10	LAB COAT ID #575
11	L49843-11	LAB COAT ID #576
12	L49843-12	LAB COAT ID "JA"
13	L49843-13	LAB COAT ID "MF"
14	L49843-14	LAB COAT ID 470
15	L49843-15	LAB COAT ID #473
16	L49843-16	LAB COAT ID #474
17	L49843-17	LAB COAT ID #632
18	L49843-18	LAB COAT ID #450
19	L49843-19	LAB COAT ID #635
20	L49843-20	LAB COAT ID #573
21	L49843-21	LAB COAT ID #619
22	L49843-22	LAB COAT ID #622
23	L49843-23	LAB COAT ID #634
24	L49843-24	LAB COAT ID #611
25	L49843-25	LAB COAT ID #614

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.62E+00**	2.29E+00	2.80E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 2 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.13E+00**	2.12E+00	2.74E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 3 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.65E+00**	2.18E+00	2.70E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 4 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.36E+00**	1.97E+00	2.77E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.81E+00**	2.19E+00	2.80E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 6 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.39E+00**	2.08E+00	2.66E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 7 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #620 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.15E+00**	2.27E+00	2.81E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 8 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.42E+00**	2.17E+00	2.80E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.34E+00**	2.26E+00	2.77E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 10 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.73E+00**	2.15E+00	2.73E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 11 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.36E+00**	2.10E+00	2.78E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 12 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.65E+00**	2.17E+00	2.78E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.36E+00	2.14E+00	2.76E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 14 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID 470 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.11E+00	2.13E+00	2.77E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 15 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.10E+00	2.14E+00	2.69E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 16 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.11E+01	2.37E+00	2.81E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.46E+00**	2.28E+00	2.79E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 18 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #450 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.79E+00**	2.21E+00	2.83E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 19 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #635 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Sample ID: 20 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.58E+00**	4.01E+00	5.28E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.59E+00**	4.06E+00	5.36E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 22 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #622 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.93E+00**	4.00E+00	5.21E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 23 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.36E+00	3.79E+00	**5.27E+00**	DPM/TOTAL		100	%		04/09/12	10	M	U

Sample ID: 24 | Collect Start: 03/19/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 03/19/2012 16:00 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49843-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.02E+01**	4.25E+00	5.28E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:33

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49843

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 25
Station: LAB COAT ID #614
Description:
LIMS Number: L49843-25

Collect Start: 03/19/2012 08:00
Collect Stop: 03/19/2012 16:00
Receive Date: 03/27/2012

Matrix: Swipes (SW)
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.12E+00**	4.09E+00	5.33E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 03/19/2012; 0800 - 1600				
1	Lab Coat ID #601	03/19/2012	0800 - 1600	1st QTR Survey
2	Lab Coat ID #602	03/19/2012	0800 - 1600	1st QTR Survey
3	Lab Coat ID #604	03/19/2012	0800 - 1600	1st QTR Survey
4	Lab Coat ID #605	03/19/2012	0800 - 1600	1st QTR Survey
5	Lab Coat ID #608	03/19/2012	0800 - 1600	1st QTR Survey
6	Lab Coat ID #616	03/19/2012	0800 - 1600	1st QTR Survey
7	Lab Coat ID #620	03/19/2012	0800 - 1600	1st QTR Survey
8	Lab Coat ID #631	03/19/2012	0800 - 1600	1st QTR Survey
9	Lab Coat ID #630	03/19/2012	0800 - 1600	1st QTR Survey
10	Lab Coat ID #575	03/19/2012	0800 - 1600	1st QTR Survey
11	Lab Coat ID #576	03/19/2012	0800 - 1600	1st QTR Survey
12	Lab Coat ID "JA"	03/19/2012	0800 - 1600	1st QTR Survey
13	Lab Coat ID "MF"	03/19/2012	0800 - 1600	1st QTR Survey
14	Lab Coat ID #470	03/19/2012	0800 - 1600	1st QTR Survey
15	Lab Coat ID #473	03/19/2012	0800 - 1600	1st QTR Survey
16	Lab Coat ID #474	03/19/2012	0800 - 1600	1st QTR Survey
17	Lab Coat ID #632	03/19/2012	0800 - 1600	1st QTR Survey
18	Lab Coat ID #450	03/19/2012	0800 - 1600	1st QTR Survey
* 19	Lab Coat ID #635	03/19/2012	0800 - 1600	1st QTR Survey
20	Lab Coat ID #573	03/19/2012	0800 - 1600	1st QTR Survey
21	Lab Coat ID #619	03/19/2012	0800 - 1600	1st QTR Survey
22	Lab Coat ID #622	03/19/2012	0800 - 1600	1st QTR Survey
23	Lab Coat ID #634	03/19/2012	0800 - 1600	1st QTR Survey
24	Lab Coat ID #611	03/19/2012	0800 - 1600	1st QTR Survey
25	Lab Coat ID #614	03/19/2012	0800 - 1600	1st QTR Survey

NOTE(S):

* Did not arrive

03/28/12 14:23

SR #: SR30848

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L49843

Initiated By: JSIMMONS
Init Date: 03/28/12 Receive Date: 03/27/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			N	
	19				Sample 19 was listed on the COC but did not arrive.
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

04/11/2012

LIMS #:	L49844
Project ID#:	EN010-3BIOCT-07
Received:	03/27/2012
Delivery Date:	04/26/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L49844-1	
002	L49844-2	
003	L49844-3	
004	L49844-4	
005	L49844-5	
006	L49844-6	
007	L49844-7	
008	L49844-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L49844-9	
010	L49844-10	
011	L49844-11	
012	L49844-12	
013	L49844-13	
014	L49844-14	
015	L49844-15	
016	L49844-16	
017	L49844-17	
018	L49844-18	
019	L49844-19	
020	L49844-20	
021	L49844-21	
022	L49844-22	
023	L49844-23	
024	L49844-24	
025	L49844-25	
026	L49844-26	
027	L49844-27	
028	L49844-28	
029	L49844-29	
030	L49844-30	
031	L49844-31	
032	L49844-32	
033	L49844-33	
034	L49844-34	
035	L49844-35	
036	L49844-36	
037	L49844-37	
038	L49844-38	
039	L49844-39	
040	L49844-40	
041	L49844-41	
042	L49844-42	
043	L49844-43	
044	L49844-44	
045	L49844-45	
046	L49844-46	
047	L49844-47	
048	L49844-48	
049	L49844-49	
050	L49844-50	
051	L49844-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L49844-52	
053	L49844-53	
054	L49844-54	
055	L49844-55	
056	L49844-56	
057	L49844-57	
058	L49844-58	
059	L49844-59	
060	L49844-60	
061	L49844-61	
062	L49844-62	
063	L49844-63	
064	L49844-64	
065	L49844-65	
066	L49844-66	
067	L49844-67	
068	L49844-68	
069	L49844-69	
070	L49844-70	
071	L49844-71	
072	L49844-72	
073	L49844-73	
074	L49844-74	
075	L49844-75	
076	L49844-76	
100	L49844-77	

Report Analysis

04/11/12 10:34

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49844

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.66E+01**	2.89E+00	3.18E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 002 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.41E+00**	2.38E+00	3.14E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 003 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+00**	1.95E+00	2.79E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 004 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.09E+00**	2.11E+00	2.92E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49844

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.69E+01**	2.83E+00	3.07E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 006 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.58E+01**	2.70E+00	2.96E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 007 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.01E+00**	2.18E+00	2.86E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 008 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.27E+01**	2.57E+00	2.99E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 009 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.26E+01**	2.91E+00	2.81E+00	DPM/TOTAL		100	%		04/04/12	30	M	+

Sample ID: 010 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.44E+01**	2.65E+00	2.98E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 011 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.02E+01**	4.70E+00	2.75E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 012 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.22E+01**	2.37E+00	2.72E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 013 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.97E+00	2.04E+00	2.82E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 014 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.41E+02	6.09E+00	2.78E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 015 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.95E+01	4.17E+00	2.79E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 016 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.36E+00	2.15E+00	2.96E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 017 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.04E+00**	2.14E+00	2.88E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 018 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.14E+00**	2.08E+00	2.77E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 019 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.37E+00**	2.31E+00	2.95E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 020 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.72E+00**	2.05E+00	2.86E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 021 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+00**	1.90E+00	2.71E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 022 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.45E+00**	2.22E+00	2.88E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 023 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.60E+00**	2.17E+00	2.88E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 024 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.13E+00	1.85E+00	**2.80E+00**	DPM/TOTAL		100	%		04/05/12	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 025 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.98E+00**	2.13E+00	2.88E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 026 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.95E+00**	2.15E+00	3.00E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 027 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.70E+01**	3.49E+00	3.37E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 028 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.97E+01**	2.93E+00	3.03E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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Sample ID: 029 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.76E+01	3.90E+00	2.91E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 030 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.19E+01	3.85E+00	3.08E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 031 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.98E+02	7.33E+00	2.93E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 032 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.58E+01	2.61E+00	2.81E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 033 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.08E+01**	3.32E+00	2.92E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 034 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.00E+00**	2.05E+00	2.75E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 035 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.97E+01**	2.80E+00	2.83E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 036 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.18E+00**	2.37E+00	2.96E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 037 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.53E-01	1.90E+00	3.03E+00	DPM/TOTAL		100	%		04/05/12	30	M	U

Sample ID: 038 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.27E+00**	2.26E+00	2.87E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 039 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.30E+01**	2.60E+00	3.00E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Sample ID: 040 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.14E+02**	5.65E+00	2.89E+00	DPM/TOTAL		100	%		04/05/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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EN010-3BIOCT-07

Sample ID: 041 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.84E+02**	1.34E+01	2.89E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 042 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.13E+02**	5.54E+00	2.76E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 043 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.09E+02**	5.56E+00	2.85E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 044 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.39E+02**	7.86E+00	2.75E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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L49844

Energy Solutions

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EN010-3BIOCT-07

Sample ID: 045 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.16E+01**	3.61E+00	2.74E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 046 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.66E+01**	2.60E+00	2.72E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 047 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.07E+02**	5.41E+00	2.75E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 048 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.24E+01**	3.34E+00	2.83E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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Sample ID: 049 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.49E+01**	3.72E+00	2.75E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 050 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.65E+02**	1.10E+01	2.83E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 051 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.70E+02**	1.06E+01	2.60E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 052 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.72E+03**	2.59E+01	2.73E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 053 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.55E+02**	1.31E+01	2.87E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 054 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.17E+02**	5.73E+00	2.84E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 055 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.87E+02**	1.15E+01	2.96E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 056 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.62E+01**	3.66E+00	3.06E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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Sample ID: 057 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+02**	5.63E+00	2.86E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 058 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.10E+01**	5.10E+00	2.83E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 059 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.33E+01**	3.48E+00	2.97E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Sample ID: 060 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.27E+01**	3.42E+00	2.92E+00	DPM/TOTAL		100	%		04/06/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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Sample ID: 061 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.45E+01**	6.58E+00	5.18E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 062 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.60E+01**	5.57E+00	5.39E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 063 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.76E+01**	8.12E+00	5.56E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 064 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.03E+02**	9.51E+00	5.34E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 065 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.82E+01	7.56E+00	5.47E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 066 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.25E+01	9.20E+00	5.48E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 067 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.94E+01	6.49E+00	5.45E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 068 Collect Start: 03/21/2012 08:30 Matrix: Swipes (SW)
Station: Collect Stop: 03/21/2012 11:30 Volume:
Description: Receive Date: 03/27/2012 % Moisture:
LIMS Number: L49844-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.14E+02	2.47E+01	5.76E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

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EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+01**	6.31E+00	5.29E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 070 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.78E+02**	2.48E+01	6.10E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 071 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.78E+02**	2.18E+01	5.52E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 072 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.11E+02**	1.80E+01	5.28E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

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Sample ID: 073 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.43E+03**	5.93E+01	7.04E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 074 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.65E+03**	6.71E+01	8.45E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 075 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
II-3	2010	**1.42E+02**	1.11E+01	5.46E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Sample ID: 076 | Collect Start: 03/21/2012 08:30 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/21/2012 11:30 | Volume:
Description: | Receive Date: 03/27/2012 | % Moisture:
LIMS Number: L49844-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
II-3	2010	**2.06E+01**	5.22E+00	5.45E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

04/11/12 10:34

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L49844

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 100		Collect Start: 03/21/2012 08:30		Matrix: Swipes	(SW)
Station:		Collect Stop: 03/21/2012 11:30		Volume:	
Description:		Receive Date: 03/27/2012		% Moisture:	
LIMS Number: L49844-77					

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.00E+00**	4.92E+00	6.53E+00	DPM/TOTAL		100	%		04/09/12	10	M	+

Flag Values

U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

L 49844

March 22, 2012
Ref. No.: 137013-179

WH37A

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium on Air Filters/Swipes

Dear Sir/Mme:

Attached is the chain-of-custody form for the First Quarter building & lab coat survey. Please analyze the sample in accordance with procedures used for tritium on air filter media/swipes.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Dates:	03/21/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filters
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Rec'd by: Jonathan S.
3/27/12
10:00

Stewart R. Smith
Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Air Filters	102	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: SR Smith Date: 03/22/2012
Reviewed By: Jeff Martin Date: 03/23/2012
Approved By: SR Smith Proj. Mgr. Date: 03/23/2012

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: SR Smith	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (203) 556-1213 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	03/21/2012	0830-1130	1st QTR Survey
002	Floor – Shipping Area	03/21/2012	0830-1130	1st QTR Survey
003	1st Floor Work Room Floor	03/21/2012	0830-1130	1st QTR Survey
004	1st Floor Vault Floor - North	03/21/2012	0830-1130	1st QTR Survey
005	Hallway @ Restrooms	03/21/2012	0830-1130	1st QTR Survey
006	Pantry Vending Machine Floor	03/21/2012	0830-1130	1st QTR Survey
007	Break Room Floor	03/21/2012	0830-1130	1st QTR Survey
008	Stairway B Landing Floor	03/21/2012	0830-1130	1st QTR Survey
009	Training Room Work Station	03/21/2012	0830-1130	1st QTR Survey
010	Training Room Work Station	03/21/2012	0830-1130	1st QTR Survey
011	Training Room Work Station	03/21/2012	0830-1130	1st QTR Survey
012	Training Room Work Station	03/21/2012	0830-1130	1st QTR Survey
013	Training Room Threshold Floor	03/21/2012	0830-1130	1st QTR Survey
014	Hallway Near Entrance Door-S	03/21/2012	0830-1130	1st QTR Survey
015	Hallway OS Watchmaker Room	03/21/2012	0830-1130	1st QTR Survey
016	Hallway Near Entrance Door-N	03/21/2012	0830-1130	1st QTR Survey
017	Floor OS Women's Bathroom	03/21/2012	0830-1130	1st QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: SR Smith	03/21/2012 1100 - 1230	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	03/21/2012 0800 - 1600	Relinquished by: W. Yee	03/21/12 - 1000
Accepted by: SR Smith	03/21/2012 1000	Relinquished by: SR Smith	03/23/12 - 1630
Accepted by: FEDEX	03/23/2012 1630	Relinquished by	
Accepted by		Relinquished by	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	03/21/2012	0830-1130	1st QTR Survey
019	Office A Hallway Floor	03/21/2012	0830-1130	1st QTR Survey
020	Office C Hallway Floor	03/21/2012	0830-1130	1st QTR Survey
021	Office F Hallway Floor	03/21/2012	0830-1130	1st QTR Survey
022	Floor – OS Copy Room	03/21/2012	0830-1130	1st QTR Survey
023	2nd Floor Hallway @ Safe	03/21/2012	0830-1130	1st QTR Survey
024	2nd Floor Safe Vestibule	03/21/2012	0830-1130	1st QTR Survey
025	2nd Floor Safe Floor	03/21/2012	0830-1130	1st QTR Survey
026	Sales Open Area Floor	03/21/2012	0830-1130	1st QTR Survey
027	Stairway A Floor - 2nd Floor	03/21/2012	0830-1130	1st QTR Survey
028	Polishing Room Floor	03/21/2012	0830-1130	1st QTR Survey
029	Cleaning Room - Sink Counter	03/21/2012	0830-1130	1st QTR Survey
030	QA Area Floor	03/21/2012	0830-1130	1st QTR Survey
031	Change Room Floor	03/21/2012	0830-1130	1st QTR Survey
032	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
033	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
034	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
035	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
036	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
037	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
038	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
039	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
040	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
041	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
042	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
043	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
044	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
045	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
046	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
047	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
049	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
050	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
051	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
052	Watchmaker Workstation	03/21/2012	0830-1130	1st QTR Survey
053	Watchmaker Room Entrance Floor - South	03/21/2012	0830-1130	1st QTR Survey
054	Watchmaker Room Floor - S	03/21/2012	0830-1130	1st QTR Survey
055	Watchmaker Room Floor - S	03/21/2012	0830-1130	1st QTR Survey
056	Watchmaker Room Floor - S	03/21/2012	0830-1130	1st QTR Survey
057	Watchmaker Room Floor - E	03/21/2012	0830-1130	1st QTR Survey
058	Watchmaker Room Floor - E	03/21/2012	0830-1130	1st QTR Survey
059	Watchmaker Room Floor - E	03/21/2012	0830-1130	1st QTR Survey
060	Watchmaker Room Floor - N	03/21/2012	0830-1130	1st QTR Survey
061	Watchmaker Room Floor - N	03/21/2012	0830-1130	1st QTR Survey
062	Watchmaker Room Floor - S	03/21/2012	0830-1130	1st QTR Survey
063	Watchmaker Room Floor - N	03/21/2012	0830-1130	1st QTR Survey
064	Watchmaker Room Entrance Floor - North	03/21/2012	0830-1130	1st QTR Survey
065	Watchmaker Room Floor - W	03/21/2012	0830-1130	1st QTR Survey
066	Watchmaker Room Floor - W	03/21/2012	0830-1130	1st QTR Survey
067	RSO Workstation Floor	03/21/2012	0830-1130	1st QTR Survey
068	QC Workstation Floor	03/21/2012	0830-1130	1st QTR Survey
069	Parts Room Floor	03/21/2012	0830-1130	1st QTR Survey
070	Radioactive Waste Closet Floor	03/21/2012	0830-1130	1st QTR Survey
071	Radioactive Waste Barrel #1	03/21/2012	0830-1130	1st QTR Survey
072	Radioactive Waste Barrel #2	03/21/2012	0830-1130	1st QTR Survey
073	Radioactive Waste Sample	03/21/2012	0830-1130	1st QTR Survey
074	Radioactive Waste Sample	03/21/2012	0830-1130	1st QTR Survey
075	Closet	03/21/2012	0830-1130	1st QTR Survey
076	Elevator 2nd Floor	03/21/2012	0830-1130	1st QTR Survey
100	**BKGD. Sample – OS Building**	03/21/2012	**0830-1130**	1st QTR Survey

03/28/12 14:36

SR #: SR30849

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L49844

Initiated By: JSIMMONS
Init Date: 03/28/12 Receive Date: 03/27/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

APPENDIX B

SECOND QUARTER 2012 SURVEY DATA

ENERGYSOLUTIONS

SECOND QUARTER 2012 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity (dpm/100cm^2)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The Second Quarter 2012 survey was performed on June 11, 2012. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

100 samples (76 locations and 24 lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are included in this report, (see Attachment 1).

In the Unrestricted Area, the highest removable result was in the 2nd Floor hallway outside the watchmaker's room on the floor. The reading was 51 dpm/100 cm^2 with a wet swipe.

In the Restricted area the highest removable result was 6,276 dpm/100 cm^2 (Watchmaker workstation – Southwest Corner near door). Remedial action was completed as a result of direct readings. No remedial action was required in the restricted areas per Table 1.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 1,378 dpm/100 cm^2 and the outside of a drum had 898 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 130 dpm/100 cm^2..

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (24 filter samples) indicate that the levels found on the lab coats were below the restrictive area limit provided in Table 1. The highest activity found was 129 dpm/100 cm^2 (Lab Coat #608) thus not requiring decontamination prior to laundering.

Conclusion

Based on the Second Quarter 2012 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ENERGYSOLUTIONS

ATTACHMENT 1

2nd QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A. Inc.
QUARTER: 2nd QTR Survey 2012
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	-4	Entrance Vestibule	L50806-001
002	U	5	Floor - Shipping Area	L50806-002
003	U	-8	1st Floor Work Room Floor	L50806-003
004	U	1	1st Floor Vault Floor - North	L50806-004
005	U	1	Hallway - Outside Rest Rooms	L50806-005
006	U	4	Pantry Vending Machine - Floor	L50806-006
007	U	-1	Break Room Floor	L50806-007
008	U	4	Stairway B Floor	L50806-008
009	U	31	Training Room Work Station-Southwest	L50806-009
010	U	21	Training Room Work Station-Northwest	L50806-010
011	U	14	Training Room Work Station-Southeast	L50806-011
012	U	18	Training Room Work Station-Northeast	L50806-012
013	U	13	Training Room Threshold Floor	L50806-013
014	U	5	Hallway Near Entrance Door-2nd Floor South	L50806-014
015	U	5	Hallway Outside Watchmaker's Room	L50806-015
016	U	51	Hallway Outside Watchmaker's Room	L50806-016
017	U	23	Floor Outside Women's Restroom	L50806-017
018	U	13	Floor In Men's Rest Room	L50806-018
019	U	4	Office A Hallway Floor	L50806-019
020	U	-2	Office C Hallway Floor	L50806-020
021	U	-1	Office F Hallway Floor	L50806-021
022	U	-5	2nd Floor - Outside Copy Room	L50806-022
023	U	11	2nd Floor Hallway Floor @ Safe	L50806-023
024	U	5	2nd Floor Safe Vestibule	L50806-024
025	U	10	2nd Floor Safe Floor	L50806-025
026	U	-1	Sales Open Area Floor	L50806-026
027	U	13	Stairway A 2nd Floor	L50806-027
028	R	25	Polishing Room Workstation	L50806-028
029	R	35	Cleaning Room - Sink Counter	L50806-029
030	R	27	QA Area Floor	L50806-030
031	R	45	Change Room Floor	L50806-031
032	R	66	Watchmaker Workstation	L50806-032
033	R	67	Watchmaker Workstation	L50806-033
034	R	298	Watchmaker Workstation	L50806-034
035	R	65	Watchmaker Workstation	L50806-035
036	R	35	Watchmaker Workstation	L50806-036
037	R	17	Watchmaker Workstation	L50806-037

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
038	R	1,266	Watchmaker Workstation	L50806-038
039	R	17	Watchmaker Workstation	L50806-039
040	R	96	Watchmaker Workstation	L50806-040
041	R	3	Watchmaker Workstation	L50806-041
042	R	20	Watchmaker Workstation	L50806-042
043	R	40	Watchmaker Workstation	L50806-043
044	R	25	Watchmaker Workstation	L50806-044
045	R	109	Watchmaker Workstation	L50806-045
046	R	6,276	Watchmaker Workstation	L50806-046
047	R	108	Watchmaker Workstation	L50806-047
048	R	46	Watchmaker Workstation	L50806-048
049	R	154	Watchmaker Workstation	L50806-049
050	R	1,996	Watchmaker Workstation	L50806-050
051	R	50	Watchmaker Workstation	L50806-051
052	R	117	Watchmaker Workstation	L50806-052
053	R	87	Watchmaker Room Entrance Door-South	L50806-053
054	R	30	Watchmaker Room Floor - South	L50806-054
055	R	19	Watchmaker Room Floor - South	L50806-055
056	R	3	Watchmaker Room Floor - South	L50806-056
057	R	-2	Watchmaker Room Floor - East	L50806-057
058	R	9	Watchmaker Room Floor - East	L50806-058
059	R	40	Watchmaker Room Floor - East	L50806-059
060	R	5	Watchmaker Room Floor - Norh	L50806-060
061	R	26	Watchmaker Room Floor - Norh	L50806-061
062	R	0	Watchmaker Room Floor - South	L50806-062
063	R	26	Watchmaker Room Floor - Norh	L50806-063
064	R	86	Watchmaker Room Entrance Door-North	L50806-064
065	R	18	Watchmaker Room Floor - West	L50806-065
066	R	26	Watchmaker Room Floor - West	L50806-066
067	R	10	RSO Workstation Floor	L50806-067
068	R	8	QC Area Floor	L50806-068
069	R	14	Parts Room	L50806-069
070	R	1,378	RadWaste Closet Floor	L50806-070
071	R	898	RadWaste Barrel #01	L50806-071
072	R	784	RadWaste Barrel #02	L50806-072
073	R	130	RadWaste Material (Step-off pads, etc)	L50806-073
074	R	23	RadWaste Material (Step-off pads, etc)	L50806-074
075	R	5	Parts Closet	L50806-075
076	U	23	Elevator Vestibule 2nd Floor	L50806-076
100	**U**	**3.86**	**Background Sample**	**L50806-100**

Completed by: **Stewart R Smith** Stewart R Smith Date: 7/20/2012

Reviewed By: DAN Snyder Date: 4/10/2013

The following areas should be decontaminated, if found to be tritium.

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	51	Lab Coat #601	L50807-1
2	R	48	Lab Coat #602	L50807-2
3	R	45	Lab Coat #604	L50807-3
4	R	55	Lab Coat #605	L50807-4
5	R	71	Lab Coat #608	L50807-5
6	R	49	Lab Coat #616	L50807-6
7	R	64	Lab Coat #620	L50807-7
8	R	236	Lab Coat #631	L50807-8
9	R	1,092	Lab Coat "RE"	L50807-9
10	R	232	Lab Coat #575	L50807-10
11	R	244	Lab Coat #576	L50807-11
12	R	189	Lab Coat "JA"	L50807-12
13	R	1,032	Lab Coat "MF"	L50807-13
14	R	290	Lab Coat #470	L50807-14
15	R	208	Lab Coat #473	L50807-15
16	R	300	Lab Coat #474	L50807-16
17	R	486	Lab Coat #632	L50807-17
18	R	166	Lab Coat #606	L50807-18
19	R	364	Lab Coat #607	L50807-19
20	R	187	Lab Coat #573	L50807-20
21	R	230	Lab Coat #622	L50807-21
22	R	113	Lab Coat #634	L50807-22
24	R	130	Lab Coat #611	L50807-23
25	R	145	Lab Coat #614	L50807-24

Completed by: **Stewart R Smith** Stewart R Smith Date: 7/20/2012

Reviewed By: DAN SLYWKA Date: 4/10/2013

The following coats require decontamination action: None

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2012

LIMS #:	L50806
Project ID#:	EN010-3BIOCT-07
Received:	06/15/2012
Delivery Date:	07/15/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L50806-1	
002	L50806-2	
003	L50806-3	
004	L50806-4	
005	L50806-5	
006	L50806-6	
007	L50806-7	
008	L50806-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L50806-9	
010	L50806-10	
011	L50806-11	
012	L50806-12	
013	L50806-13	
014	L50806-14	
015	L50806-15	
016	L50806-16	
017	L50806-17	
018	L50806-18	
019	L50806-19	
020	L50806-20	
021	L50806-21	
022	L50806-22	
023	L50806-23	
024	L50806-24	
025	L50806-25	
026	L50806-26	
027	L50806-27	
028	L50806-28	
029	L50806-29	
030	L50806-30	
031	L50806-31	
032	L50806-32	
033	L50806-33	
034	L50806-34	
035	L50806-35	
036	L50806-36	
037	L50806-37	
038	L50806-38	
039	L50806-39	
040	L50806-40	
041	L50806-41	
042	L50806-42	
043	L50806-43	
044	L50806-44	
045	L50806-45	
046	L50806-46	
047	L50806-47	
048	L50806-48	
049	L50806-49	
050	L50806-50	
051	L50806-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L50806-52	
053	L50806-53	
054	L50806-54	
055	L50806-55	
056	L50806-56	
057	L50806-57	
058	L50806-58	
059	L50806-59	
060	L50806-60	
061	L50806-61	
062	L50806-62	
063	L50806-63	
064	L50806-64	
065	L50806-65	
066	L50806-66	
067	L50806-67	
068	L50806-68	
069	L50806-69	
070	L50806-70	
071	L50806-71	
072	L50806-72	
073	L50806-73	
074	L50806-74	
075	L50806-75	
076	L50806-76	
078	L50806-77	
100	L50806-78	

Report of Analysis

06/28/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.94E-01	4.79E+00	7.92E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 002 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.16E+00	4.98E+00	7.53E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 003 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.99E+00	4.27E+00	7.37E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 004 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.54E+00	4.81E+00	7.52E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- + = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.31E+00	4.79E+00	7.52E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 006 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.95E+00	4.88E+00	7.41E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 007 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.59E+00	4.64E+00	7.39E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 008 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.75E+00	4.95E+00	7.55E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/20/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 009 (SW)
Station:
Description:
LIMS Number: L50806-9
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.76E+01**	6.08E+00	7.50E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 010 (SW)
Station:
Description:
LIMS Number: L50806-10
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.22E+01**	5.56E+00	7.36E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 011 (SW)
Station:
Description:
LIMS Number: L50806-11
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.92E+00**	5.33E+00	7.42E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 012 (SW)
Station:
Description:
LIMS Number: L50806-12
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.08E+01**	5.49E+00	7.43E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/xx/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 013 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.32E+00**	5.48E+00	7.75E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 014 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.57E+00	4.92E+00	**7.39E+00**	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 015 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.57E+00	4.92E+00	**7.37E+00**	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 016 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.74E+01**	7.10E+00	7.99E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/26/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.32E+01**	5.84E+00	7.67E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 018 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.43E+00**	5.29E+00	7.43E+00	DPM/TOTAL		100	%		06/22/12	10	M	+

Sample ID: 019 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.74E+00	4.94E+00	**7.53E+00**	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 020 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.18E-01	4.63E+00	**7.48E+00**	DPM/TOTAL		100	%		06/22/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/28/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.42E+00	4.68E+00	7.48E+00	DPM/TOTAL		100	%		06/22/12	10	M	U

Sample ID: 022 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-6.84E-01	4.45E+00	7.44E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 023 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.25E+00	5.31E+00	7.62E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 024 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.54E+00	4.93E+00	7.40E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis

06/Jun 12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 025 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.01E+00	5.29E+00	7.63E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 026 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.60E+00	4.67E+00	7.44E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 027 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.32E+00	5.30E+00	7.46E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 028 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.46E+01	5.63E+00	7.08E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis
06/2o/12 12:52

TELEDYN BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.96E+01**	6.17E+00	7.32E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 030 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+01**	5.76E+00	7.20E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 031 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.44E+01**	6.41E+00	7.15E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 032 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.50E+01**	7.11E+00	7.13E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis

06/20/12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 033 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.52E+01	7.27E+00	7.34E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 034 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.51E+02	1.64E+01	9.48E+00	DPM/TOTAL		100	%		06/23/12	5.64	M	+

Sample ID: 035 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.43E+01	7.16E+00	7.27E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 036 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.92E+01	5.99E+00	7.09E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE BROWN ENGINEERING, INC.
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L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 037 (SW)
Station:
Description:
LIMS Number: L50806-37
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.03E+01	5.28E+00	7.11E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 038 (SW)
Station:
Description:
LIMS Number: L50806-38
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.35E+02	6.46E+01	1.90E+01	DPM/TOTAL		100	%		06/23/12	1.41	M	+

Sample ID: 039 (SW)
Station:
Description:
LIMS Number: L50806-39
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.05E+01	5.28E+00	7.06E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 040 (SW)
Station:
Description:
LIMS Number: L50806-40
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.97E+01	8.31E+00	7.57E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/26/12 12:52

TELEDYN BROWN ENGINEERING, INC.
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Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 041 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.66E+00	4.71E+00	7.16E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 042 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	5.21E+00	6.77E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 043 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.20E+01**	6.21E+00	7.11E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 044 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.45E+01**	5.63E+00	7.10E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/28/12 12:52

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Stewart Smith

EN010-3BIOCT-07

Sample ID: 045 (SW)
Station:
Description:
LIMS Number: L50806-45
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.66E+01	8.36E+00	7.10E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 046 (SW)
Station:
Description:
LIMS Number: L50806-46
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.14E+03	3.11E+02	3.90E+01	DPM/TOTAL		100	%		06/27/12	29	M	+

Sample ID: 047 (SW)
Station:
Description:
LIMS Number: L50806-47
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.60E+01	8.55E+00	7.40E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 048 (SW)
Station:
Description:
LIMS Number: L50806-48
Collect Start: 06/11/2012 10:00
Collect Stop: 06/11/2012 16:00
Receive Date: 06/15/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.48E+01	6.51E+00	7.27E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis

06/2a/12 12:52

TELEDYN BROWN ENGINEERING, INC.
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L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 049 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.89E+01	9.58E+00	7.21E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 050 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.00E+03	1.01E+02	2.43E+01	DPM/TOTAL		100	%		06/23/12	.94	M	+

Sample ID: 051 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.68E+01	6.56E+00	7.12E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 052 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.04E+01	8.64E+00	7.29E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis
06/2 12 12:52

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EN010-3BIOCT-07

Sample ID: 053 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.52E+01	7.84E+00	7.34E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 054 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.71E+01	5.85E+00	7.16E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 055 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.14E+01	5.48E+00	7.29E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 056 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.28E+00	4.81E+00	7.38E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/[illegible]12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

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EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.39E-01	4.65E+00	7.50E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 058 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.40E+00	4.81E+00	6.91E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 059 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.18E+01	6.30E+00	7.31E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 060 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.54E+00	4.85E+00	7.26E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values
U = Compound/Analyte not detected (<MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis
06/26/12 12:52

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EN010-3B1OCT-07

Sample ID: 061 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.50E+01**	5.74E+00	7.25E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 062 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.83E+00	4.63E+00	7.32E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 063 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.50E+01**	5.74E+00	7.25E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 064 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.48E+01**	8.00E+00	7.61E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

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Sample ID: 065 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.09E+01	5.40E+00	7.24E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 066 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.48E+01	5.73E+00	7.26E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 067 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.13E+00	5.12E+00	7.30E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Sample ID: 068 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.95E+00	4.98E+00	7.26E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis
06/2a 12 12:52

TELEDYN BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith EN010-3BIOCT-07

Sample ID: 069 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.01E+00	5.22E+00	7.20E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 070 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.91E+02	7.00E+01	2.05E+01	DPM/TOTAL		100	%		06/23/12	1.36	M	+

Sample ID: 071 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.51E+02	4.62E+01	1.65E+01	DPM/TOTAL		100	%		06/23/12	2.01	M	+

Sample ID: 072 Collect Start: 06/11/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 06/11/2012 16:00 Volume:
Description: Receive Date: 06/15/2012 % Moisture:
LIMS Number: L50806-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.94E+02	4.04E+01	1.52E+01	DPM/TOTAL		100	%		06/23/12	2.24	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.67E+01**	8.55E+00	6.74E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 074 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.64E+02**	4.75E+01	1.63E+01	DPM/TOTAL		100	%		06/23/12	1.86	M	+

Sample ID: 075 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.32E+02**	1.46E+01	9.07E+00	DPM/TOTAL		100	%		06/23/12	6.38	M	+

Sample ID: 076 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.57E+00	4.88E+00	**7.31E+00**	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/[illegible]12 12:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50806

Energy Solutions

Stewart Smith

EN010-3B1OCT-07

Sample ID: 078 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.32E+01	5.60E+00	7.26E+00	DPM/TOTAL		100	%		06/23/12	10	M	+

Sample ID: 100 | Collect Start: 06/11/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50806-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.93E+00	4.64E+00	7.33E+00	DPM/TOTAL		100	%		06/23/12	10	M	U

Flag Values

- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

* Samples in 2 bags *

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

L50806

WH52B

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka	for: Breitling USA, Inc.
Site Contact: AS ABOVE Phone: (801) 303-1093 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	6/11/2012	1000 -1600	2nd QTR Survey
002	Floor – Shipping Area	6/11/2012	1000 -1600	2nd QTR Survey
003	1st Floor Work Room Floor	6/11/2012	1000 -1600	2nd QTR Survey
004	1st Floor Vault Floor - North	6/11/2012	1000 -1600	2nd QTR Survey
005	Inside Men's Restroom	6/11/2012	1000 -1600	2nd QTR Survey
006	Pantry Vending Machine Floor	6/11/2012	1000 -1600	2nd QTR Survey
007	Break Room Floor	6/11/2012	1000 -1600	2nd QTR Survey
008	Stairway B Landing Floor	6/11/2012	1000 -1600	2nd QTR Survey
009	Training Room Work Station	6/11/2012	1000 -1600	2nd QTR Survey
010	Training Room Work Station	6/11/2012	1000 -1600	2nd QTR Survey
011	Training Room Work Station	6/11/2012	1000 -1600	2nd QTR Survey
012	Training Room Work Station	6/11/2012	1000 -1600	2nd QTR Survey
013	Training Room Threshold Floor	6/11/2012	1000 -1600	2nd QTR Survey
014	Hallway Near Entrance Door	6/11/2012	1000 -1600	2nd QTR Survey
015	Hallway OS Watchmaker Room	6/11/2012	1000 -1600	2nd QTR Survey
016	Hallway OS Watchmaker Room	6/11/2012	1000 -1600	2nd QTR Survey
017	Floor OS Supplies Closet	6/11/2012	1000 -1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	6/11/2012 1000 -1600	Relinquished by: D. Slywka	6/11/2012 1630
Accepted by: FEDEX	6/11/2012 1630	Relinquished by	
Accepted by		Relinquished by	

Rec'd by: Jonathan [signature]

~~6/18~~ JMS 6/15/12 10:00

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	6/11/2012	1000 -1600	2nd QTR Survey
019	Office A Hallway Floor	6/11/2012	1000 -1600	2nd QTR Survey
020	Office C Hallway Floor	6/11/2012	1000 -1600	2nd QTR Survey
021	Office F Hallway Floor	6/11/2012	1000 -1600	2nd QTR Survey
022	Floor – OS Copy Room	6/11/2012	1000 -1600	2nd QTR Survey
023	2nd Floor Hallway @ Safe	6/11/2012	1000 -1600	2nd QTR Survey
024	2nd Floor Safe Vestibule	6/11/2012	1000 -1600	2nd QTR Survey
025	2nd Floor Safe Floor	6/11/2012	1000 -1600	2nd QTR Survey
026	Sales Open Area Floor	6/11/2012	1000 -1600	2nd QTR Survey
027	Stairway A Floor - 2nd Floor	6/11/2012	1000 -1600	2nd QTR Survey
028	Polishing Room Floor	6/11/2012	1000 -1600	2nd QTR Survey
029	Cleaning Room - Sink Counter	6/11/2012	1000 -1600	2nd QTR Survey
030	QA Area Floor	6/11/2012	1000 -1600	2nd QTR Survey
031	Change Room Floor	6/11/2012	1000 -1600	2nd QTR Survey
032	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
033	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
034	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
035	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
036	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
037	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
038	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
039	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
040	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
041	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
042	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
043	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
044	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
045	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
046	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
047	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
049	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
050	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
051	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
052	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
053	Watchmaker Room Entrance Floor - South	6/11/2012	1000 -1600	2nd QTR Survey
054	Watchmaker Room Floor - S	6/11/2012	1000 -1600	2nd QTR Survey
055	Watchmaker Room Floor - S	6/11/2012	1000 -1600	2nd QTR Survey
056	Watchmaker Room Floor - S	6/11/2012	1000 -1600	2nd QTR Survey
057	Watchmaker Room Floor - E	6/11/2012	1000 -1600	2nd QTR Survey
058	Watchmaker Room Floor - E	6/11/2012	1000 -1600	2nd QTR Survey
059	Watchmaker Room Floor - E	6/11/2012	1000 -1600	2nd QTR Survey
060	Watchmaker Room Floor - N	6/11/2012	1000 -1600	2nd QTR Survey
061	Watchmaker Room Floor - N	6/11/2012	1000 -1600	2nd QTR Survey
062	Watchmaker Room Floor - S	6/11/2012	1000 -1600	2nd QTR Survey
063	Watchmaker Room Floor - N	6/11/2012	1000 -1600	2nd QTR Survey
064	Watchmaker Room Entrance Floor - North	6/11/2012	1000 -1600	2nd QTR Survey
065	Watchmaker Room Floor - W	6/11/2012	1000 -1600	2nd QTR Survey
066	Watchmaker Room Floor - W	6/11/2012	1000 -1600	2nd QTR Survey
067	RSO Workstation Floor	6/11/2012	1000 -1600	2nd QTR Survey
068	QC Workstation Floor	6/11/2012	1000 -1600	2nd QTR Survey
069	Parts Room Floor	6/11/2012	1000 -1600	2nd QTR Survey
070	Radioactive Waste Closet Floor	6/11/2012	1000 -1600	2nd QTR Survey
071	Radioactive Waste Barrel #1	6/11/2012	1000 -1600	2nd QTR Survey
072	Radioactive Waste Barrel #2	6/11/2012	1000 -1600	2nd QTR Survey
073	Radioactive Waste Sample	6/11/2012	1000 -1600	2nd QTR Survey
074	Radioactive Waste Sample	6/11/2012	1000 -1600	2nd QTR Survey
075	Watchmaker Workstation	6/11/2012	1000 -1600	2nd QTR Survey
076	Elevator 2nd Floor	6/11/2012	1000 -1600	2nd QTR Survey
078	Stairway "A" – Floor 1	6/11/2012	1000 -1600	2nd QTR Survey
100	**BKGD. Sample – OS Building**	6/11/2012	1000 -1600	2nd QTR Survey

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	24	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/11/2012

Reviewed By: SR Smith Proj. Mgr. Date: 6/11/2012

Approved By: SR Smith Proj. Mgr. Date: 6/11/2012

June 11, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	6/11/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Various; Urine, Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

06/19/12 14:41
SR #: SR31730

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L50806

Initiated By: JSIMMONS
Init Date: 06/19/12 Receive Date: 06/15/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2012

LIMS #:	L50817
Project ID#:	EN010-3BIOCT-07
Received:	06/15/2012
Delivery Date:	07/15/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
12A-086	L50817-1	

Report Analysis

06/20/12 13:09

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50817

Energy Solutions

EN010-3BIOCT-07

Sample ID:	12A-086	Collect Start:	06/07/2012 08:00	Matrix:	Urine (U)
Station:		Collect Stop:	06/07/2012 16:00	Volume:	
Description:		Receive Date:	06/15/2012	% Moisture:	
LIMS Number:	L50817-1				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	**1.34E-02**	1.47E-03	1.22E-03	uCi/L		1	ml		06/28/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L 50817

June 7, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

B6C

Subject: **Request for Analysis – Tritium in Bioassay (Urine) Sample.**

Dear Sir/Mme:

Attached is the chain-of-custody form for bioassay sample. Please analyze the sample in accordance with procedures used for tritium in urine samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Urine
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

Rec'd by:
Jonathan
6/15/12
10:00

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Urine		LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/7/2012

Reviewed By: SR Smith Proj. Mgr. Date: 6/7/2012

Approved By: SR Smith Proj. Mgr. Date: 6/7/2012

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling	for: Breitling USA, Inc.
Site Contact: Stewart Smith Phone: (801) 303-1603 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: [redacted] TLING			; 0800 - 1600	
	12A-086			

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: [redacted] Breitling, USA		Relinquished by: [redacted] Breitling, USA	
Accepted by: D. Slywka		Relinquished by: D. Slywka	
FEDEX			

06/20/12 13:37
SR #: SR31741

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L50817

Initiated By: JSIMMONS
Init Date: 06/20/12 Receive Date: 06/20/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody		N		COC did not have an ID or date of sampling. The ship date was used as the sampling date and the ID was taken from the bottle.
8	Sample(s) properly preserved and in appropriate container(s)		N		Urine sample was not properly packaged. The bottle was not sealed with tape therefore allowing the lid to loosen up and result in urine leaking out into the bag.
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2012

LIMS #: L50807
Project ID#: EN010-3BIOCT-07
Received: 06/15/2012
Delivery Date: 07/15/2012
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L50807-1	LAB COAT ID #601
2	L50807-2	LAB COAT ID #602
3	L50807-3	LAB COAT ID #604
4	L50807-4	LAB COAT ID #605
5	L50807-5	LAB COAT ID #608
6	L50807-6	LAB COAT ID #616
7	L50807-7	LAB COAT ID #620
8	L50807-8	LAB COAT ID #631

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L50807-9	LAB COAT ID "RE"
10	L50807-10	LAB COAT ID #575
11	L50807-11	LAB COAT ID #576
12	L50807-12	LAB COAT ID "JA"
13	L50807-13	LAB COAT ID "MF"
14	L50807-14	LAB COAT ID 470
15	L50807-15	LAB COAT ID #473
16	L50807-16	LAB COAT ID #474
17	L50807-17	LAB COAT ID #632
18	L50807-18	LAB COAT ID #606
19	L50807-19	LAB COAT ID #607
20	L50807-20	LAB COAT ID #573
21	L50807-21	LAB COAT ID #622
22	L50807-22	LAB COAT ID #634
23	L50807-23	LAB COAT ID #611
24	L50807-24	LAB COAT ID #614

Repor[illegible] Analysis

06/[illegible]12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 — Collect Start: 06/11/2012 08:00 — Matrix: Swipes (SW)
Station: LAB COAT ID #601 — Collect Stop: 06/11/2012 16:00 — Volume:
Description: — Receive Date: 06/15/2012 — % Moisture:
LIMS Number: L50807-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.72E+01	6.02E+00	6.15E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 2 — Collect Start: 06/11/2012 08:00 — Matrix: Swipes (SW)
Station: LAB COAT ID #602 — Collect Stop: 06/11/2012 16:00 — Volume:
Description: — Receive Date: 06/15/2012 — % Moisture:
LIMS Number: L50807-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.61E+01	5.93E+00	6.12E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 3 — Collect Start: 06/11/2012 08:00 — Matrix: Swipes (SW)
Station: LAB COAT ID #604 — Collect Stop: 06/11/2012 16:00 — Volume:
Description: — Receive Date: 06/15/2012 — % Moisture:
LIMS Number: L50807-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.44E+01	5.83E+00	6.14E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 4 — Collect Start: 06/11/2012 08:00 — Matrix: Swipes (SW)
Station: LAB COAT ID #605 — Collect Stop: 06/11/2012 16:00 — Volume:
Description: — Receive Date: 06/15/2012 — % Moisture:
LIMS Number: L50807-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.96E+01	6.17E+00	6.12E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/Jun/12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

Stewart Smith

EN010-3B1OCT-07

Sample ID: 5 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.76E+01	6.67E+00	6.11E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 6 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.62E+01	5.94E+00	6.12E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 7 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #620 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.38E+01	6.48E+00	6.17E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 8 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+02	1.31E+01	7.65E+00	DPM/TOTAL		100	%		06/27/12	6.33	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Repor Analysis

06/20/12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.48E+02**	5.54E+01	1.58E+01	DPM/TOTAL		100	%		06/27/12	1.48	M	+

Sample ID: 10 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+02**	1.29E+01	7.59E+00	DPM/TOTAL		100	%		06/27/12	6.47	M	+

Sample ID: 11 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.24E+02**	1.35E+01	7.77E+00	DPM/TOTAL		100	%		06/27/12	6.18	M	+

Sample ID: 12 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.62E+01**	1.08E+01	6.92E+00	DPM/TOTAL		100	%		06/27/12	7.85	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/28/12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.18E+02	5.27E+01	1.56E+01	DPM/TOTAL		100	%		06/27/12	1.56	M	+

Sample ID: 14 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID 470 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.47E+02	1.58E+01	8.46E+00	DPM/TOTAL		100	%		06/27/12	5.32	M	+

Sample ID: 15 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+02	1.17E+01	7.21E+00	DPM/TOTAL		100	%		06/27/12	7.11	M	+

Sample ID: 16 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.52E+02	1.63E+01	8.59E+00	DPM/TOTAL		100	%		06/27/12	5.13	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/20/12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.45E+02	2.55E+01	1.08E+01	DPM/TOTAL		100	%		06/27/12	3.21	M	+

Sample ID: 18 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.51E+01	9.72E+00	6.57E+00	DPM/TOTAL		100	%		06/27/12	8.81	M	+

Sample ID: 19 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.84E+02	1.94E+01	9.38E+00	DPM/TOTAL		100	%		06/27/12	4.27	M	+

Sample ID: 20 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.52E+01	1.07E+01	6.89E+00	DPM/TOTAL		100	%		06/27/12	7.9	M	+

Flag Values

U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/12 12:54

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50807

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #622 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.17E+02	1.29E+01	7.60E+00	DPM/TOTAL		100	%		06/27/12	6.53	M	+

Sample ID: 22 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.56E+01	9.76E+00	6.56E+00	DPM/TOTAL		100	%		06/27/12	8.69	M	+

Sample ID: 23 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.68E+01	8.22E+00	6.06E+00	DPM/TOTAL		100	%		06/27/12	10	M	+

Sample ID: 24 | Collect Start: 06/11/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 06/11/2012 16:00 | Volume:
Description: | Receive Date: 06/15/2012 | % Moisture:
LIMS Number: L50807-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.45E+01	8.70E+00	6.17E+00	DPM/TOTAL		100	%		06/27/12	9.89	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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MDC - Minimum Detectable Concentration

In Process

Sample#	Analysis	Matrix	Clientid

In Process QC

Sample #	Analysis	Matrix	Clientid	Original Sample#

Missing gamma nuclides

Sample #	Nuclide

Spec/High Flags

Sample#	Client ID	Analysis	Result	Error	MDC	Flag

QC Failures

Qc Sample	Analysis	QC type	Passfail

Recoveries

Sample#	Analysis	Flag	Recovery	Range	SR-89	Carrier	Flag	Recovery

Comments

R=Rerun
C=Recount
L=Lab
G=General

Sample#	Analysis	Seq	Type	Comments

K-40 Non-Detects in Vegetation/Animal

Sample#	Matnum	Analysis	Activity	Error	Mdc	Flag1

Invalid QC Type

Samplenum	Qctype

Gamma with U*

Sample#	ClientID	Nuclide	Activity	Error	MDC	Flag1

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6187

06/28/2012

EN010-3BIOCT-07

L50817

Project Mgr R.CHARLES

Due Date: 07/15/2012

Date Sent

Ship To:

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury CT 06811

Copies:
Report Format: Level 1 - Full 3Sigma
Smail: Y
Email when posted:
Email: Y ssmith@energysolutions.com;
FTP: N
EDI: N EDI Email
EDI FTP:
EDI Format:
Comments: Called Randy

Data Package Requirements

Project# EN010-3BIOCT-07

Distribution Y	QC Summary	CaseNarrativeShort	Efficiency Files	Balances Used
Coverpage	Sample Receipt	CaseNarrativeLong	Background Files	Pipettes Used
Inprocess Y	InternalCoc	Rawdata	Spike Sources	Percent Moisture
ROA Y	Dividers	GammaRawdata	Logbook Pages	Datasheet

Reviewed by Program Manager _____ Date _____

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2012

LIMS #:	L50817
Project ID#:	EN010-3BIOCT-07
Received:	06/15/2012
Delivery Date:	07/15/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
12A-086	L50817-1	

Report of Analysis

06/20/12 12:55

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L50817

Energy Solutions

EN010-3BIOCT-07

Sample ID:	12A-086	Collect Start:	06/07/2012 08:00	Matrix:	Urine (U)
Station:		Collect Stop:	06/07/2012 16:00	Volume:	
Description:		Receive Date:	06/15/2012	% Moisture:	
LIMS Number:	L50817-1				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	1.34E-02	1.47E-03	1.22E-03	uCi/L		1	ml		06/28/12	30	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

CP-CHM-101, Rev 01 L50807

WHS1A

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact: Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
1	Lab Coat ID #601	6/11/2012	0800 - 1600	2nd QTR Survey
2	Lab Coat ID #602	6/11/2012	0800 - 1600	2nd QTR Survey
3	Lab Coat ID #604	6/11/2012	0800 - 1600	2nd QTR Survey
4	Lab Coat ID #605	6/11/2012	0800 - 1600	2nd QTR Survey
5	Lab Coat ID #608	6/11/2012	0800 - 1600	2nd QTR Survey
6	Lab Coat ID #616	6/11/2012	0800 - 1600	2nd QTR Survey
7	Lab Coat ID #620	6/11/2012	0800 - 1600	2nd QTR Survey
8	Lab Coat ID #631	6/11/2012	0800 - 1600	2nd QTR Survey
9	Lab Coat ID "RE"	6/11/2012	0800 - 1600	2nd QTR Survey
10	Lab Coat ID #575	6/11/2012	0800 - 1600	2nd QTR Survey
11	Lab Coat ID #576	6/11/2012	0800 - 1600	2nd QTR Survey
12	Lab Coat ID "JA"	6/11/2012	0800 - 1600	2nd QTR Survey
13	Lab Coat ID "MF"	6/11/2012	0800 - 1600	2nd QTR Survey
14	Lab Coat ID #470	6/11/2012	0800 - 1600	2nd QTR Survey
15	Lab Coat ID #473	6/11/2012	0800 - 1600	2nd QTR Survey
16	Lab Coat ID #474	6/11/2012	0800 - 1600	2nd QTR Survey
17	Lab Coat ID #632	6/11/2012	0800 - 1600	2nd QTR Survey
18	Lab Coat ID #606	6/11/2012	0800 - 1600	2nd QTR Survey
19	Lab Coat ID #607	6/11/2012	0800 - 1600	2nd QTR Survey
20	Lab Coat ID #573	6/11/2012	0800 - 1600	2nd QTR Survey
21	Lab Coat ID #622	6/11/2012	0800 - 1600	2nd QTR Survey
22	Lab Coat ID #634	6/11/2012	0800 - 1600	2nd QTR Survey
23	Lab Coat ID #611	6/11/2012	0800 - 1600	2nd QTR Survey
24	Lab Coat ID #614	6/11/2012	0800 - 1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	6/11/2012 0800 - 1600	Relinquished by: W. Yee, Breitling, USA	6/11/2012 1300
Accepted by: D. Slywka	6/11/2012 1300	Relinquished by: D. Slywka	6/11/2012 1600
FEDEX	6/11/2012 1600		

Rec'd by: [signature] 6/15/12 10:00

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	24	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/11/2012

Reviewed By: SR Smith Proj. Mgr. Date: 6/11/2012

Approved By: SR Smith Proj. Mgr. Date: 6/11/2012

06/19/12 14:50

SR #: SR31731

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L50807

Initiated By: JSIMMONS
Init Date: 06/19/12 Receive Date: 06/15/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

APPENDIX C

THIRD QUARTER 2012 SURVEY DATA

ENERGYSOLUTIONS

THIRD QUARTER 2012 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The Third Quarter 2012 survey was performed on September 14, 2012. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

101 samples (78 locations and 23 lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are included in this report, (see Attachment 1).

In the Unrestricted Area, the highest removable result was on the floor of the Shipping Area. The reading was 18 dpm/100 cm^2 with a wet swipe. No action is required for any of the Unrestricted Area. All readings were near background levels.

In the Restricted Area the highest removable result was 1,622 dpm/100 cm^2 (Watchmaker workstation – Southwest Corner near door). No remedial action was required in the Restricted Areas per Table 1. The Breitling RSO had the workstation cleaned as a result of the survey.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 80 dpm/100 cm^2 and the outside of a drum had 247 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 5,991 dpm/100 cm^2..

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (23 filter samples) indicate that the highest reading was 199 dpm/100 cm^2, which is below the Restricted Area limit provided in Table 1.

Conclusion

Based on the Third Quarter 2012 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 3rd QTR Survey 2012
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	-2	Entrance Floor	L52501-1
002	U	18	Floor - Shipping Area	L52501-2
003	U	-3	1st Floor Work Room Floor	L52501-3
004	U	0	1st Floor Vault Floor - North	L52501-4
005	U	-3	Inside Men's Restroom	L52501-5
006	U	-12	Pantry Vending Machine - Floor	L52501-6
007	U	1	Break Room Floor	L52501-7
008	U	6	Stairway B Landing Floor	L52501-8
009	U	8	Training Room Work Station	L52501-9
010	U	12	Training Room Work Station	L52501-10
011	U	16	Training Room Work Station	L52501-11
012	U	4	Training Room Work Station	L52501-12
013	U	9	Training Room Threshold Floor	L52501-13
014	U	9	Hallway Near Entrance Door	L52501-14
015	U	-1	Hallway Outside Watchmaker's Room	L52501-15
016	U	17	Hallway Outside Watchmaker's Room	L52501-16
017	U	3	Floor Outside Supplies Closet	L52501-17
018	U	-1	Floor In Men's Restroom	L52501-18
019	U	7	Office A Hallway Floor	L52501-19
020	U	-3	Office C Hallway Floor	L52501-20
021	U	-2	Office F Hallway Floor	L52501-21
022	U	8	2nd Floor - Outside Copy Room	L52501-22
023	U	0	2nd Floor Hallway Floor @ Safe	L52501-23
024	U	15	2nd Floor Safe Vestibule	L52501-24
025	U	4	2nd Floor Safe Floor	L52501-25
026	U	-3	Sales Open Area Floor	L52501-26
027	U	7	Stairway A 2nd Floor	L52501-27
028	R	45	Polishing Room Floor	L52501-28
029	R	104	Cleaning Room - Sink Counter	L52501-29
030	R	41	QA Area Floor	L52501-30
031	R	13	Change Room Floor	L52501-31
032	R	11	Watchmaker Workstation	L52501-32
033	R	50	Watchmaker Workstation	L52501-33
034	R	36	Watchmaker Workstation	L52501-34
035	R	30	Watchmaker Workstation	L52501-35
036	R	-1	Watchmaker Workstation	L52501-36
037	R	-3	Watchmaker Workstation	L52501-37

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
038	R	10	Watchmaker Workstation	L52501-38
039	R	-7	Watchmaker Workstation	L52501-39
040	R	12	Watchmaker Workstation	L52501-40
041	R	32	Watchmaker Workstation	L52501-41
042	R	9	Watchmaker Workstation	L52501-42
043	R	473	Watchmaker Workstation	L52501-43
044	R	28	Watchmaker Workstation	L52501-44
045	R	4	Watchmaker Workstation	L52501-45
046	R	28	Watchmaker Workstation	L52501-46
047	R	4	Watchmaker Workstation	L52501-47
048	R	10	Watchmaker Workstation	L52501-48
049	R	130	Watchmaker Workstation	L52501-49
050	R	125	Watchmaker Workstation	L52501-50
051	R	4	Watchmaker Workstation	L52501-51
052	R	1,622	Watchmaker Workstation	L52501-52
053	R	76	Watchmaker Room Entrance Door-South	L52501-53
054	R	41	Watchmaker Room Floor - S	L52501-54
055	R	16	Watchmaker Room Floor - S	L52501-55
056	R	49	Watchmaker Room Floor - S	L52501-56
057	R	25	Watchmaker Room Floor - E	L52501-57
058	R	27	Watchmaker Room Floor - E	L52501-58
059	R	12	Watchmaker Room Floor - E	L52501-59
060	R	-2	Watchmaker Room Floor - N	L52501-60
061	R	26	Watchmaker Room Floor - N	L52501-61
062	R	62	Watchmaker Room Floor - S	L52501-62
063	R	27	Watchmaker Room Floor - N	L52501-63
064	R	206	Watchmaker Room Entrance Door-North	L52501-64
065	R	137	Watchmaker Room Floor - W	L52501-65
066	R	23	Watchmaker Room Floor - W	L52501-66
067	R	21	RSO Workstation Floor	L52501-67
068	R	34	QC Workstation Floor	L52501-68
069	R	24	Parts Room Floor	L52501-69
070	R	80	Radioactive Waste Closet Floor	L52501-70
071	R	93	Radioactive Waste Barrel #1	L52501-71
072	R	247	Radioactive Waste Barrel #2	L52501-72
073	R	5,991	Radioactive Waste Sample	L52501-73
074	R	293	Radioactive Waste Sample	L52501-74
075	R	1,374	Watchmaker Workstation	L52501-75
076	U	7	Elevator 2nd Floor	L52501-76
077	U	-2	Stairway "A" - Floor 1	L52501-77
100	**U**	**7.76**	**Background Sample**	L52501-78

Completed by: **Stewart R Smith** Stewart R Smith Date: 11/27/2012

Reviewed By: DAN SLYWKA Date: 4/10/2013

The following areas should be decontaminated, if found to be tritium.

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	76	Lab Coat #601	L52502-1
2	R	199	Lab Coat #602	L52502-2
3	R	175	Lab Coat #604	L52502-3
4	R	69	Lab Coat #605	L52502-4
5	R	44	Lab Coat #608	L52502-5
6	R	57	Lab Coat #616	L52502-6
7	R	58	Lab Coat #620	L52502-7
8	R	79	Lab Coat #631	L52502-8
9	R	84	Lab Coat "RE"	L52502-9
10	R	108	Lab Coat #575	L52502-10
11	R	94	Lab Coat #576	L52502-11
12	R	126	Lab Coat "JA"	L52502-12
13	R	49	Lab Coat "MF"	L52502-13
14	R	95	Lab Coat #470	L52502-14
15	R	58	Lab Coat #473	L52502-15
16	R	95	Lab Coat #474	L52502-16
17	R	52	Lab Coat #632	L52502-17
18	R	49	Lab Coat #606	L52502-18
19	R	114	Lab Coat #607	L52502-19
20	R	101	Lab Coat #573	L52502-20
21	R	145	Lab Coat #622	L52502-21
22	R	80	Lab Coat #611	L52502-22
23	R	132	Lab Coat #614	L52502-23

Completed by: **Stewart R Smith** Stewart R Smith Date: 11/27/2012

Reviewed By: DAN SCHWICK Date: 4/10/2013

The following coats require decontamination action: None

ENERGYSOLUTIONS

ATTACHMENT 1

3rd QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering Analyses

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

11/20/2012

LIMS #: L52501
Project ID#: EN010-3BIOCT-07
Received: 11/02/2012
Delivery Date: 12/02/2012
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L52501-1	
002	L52501-2	
003	L52501-3	
004	L52501-4	
005	L52501-5	
006	L52501-6	
007	L52501-7	
008	L52501-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L52501-9	
010	L52501-10	
011	L52501-11	
012	L52501-12	
013	L52501-13	
014	L52501-14	
015	L52501-15	
016	L52501-16	
017	L52501-17	
018	L52501-18	
019	L52501-19	
020	L52501-20	
021	L52501-21	
022	L52501-22	
023	L52501-23	
024	L52501-24	
025	L52501-25	
026	L52501-26	
027	L52501-27	
028	L52501-28	
029	L52501-29	
030	L52501-30	
031	L52501-31	
032	L52501-32	
033	L52501-33	
034	L52501-34	
035	L52501-35	
036	L52501-36	
037	L52501-37	
038	L52501-38	
039	L52501-39	
040	L52501-40	
041	L52501-41	
042	L52501-42	
043	L52501-43	
044	L52501-44	
045	L52501-45	
046	L52501-46	
047	L52501-47	
048	L52501-48	
049	L52501-49	
050	L52501-50	
051	L52501-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L52501-52	
053	L52501-53	
054	L52501-54	
055	L52501-55	
056	L52501-56	
057	L52501-57	
058	L52501-58	
059	L52501-59	
060	L52501-60	
061	L52501-61	
062	L52501-62	
063	L52501-63	
064	L52501-64	
065	L52501-65	
066	L52501-66	
067	L52501-67	
068	L52501-68	
069	L52501-69	
070	L52501-70	
071	L52501-71	
072	L52501-72	
073	L52501-73	
074	L52501-74	
075	L52501-75	
076	L52501-76	
078	L52501-77	
100	L52501-78	

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: Entrance Floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.16E+00	2.45E+00	3.73E+00	DPM/TOTAL		100	%		11/16/12	30	M	U

Sample ID: 002 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.27E+01	3.16E+00	3.71E+00	DPM/TOTAL		100	%		11/16/12	30	M	+

Sample ID: 003 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.29E+00	2.37E+00	3.60E+00	DPM/TOTAL		100	%		11/16/12	30	M	U

Sample ID: 004 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.63E+00	2.46E+00	3.57E+00	DPM/TOTAL		100	%		11/16/12	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: inside mens restroom | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.34E+00	2.40E+00	3.64E+00	DPM/TOTAL		100	%		11/16/12	30	M	U

Sample ID: 006 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.26E-01	2.17E+00	3.61E+00	DPM/TOTAL		100	%		11/16/12	30	M	U

Sample ID: 007 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: break room floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.16E+00	2.57E+00	3.69E+00	DPM/TOTAL		100	%		11/16/12	30	M	+

Sample ID: 008 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.04E+00	2.75E+00	3.64E+00	DPM/TOTAL		100	%		11/16/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 009 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: training room work station — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.82E+00	2.78E+00	3.60E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 010 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: training room work station — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.74E+00	2.87E+00	3.54E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 011 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: training room work station — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.18E+01	3.05E+00	3.63E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 012 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: training room work station — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.83E+00	2.67E+00	3.64E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 013 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: training room threshold floor — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.38E+00**	2.83E+00	3.63E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 014 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: hallway near entrance door — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.43E+00**	2.84E+00	3.64E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 015 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: hallway os watchmaker room — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.51E+00	2.46E+00	**3.58E+00**	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 016 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: hallway os watchmaker room — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.21E+01**	3.13E+00	3.72E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
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Stewart Smith

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Sample ID: 017 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: floor os supplies closet | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.27E+00	2.62E+00	3.64E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 018 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.11E+00	2.55E+00	3.78E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 019 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: office A hallway floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.06E+00	2.72E+00	3.59E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 020 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: office C hallway floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.29E+00	2.37E+00	3.60E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery
Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
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Stewart Smith

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Sample ID: 021 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: office F hallway floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.80E+00	2.36E+00	**3.50E+00**	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 022 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.75E+00**	2.67E+00	3.43E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 023 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.66E+00	2.44E+00	**3.53E+00**	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 024 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.14E+01**	3.03E+00	3.64E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
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Energy Solutions

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Stewart Smith

Sample ID: 025 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.66E+00	2.59E+00	3.54E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 026 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: sales open area floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.11E+00	2.33E+00	3.55E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 027 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.24E+00	2.73E+00	3.58E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 028 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: polishing room floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.59E+01	3.78E+00	3.56E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.54E+01	6.36E+00	4.59E+00	DPM/TOTAL		100	%		11/17/12	18.08	M	+

Sample ID: 030 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: QA area floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.40E+01	3.65E+00	3.51E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 031 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: change room floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.02E+01	2.99E+00	3.68E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 032 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.36E+00	2.85E+00	3.56E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 033 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L52501-33
Collect Start: 09/14/2012 10:00
Collect Stop: 09/14/2012 16:00
Receive Date: 11/02/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.84E+01	3.88E+00	3.52E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 034 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L52501-34
Collect Start: 09/14/2012 10:00
Collect Stop: 09/14/2012 16:00
Receive Date: 11/02/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.19E+01	3.53E+00	3.49E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 035 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L52501-35
Collect Start: 09/14/2012 10:00
Collect Stop: 09/14/2012 16:00
Receive Date: 11/02/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.89E+01	3.36E+00	3.48E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 036 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L52501-36
Collect Start: 09/14/2012 10:00
Collect Stop: 09/14/2012 16:00
Receive Date: 11/02/2012
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.46E+00	2.41E+00	3.51E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 037 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.20E+00	2.32E+00	3.52E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 038 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.64E+00	2.78E+00	3.51E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 039 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.81E-01	2.19E+00	3.53E+00	DPM/TOTAL		100	%		11/17/12	30	M	U

Sample ID: 040 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.94E+00	2.88E+00	3.54E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 041 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.99E+01**	3.44E+00	3.51E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 042 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.10E+00**	2.74E+00	3.52E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 043 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.38E+02**	2.44E+01	9.19E+00	DPM/TOTAL		100	%		11/18/12	4.65	M	+

Sample ID: 044 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.75E+01**	3.34E+00	3.56E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 045 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.95E+00**	2.61E+00	3.53E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 046 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.78E+01**	3.35E+00	3.54E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 047 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.92E+00**	2.63E+00	3.57E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 048 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.55E+00**	2.76E+00	3.49E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 049 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.83E+01**	7.60E+00	5.01E+00	DPM/TOTAL		100	%		11/18/12	14.78	M	+

Sample ID: 050 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.55E+01**	7.31E+00	4.89E+00	DPM/TOTAL		100	%		11/18/12	15.34	M	+

Sample ID: 051 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.64E+00**	2.55E+00	3.48E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 052 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.07E+02**	8.10E+01	1.64E+01	DPM/TOTAL		100	%		11/18/12	1.36	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 053 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.17E+01	5.02E+00	4.02E+00	DPM/TOTAL		100	%		11/18/12	23.21	M	+

Sample ID: 054 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.40E+01	3.65E+00	3.52E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 055 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.18E+01	2.99E+00	3.54E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 056 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.82E+01	3.87E+00	3.53E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.63E+01	3.26E+00	3.54E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 058 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.72E+01	3.34E+00	3.58E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 059 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.71E+00	2.85E+00	3.51E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 060 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.00E+00	2.38E+00	3.52E+00	DPM/TOTAL		100	%		11/19/12	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 061 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.69E+01	3.27E+00	3.50E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Sample ID: 062 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.43E+01	4.33E+00	3.70E+00	DPM/TOTAL		100	%		11/19/12	27.27	M	+

Sample ID: 063 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.72E+01	3.37E+00	3.63E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Sample ID: 064 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+02	1.13E+01	6.05E+00	DPM/TOTAL		100	%		11/19/12	9.6	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.17E+01**	7.92E+00	5.10E+00	DPM/TOTAL		100	%		11/19/12	14.08	M	+

Sample ID: 066 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+01**	3.16E+00	3.47E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Sample ID: 067 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.43E+01**	3.10E+00	3.46E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Sample ID: 068 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: qc workstation floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.05E+01**	3.37E+00	3.36E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: parts room floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.55E+01	3.22E+00	3.55E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Sample ID: 070 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.36E+01	5.19E+00	4.07E+00	DPM/TOTAL		100	%		11/19/12	22.13	M	+

Sample ID: 071 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.00E+01	5.50E+00	4.18E+00	DPM/TOTAL		100	%		11/19/12	23.74	M	+

Sample ID: 072 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.26E+02	1.33E+01	6.69E+00	DPM/TOTAL		100	%		11/19/12	8.44	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 073 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.97E+03	2.95E+02	3.11E+01	DPM/TOTAL		100	%		11/19/12	37	M	+

Sample ID: 074 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.49E+02	1.56E+01	7.57E+00	DPM/TOTAL		100	%		11/19/12	7.76	M	+

Sample ID: 075 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.84E+02	6.87E+01	1.52E+01	DPM/TOTAL		100	%		11/19/12	1.62	M	+

Sample ID: 076 | Collect Start: 09/14/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 09/14/2012 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52501-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.23E+00	2.72E+00	3.56E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:13

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52501

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 078 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: stairway "a" - FLOOR 1 — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.00E+00	2.46E+00	3.65E+00	DPM/TOTAL		100	%		11/19/12	30	M	U

Sample ID: 100 — Collect Start: 09/14/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 09/14/2012 16:00 — Volume:
Description: BKGD Sample - OS Building — Receive Date: 11/02/2012 — % Moisture:
LIMS Number: L52501-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+00**	2.40E+00	3.45E+00	DPM/TOTAL		100	%		11/19/12	30	M	+

Flag Values

U	=	Compound/Analyte not detected (< MDC) or less than 3 sigma
+	=	Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U*	=	Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High	=	Activity concentration exceeds customer reporting value
Spec	=	MDC exceeds customer technical specification
L	=	Low recovery
H	=	High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L52501

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

ATTACHMENT 6.1

WH67D

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka **for: Breitling USA, Inc.**

Site Contact:, AS ABOVE

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	9/14/2012	1000 -1600	3rd QTR Survey
002	Floor – Shipping Area	9/14/2012	1000 -1600	3rd QTR Survey
003	1st Floor Work Room Floor	9/14/2012	1000 -1600	3rd QTR Survey
004	1st Floor Vault Floor - North	9/14/2012	1000 -1600	3rd QTR Survey
005	Inside Men's Restroom	9/14/2012	1000 -1600	3rd QTR Survey
006	Pantry Vending Machine Floor	9/14/2012	1000 -1600	3rd QTR Survey
007	Break Room Floor	9/14/2012	1000 -1600	3rd QTR Survey
008	Stairway B Landing Floor	9/14/2012	1000 -1600	3rd QTR Survey
009	Training Room Work Station	9/14/2012	1000 -1600	3rd QTR Survey
010	Training Room Work Station	9/14/2012	1000 -1600	3rd QTR Survey
011	Training Room Work Station	9/14/2012	1000 -1600	3rd QTR Survey
012	Training Room Work Station	9/14/2012	1000 -1600	3rd QTR Survey
013	Training Room Threshold Floor	9/14/2012	1000 -1600	3rd QTR Survey
014	Hallway Near Entrance Door	9/14/2012	1000 -1600	3rd QTR Survey
015	Hallway OS Watchmaker Room	9/14/2012	1000 -1600	3rd QTR Survey
016	Hallway OS Watchmaker Room	9/14/2012	1000 -1600	3rd QTR Survey
017	Floor OS Supplies Closet	9/14/2012	1000 -1600	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	9/14/2012 1000 -1600	Relinquished by: D. Slywka	9/14/2012 1630
Accepted by: FEDEX	9/14/2012 1630	Relinquished by	
Accepted by		Relinquished by	

Rec'd by:
Jonathan
11/2/12
10:00

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	9/14/2012	1000 -1600	3rd QTR Survey
019	Office A Hallway Floor	9/14/2012	1000 -1600	3rd QTR Survey
020	Office C Hallway Floor	9/14/2012	1000 -1600	3rd QTR Survey
021	Office F Hallway Floor	9/14/2012	1000 -1600	3rd QTR Survey
022	Floor -- OS Copy Room	9/14/2012	1000 -1600	3rd QTR Survey
023	2nd Floor Hallway @ Safe	9/14/2012	1000 -1600	3rd QTR Survey
024	2nd Floor Safe Vestibule	9/14/2012	1000 -1600	3rd QTR Survey
025	2nd Floor Safe Floor	9/14/2012	1000 -1600	3rd QTR Survey
026	Sales Open Area Floor	9/14/2012	1000 -1600	3rd QTR Survey
027	Stairway A Floor - 2nd Floor	9/14/2012	1000 -1600	3rd QTR Survey
028	Polishing Room Floor	9/14/2012	1000 -1600	3rd QTR Survey
029	Cleaning Room - Sink Counter	9/14/2012	1000 -1600	3rd QTR Survey
030	QA Area Floor	9/14/2012	1000 -1600	3rd QTR Survey
031	Change Room Floor	9/14/2012	1000 -1600	3rd QTR Survey
032	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
033	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
034	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
035	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
036	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
037	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
038	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
039	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
040	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
041	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
042	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
043	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
044	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
045	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
046	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
047	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
049	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
050	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
051	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
052	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
053	Watchmaker Room Entrance Floor - South	9/14/2012	1000 -1600	3rd QTR Survey
054	Watchmaker Room Floor - S	9/14/2012	1000 -1600	3rd QTR Survey
055	Watchmaker Room Floor - S	9/14/2012	1000 -1600	3rd QTR Survey
056	Watchmaker Room Floor - S	9/14/2012	1000 -1600	3rd QTR Survey
057	Watchmaker Room Floor - E	9/14/2012	1000 -1600	3rd QTR Survey
058	Watchmaker Room Floor - E	9/14/2012	1000 -1600	3rd QTR Survey
059	Watchmaker Room Floor - E	9/14/2012	1000 -1600	3rd QTR Survey
060	Watchmaker Room Floor - N	9/14/2012	1000 -1600	3rd QTR Survey
061	Watchmaker Room Floor - N	9/14/2012	1000 -1600	3rd QTR Survey
062	Watchmaker Room Floor - S	9/14/2012	1000 -1600	3rd QTR Survey
063	Watchmaker Room Floor - N	9/14/2012	1000 -1600	3rd QTR Survey
064	Watchmaker Room Entrance Floor - North	9/14/2012	1000 -1600	3rd QTR Survey
065	Watchmaker Room Floor - W	9/14/2012	1000 -1600	3rd QTR Survey
066	Watchmaker Room Floor - W	9/14/2012	1000 -1600	3rd QTR Survey
067	RSO Workstation Floor	9/14/2012	1000 -1600	3rd QTR Survey
068	QC Workstation Floor	9/14/2012	1000 -1600	3rd QTR Survey
069	Parts Room Floor	9/14/2012	1000 -1600	3rd QTR Survey
070	Radioactive Waste Closet Floor	9/14/2012	1000 -1600	3rd QTR Survey
071	Radioactive Waste Barrel #1	9/14/2012	1000 -1600	3rd QTR Survey
072	Radioactive Waste Barrel #2	9/14/2012	1000 -1600	3rd QTR Survey
073	Radioactive Waste Sample	9/14/2012	1000 -1600	3rd QTR Survey
074	Radioactive Waste Sample	9/14/2012	1000 -1600	3rd QTR Survey
075	Watchmaker Workstation	9/14/2012	1000 -1600	3rd QTR Survey
076	Elevator 2nd Floor	9/14/2012	1000 -1600	3rd QTR Survey
078	Stairway "A" – Floor 1	9/14/2012	1000 -1600	3rd QTR Survey
100	**BKGD. Sample – OS Building**	9/14/2012	1000 -1600	3rd QTR Survey

September 14, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	9/14/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Various; Urine, Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	24 23 DD.	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 9/14/2012
Reviewed By: SR Smith Proj. Mgr. Date: 9/14/2012
Approved By: SR Smith Proj. Mgr. Date: 9/14/2012

11/02/12 14:14

SR #: SR33276

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L52501

Initiated By: JSIMMONS
Init Date: 11/02/12 Receive Date: 11/02/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

11/20/2012

LIMS #:	L52502
Project ID#:	EN010-3BIOCT-07
Received:	11/02/2012
Delivery Date:	12/02/2012
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L52502-1	LAB COAT ID #601
2	L52502-2	LAB COAT ID #602
3	L52502-3	LAB COAT ID #604
4	L52502-4	LAB COAT ID #605
5	L52502-5	LAB COAT ID #608
6	L52502-6	LAB COAT ID #616
7	L52502-7	LAB COAT ID #620
8	L52502-8	LAB COAT ID #631

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L52502-9	LAB COAT ID "RE"
10	L52502-10	LAB COAT ID #575
11	L52502-11	LAB COAT ID #576
12	L52502-12	LAB COAT ID "JA"
13	L52502-13	LAB COAT ID "MF"
14	L52502-14	LAB COAT ID #470
15	L52502-15	LAB COAT ID #473
16	L52502-16	LAB COAT ID #474
17	L52502-17	LAB COAT ID #632
18	L52502-18	LAB COAT ID #606
19	L52502-19	LAB COAT ID #607
20	L52502-20	LAB COAT ID #573
21	L52502-21	LAB COAT ID #622
22	L52502-22	LAB COAT ID #611
23	L52502-23	LAB COAT ID #614

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.14E+01	3.02E+00	3.62E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 2 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.35E+01	3.67E+00	3.58E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 3 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.12E+01	3.54E+00	3.56E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Sample ID: 4 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.07E+01	2.97E+00	3.60E+00	DPM/TOTAL		100	%		11/17/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.17E+00**	2.75E+00	3.52E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 6 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.48E+00**	2.93E+00	3.66E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 7 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #620 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.61E+00**	2.86E+00	3.54E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 8 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.17E+01**	3.11E+00	3.72E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.22E+01	3.01E+00	3.52E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 10 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.45E+01	3.19E+00	3.59E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 11 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.31E+01	3.07E+00	3.53E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 12 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.63E+01	3.28E+00	3.56E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.73E+00**	2.84E+00	3.60E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 14 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.32E+01**	3.11E+00	3.59E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 15 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.62E+00**	2.90E+00	3.61E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 16 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.32E+01**	3.09E+00	3.55E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.98E+00	2.83E+00	3.56E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 18 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.68E+00	2.88E+00	3.67E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 19 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.51E+01	3.24E+00	3.61E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 20 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.38E+01	3.19E+00	3.65E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

11/20/12 10:15

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L52502

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 21 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #622 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.82E+01	3.33E+00	3.48E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 22 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.18E+01	2.99E+00	3.52E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Sample ID: 23 | Collect Start: 09/14/2012 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 09/14/2012 16:00 | Volume:
Description: | Receive Date: 11/02/2012 | % Moisture:
LIMS Number: L52502-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.69E+01	3.23E+00	3.44E+00	DPM/TOTAL		100	%		11/18/12	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

L52502

WH67C

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
1	Lab Coat ID #601	9/14/2012	0800 - 1600	3rd QTR Survey
2	Lab Coat ID #602	9/14/2012	0800 - 1600	3rd QTR Survey
3	Lab Coat ID #604	9/14/2012	0800 - 1600	3rd QTR Survey
4	Lab Coat ID #605	9/14/2012	0800 - 1600	3rd QTR Survey
5	Lab Coat ID #608	9/14/2012	0800 - 1600	3rd QTR Survey
6	Lab Coat ID #616	9/14/2012	0800 - 1600	3rd QTR Survey
7	Lab Coat ID #620	9/14/2012	0800 - 1600	3rd QTR Survey
8	Lab Coat ID #631	9/14/2012	0800 - 1600	3rd QTR Survey
9	Lab Coat ID "RE"	9/14/2012	0800 - 1600	3rd QTR Survey
10	Lab Coat ID #575	9/14/2012	0800 - 1600	3rd QTR Survey
11	Lab Coat ID #576	9/14/2012	0800 - 1600	3rd QTR Survey
12	Lab Coat ID "JA"	9/14/2012	0800 - 1600	3rd QTR Survey
13	Lab Coat ID "MF"	9/14/2012	0800 - 1600	3rd QTR Survey
14	Lab Coat ID #470	9/14/2012	0800 - 1600	3rd QTR Survey
15	Lab Coat ID #473	9/14/2012	0800 - 1600	3rd QTR Survey
16	Lab Coat ID #474	9/14/2012	0800 - 1600	3rd QTR Survey
17	Lab Coat ID #632	9/14/2012	0800 - 1600	3rd QTR Survey
18	Lab Coat ID #606	9/14/2012	0800 - 1600	3rd QTR Survey
19	Lab Coat ID #607	9/14/2012	0800 - 1600	3rd QTR Survey
20	Lab Coat ID #573	9/14/2012	0800 - 1600	3rd QTR Survey
21	Lab Coat ID #622	9/14/2012	0800 - 1600	3rd QTR Survey
22	Lab Coat ID #611	9/14/2012	0800 - 1600	3rd QTR Survey
23	Lab Coat ID #614	9/14/2012	0800 - 1600	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	9/14/2012 0800 - 1600	Relinquished by: W. Yee, Breitling, USA	9/14/2012 1300
Accepted by: D. Slywka	9/14/2012 1300	Relinquished by: D. Slywka	9/14/2012 1600
FEDEX	9/14/2012 1600		

Rec'd by: [signature] 11/2/12 10:00

September 14, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	9/14/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Various; Urine, Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	~~24~~ 23 DS.	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 9/14/2012
Reviewed By: SR Smith Proj. Mgr. Date: 9/14/2012
Approved By: SR Smith Proj. Mgr. Date: 9/14/2012

11/02/12 14:28

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

SR #: SR33277

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L52502

Initiated By: JSIMMONS
Init Date: 11/02/12 Receive Date: 11/02/12

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

APPENDIX D

FOURTH QUARTER 2012 SURVEY DATA

ENERGYSOLUTIONS

FOURTH QUARTER 2012 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity (dpm/100cm^2)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The Fourth Quarter 2012 survey was performed on November 21, 2012. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

102 samples (78 locations and 24 lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are included in this report, (see Attachment 1).

In the Unrestricted Area, the highest removable result was on the southwest Training Room workstation. The reading was 955 dpm/100 cm^2 with a wet swipe.

In the Restricted area the highest removable result was 4,475 dpm/100 cm^2 (Watchmaker workstation, northeast central row). No remedial action was required in the restricted areas per Table 1.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 341 dpm/100 cm^2 and the outside of a drum had 857 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 1,317 dpm/100 cm^2..

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (24 filter samples) indicate that the levels found on the lab coats were below the restrictive area limit provided in Table 1. The highest activity found was 32 dpm/100 cm^2 (Lab Coat #602) thus not requiring decontamination prior to laundering.

Conclusion

The results of the survey were discussed with the Breitling Radiation Safety Officer. Based on the Fourth Quarter 2012 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A. Inc.
QUARTER: 4th QTR Survey 2012
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	1	Entrance Floor	L53252-1
002	U	3	Floor - Shipping Area	L53252-2
003	U	-1	1st Floor Work Room Floor	L53252-3
004	U	4	1st Floor Vault Floor - North	L53252-4
005	U	0	Inside Men's Restroom	L53252-5
006	U	-3	Pantry Vending Machine - Floor	L53252-6
007	U	3	Break Room Floor	L53252-7
008	U	3	Stairway B Landing Floor	L53252-8
009	U	15	Training Room Work Station	L53252-9
010	U	955	Training Room Work Station	L53252-10
011	U	15	Training Room Work Station	L53252-11
012	U	92	Training Room Work Station	L53252-12
013	U	1	Training Room Threshold Floor	L53252-13
014	U	3	Hallway Near Entrance Door	L53252-14
015	U	2	Hallway Outside Watchmaker's Room	L53252-15
016	U	15	Hallway Outside Watchmaker's Room	L53252-16
017	U	9	Floor Outside Supplies Closet	L53252-17
018	U	-5	Floor In Men's Restroom	L53252-18
019	U	2	Office A Hallway Floor	L53252-19
020	U	0	Office C Hallway Floor	L53252-20
021	U	-4	Office F Hallway Floor	L53252-21
022	U	86	2nd Floor - Outside Copy Room	L53252-22
023	U	5	2nd Floor Hallway Floor @ Safe	L53252-23
024	U	32	2nd Floor Safe Vestibule	L53252-24
025	U	257	2nd Floor Safe Floor	L53252-25
026	U	1	Sales Open Area Floor	L53252-26
027	U	0	Stairway A 2nd Floor	L53252-27
028	R	18	Polishing Room Floor	L53252-28
029	R	46	Cleaning Room - Sink Counter	L53252-29
030	R	18	QA Area Floor	L53252-30
031	R	37	Change Room Floor	L53252-31
032	R	99	Watchmaker Workstation	L53252-32
033	R	6	Watchmaker Workstation	L53252-33
034	R	27	Watchmaker Workstation	L53252-34
035	R	9	Watchmaker Workstation	L53252-35
036	R	2	Watchmaker Workstation	L53252-36
037	R	22	Watchmaker Workstation	L53252-37
038	R	55	Watchmaker Workstation	L53252-38
039	R	3	Watchmaker Workstation	L53252-39
040	R	375	Watchmaker Workstation	L53252-40
041	R	9	Watchmaker Workstation	L53252-41

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
042	R	22	Watchmaker Workstation	L53252-42
043	R	81	Watchmaker Workstation	L53252-43
044	R	30	Watchmaker Workstation	L53252-44
045	R	4,475	Watchmaker Workstation	L53252-45
046	R	177	Watchmaker Workstation	L53252-46
047	R	141	Watchmaker Workstation	L53252-47
048	R	53	Watchmaker Workstation	L53252-48
049	R	52	Watchmaker Workstation	L53252-49
050	R	20	Watchmaker Workstation	L53252-50
051	R	28	Watchmaker Workstation	L53252-51
052	R	30	Watchmaker Workstation	L53252-52
053	R	39	Watchmaker Room Entrance Door-South	L53252-53
054	R	551	Watchmaker Room Floor - S	L53252-54
055	R	8	Watchmaker Room Floor - S	L53252-55
056	R	17	Watchmaker Room Floor - S	L53252-56
057	R	19	Watchmaker Room Floor - E	L53252-57
058	R	24	Watchmaker Room Floor - E	L53252-58
059	R	23	Watchmaker Room Floor - E	L53252-59
060	R	26	Watchmaker Room Floor - N	L53252-60
061	R	20	Watchmaker Room Floor - N	L53252-61
062	R	9	Watchmaker Room Floor - S	L53252-62
063	R	82	Watchmaker Room Floor - N	L53252-63
064	R	349	Watchmaker Room Entrance Door-North	L53252-64
065	R	52	Watchmaker Room Floor - W	L53252-65
066	R	75	Watchmaker Room Floor - W	L53252-66
067	R	16	RSO Workstation Floor	L53252-67
068	R	23	QC Workstation Floor	L53252-68
069	R	22	Parts Room Floor	L53252-69
070	R	341	Radioactive Waste Closet Floor	L53252-70
071	R	857	Radioactive Waste Barrel #1	L53252-71
072	R	459	Radioactive Waste Barrel #2	L53252-72
073	R	633	Radioactive Waste Sample	L53252-73
074	R	1,317	Radioactive Waste Sample	L53252-74
075	R	1,157	Watchmaker Workstation	L53252-75
076	U	8	Elevator 2nd Floor	L53252-76
078	U	12	Stairway "A" - Floor 1	L53252-77
100	U	**4.86**	**Background Sample**	L53252-78

Completed by: **Stewart R Smith** Date: 2/5/2013

Reviewed By: DAN SLYDER Date: 4/10/2013

The following areas should be decontaminated, if found to be tritium.

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	6	Lab Coat #601	L53253-1
2	R	32	Lab Coat #602	L53253-2
3	R	3	Lab Coat #604	L53253-3
4	R	6	Lab Coat #605	L53253-4
5	R	5	Lab Coat #608	L53253-5
6	R	-1	Lab Coat #616	L53253-6
7	R	9	Lab Coat #620	L53253-7
8	R	13	Lab Coat #631	L53253-8
9	R	19	Lab Coat "RE"	L53253-9
10	R	11	Lab Coat #575	L53253-10
11	R	5	Lab Coat #576	L53253-11
12	R	4	Lab Coat "JA"	L53253-12
13	R	5	Lab Coat "MF"	L53253-13
14	R	17	Lab Coat #470	L53253-14
15	R	5	Lab Coat #473	L53253-15
16	R	8	Lab Coat #474	L53253-16
17	R	7	Lab Coat #632	L53253-17
18	R	11	Lab Coat #606	L53253-18
19	R	2	Lab Coat #607	L53253-19
20	R	2	Lab Coat #573	L53253-20
21	R	7	Lab Coat #622	L53253-21
22	R	5	Lab Coat #611	L53253-22
23	R	11	Lab Coat #614	L53253-23
24	R	8	Lab Coat #	L53253-24

Completed by: Stewart R Smith Stewart R Smith Date: 2/5/2013

Reviewed By: DAN SLYWKA D L R Date: 4/10/2013

The following coats require decontamination action: None

ENERGYSOLUTIONS

ATTACHMENT 1

4th QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

02/04/2013

LIMS #: L53252
Project ID#: EN010-3BIOCT-07
Received: 01/10/2013
Delivery Date: 02/09/2013
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L53252-1	
002	L53252-2	
003	L53252-3	
004	L53252-4	
005	L53252-5	
006	L53252-6	
007	L53252-7	
008	L53252-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L53252-9	
010	L53252-10	
011	L53252-11	
012	L53252-12	
013	L53252-13	
014	L53252-14	
015	L53252-15	
016	L53252-16	
017	L53252-17	
018	L53252-18	
019	L53252-19	
020	L53252-20	
021	L53252-21	
022	L53252-22	
023	L53252-23	
024	L53252-24	
025	L53252-25	
026	L53252-26	
027	L53252-27	
028	L53252-28	
029	L53252-29	
030	L53252-30	
031	L53252-31	
032	L53252-32	
033	L53252-33	
034	L53252-34	
035	L53252-35	
036	L53252-36	
037	L53252-37	
038	L53252-38	
039	L53252-39	
040	L53252-40	
041	L53252-41	
042	L53252-42	
043	L53252-43	
044	L53252-44	
045	L53252-45	
046	L53252-46	
047	L53252-47	
048	L53252-48	
049	L53252-49	
050	L53252-50	
051	L53252-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L53252-52	
053	L53252-53	
054	L53252-54	
055	L53252-55	
056	L53252-56	
057	L53252-57	
058	L53252-58	
059	L53252-59	
060	L53252-60	
061	L53252-61	
062	L53252-62	
063	L53252-63	
064	L53252-64	
065	L53252-65	
066	L53252-66	
067	L53252-67	
068	L53252-68	
069	L53252-69	
070	L53252-70	
071	L53252-71	
072	L53252-72	
073	L53252-73	
074	L53252-74	
075	L53252-75	
076	L53252-76	
078	L53252-77	
100	L53252-78	

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: Entrance Floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.07E+00	2.43E+00	**3.58E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 002 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.85E+00**	2.48E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 003 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.85E+00	2.32E+00	**3.56E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 004 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.37E+00**	2.50E+00	3.54E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 005 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: inside mens restroom — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.45E+00	2.36E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 006 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: pantry vending machine floor — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.95E-01	2.24E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 007 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: break room floor — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.89E+00**	2.47E+00	3.54E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 008 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: stairway b landing floor — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.14E+00**	2.50E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: training room work station | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.01E+01**	2.91E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 010 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: training room work station | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.80E+02**	1.37E+01	3.54E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 011 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: training room work station | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.68E+00**	2.89E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 012 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: training room work station | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.86E+01**	4.82E+00	3.57E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
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L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 013 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: training room threshold floor — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.74E+00	2.39E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 014 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: hallway near entrance door — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.97E+00**	2.49E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 015 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: hallway os watchmaker room — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.56E+00	2.47E+00	**3.58E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 016 — Collect Start: 11/21/2012 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/21/2012 16:00 — Volume:
Description: hallway os watchmaker room — Receive Date: 01/10/2013 — % Moisture:
LIMS Number: L53252-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.75E+00**	2.89E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BJOCT-07

Sample ID: 017 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: floor os supplies closet | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.72E+00	2.68E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 018 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.69E-02	2.16E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 019 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: office A hallway floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.64E+00	2.45E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 020 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: office C hallway floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.22E+00	2.34E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: office F hallway floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.85E-01	2.19E+00	**3.56E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 022 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.56E+01**	4.69E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 023 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.80E+00**	2.56E+00	3.58E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 024 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.84E+01**	3.41E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 025 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.31E+02**	7.38E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 026 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: sales open arae floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.85E+00	2.42E+00	**3.59E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 027 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.22E+00	2.34E+00	**3.55E+00**	DPM/TOTAL		1	ml		01/30/13	30	M	U

Sample ID: 028 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: polishing room floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.12E+01**	2.98E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.56E+01**	3.79E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 030 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: QA area floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	3.00E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 031 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: change room floor | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.11E+01**	3.56E+00	3.56E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 032 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.18E+01**	4.93E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 033 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.56E+00**	2.59E+00	3.54E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 034 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.60E+01**	3.28E+00	3.55E+00	DPM/TOTAL		1	ml		01/30/13	30	M	+

Sample ID: 035 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.09E+00**	2.73E+00	3.58E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 036 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.28E+00	2.43E+00	**3.55E+00**	DPM/TOTAL		1	ml		01/31/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 037 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.32E+01	3.11E+00	3.56E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 038 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.01E+01	4.01E+00	3.55E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 039 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.08E+00	2.50E+00	3.56E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 040 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.90E+02	8.77E+00	3.55E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 041 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.95E+00	2.56E+00	3.25E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 042 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.33E+01	2.97E+00	3.20E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 043 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.27E+01	4.98E+00	3.63E+00	DPM/TOTAL		1	ml		01/31/13	24.39	M	+

Sample ID: 044 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.74E+01	3.28E+00	3.28E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

L53252

Energy Solutions

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Sample ID: 045 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: watchmaker workstation Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.24E+03**	2.23E+02	2.45E+01	DPM/TOTAL		1	ml		01/31/13	.52	M	+

Sample ID: 046 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: watchmaker workstation Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.09E+01**	9.69E+00	5.15E+00	DPM/TOTAL		1	ml		01/31/13	12.24	M	+

Sample ID: 047 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: watchmaker workstation Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.31E+01**	7.93E+00	4.60E+00	DPM/TOTAL		1	ml		01/31/13	14.71	M	+

Sample ID: 048 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: watchmaker workstation Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.88E+01**	3.86E+00	3.23E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
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L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 049 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.85E+01	3.81E+00	3.19E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 050 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.24E+01	2.90E+00	3.19E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 051 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.62E+01	3.19E+00	3.25E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 052 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.73E+01	3.30E+00	3.32E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
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Energy Solutions

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EN010-3BIOCT-07

Sample ID: 053 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.18E+01**	3.51E+00	3.26E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 054 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.78E+02**	2.83E+01	8.95E+00	DPM/TOTAL		1	ml		01/31/13	4.25	M	+

Sample ID: 055 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.30E+00**	2.51E+00	3.24E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 056 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.08E+01**	2.85E+00	3.27E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.19E+01	2.94E+00	3.30E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 058 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.45E+01	3.07E+00	3.24E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 059 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.37E+01	3.00E+00	3.20E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 060 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.56E+01	3.22E+00	3.35E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.25E+01	2.95E+00	3.24E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 062 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.88E+00	2.57E+00	3.27E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 063 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.34E+01	5.01E+00	3.58E+00	DPM/TOTAL		1	ml		01/31/13	23.46	M	+

Sample ID: 064 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.77E+02	1.83E+01	7.00E+00	DPM/TOTAL		1	ml		01/31/13	6.23	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 065 (SW)
Station:
Description: watchmaker room floor - w
LIMS Number: L53252-65
Collect Start: 11/21/2012 10:00
Collect Stop: 11/21/2012 16:00
Receive Date: 01/10/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.83E+01**	3.86E+00	3.27E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 066 (SW)
Station:
Description: watchmaker room floor - w
LIMS Number: L53252-66
Collect Start: 11/21/2012 10:00
Collect Stop: 11/21/2012 16:00
Receive Date: 01/10/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.99E+01**	4.73E+00	3.57E+00	DPM/TOTAL		1	ml		01/31/13	26.54	M	+

Sample ID: 067 (SW)
Station:
Description: RSO workstation floor
LIMS Number: L53252-67
Collect Start: 11/21/2012 10:00
Collect Stop: 11/21/2012 16:00
Receive Date: 01/10/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.04E+01**	2.84E+00	3.30E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 068 (SW)
Station:
Description: qc workstation floor
LIMS Number: L53252-68
Collect Start: 11/21/2012 10:00
Collect Stop: 11/21/2012 16:00
Receive Date: 01/10/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	3.04E+00	3.25E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

Sample ID: 069 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: parts room floor Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.34E+01	3.03E+00	3.28E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 070 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: radioactive waste closet floor Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.73E+02	1.78E+01	7.03E+00	DPM/TOTAL		1	ml		02/01/13	6.65	M	+

Sample ID: 071 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: radioactive waste barrel #1 Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.31E+02	4.35E+01	1.10E+01	DPM/TOTAL		1	ml		02/01/13	2.7	M	+

Sample ID: 072 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: radioactive waste barrel #2 Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.32E+02	2.37E+01	8.21E+00	DPM/TOTAL		1	ml		02/01/13	5.1	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 073 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: radioactive waste sample Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.19E+02	3.26E+01	1.11E+01	DPM/TOTAL		1	ml		02/01/13	4.97	M	+

Sample ID: 074 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: radioactive waste sample Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.61E+02	6.12E+01	1.22E+01	DPM/TOTAL		1	ml		02/01/13	2.01	M	+

Sample ID: 075 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: watchmaker workstation Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.81E+02	5.84E+01	1.27E+01	DPM/TOTAL		1	ml		02/01/13	2.02	M	+

Sample ID: 076 Collect Start: 11/21/2012 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/21/2012 16:00 Volume:
Description: elevator 2nd floor Receive Date: 01/10/2013 % Moisture:
LIMS Number: L53252-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.18E+00	2.49E+00	3.23E+00	DPM/TOTAL		1	ml		02/01/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:50

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53252

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 078 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: stairway "a" - FLOOR 1 | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.38E+00**	2.82E+00	3.48E+00	DPM/TOTAL		1	ml		02/01/13	30	M	+

Sample ID: 100 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: BKGD Sample - OS Building | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53252-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.43E+00	2.17E+00	**3.20E+00**	DPM/TOTAL		1	ml		02/01/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

November 28, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for water and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in liquid and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	11/21/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Various; Water, Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	24	LSC	60 dpm/cm²	30 days
Air Samples (water)	2	LSC	60 dpm/cm²	30 days
Air Samples (water)	2	LSC	60 dpm/cm³	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 11/28/2012
Reviewed By: SR Smith Proj. Mgr. Date: 11/28/2012
Approved By: SR Smith Proj. Mgr. Date: 11/28/2012

L53252

WH82B

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka	for: Breitling USA, Inc.
Site Contact:; AS ABOVE Phone: (801) 303-1093 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	11/21/2012	1000 -1600	4th QTR Survey
002	Floor – Shipping Area	11/21/2012	1000 -1600	4th QTR Survey
003	1st Floor Work Room Floor	11/21/2012	1000 -1600	4th QTR Survey
004	1st Floor Vault Floor - North	11/21/2012	1000 -1600	4th QTR Survey
005	Inside Men's Restroom	11/21/2012	1000 -1600	4th QTR Survey
006	Pantry Vending Machine Floor	11/21/2012	1000 -1600	4th QTR Survey
007	Break Room Floor	11/21/2012	1000 -1600	4th QTR Survey
008	Stairway B Landing Floor	11/21/2012	1000 -1600	4th QTR Survey
009	Training Room Work Station	11/21/2012	1000 -1600	4th QTR Survey
010	Training Room Work Station	11/21/2012	1000 -1600	4th QTR Survey
011	Training Room Work Station	11/21/2012	1000 -1600	4th QTR Survey
012	Training Room Work Station	11/21/2012	1000 -1600	4th QTR Survey
013	Training Room Threshold Floor	11/21/2012	1000 -1600	4th QTR Survey
014	Hallway Near Entrance Door	11/21/2012	1000 -1600	4th QTR Survey
015	Hallway OS Watchmaker Room	11/21/2012	1000 -1600	4th QTR Survey
016	Hallway OS Watchmaker Room	11/21/2012	1000 -1600	4th QTR Survey
017	Floor OS Supplies Closet	11/21/2012	1000 -1600	4th QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	11/21/2012 1000 -1600	Relinquished by: D. Slywka	11/28/2012 1630
Accepted by: FEDEX	11/28/2012 1630	Relinquished by	
Accepted by: Jonathan	1/10/13 0800	Relinquished by	

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	11/21/2012	1000 -1600	4th QTR Survey
019	Office A Hallway Floor	11/21/2012	1000 -1600	4th QTR Survey
020	Office C Hallway Floor	11/21/2012	1000 -1600	4th QTR Survey
021	Office F Hallway Floor	11/21/2012	1000 -1600	4th QTR Survey
022	Floor – OS Copy Room	11/21/2012	1000 -1600	4th QTR Survey
023	2nd Floor Hallway @ Safe	11/21/2012	1000 -1600	4th QTR Survey
024	2nd Floor Safe Vestibule	11/21/2012	1000 -1600	4th QTR Survey
025	2nd Floor Safe Floor	11/21/2012	1000 -1600	4th QTR Survey
026	Sales Open Area Floor	11/21/2012	1000 -1600	4th QTR Survey
027	Stairway A Floor - 2nd Floor	11/21/2012	1000 -1600	4th QTR Survey
028	Polishing Room Floor	11/21/2012	1000 -1600	4th QTR Survey
029	Cleaning Room - Sink Counter	11/21/2012	1000 -1600	4th QTR Survey
030	QA Area Floor	11/21/2012	1000 -1600	4th QTR Survey
031	Change Room Floor	11/21/2012	1000 -1600	4th QTR Survey
032	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
033	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
034	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
035	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
036	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
037	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
038	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
039	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
040	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
041	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
042	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
043	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
044	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
045	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
046	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
047	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
049	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
050	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
051	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
052	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
053	Watchmaker Room Entrance Floor - South	11/21/2012	1000 -1600	4th QTR Survey
054	Watchmaker Room Floor - S	11/21/2012	1000 -1600	4th QTR Survey
055	Watchmaker Room Floor - S	11/21/2012	1000 -1600	4th QTR Survey
056	Watchmaker Room Floor - S	11/21/2012	1000 -1600	4th QTR Survey
057	Watchmaker Room Floor - E	11/21/2012	1000 -1600	4th QTR Survey
058	Watchmaker Room Floor - E	11/21/2012	1000 -1600	4th QTR Survey
059	Watchmaker Room Floor - E	11/21/2012	1000 -1600	4th QTR Survey
060	Watchmaker Room Floor - N	11/21/2012	1000 -1600	4th QTR Survey
061	Watchmaker Room Floor - N	11/21/2012	1000 -1600	4th QTR Survey
062	Watchmaker Room Floor - S	11/21/2012	1000 -1600	4th QTR Survey
063	Watchmaker Room Floor - N	11/21/2012	1000 -1600	4th QTR Survey
064	Watchmaker Room Entrance Floor - North	11/21/2012	1000 -1600	4th QTR Survey
065	Watchmaker Room Floor - W	11/21/2012	1000 -1600	4th QTR Survey
066	Watchmaker Room Floor - W	11/21/2012	1000 -1600	4th QTR Survey
067	RSO Workstation Floor	11/21/2012	1000 -1600	4th QTR Survey
068	QC Workstation Floor	11/21/2012	1000 -1600	4th QTR Survey
069	Parts Room Floor	11/21/2012	1000 -1600	4th QTR Survey
070	Radioactive Waste Closet Floor	11/21/2012	1000 -1600	4th QTR Survey
071	Radioactive Waste Barrel #1	11/21/2012	1000 -1600	4th QTR Survey
072	Radioactive Waste Barrel #2	11/21/2012	1000 -1600	4th QTR Survey
073	Radioactive Waste Sample	11/21/2012	1000 -1600	4th QTR Survey
074	Radioactive Waste Sample	11/21/2012	1000 -1600	4th QTR Survey
075	Watchmaker Workstation	11/21/2012	1000 -1600	4th QTR Survey
076	Elevator 2nd Floor	11/21/2012	1000 -1600	4th QTR Survey
078	Stairway "A" – Floor 1	11/21/2012	1000 -1600	4th QTR Survey
100	BKGD. Sample – OS Building	11/21/2012	1000 -1600	4th QTR Survey

01/15/13 08:19

SR #: SR33978

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions **Project #:** EN010-3BIOCT-07 **LIMS #L53252**

Initiated By: JSIMMONS
Init Date: 01/15/13 Receive Date: 01/10/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			NA	
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received			NA	
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

02/04/2013

LIMS #: L53253
Project ID#: EN010-3BIOCT-07
Received: 01/10/2013
Delivery Date: 02/09/2013
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L53253-1	LAB COAT ID #601
2	L53253-2	LAB COAT ID #602
3	L53253-3	LAB COAT ID #604
4	L53253-4	LAB COAT ID #605
5	L53253-5	LAB COAT ID #608
6	L53253-6	LAB COAT ID #616
7	L53253-7	LAB COAT ID #620
8	L53253-8	LAB COAT ID #631

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L53253-9	LAB COAT ID "RE"
10	L53253-10	LAB COAT ID #575
11	L53253-11	LAB COAT ID #576
12	L53253-12	LAB COAT ID "JA"
13	L53253-13	LAB COAT ID "MF"
14	L53253-14	LAB COAT ID #470
15	L53253-15	LAB COAT ID #473
16	L53253-16	LAB COAT ID #474
17	L53253-17	LAB COAT ID #632
18	L53253-18	LAB COAT ID #606
19	L53253-19	LAB COAT ID #607
20	L53253-20	LAB COAT ID #573
21	L53253-21	LAB COAT ID #622
22	L53253-22	LAB COAT ID #611
23	L53253-23	LAB COAT ID #614
24	L53253-24	

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.32E+00	2.56E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 2 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.84E+01	3.39E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 3 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.90E+00	2.45E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 4 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.24E+00	2.55E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.02E+00**	2.54E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 6 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.77E+00	2.28E+00	**3.51E+00**	DPM/TOTAL		1	ml		01/31/13	30	M	U

Sample ID: 7 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #620 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.06E+00**	2.68E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 8 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.02E+00**	2.82E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	3.00E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 10 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.06E+00**	2.75E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 11 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.95E+00**	2.53E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 12 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.19E+00**	2.47E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.74E+00	2.52E+00	3.51E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 14 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.11E+01	2.96E+00	3.51E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 15 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.95E+00	2.52E+00	3.48E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 16 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.39E+00	2.64E+00	3.51E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.74E+00**	2.58E+00	3.50E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 18 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.88E+00**	2.75E+00	3.51E+00	DPM/TOTAL		1	ml		01/31/13	30	M	+

Sample ID: 19 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.19E+00	2.40E+00	**3.51E+00**	DPM/TOTAL		1	ml		01/31/13	30	M	U

Sample ID: 20 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.30E+00	2.40E+00	**3.50E+00**	DPM/TOTAL		1	ml		01/31/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

02/04/13 11:52

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53253

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #622 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.93E+00	3.47E+00	4.52E+00	DPM/TOTAL		1	ml		02/01/13	15	M	+

Sample ID: 22 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.16E+00	3.38E+00	4.52E+00	DPM/TOTAL		1	ml		02/01/13	15	M	+

Sample ID: 23 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.91E+00	3.66E+00	4.50E+00	DPM/TOTAL		1	ml		02/01/13	15	M	+

Sample ID: 24 | Collect Start: 11/21/2012 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/21/2012 16:00 | Volume:
Description: | Receive Date: 01/10/2013 | % Moisture:
LIMS Number: L53253-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.36E+00	3.52E+00	4.52E+00	DPM/TOTAL		1	ml		02/01/13	15	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L53253

WH82B

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
1	Lab Coat ID #601	11/21/2012	1000 -1600	4th QTR Survey
2	Lab Coat ID #602	11/21/2012	1000 -1600	4th QTR Survey
3	Lab Coat ID #604	11/21/2012	1000 -1600	4th QTR Survey
4	Lab Coat ID #605	11/21/2012	1000 -1600	4th QTR Survey
5	Lab Coat ID #608	11/21/2012	1000 -1600	4th QTR Survey
6	Lab Coat ID #616	11/21/2012	1000 -1600	4th QTR Survey
7	Lab Coat ID #620	11/21/2012	1000 -1600	4th QTR Survey
8	Lab Coat ID #631	11/21/2012	1000 -1600	4th QTR Survey
9	Lab Coat ID "RE"	11/21/2012	1000 -1600	4th QTR Survey
10	Lab Coat ID #575	11/21/2012	1000 -1600	4th QTR Survey
11	Lab Coat ID #576	11/21/2012	1000 -1600	4th QTR Survey
12	Lab Coat ID "JA"	11/21/2012	1000 -1600	4th QTR Survey
13	Lab Coat ID "MF"	11/21/2012	1000 -1600	4th QTR Survey
14	Lab Coat ID #470	11/21/2012	1000 -1600	4th QTR Survey
15	Lab Coat ID #473	11/21/2012	1000 -1600	4th QTR Survey
16	Lab Coat ID #474	11/21/2012	1000 -1600	4th QTR Survey
17	Lab Coat ID #632	11/21/2012	1000 -1600	4th QTR Survey
18	Lab Coat ID #606	11/21/2012	1000 -1600	4th QTR Survey
19	Lab Coat ID #607	11/21/2012	1000 -1600	4th QTR Survey
20	Lab Coat ID #573	11/21/2012	1000 -1600	4th QTR Survey
21	Lab Coat ID #622	11/21/2012	1000 -1600	4th QTR Survey
22	Lab Coat ID #611	11/21/2012	1000 -1600	4th QTR Survey
23	Lab Coat ID #614	11/21/2012	1000 -1600	4th QTR Survey
* 24				

* arrived but was not on CoC.

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	11/20/2012 0800 - 1600	Relinquished by: W. Yee, Breitling, USA	11/21/2012 1300
Accepted by: D. Slywka	11/21/2012 1300	Relinquished by: D. Slywka	11/28/2012 1600
FEDEX	11/28/2012 1600		1/15/13 JMS 10:00 1/10/13

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	24	LSC	60 dpm/cm²	30 days
Air Samples (water)	2	LSC	60 dpm/cm²	30 days
Air Samples (water)	2	LSC	60 dpm/cm³	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 11/28/2012

Reviewed By: SR Smith Proj. Mgr. Date: 11/28/2012

Approved By: SR Smith Proj. Mgr. Date: 11/28/2012

November 28, 2012
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for water and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in liquid and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	11/21/2012
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Various; Water, Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

Charles, Rebecca

From: Charles, Rebecca
Sent: Wednesday, January 16, 2013 10:45 AM
To: 'Stewart Smith'
Subject: Acknowledgments
Attachments: Energy Sol L53253 ACK.pdf; Energy Sol L53252 ACK.pdf

Please note that the glass container fro sample 16 arrived broken and that sample 24 was not listed on the COC.

Rebecca Charles
Teledyne Brown Engineering
865 934-0379

01/16/13 09:47

SR #: SR33979

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L53253

Initiated By: JSIMMONS
Init Date: 01/15/13 Receive Date: 01/10/13

Notification of Variance

Person Notified: Stewart Smith Contacted By: R. Charles
Notify Date: 01/16/13
Notify Method: email
Notify Comment: see email

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition		N		
	16				The glass container for sample 1 was broken at arrival. The sample was transfered to a new container.
4	Chain of custody received with samples			NA	
5	All samples listed on chain of custody received		N		
	24				This sample arrived but was not on the ECOC.
6	Sample container labels present and legible.			NA	
7	Information on container labels correspond with chain of custody			NA	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

5.0 REFERENCES

5.1 Scientech, LLC. "*Breitling U.S.A., Inc. Radiation Protection Program*", Document No. 82A9415, Revision 5. August 2003.

5.2 International Commission on Radiological Protection, "*Limits for Intakes of Radionuclides by Workers*", ICRP Publication 30, Pergamum Press, Oxford, July 1978.

5.3 U.S. Nuclear Regulatory Commission Radioactive Materials License # 06-23863-01, latest revision.

5.4 U.S. Nuclear Regulatory Commission Radioactive Materials License # 06-23863-02E, latest revision.

SUMMARY OF LICENSE COMPLIANCE ASSESSMENT

1.0 ORGANIZATION AND SCOPE OF PROGRAM

1.1 ***Criteria:*** *Breitling, U.S.A.'s Radiation Protection Program (the Program) requires the Radiation Safety Officer (RSO) to manage the Program on a day-to-day basis. A Management Oversight process is required to ensure that the Program is administered properly.*

Assessment: Willie Yee is currently the Breitling Radiation Safety Officer. Energy*Solutions* has been contracted to provide technical oversight of the RPP. Any changes that affect the RPP are reviewed and approved by the RSO.

Conclusion: Breitling has met the RPP requirement to have a RSO that is qualified to implement the program. Management oversight is sufficient to provide the Breitling U.S.A. staff with adequate resources and authority to administer the RPP.

1.2 ***Criteria:*** *10 CFR 33.13 requires a licensee to provide sufficient support for implementation of the RPP, including an administrative system in place to implement policies and procedures.*

Assessment: Energy*Solutions,* LLC provides the Breitling, USA RSO with sufficient support for implementation of the RPP including technical support, preparation of plans and procedures, conducting quarterly surveys and, at the request of the RSO, employee refresher training.

Conclusion: Breitling has met the NRC requirements to provide sufficient support for implementation of the RPP.

2.0 TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

2.1 ***Criteria:*** *The RPP requires that all personnel working in the radioactive material area (Restricted Area) have adequate radiological training commensurate with their job duties.*

Assessment: There were no new watch repair employees hired in 2013.

Conclusion: Since there were no new employees in 2013, Breitling has met the RPP requirement to provide radiation safety training for all radiation workers via refresher training item below

2.2 ***Criteria:*** *The RPP requires the refresher training for all radiation workers.*

Assessment: The Breitling RSO provided refresher training for twenty-nine employees during 2013.

Conclusion: Breitling has met the RPP requirement to provide refresher training for all radiation workers.

2.3 ***Criteria:*** *As required in 10 CFR 20, workers must be instructed on the NRC policy that female workers voluntarily inform the employee, in writing, of a pregnancy.*

Assessment: Based on a review of the employee training records, training included discussion of a female's right to inform Breitling, in writing, of her pregnancy.

Conclusion: Breitling has met the NRC requirement to instruct workers on this NRC policy.

3.0 INTERNAL AUDITS, REVIEWS OR INSPECTIONS

3.1 ***Criteria:*** *10 CFR 20.1101(c) requires a licensee to review the RPP (RPP) content and implementation at least annually.*

Assessment: An external audit was conducted on November 7, 2013 by Energy*Solutions*. Additionally, the Radiation Protection Plan was evaluated for adequacy by Energy*Solutions* personnel.

Conclusion: Breitling has met the NRC requirement for an annual audit and RPP compliance for the year 2013.

4.0 FACILITIES

4.1 ***Criteria:*** *The RPP requires Breitling to secure all tritium-containing material from unauthorized removal or access while in storage and control and maintain constant surveillance over materials that are in active use according to the requirements of 10 CFR 20.1801 and 20.1802. When not in use, tritium-containing materials are stored in locked storage cabinets or in locked rooms.*

Assessment: Approximately half of the second floor is dedicated to the repair of watches and is maintained as a Radioactive Materials Area (Restricted Area). Breitling maintains watch parts in two vaults found at the facility. Areas of licensed materials receipt, use and storage are adequately secured with access cards and locked doors to prevent unauthorized access or removal. No periods of open access to the Restricted Area, the second floor safe, or first floor vault were observed during the four quarterly assessments during 2013.

Conclusion: Breitling has met the RPP requirement for security of licensed materials.

4.2 ***Criteria:*** *Section 4.0 of the RPP discusses the radiological controls required at the Breitling facility for protecting health and minimizing danger to property.*

Assessment: Housekeeping practices are well maintained throughout the Breitling facility. Work stations are wiped daily with cleaning towels that are stored in 30 gallon open top metal barrels, locked in a separate closet in the Restricted Area. The RSO maintains control over the closet access key. Samples of cleaning towels and rags are taken during quarterly surveys and analyzed prior to disposal. No prohibited materials or activities (e.g., food, beverages, application of make-up) were observed in the Restricted Area. The Restricted Area is well defined with radiation labels and postings. Throughout the Breitling facility, "Caution Radioactive Material(s)" signs are posted on the doors of the Restricted Area. Multi-layer disposable adhesive threshold step-off pads are used both inside and outside the Restricted Area to reduce any spread of contamination to areas other than the Restricted Area. De-cased watches are allowed only in the Restricted Area.

Conclusion: Breitling has met RPP requirement to provide engineering controls adequate to protect health and minimize danger to life or property. Housekeeping practices are well maintained throughout the Breitling facility.

5.0 MATERIAL USE, CONTROL AND TRANSFER

5.1 ***Criteria:*** *Item 6 of the Breitling NRC license # 06-23863-01 details the radionuclide type (hydrogen-3), physical form (Radium Chemia PS 362 luminous paint) and maximum quantity (200 curies) that may be possessed at any one time.*

Assessment: Type, physical form and quantities of hydrogen-3 (tritium) used at Breitling are within the scope of the NRC license. Energy*Solutions* personnel have reviewed the reduction of tritium-bearing watch parts in the physical inventory, as required by Item 13 of License 06-23863-01 to ensure that Breitling U.S.A.'s quantity of tritium is within the scope of the license. The current inventory indicates that there is approximately 500 mCi of potential tritium-bearing parts in the waste on site.

Conclusion: Breitling has met the NRC license requirement to use the radionuclide type, chemical form, and quantities that are within the scope of the license.

5.2 ***Criteria:*** *10 CFR 32.14 requires a licensee to maintain records of transfer of material and report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, a description or identification of the type of each product; the total quantity of the radionuclide; and the number of units of each type of product transferred during the reporting period. The licensee is required to file the report after five years of filing the preceding report or after filing an application for renewal of the license under Part 30.37. The licensee is required to maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.*

Assessment: There have been no transfers of material since 05/15/2007, other than repair and return of consumer products. The RSO or Breitling management will report material transfers to the NRC as required.

Conclusion: Breitling meets the NRC requirements to maintain receipt, transfer and disposal records.

6.0 INVENTORIES

6.1 ***Criteria:*** *Item 13 of NRC License 06-23863-01 requires Breitling to conduct a physical inventory every six months to account for all watches received and possessed under the license.*

Assessment: There are no tritium-bearing parts or watches at the licensed facility, other than those being repaired. Any tritium-bearing watches sent to the licensee facility for repair have the parts removed and replaced with non-tritium bearing components. The current inventory indicates that there are approximately 898 watch hands and 508 watch faces that are potential tritium-bearing parts. All

of these parts are now part of the waste stream. The estimated total activity on site at the end of 2013 was 500 mCi of tritium. This is approximately 0.25% of the license limit.

Conclusion: Breitling has met the license requirement to conduct a physical inventory every six months to account for all watches received and possessed under the license.

7.0 RADIOLOGICAL MONITORING

7.1 ***Criteria:*** *The RPP requires quantitative loose contamination surveys to be performed in the Restricted Area and quantitative loose and fixed contamination surveys to be performed in Unrestricted Areas at a frequency of not less than four quarterly surveys per year.*

Assessment: As part of the Breitling quarterly survey program, Energy*Solutions* performed four quarterly surveys of the Restricted and Unrestricted Areas for contamination in 2013. Maps with predetermined survey point locations were used to collect survey data to analyze the spread of contamination over time. If any survey location was contaminated near or above the facility limits, the Breitling RSO had the area decontaminated. Subsequent quarterly surveys have confirmed the effectiveness of the Breitling control of radioactive material. In addition to quarterly surveys, air samples were collected in the Restricted Area for quantitative tritium analysis.

Conclusion: Breitling has met the RPP requirement to perform quarterly surveys.

7.2 ***Criteria:*** *The RPP requires quantitative air sampling to be performed in the decasing area annually.*

Assessment: An air sample was collected in November of 2013 in the Restricted Area using two distilled water filled impingers. Sampling was performed over a nine hour duration during high watch repair volume working hours. The sampling location was selected adjacent to the watchmaker work station known to have the highest loose contamination from previous quarterly surveys. Background measurements were obtained at the Energy*Solutions* facility in Danbury, CT. The Energy*Solutions* Danbury office is an Unaffected Area that has no radioactive materials present. Results of the 2013 air sampling showed airborne tritium levels well below $1/10^{th}$ of the DAC. $1/10^{th}$ DAC values are documented as follows:

Air Sampling & DAC Values – 1st Quarter 2013

Impingers(Qty.–2) Total Volumes – Background= 1.0 Liter
Impingers(Qty.–2) Total Volumes – Air Sample = 1.0 Liter
Air Sampler Flow Rate(LPM) = 2.5
Total Sampler Time(Background–Minutes) = 360
Total Volume(Background)=360 minutes×2.5 LPM = 900 Liters
Air Sampler Flow Rate(LPM) = 2.5
Total Sampler Time(AIr Sample–Minutes) = 240
Total Volume(Air Sample)=240 minutes×2.5 LPM = 600 Liters

Analytical Results by LSC (Teledyne– Brown Report# L53782)

Sample# – L53782–1(Background) = 2.49E+01 pCl/Liter; MDC – 1.83E+02 pCi/Liter
Sample# – L53782–2(Background) = 1.42E+02 pCl/Liter; MDC – 1.78E+02 pCi/Liter

$$\frac{1.67E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 1.67E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{1.67E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 1.85E-04\ \mu Ci/L}{(900 Liters \times 1000\ ml/L)} = 2.06E-10\ \mu Ci/ml\right]_{BACKGROND}$$

Analytical Results by LSC (Teledyne– Brown Report# L53782)

Sample# – L53782–3(Air Sample) = 5.06E+02 pCl/Liter; MDC – 1.68E+02 pCi/Liter
Sample# – L53782–4(Air Sample) = 5.29E+01 pCl/Liter; MDC – 1.79E+02 pCi/Liter

$$\frac{5.59E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 5.59E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{5.59E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 6.21E-04\ \mu Ci/L}{(600 Liters \times 1000\ ml/L)} = 1.035E-09\ \mu Ci/ml\right]_{SAMPLE}$$

$$[(1.035E-09)-(2.06E-10)] = 8.29E-09\ \mu Ci/ml$$

DAC Fraction 10CFR20, Appendix B

$$2.0E-05\ \mu Ci/ml \times 0.1 = 2.0E-06\ \mu Ci/ml\ (10\%\ of\ DAC)$$

$$\frac{8.29E-10\ \mu Ci/ml}{2.0E-06\ \mu Ci/ml} = 4.145E-04\ Fraction\ of\ 10\%\ DAC_{1st\ Quarter}$$

Air Sampling & DAC Values – 4th Quarter 2013

Impingers (Qty. – 2) Total Volume – Background = 1.0 Liter
Impingers (Qty. – 2) Total Volume – Air Sample = 1.0 Liter
Impinger Efficiency = 0.9
Tritium Occupational DAC = 2.0 E-5 µCi/ml

Air Sampler Flow Rate (Background) = 2.5 LPM
Total Sampler Time (Background) = 540 minutes
Total Volume (Background) = 540 minutes x 2.5 LPM = 1350 Liters

Air Sampler Flow Rate (Sample) = 2.5 LPM
Total Sampler Time (Sample) = 540 minutes
Total Volume (Sample) = 540 minutes x 2.5 LPM = 1350 Liters

Analytical Results by Liquid Scintillation (Teledyne Brown Report #L-58209)
Sample #L-58209-1 (Background) = -1.46E-5 uCi/L, MDC =1.90E-4 uCi/L

Since the reported tritium background sample value was negative, "0" was used for background in the calculation of the restricted area tritium air sample activity.

Analytical Results by Liquid Scintillation (Teledyne Brown Report #L-58209)

Sample #L-58209-2 (Air Sample) = 1.75E-4 uCi/L, MDC =1.90E-4 uCi/ml

$$\left[\frac{\left(\frac{1.75E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency} = 1.94E-4\mu Ci/L\right)}{(1350\ Liters\ x\ 1000\ ml/L)} = 1.44E-10\ \mu Ci/ml\right]$$

2013 DAC Fraction 10 CFR 20, Appendix B
2.0E-5 *µCi/ml* × 0.1 = 2.0E-6 *µCi/ml* (10% *of DAC*)

$$\frac{1.44E-10\ \mu Ci/ml}{2.0E-6\ \mu Ci/ml} = 7.200\ E-5\ Fraction\ of\ 10\ \%\ DAC$$

Total DAC Fraction 2013

1st Quarter 1/10 DAC Fraction = 4.145 E-04
4th Quarter 1/10 DAC Fraction = 7.200 E-05

Total 2013 DAC Fraction = 4.865 E-04

Conclusion: Breitling has met the RPP requirement to perform annual air sampling and the tritium air concentration fraction is substantially below $^{1}/_{10}$ (10%) of the DAC.

8.0 RADIOACTIVE WASTE MANAGEMENT

8.1 ***Criteria:*** *The RPP requires an interim storage area for radioactive waste.*

Assessment: Currently, Breitling U.S.A., stores all radioactive waste in drums located in a locked closet of the Restricted Area. The waste is picked up and disposed of by a radioactive waste broker [currently Radiac Research Corp.]. An estimate and characterization (per 10 CFR 61.55 & 49 CFR 173.436) of the current radioactive waste is as follows:

Total Estimated Watch Parts in Waste

Note: Activity is decayed to 12/31/90. Per the Breitling RSO, no new tritiated watch parts were produced after the early 1980s.

Watch Faces/Dials
2008-193
2009-109
2010-91
2011-68
2012-47
2013-0

508 total watch faces/dials

Watch Hands
2008 – 166
2009 – 207
2010 – 207
2011 - 152
2012 – 166
2013 – 0

898 total watch hands

On-site estimated tritiated watch dials = 508 @ 1.5 mCi X $A_{decayed}$ – 217.048 mCi
On-site estimated tritiated watch hands = 898 @ 1.1 mCi X $A_{decayed}$ – 281.366 mCi

Total estimated tritium in watch parts in waste = 498.415

Total Estimated Waste (Step-off Pads)

24" ×36" = 5,574 cm^2 each SoP (Step-off Pad)

52 SoPs × 2/week =104 SoPs/ annum

5,574 cm^2/SoP × 104 SoPs/annum = 579,715 cm^2

Average decayed tritium in radwaste samples (2008-2013) = 872 dpm/100 cm^2

8.72 dpm/cm^2 × 579,715 cm^2 = 5.506 E+6 dpm/annum

5.506 E+6 dpm/annum × 4.5045 E–7 µCi/dpm = 2.277 µCi/annum

2.277 µCi/annum × 6 years = 13.665 µCi from Step-off Pads

Total Estimated Waste (Wipes)

Average Work Area = 48" × 48"=14,864 cm^2
Total Work Areas = 21 × 14,864 = 312,154 cm^2
260 work days × 312,154 cm^2= 8.11 E+7 cm^2
8.11 E+07 cm^2/annum × 6 years = 4.866 E+8
Average decayed removable tritium (2008-2013) = 532 dpm/100 cm^2
5.32 dpm /cm^2 × 4.866 E+8 cm^2 = 2.589 E+9 dpm

2.589 E+9 dpm × 4.5045 E-7 µCi/dpm = 1,166.22 µCi from wipes

Step-Off Pad and Wipe Estimated Waste Activity = 1,180 µCi

Discarded Parts Activity (2008-2013)

Total dials @ 1.5 µCi each = 508 = 762 µCi
Total dials = 3,610; tritium bearing dials = 14.07%
Total watch hands = 6,500

Estimated watch hand activity = 1.0062E+03 µCi
Estimated watch parts activity = 1.7682 E+03 µCi

Total Estimated Activity in Watch Parts = 1.6195 E+03 µCi + 1.7682 E+03 µCi = 3.3877 E+03 µCi

The total facility waste inventory at Breitling is 499.399 mCi. As Breitling has no inventory of tritiated watch parts for repair or production, the waste inventory is also the facility inventory.

Waste Class & Transport

Volume 30 gallon drum = 4.01 cu. ft. = 1.14E+05 cc

density of paper = 0.8 $\frac{gms.}{cc}$

Watch Hands = 2.0 cm l × 0.2 cm w × 0.1 cm th = 0.04 cc = 7.833E+03 $\frac{\mu Ci}{cc} \geq 40 \frac{\mu Ci}{cc}$ *CLASS A Waste*

Watch Faces = 4.0 cm dia, 0.1 cm th = 1.26 cc = 3.400E+02 $\frac{\mu Ci}{cc} \geq 40 \frac{\mu Ci}{cc}$ *CLASS A Waste*

density of brass = 8.0 $\frac{gms.}{cc}$

Estimated weight of watch parts = 519248 grams

Watch Parts = 519248 grams = 11.45 lbs or 5.724 lbs/drum

Estimated weight of 95% paper filled drum = 39.15 lbs. – DAW

39.15 + 5.724 = 44.874 lbs. or 2.035E+04 grams

$$\frac{0.984\,mCi + 498.415\,mCi}{2\ drums} = 249.7\,mCi = 0.2497\,Ci$$

$$\frac{0.2497\,Ci}{2.035E+04} = 1.2E-05\ \frac{Ci}{gm.}$$

$$\frac{2.497E-01\,Ci}{2.7E-02} = 9.2482 \geq 1.0\ [49CFR\S 173.436] = not\ Exempt\ USDOT$$

$$\frac{1.2E-05\ \frac{Ci}{gm.}}{2.7E-05\ \frac{Ci}{gm}} = 0.4554 \leq 1.0\ [49CFR\S 173.436] = Exempt\ USDOT$$

Conclusion: Breitling has met the RPP requirement to manage Low Level Radioactive Waste.

9.0 RADIATION PROTECTION

9.1 ***Criteria:*** *According to 10 CFR 20.1101, each licensee will develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part. Each licensee will maintain records of the program, including the provisions of the program; and audits and other reviews of program content and implementation.*

Assessment: The Breitling RPP is commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with NRC regulations.

Conclusion: Breitling has met the RPP requirement to develop, document and implement a radiation protection program and retain all applicable records.

9.2 ***Criteria:*** *10 CFR 20.1101(b) requires that licensees use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as reasonably achievable (ALARA). Licensees are required to address and document ALARA considerations in all aspects of their programs, including established administrative action levels and monitoring programs.*

Assessment: ALARA concepts, discussed in detail throughout the RPP, address the requirement to perform quarterly surveys that adhere to administrative action levels, wear protective clothing, wash hands prior to leaving the Radioactive Material Area (Restricted Area), wipe down tools, floors and work areas and lock the Restricted Area when not in use.

Conclusion: Breitling has met the NRC requirements to implement ALARA policies.

9.3 ***Criteria:*** *As a minimum, the RPP requires lab coats to be donned upon entering the Watchmaker Room and must be removed upon exiting the Watchmaker Room.*

Assessment: The PPE used at Breitling, consisting of cotton lab coats and surgeons gloves, when necessary, is adequate for the work activities performed at Breitling. Workers were observed using their lab coats in the Restricted Area and doffing them prior to exit from the Restricted Area.

Conclusion: Breitling has met the RPP requirement to minimize levels of contamination by requiring employees to wear PPE when working with tritium.

9.4 **Criteria:** According to 10 CFR 20.2104, licensees must obtain current year occupational radiation dose for each individual who is likely to receive in a year, an occupational dose requiring monitoring pursuant to 10 CFR 20.1502.

Assessment: 10CFR20.2104 was amended in December 2007. It is no longer necessary to obtain cumulative occupational dose UNLESS the worker is going to receive a planned special exposure per SECY-07-0162. No Breitling USA has ever been required to receive a planned special exposure. With the substantial reduction in the inventory, there would be little or no chance for a Breitling USA worker to receive a dose in excess of the "Occupational Dose Limits" described in § 20.1201.

Conclusion: Breitling has met the requirement to obtain records of *current year occupational radiation dose for each individ*ual, if applicable.

9.5 ***Criteria:*** *The RPP requires tritium urinalysis bioassay (in vitro) sampling, which will include a baseline urinalysis bioassay sample, prior to working in the Restricted Area.*

Assessment: Breitling maintained a tritium bioassay program for all workers in the Restricted Area. Aside from a baseline urinalysis bioassay sample, samples are collected annually from every worker. NRC Form 5 has been used to document the bioassay program.

Conclusion: Breitling has met the RPP requirement to perform tritium urinalysis bioassay (in vitro) sampling.

9.6 ***Criteria:*** *The RPP requires records of radiation surveys, instrument calibrations, dosimetry, incident reports or unusual event reports, inventory records, disposal of licensed materials and decontamination/remediation activities to be retained by the RSO for the life of the license. Radiation worker training records are maintained for two years. Records of receipt and transfer of all licensed material are maintained for as long as the material is possessed until 3 years after transfer.*

Assessment: License compliance assessment records were reviewed. Records have been well maintained, by the RSO or the Breitling radiation safety consultant, since issuance of the license.

Conclusion: Breitling has met the RPP requirements for good record keeping and storing of documents.

10.0 NOTIFICATION AND REPORTS

Criteria: *The RPP requires that records of radiation doses be maintained for all individuals for whom personnel monitoring are required. As required in 10 CFR 19.13(a), radiation exposure data and the results of any measurements, analysis and calculations of radioactive material deposited or retained in the body must be reported to the individual.*

Assessment: Radiation dose records are maintained on a NRC Form 5. A record of each radiation worker's employee's dose is provided to them. Breitling also provides all individuals in the tritium bioassay program with copies of NRC Form 5 listing their radiation dose for the year.

Conclusion: Breitling has met the RPP requirement to maintain dose records and report the results to the employees.

11.0 POSTING AND LABELING

11.1 ***Criteria:*** *The RPP requires that* the Restricted Area be posted with a conspicuous sign(s) bearing the radiation symbol and the words "CAUTION - RADIOACTIVE MATERIALS."

Assessment: Work areas are well defined with radiation labels and postings. Throughout the Breitling facility, "Caution, Radiation Materials" signs are posted on the doors of the Restricted Area.

Conclusion: Breitling has met the RPP requirement to properly post the Restricted Area.

11.2 ***Criteria:*** *10 CFR 19.11 requires each licensee to prominently post NRC Form 3, "Notice to Employees," (5 – 2005).*

Assessment: Posting of NRC Form 3 can be found in the employee Break Room on the first floor.

Conclusion: Breitling has met the NRC requirement to post NRC Form 3.

12.0 OTHER OBSERVATIONS

12.1 Decasing Activities and Inventory - 2013

The following information reflects decasing activities conducted in association with watch repairs for the calendar year 2013. The total number of watches de-cased during 2013 was 8,144. The most watches de-cased by a single worker was 1,222 watches. This value includes all watches without regard to whether the watch contained tritium-bearing parts. This value is approximately 27.2% of the annual limit of 4,500 tritium-bearing watches for a single watchmaker specified in the Breitling RPP[1].

In conjunction with the decasing summary, an inventory of estimated activity on-hand was conducted based upon the total number of watches stored in the vault and the total number of watches repaired during 2013. Watches now being manufactured by Breitling do not use tritium luminescent radiochemicals. In 2013, there were no watches with tritium-bearing radiochemicals. Each watch could potentially contain 3.1 millicuries. There are no parts bearing tritium for repair or replacement in stock. The total inventory on hand at any time during 2013 was zero.

12.2 Lab Coat Surveys - 2013

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveys the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on a liquid scintillation counter. Results indicate that annual total activity found on the lab coats at 10% removal efficiency is approximately 7.483 *E-03* µCi. If all of the activity were released into the sewer, an average monthly release concentration would be 1.2964 *E-14* µCi/ml. This is well below the monthly average concentrations of activity of 1.0E-02 µCi/ml of 10CFR§20, Appendix B-Table 3[2]. The worst release concentration for an incidental release would be approximately 5.686 *E-10* µCi/ml/minute. This is well below 1.0E-03 µCi/ml effluent water concentration of 10CFR§20, Appendix B-Table 2. Therefore lab coats did not require decontamination prior to laundering. The water flow data obtained from the Aquarion Water Company for the Danbury Road, Wilton area near Breitling suggests that the dilution factor used in the RPP may be conservative. The total flow was tested at 2,262 gallons per minute, or 3.7 E+08 liters per month. Breitling is well within the limits of 10CFR20, Appendix B Tables 2 and 3.

[1] 82A9415, Rev.5, §4.3
[2] 10CFR§20, Appendix B, Tables 2 & 3, Hydrogen, verified 04/02/2014

Effluence Monitoring - 2013

1st Quarter Lab Coat Results = 553 dpm
2nd Quarter Lab Coat Results = 245 dpm
3rd Quarter Lab Coat Results = 526 dpm
4th Quarter Lab Coat Results = 526 dpm

$$Total\ Activity = \frac{1{,}850\ dpm}{0.1\ Removal\ Efficiency} = 18{,}500\ dpm$$

$$18{,}500\ dpm \times 4.5045E-07\ \mu Ci/dpm = 7.483E-03\ \mu Ci$$

$$Water\ Fluence(@20\ psi) = 3748\ gpm = 131685\ lpm = 1.316E+07\ ml/min.$$
$$ml/month = 30.4375\ days/mo. \times 24\ hours \times 60\ minutes = 43830\ minutes$$
$$43830\ minutes \times 1.316E+07\ ml/min. = 5.772E+11\ ml/month$$

$$\frac{7.483E-03\ \mu Ci}{1.316E+07\ ml/min} = 5.686E-10\ \mu Ci/ml\ per\ minute$$

$$\frac{7.483E-03\ \mu Ci}{5.772E+11\ ml/month} = 1.2964E-14\ \mu Ci/ml/mo$$

10CFR20, Appendix B Table 3 Limit – Release to Sanitary Sewer
$T_2O = 1.00E-02\ \mu Ci/ml - monthly\ average$
$$\frac{1.2964E-14\ \mu Ci/ml}{1.00E-02\ \mu Ci/ml} = 1.2964E-12\ monthly\ average\ fraction$$
Table 3 Limit fraction (f) = 1.2964E-12

10CFR20, Appendix B Table 2 Limit – Effluent µCi / mL–Water
$T_2O = 1.00E-03\ \mu Ci/ml$
$$\frac{5.686E-10\ \mu Ci/ml/min.}{1.00E-03\ \mu Ci/ml/min} = 5.686E-07$$
Table 2 Limit fraction (f) = 5.686E-07

12.3 Radioactive Waste Estimate & Surveys - 2013

Bags containing rags, step-off pads and disposable paper towels were sampled directly by removing swatches for liquid scintillation counting for contamination. Radioactive waste material counting results showed the highest concentration was 1,604 dpm/100 cm². This is below the Restricted Area action level of 100,000 dpm/100 cm². The estimated amount of radioactive waste in the two disposal/transportation containers is ~500 mCi. The radioactive waste containers had a maximum of approximately 1,400 dpm/100 cm² removable surface contamination during quarterly surveys. The barrels will be decontaminated by the Breitling and broker staff prior to removal for disposal.

12.4 *Records*

Attached are:

- Laboratory analyses used to determine the DAC fraction,
- Copies of the USNRC Form 5's for 2013,
- Notification to individual workers of annual dose (see Appendix G).

12.5 *Conclusions*

Based upon the observations made during the four quarterly inspections, the annual program review, the dose assessments, and reviews of the Radiation Protection and Radiation training protocols, Breitling, U.S.A. has been in compliance with the requirements of the Licenses 06-23863-01 and 06-23863-02E.

The information depicted in Appendix E – "Trends" indicates that the levels of loose contamination have been decreasing over the last four years. The collective annual dose for Breitling U.S.A. has been decreasing in a linear manner with the declining inventory of watches that contain tritium-based luminous paint.

During the review of this report, the Energy*Solutions* Certified Health Physicist suggested the following:

1. More frequent air sampling
2. More frequent or staggered bioassay sampling
3. Time and volume data for the bioassay sampling

These will be considered by the Breitling RSO.

ENERGYSOLUTIONS

FIRST QUARTER 2013 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The First Quarter 2013 survey was performed on February 27, 2013. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

104 samples (seventy six location swipes, one background location swipe, one restricted area air sample, one background air sample, and twenty five lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are included in this report, (see Attachment 1).

In the Unrestricted Area, the highest removable result was on the southwest training room workstation on the second floor. The reading was 254 dpm/100 cm^2 with a damp swipe.

In the Restricted area the highest removable result was 1,854 dpm/100 cm^2 on the workstation near the south door with a damp swipe. No remedial action was required in the restricted areas per Table 1. The RSO was contacted with the results for wipe down of the workstation.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 1,604 dpm/100 cm^2 and the outside of a drum had 1,398 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 1,204 dpm/100 cm^2.

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (25 filter samples) indicate that the levels found on the lab coats were below the restrictive area limit provided in Table 1. The highest activity found was 38 dpm/100 cm^2 (Lab Coat #573) thus not requiring decontamination prior to laundering.

Restricted Area Air Sample

Per the guidance of the Energy***Solutions***, CHP, in the 2011 Annual Report, an air sample was taken on the 27th of February 2013 to supplement the quarterly survey.

Air Sampling & DAC Values – 1st Quarter 2013

Impingers (Qty.–2) Total Volumes – Background = 1.0 Liter

Impingers (Qty.–2) Total Volumes – Air Sample = 1.0 Liter

Air Sampler Flow Rate (LPM) = 2.5

Total Sampler Time (Background – Minutes) = 360

Total Volume (Background) = 360 *minutes* × 2.5 *LPM* = 900 *Liters*

Air Sampler Flow Rate (LPM) = 2.5

Total Sampler Time (Air Sample – Minutes) = 240

Total Volume (Air Sample) = 240 *minutes* × 2.5 *LPM* = 600 *Liters*

Analytical Results by LSC (Teledyne – Brown Report# L53782)

Sample# – L53782 – 1 (Background) = 2.49E + 01 *pCi/Liter; MDC* – 1.83E + 02 *pCi/Liter*

Sample# – L53782 – 2 (Background) = 1.42E + 02 *pCi/Liter; MDC* – 1.78E + 02 *pCi/Liter*

$$\frac{1.67E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 1.67E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{1.67E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 1.85E-04\ \mu Ci/L}{(900\ Liters \times 1000\ ml/L)} = 2.06E-10\ \mu Ci/ml\right]_{BACKGROND}$$

Analytical Results by LSC (Teledyne – Brown Report# L53782)

Sample# – L53782 – 3 (Air Sample) = 5.06E + 02 *pCi/Liter; MDC* – 1.68E + 02 *pCi/Liter*

Sample# – L53782 – 4 (Air Sample) = 5.29E + 01 *pCi/Liter; MDC* – 1.79E + 02 *pCi/Liter*

$$\frac{5.59E+02\ pCi/L}{1.0E+06\ pCi/\mu Ci} = 5.59E-04\ \mu Ci/L$$

$$\left[\frac{\left(\frac{5.59E-04\ \mu Ci/L}{0.9\ Impinger\ Efficiency}\right) = 6.21E-04\ \mu Ci/L}{(600\ Liters \times 1000\ ml/L)} = 1.035E-09\ \mu Ci/ml\right]_{SAMPLE}$$

$$[(1.035E-09) - (2.06E-10)] = 8.29E-09\ \mu Ci/ml$$

DAC Fraction 10CFR20, Appendix B

$2.0E-05\ \mu Ci/ml \times 0.1 = 2.0E-06\ \mu Ci/ml$ (10% *of DAC*)

$$\frac{8.29E-10\ \mu Ci/ml}{2.0E-06\ \mu Ci/ml} = 4.145E-04\ Fraction\ of\ 10\%\ DAC_{1st\ Quarter}$$

Conclusion

Based on the First Quarter 2013 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ENERGYSOLUTIONS

ATTACHMENT 1

1st QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 1st QTR Survey 2013
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	28	Entrance Vestibule	L53835-001
002	U	9	Floor - Shipping/Receiving Area	L53835-002
003	U	7	1st Floor Work Room Floor	L53835-003
004	U	9	1st Floor Vault Floor - North	L53835-004
005	U	12	Hallway - Outside Rest Rooms	L53835-005
006	U	12	Pantry Vending Machine - Floor	L53835-006
007	U	9	Break Room Floor	L53835-007
008	U	11	Stairway B Floor	L53835-008
009	U	254	Training Room Work Station-Southwest	L53835-009
010	U	28	Training Room Work Station-Northwest	L53835-010
011	U	34	Training Room Work Station-Southeast	L53835-011
012	U	28	Training Room Work Station-Northeast	L53835-012
013	U	7	Training Room Threshold Floor	L53835-013
014	U	17	Hallway Near Entrance Door-2nd Floor South	L53835-014
015	U	22	Hallway Outside Watchmaker's Room	L53835-015
016	U	21	Hallway Outside Watchmaker's Room	L53835-016
017	U	11	Floor Outside Women's Restroom	L53835-017
018	U	9	Floor In Men's Rest Room	L53835-018
019	U	6	Office A Hallway Floor	L53835-019
020	U	9	Office C Hallway Floor	L53835-020
021	U	2	Office F Hallway Floor	L53835-021
022	U	6	2nd Floor - Outside Copy Room	L53835-022
023	U	6	2nd Floor Hallway Floor @ Safe	L53835-023
024	U	20	2nd Floor Safe Vestibule	L53835-024
025	U	20	2nd Floor Safe Floor	L53835-025
026	U	7	Sales Open Area Floor	L53835-026
027	U	11	Stairway A 2nd Floor	L53835-027
028	R	13	Polishing Room Workstation	L53835-028
029	R	62	Cleaning Room - Sink Counter	L53835-029
030	R	60	QA Area Floor	L53835-030
031	R	31	Change Room Floor	L53835-031
032	R	256	Watchmaker Workstation	L53835-032
033	R	29	Watchmaker Workstation	L53835-033
034	R	121	Watchmaker Workstation	L53835-034
035	R	52	Watchmaker Workstation	L53835-035
036	R	12	Watchmaker Workstation	L53835-036
037	R	8	Watchmaker Workstation	L53835-037

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
038	R	65	Watchmaker Workstation	L53835-038
039	R	32	Watchmaker Workstation	L53835-039
040	R	388	Watchmaker Workstation	L53835-040
041	R	17	Watchmaker Workstation	L53835-041
042	R	16	Watchmaker Workstation	L53835-042
043	R	162	Watchmaker Workstation	L53835-043
044	R	42	Watchmaker Workstation	L53835-044
045	R	66	Watchmaker Workstation	L53835-045
046	R	126	Watchmaker Workstation	L53835-046
047	R	113	Watchmaker Workstation	L53835-047
048	R	101	Watchmaker Workstation	L53835-048
049	R	424	Watchmaker Workstation	L53835-049
050	R	82	Watchmaker Workstation	L53835-050
051	R	1,854	Watchmaker Workstation	L53835-051
052	R	172	Watchmaker Workstation	L53835-052
053	R	23	Watchmaker Room Entrance Door-South	L53835-053
054	R	80	Watchmaker Room Floor - South	L53835-054
055	R	18	Watchmaker Room Floor - South	L53835-055
056	R	28	Watchmaker Room Floor - South	L53835-056
057	R	15	Watchmaker Room Floor - East	L53835-057
058	R	14	Watchmaker Room Floor - East	L53835-058
059	R	25	Watchmaker Room Floor - East	L53835-059
060	R	9	Watchmaker Room Floor - North	L53835-060
061	R	28	Watchmaker Room Floor - Center	L53835-061
062	R	24	Watchmaker Room Floor - Center	L53835-062
063	R	33	Watchmaker Room Floor - North	L53835-063
064	R	23	Watchmaker Room Entrance Door-North	L53835-064
065	R	26	Watchmaker Room Floor - West	L53835-065
066	R	49	Watchmaker Room Floor - West	L53835-066
067	R	24	RSO Workstation Floor	L53835-067
068	R	10	QC Area Floor	L53835-068
069	R	55	Parts Room	L53835-069
070	R	1,604	RadWaste Closet Floor	L53835-070
071	R	1,398	RadWaste Barrel #01	L53835-071
072	R	612	RadWaste Barrel #02	L53835-072
073	R	852	RadWaste Material (Step-off pads, etc)	L53835-073
074	R	1,204	RadWaste Material (Step-off pads, etc)	L53835-074
075	R	52	Parts Closet	L53835-075
076	U	4	Elevator Vestibule 2nd Floor	L53835-076
100	**U**	**2.40**	**Background Sample**	**L53835-100**

Completed by: **Stewart R Smith** Date: 3/25/2013

Reviewed By: DAN SLYWKA Date: 4/3/2013

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	24	Lab Coat #601	L53836-LC1
2	R	18	Lab Coat #602	L53836-LC2
3	R	16	Lab Coat #604	L53836-LC3
4	R	21	Lab Coat #605	L53836-LC4
5	R	23	Lab Coat #608	L53836-LC5
6	R	19	Lab Coat #616	L53836-LC6
7	R	15	Lab Coat #620	L53836-LC7
8	R	22	Lab Coat #631	L53836-LC8
9	R	28	Lab Coat #630/RE	L53836-LC9
10	R	13	Lab Coat #575	L53836-LC10
11	R	22	Lab Coat #576	L53836-LC11
12	R	19	Lab Coat "JA"	L53836-LC12
13	R	19	Lab Coat "MF"	L53836-LC13
14	R	23	Lab Coat #470	L53836-LC14
15	R	25	Lab Coat #473	L53836-LC15
16	R	23	Lab Coat #474	L53836-LC16
17	R	30	Lab Coat #632	L53836-LC17
18	R	24	Lab Coat #606	L53836-LC19
19	R	26	Lab Coat #607	L53836-LC20
20	R	38	Lab Coat #573	L53836-LC21
21	R	21	Lab Coat #619	L53836-LC22
22	R	21	Lab Coat #634	L53836-LC23
23	R	18	Lab Coat #611	L53836-LC24
24	R	24	Lab Coat #614	L53836-LC25
25	R	22	Lab Coat #450	L53836-LC-26

Completed by: **Stewart R Smith** Date: 3/25/2013

Reviewed By: DAN SLYWKA Date: 4/3/2013

The following coats require decontamination action: None

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

03/28/2013

LIMS #:	L53782
Project ID#:	EN010-3BIOCT-07
Received:	03/05/2013
Delivery Date:	04/04/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
AS-BKG-001	L53782-1	100 MILL PLAIN RD. DANBURY
AS-BKG-002	L53782-2	100 MILL PLAIN RD. DANBURY
AS-B-USA-001	L53782-3	BREITING, USA-RESTRICTED AREA
AS-B-USA-002	L53782-4	BREITING, USA-RESTRICTED AREA

Report of Analysis

03/28/13 12:56

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53782

Energy Solutions

EN010-3BIOCT-07

Sample ID: AS-BKG-001 | Collect Start: 02/26/2013 14:21 | Matrix: Dissolved Air | (WA)
Station: 100 MILL PLAIN RD. DANBURY | Collect Stop: | Volume:
Description: | Receive Date: 03/05/2013 | % Moisture:
LIMS Number: L53782-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	2.49E+01	1.13E+02	1.83E+02	pCi/L		10	ml		03/20/13	50	M	U

Sample ID: AS-BKG-002 | Collect Start: 02/26/2013 14:21 | Matrix: Dissolved Air | (WA)
Station: 100 MILL PLAIN RD. DANBURY | Collect Stop: | Volume:
Description: | Receive Date: 03/05/2013 | % Moisture:
LIMS Number: L53782-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	1.42E+02	1.18E+02	1.78E+02	pCi/L		10	ml		03/20/13	50	M	U

Sample ID: AS-B-USA-001 | Collect Start: 02/27/2013 12:33 | Matrix: Dissolved Air | (WA)
Station: BREITING, USA-RESTRICTED AREA | Collect Stop: | Volume:
Description: | Receive Date: 03/05/2013 | % Moisture:
LIMS Number: L53782-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	5.06E+02	1.31E+02	1.68E+02	pCi/L		10	ml		03/27/13	60	M	+

Sample ID: AS-B-USA-002 | Collect Start: 02/27/2013 12:33 | Matrix: Dissolved Air | (WA)
Station: BREITING, USA-RESTRICTED AREA | Collect Stop: | Volume:
Description: | Receive Date: 03/05/2013 | % Moisture:
LIMS Number: L53782-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	5.29E+01	1.12E+02	1.79E+02	pCi/L		10	ml		03/20/13	50	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
12B-062	###-##-6650	02/26/2013	14:12:00	Urine Sample
12B-063	###-##-8645	02/26/2013	09:15:00	Urine Sample
12B-067	###-##-3237	02/26/2013	08:34:00	Urine Sample
12B-072	###-##-0289	02/26/2013	11:30:00	Urine Sample
12B-077	###-##-5784	02/25/2013	14:16:00	Urine Sample
13C-079	###-##-4053	02/07/2013	08:01:00	Urine Sample
12B-081	###-##-4768	02/27/2013	05:00:00	Urine Sample
12B-082	###-##-7415	02/25/2013	12:00:00	Urine Sample
12B-083	###-##-6793	02/25/2013	15:31:00	Urine Sample
12B-084	###-##-5111	02/25/2013	06:26:00	Urine Sample
12B-085	###-##-0797	02/26/2013	11:47:00	Urine Sample
12B-086	###-##-1698	02/25/2013	08:21:00	Urine Sample
AS-BKG-001	100 Mill Plain Rd. Danbury, CT 06811	02/26/2013	14:21:00	1st QTR BKGD H_2O Impinger #01
AS-BKG-002	100 Mill Plain Rd. Danbury, CT 06811	02/26/2013	14:21:00	1st QTR BKGD H_2O Impinger #02
AS-B-USA-001	Breitling, USA - Restricted Area	02/27/2013	12:33:00	1st QTR A/S H_2O Impinger #01
AS-B-USA-002	Breitling, USA - Restricted Area	02/27/2013	12:33:00	1st QTR A/S H_2O Impinger #02

L-3782

NOTE(S): **FEDEX TRACKING #: 7948 6791 1202**

153782

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: SR Smith **for: Breitling USA, Inc.**

Site Contact:; AS ABOVE

Phone: (203) 558-1213 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
12B-001	###-##-8174	02/26/2013	04:33:00	Urine Sample
12B-003	###-##-8292	02/25/2013	09:00:00	Urine Sample
12B-009	###-##-1230	02/26/2013	13:40:00	Urine Sample
12B-011	###-##-5425	02/26/2013	08:45:00	Urine Sample
12B-012	###-##-7149	02/22/2013	04:44:00	Urine Sample
12B-013	###-##-0332	02/26/2013	06:40:00	Urine Sample
12B-015	###-##-6470	02/25/2013	06:45:00	Urine Sample
12B-025	###-##-5809	02/25/2013	09:14:00	Urine Sample
12B-032	###-##-8068	02/25/2013	10:02:00	Urine Sample
12B-036	###-##-6707	02/26/2013	12:11:00	Urine Sample
12B-039	###-##-2976	02/26/2013	16:25:00	Urine Sample
12B-040	###-##-8111	02/26/2013	09:20:00	Urine Sample
12B-048	###-##-2421	02/26/2013	08:30:00	Urine Sample
12B-053	###-##-9383	02/13/2013	14:15:00	Urine Sample
12B-055	###-##-5397	02/26/2013	08:46:00	Urine Sample
12B-056	###-##-0319	02/26/2013	10:03:00	Urine Sample
12B-060	###-##-1376	02/26/2013	16:10:00	Urine Sample

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: SR Smith	02/27/2013 0833 - 1233	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	02/07-27/2013 0800 - 1600	Relinquished by: W. Yee	02/27/13 - 1200
Accepted by: SR Smith	02/27/2013 1200	Relinquished by: SR Smith	03/01/13 - 1630
Accepted by: FEDEX	03/01/2013 1630	Relinquished by	
Accepted by K. Charles	03/5/13	Relinquished by	

L53782
WH90B

ENERGYSOLUTIONS

March 01, 2013
Ref. No.: 137013-182

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Urine/Water

Dear Sir/Mme:

Attached is the chain-of-custody form for the 2012 Bioassay urine samples and First Quarter 2013 air sample impinger water. Please analyze the sample in accordance with procedures used for tritium in urine and tritium in water.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Dates:	02/07-27/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Urine, Distilled water
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Stewart R Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R. Charles
3/5/13

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L54990-52	
053	L54990-53	
054	L54990-54	
055	L54990-55	
056	L54990-56	
057	L54990-57	
058	L54990-58	
059	L54990-59	
060	L54990-60	
061	L54990-61	
062	L54990-62	
063	L54990-63	
064	L54990-64	
065	L54990-65	
066	L54990-66	
067	L54990-67	
068	L54990-68	
069	L54990-69	
070	L54990-70	
071	L54990-71	
072	L54990-72	
073	L54990-73	
074	L54990-74	
075	L54990-75	
076	L54990-76	
078	L54990-77	
100	L54990-78	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L54990-9	
010	L54990-10	
011	L54990-11	
012	L54990-12	
013	L54990-13	
014	L54990-14	
015	L54990-15	
016	L54990-16	
017	L54990-17	
018	L54990-18	
019	L54990-19	
020	L54990-20	
021	L54990-21	
022	L54990-22	
023	L54990-23	
024	L54990-24	
025	L54990-25	
026	L54990-26	
027	L54990-27	
028	L54990-28	
029	L54990-29	
030	L54990-30	
031	L54990-31	
032	L54990-32	
033	L54990-33	
034	L54990-34	
035	L54990-35	
036	L54990-36	
037	L54990-37	
038	L54990-38	
039	L54990-39	
040	L54990-40	
041	L54990-41	
042	L54990-42	
043	L54990-43	
044	L54990-44	
045	L54990-45	
046	L54990-46	
047	L54990-47	
048	L54990-48	
049	L54990-49	
050	L54990-50	
051	L54990-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2013

LIMS #:	L54990
Project ID#:	EN010-3BIOCT-07
Received:	06/19/2013
Delivery Date:	07/19/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

For Keith Jeter

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L54990-1	
002	L54990-2	
003	L54990-3	
004	L54990-4	
005	L54990-5	
006	L54990-6	
007	L54990-7	
008	L54990-8	

06/20/13 09:43

SR #: SR35578

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L54993

Initiated By: JSIMMONS
Init Date: 06/20/13 Receive Date: 06/19/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	Y	
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	N	
	10		This sample was listed on the COC but did not arrive.
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	
For Hazardous Materials Only:			
10	Paperwork shows TBE and shippers name, address and phone number	NA	
11	Paperwork shows sample quantity information	NA	

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	26	LSC	60 dpm/cm²	30 days
Bio Assay Sample	2		3.5E-04 µCi/L	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 5/17/2013

Reviewed By: SR Smith Proj. Mgr. Date: 5/17/2013

Approved By: SR Smith Proj. Mgr. Date: 5/17/2013

May 17, 2013
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	5/17/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper) / urine - bioassay
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

L54993

WHGD

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
	Collected by: W. Yee BREITLING		; 0800 - 1600	
1	Lab Coat ID #601		0800 - 1600	2nd QTR Survey
2	Lab Coat ID #602		0800 - 1600	2nd QTR Survey
3	Lab Coat ID #604		0800 - 1600	2nd QTR Survey
4	Lab Coat ID #605		0800 - 1600	2nd QTR Survey
5	Lab Coat ID #608		0800 - 1600	2nd QTR Survey
6	Lab Coat ID #616		0800 - 1600	2nd QTR Survey
7	Lab Coat ID #631		0800 - 1600	2nd QTR Survey
8	Lab Coat ID "RE"		0800 - 1600	2nd QTR Survey
9	Lab Coat ID #575		0800 - 1600	2nd QTR Survey
10 *	Lab Coat ID #576		0800 - 1600	2nd QTR Survey
11	Lab Coat ID "JA"		0800 - 1600	2nd QTR Survey
12	Lab Coat ID "MF"		0800 - 1600	2nd QTR Survey
13	Lab Coat ID #470		0800 - 1600	2nd QTR Survey
14	Lab Coat ID #473		0800 - 1600	2nd QTR Survey
15	Lab Coat ID #474		0800 - 1600	2nd QTR Survey
16	Lab Coat ID #632		0800 - 1600	2nd QTR Survey
17	Lab Coat ID #612		0800 - 1600	2nd QTR Survey
18	Lab Coat ID #606		0800 - 1600	2nd QTR Survey
26	Lab Coat ID #861		0800 - 1600	2nd QTR Survey
19	Lab Coat ID #607		0800 - 1600	2nd QTR Survey
20	Lab Coat ID #573		0800 - 1600	2nd QTR Survey
21	Lab Coat ID #619		0800 - 1600	2nd QTR Survey
22	Lab Coat ID #634		0800 - 1600	2nd QTR Survey
23	Lab Coat ID #611		0800 - 1600	2nd QTR Survey
24	Lab Coat ID #614		0800 - 1600	
25	Lab Coat ID #450		0800 - 1600	

~~** 26 (QC)~~ JMS 6/19

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	6/4/13 1600	Relinquished by: W. Yee, Breitling, USA	6/5/13 0900
Accepted by: D. Slywka	6/5/13 0900	Relinquished by: D. Slywka	6/14/13 0900
FEDEX	6/14/13 0800		6/19/13 10:00

* DID NOT ARRIVE

~~** Arrived but was not on COC~~ JMS

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 24 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.80E+01**	2.82E+00	2.67E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 25 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #450 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.38E+01**	2.69E+00	2.68E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 20 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.21E+01**	3.08E+00	2.83E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 21 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.77E+01**	3.44E+00	2.68E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 22 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.70E+01**	2.81E+00	2.70E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 23 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.97E+01**	2.96E+00	2.78E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.98E+02**	9.15E+00	2.83E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 18 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.46E+02**	5.19E+00	2.38E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 26 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.45E+01**	2.65E+00	2.59E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Sample ID: 19 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.33E+01**	3.13E+00	2.85E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.14E+01**	3.01E+00	2.77E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 14 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.83E+01**	2.91E+00	2.77E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 15 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.07E+01**	2.99E+00	2.77E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 16 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.62E+01**	2.55E+00	2.37E+00	DPM/TOTAL		100	%		06/30/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.89E+01**	3.26E+00	2.78E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 10 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Sample ID: 11 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.06E+01**	2.99E+00	2.78E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 12 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.90E+02**	5.81E+00	2.33E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.74E+01**	3.14E+00	2.68E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 6 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.86E+01**	2.30E+00	2.39E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 7 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.78E+01**	2.23E+00	2.32E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 8 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.52E+01**	3.15E+00	2.79E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

07/09/13 10:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54993

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.90E+01**	3.17E+00	2.67E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 2 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.81E+01**	3.25E+00	2.80E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 3 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.83E+01**	2.31E+00	2.42E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Sample ID: 4 | Collect Start: 05/17/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 05/17/2013 16:00 | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54993-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.54E+01**	3.13E+00	2.76E+00	DPM/TOTAL		100	%		06/29/13	45	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L54993-9	LAB COAT ID #575
10	L54993-10	LAB COAT ID #576
11	L54993-11	LAB COAT ID "JA"
12	L54993-12	LAB COAT ID "MF"
13	L54993-13	LAB COAT ID #470
14	L54993-14	LAB COAT ID #473
15	L54993-15	LAB COAT ID #474
16	L54993-16	LAB COAT ID #632
17	L54993-17	LAB COAT ID #612
18	L54993-18	LAB COAT ID #606
26	L54993-19	LAB COAT ID #861
19	L54993-20	LAB COAT ID #607
20	L54993-21	LAB COAT ID #573
21	L54993-22	LAB COAT ID #619
22	L54993-23	LAB COAT ID #634
23	L54993-24	LAB COAT ID #611
24	L54993-25	LAB COAT ID #614
25	L54993-26	LAB COAT ID #450

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

07/09/2013

LIMS #: L54993
Project ID#: EN010-3BIOCT-07
Received: 06/19/2013
Delivery Date: 07/19/2013
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L54993-1	LAB COAT ID #601
2	L54993-2	LAB COAT ID #602
3	L54993-3	LAB COAT ID #604
4	L54993-4	LAB COAT ID #605
5	L54993-5	LAB COAT ID #608
6	L54993-6	LAB COAT ID #616
7	L54993-7	LAB COAT ID #631
8	L54993-8	LAB COAT ID "RE"

ATTACHMENT 2

2nd QUARTER LOOSE CONTAMINATION SURVEY

Teledyne-Brown Engineering

ENERGYSOLUTIONS

Survey Point	Type	f_r corrected dpm/100 cm²	Location	Lab Sample ID
1	R	75	Lab Coat #601	L54993-1
2	R	73	Lab Coat #602	L54993-2
3	R	33	Lab Coat #604	L54993-3
4	R	67	Lab Coat #605	L54993-4
5	R	71	Lab Coat #608	L54993-5
6	R	34	Lab Coat #616	L54993-6
7	R	32	Lab Coat #631	L54993-7
8	R	67	Lab Coat #"RE"	L54993-8
9	R	74	Lab Coat #575	L54993-9
10	R	70	Lab Coat #576	L55262-1
11	R	58	Lab Coat "JA"	L54993-11
12	R	377	Lab Coat "MF"	L54993-12
13	R	59	Lab Coat #470	L54993-13
14	R	53	Lab Coat #473	L54993-14
15	R	58	Lab Coat #474	L54993-15
16	R	49	Lab Coat #632	L54993-16
17	R	793	Lab Coat #612	L54993-17
18	R	289	Lab Coat #606	L54993-18
19	R	63	Lab Coat #607	L54993-19
20	R	61	Lab Coat #573	L54993-20
21	R	92	Lab Coat #619	L54993-21
22	R	51	Lab Coat #634	L54993-22
23	R	56	Lab Coat #611	L54993-23
24	R	53	Lab Coat #614	L54993-24
25	R	44	Lab Coat #450	L54993-25
26	R	46	Lab Coat #861	L54993-26

Completed by: **Stewart R Smith** Date: 8/5/2013

Reviewed By: _____ Date: _____

The following coats require decontamination action: None

ENERGYSOLUTIONS

Survey Point	Type	f, corrected dpm/100 cm²	Location	Lab Sample ID
038	R	27	Watchmaker Workstation	L54990-038
039	R	1	Watchmaker Workstation	L54990-039
040	R	2	Watchmaker Workstation	L54990-040
041	R	1,067	Watchmaker Workstation	L54990-041
042	R	29	Watchmaker Workstation	L54990-042
043	R	53	Watchmaker Workstation	L54990-043
044	R	8	Watchmaker Workstation	L54990-044
045	R	28	Watchmaker Workstation	L54990-045
046	R	20	Watchmaker Workstation	L54990-046
047	R	95	Watchmaker Workstation	L54990-047
048	R	55	Watchmaker Workstation	L54990-048
049	R	31	Watchmaker Workstation	L54990-049
050	R	79	Watchmaker Workstation	L54990-050
051	R	16	Watchmaker Workstation	L54990-051
052	R	36	Watchmaker Workstation	L54990-052
053	R	17	Watchmaker Room Entrance Door-South	L54990-053
054	R	827	Watchmaker Room Floor - South	L54990-054
055	R	27	Watchmaker Room Floor - South	L54990-055
056	R	20	Watchmaker Room Floor - South	L54990-056
057	R	28	Watchmaker Room Floor - East	L54990-057
058	R	20	Watchmaker Room Floor - East	L54990-058
059	R	35	Watchmaker Room Floor - East	L54990-059
060	R	47	Watchmaker Room Floor - North	L54990-060
061	R	24	Watchmaker Room Floor - Center	L54990-061
062	R	150	Watchmaker Room Floor - Center	L54990-062
063	R	46	Watchmaker Room Floor - North	L54990-063
064	R	14	Watchmaker Room Entrance Door-North	L54990-064
065	R	24	Watchmaker Room Floor - West	L54990-065
066	R	57	Watchmaker Room Floor - West	L54990-066
067	R	5	RSO Workstation Floor	L54990-067
068	R	20	QC Area Floor	L54990-068
069	R	7	Parts Room	L54990-069
070	R	75	RadWaste Closet Floor	L54990-070
071	R	1,375	RadWaste Barrel #01	L54990-071
072	R	313	RadWaste Barrel #02	L54990-072
073	R	140	RadWaste Material (Step-off pads, etc)	L54990-073
074	R	1,599	RadWaste Material (Step-off pads, etc)	L54990-074
075	R	27	Parts Closet	L54990-075
076	U	2	Elevator Vestibule 2nd Floor	L54990-076
078	U	7	Starirway "A" - Floor 1	L54990-078
100	**U**	**3.38**	**Background Sample**	**L54990-100**

Completed by: **Stewart R Smith** Date: 8/5/2013

Reviewed By: _____ Date: _____

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 2nd QTR Survey 2013
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	f_r corrected dpm/100 cm^2	Location	Lab Sample ID
001	U	2	Entrance Vestibule	L54990-001
002	U	0	Floor - Shipping/Receiving Area	L54990-002
003	U	-4	1st Floor Work Room Floor	L54990-003
004	U	-5	1st Floor Vault Floor - North	L54990-004
005	U	0	Hallway - Outside Rest Rooms	L54990-005
006	U	-4	Pantry Vending Machine - Floor	L54990-006
007	U	0	Break Room Floor	L54990-007
008	U	2	Stairway B Floor	L54990-008
009	U	12	Training Room Work Station-Southwest	L54990-009
010	U	7	Training Room Work Station-Northwest	L54990-010
011	U	9	Training Room Work Station-Southeast	L54990-011
012	U	24	Training Room Work Station-Northeast	L54990-012
013	U	5	Training Room Threshold Floor	L54990-013
014	U	7	Hallway Near Entrance Door-2nd Floor South	L54990-014
015	U	36	Hallway Outside Watchmaker's Room	L54990-015
016	U	20	Hallway Outside Watchmaker's Room	L54990-016
017	U	32	Floor Outside Women's Restroom	L54990-017
018	U	12	Floor In Men's Rest Room	L54990-018
019	U	2	Office A Hallway Floor	L54990-019
020	U	3	Office C Hallway Floor	L54990-020
021	U	3	Office F Hallway Floor	L54990-021
022	U	25	2nd Floor - Outside Copy Room	L54990-022
023	U	19	2nd Floor Hallway Floor @ Safe	L54990-023
024	U	39	2nd Floor Safe Vestibule	L54990-024
025	U	30	2nd Floor Safe Floor	L54990-025
026	U	10	Sales Open Area Floor	L54990-026
027	U	6	Stairway A 2nd Floor	L54990-027
028	R	7	Polishing Room Workstation	L54990-028
029	R	15	Cleaning Room - Sink Counter	L54990-029
030	R	11	QA Area Floor	L54990-030
031	R	14	Change Room Floor	L54990-031
032	R	162	Watchmaker Workstation	L54990-032
033	R	7	Watchmaker Workstation	L54990-033
034	R	78	Watchmaker Workstation	L54990-034
035	R	20	Watchmaker Workstation	L54990-035
036	R	70	Watchmaker Workstation	L54990-036
037	R	9	Watchmaker Workstation	L54990-037

ATTACHMENT 1

2nd QUARTER SURVEY DATA SHEET

ATTACHMENT 2

Conclusion

Based on the Second Quarter 2013 survey, Breitling has maintained compliance with the Radiation Protection Manual.

SECOND QUARTER 2013 SURVEY EXECUTIVE SUMMARY

The action levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Quarterly Surveys Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

The Second Quarter 2013 survey was performed on May 17, 2013. Results from the Teledyne-Brown Engineering (TBE) laboratory indicated all analyzed swipe samples are well below the above-stated Action Levels in Table 1.

104 samples (seventy seven location swipes, one background location swipe, and twenty six lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for counting on a LSC. The results of these analyses are summarized on the Survey Data Sheet included in this report as Attachment 1. Teledyne Brown analytical results are included as Attachment 2.

In the Unrestricted Area, the highest removable result was on the floor of the 2nd Floor safe vestibule. The reading was 39 dpm/100 cm^2 with a damp swipe.

In the Restricted area the highest removable location result was 1,067 dpm/100 cm^2 at a workstation in the west central watchmaker area with a damp swipe. No remedial action was required in the restricted areas per Table 1. The RSO was contacted with the results for wipe down of the workstation.

Radioactive Waste Closet Survey

The Radioactive Waste Closet was surveyed for loose contamination. The collected samples indicated that the floor had 75 dpm/100 cm^2 and the outside of a drum had 1,375 dpm/100 cm^2. The result from a sample taken from cleaning swipes and step-off pads was 1,599 dpm/100 cm^2.

Lab Coat Survey

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveyed the lab coats to determine if they contain removable contamination. Breitling uses an air sampler to draw debris from the lab coats through an air filter. The sample is collected onto the filter and counted on the LSC. The results (26 filter samples) indicate that the levels found on the lab coats were below the unrestricted area limit provided in Table 1. The highest activity found was 793 dpm/100 cm^2 (Lab Coat #612) thus not requiring decontamination prior to laundering.

03/11/13 09:25

SR #: SR34512

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L53836

Initiated By: JSIMMONS
Init Date: 03/11/13 Receive Date: 03/08/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 03/19/2012; 0800 - 1600				
LC-1	Lab Coat ID #601	03/05/2013	0800 - 1600	1st QTR Survey
LC-2*	Lab Coat ID #602	03/05/2013	0800 - 1600	1st QTR Survey
LC-3*	Lab Coat ID #604	03/05/2013	0800 - 1600	1st QTR Survey
LC-4	Lab Coat ID #605	03/05/2013	0800 - 1600	1st QTR Survey
LC-5	Lab Coat ID #608	03/05/2013	0800 - 1600	1st QTR Survey
LC-6	Lab Coat ID #616	03/05/2013	0800 - 1600	1st QTR Survey
LC-7	Lab Coat ID #620	03/05/2013	0800 - 1600	1st QTR Survey
LC-8	Lab Coat ID #631	03/05/2013	0800 - 1600	1st QTR Survey
LC-9	Lab Coat ID #630	03/05/2013	0800 - 1600	1st QTR Survey
LC-10	Lab Coat ID #575	03/05/2013	0800 - 1600	1st QTR Survey
LC-11	Lab Coat ID #576	03/05/2013	0800 - 1600	1st QTR Survey
LC-12	Lab Coat ID "JA"	03/05/2013	0800 - 1600	1st QTR Survey
LC-13	Lab Coat ID "MF"	03/05/2013	0800 - 1600	1st QTR Survey
LC-14	Lab Coat ID #470	03/05/2013	0800 - 1600	1st QTR Survey
LC-15	Lab Coat ID #473	03/05/2013	0800 - 1600	1st QTR Survey
LC-16	Lab Coat ID #474	03/05/2013	0800 - 1600	1st QTR Survey
LC-17	Lab Coat ID #632	03/05/2013	0800 - 1600	1st QTR Survey
LC-19	Lab Coat ID #606	03/05/2013	0800 - 1600	1st QTR Survey
LC-20	Lab Coat ID #607	03/05/2013	0800 - 1600	1st QTR Survey
LC-21	Lab Coat ID #573	03/05/2013	0800 - 1600	1st QTR Survey
LC-22	Lab Coat ID #619	03/05/2013	0800 - 1600	1st QTR Survey
LC-23	Lab Coat ID #634	03/05/2013	0800 - 1600	1st QTR Survey
LC-24	Lab Coat ID #611	03/05/2013	0800 - 1600	1st QTR Survey
LC-25	Lab Coat ID #614	03/05/2013	0800 - 1600	1st QTR Survey
LC-26	Lab Coat ID #450	03/05/2013	0800 - 1600	1st QTR Survey

NOTE(S): ***Two LC Vials [LC-2, LC-3] are in a separate bag on top of LSV box.**
FEDEX Air bill #: 7949 0654 3333

ENERGYSOLUTIONS

L53836.
WH89D

March 06, 2013
Ref. No.: 137013-183

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Urine/Tritium on swipe/filter

Dear Sir/Mme:

Attached are chain-of-custody forms for a 2013 Bioassay urine sample and First Quarter 2013 loose contamination swipes and Lab Coat air filters. Please analyze the sample in accordance with procedures used for tritium in urine and tritium on swipes and air filters.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Dates:	02/27-03/05/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Urine, Air filters/swipes
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID:	LC-26	Collect Start:	03/05/2013 08:00	Matrix:	Swipes (SW)
Station:	LAB COAT ID #450	Collect Stop:	03/05/2013 16:00	Volume:	
Description:		Receive Date:	03/08/2013	% Moisture:	
LIMS Number:	L53836-25				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+01	2.65E+00	3.04E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: LC-22 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	2.58E+00	2.95E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-23 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	2.58E+00	2.95E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-24 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.04E+01**	2.48E+00	2.92E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-25 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.31E+01**	2.73E+00	3.07E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: LC-17 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.64E+01	2.82E+00	2.95E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-19 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.31E+01	2.68E+00	2.99E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-20 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.41E+01	2.73E+00	2.99E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-21 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.04E+01	2.69E+00	2.48E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: LC-13 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.05E+01**	2.62E+00	3.13E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-14 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.28E+01**	2.59E+00	2.88E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-15 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	2.67E+00	2.92E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-16 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.25E+01**	2.75E+00	3.15E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: LC-9 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.24E+01	2.55E+00	2.86E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-10 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.63E+00	2.09E+00	2.57E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-11 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+01	2.36E+00	2.59E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-12 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+01	2.54E+00	2.99E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: LC-5 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.25E+01**	2.64E+00	2.98E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-6 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.06E+01**	2.44E+00	2.84E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-7 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #620 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.65E+00**	2.40E+00	2.96E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-8 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.20E+01**	2.56E+00	2.90E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 10:23

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53836

Energy Solutions

EN010-3BIOCT-07

Sample ID: LC-1 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.30E+01**	2.68E+00	3.00E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-2 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.03E+01**	2.52E+00	3.00E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-3 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.44E+00**	2.40E+00	2.88E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: LC-4 | Collect Start: 03/05/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 03/05/2013 16:00 | Volume:
Description: | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53836-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	2.58E+00	2.98E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
LC-9	L53836-9	LAB COAT ID #630
LC-10	L53836-10	LAB COAT ID #575
LC-11	L53836-11	LAB COAT ID #576
LC-12	L53836-12	LAB COAT ID "JA"
LC-13	L53836-13	LAB COAT ID "MF"
LC-14	L53836-14	LAB COAT ID #470
LC-15	L53836-15	LAB COAT ID #473
LC-16	L53836-16	LAB COAT ID #474
LC-17	L53836-17	LAB COAT ID #632
LC-19	L53836-18	LAB COAT ID #606
LC-20	L53836-19	LAB COAT ID #607
LC-21	L53836-20	LAB COAT ID #573
LC-22	L53836-21	LAB COAT ID #619
LC-23	L53836-22	LAB COAT ID #634
LC-24	L53836-23	LAB COAT ID #611
LC-25	L53836-24	LAB COAT ID #614
LC-26	L53836-25	LAB COAT ID #450

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

03/19/2013

LIMS #:	L53836
Project ID#:	EN010-3BIOCT-07
Received:	03/08/2013
Delivery Date:	04/07/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
LC-1	L53836-1	LAB COAT ID #601
LC-2	L53836-2	LAB COAT ID #602
LC-3	L53836-3	LAB COAT ID #604
LC-4	L53836-4	LAB COAT ID #605
LC-5	L53836-5	LAB COAT ID #608
LC-6	L53836-6	LAB COAT ID #616
LC-7	L53836-7	LAB COAT ID #620
LC-8	L53836-8	LAB COAT ID #631

03/11/13 09:13

SR #: SR34511

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L53835

Initiated By: JSIMMONS
Init Date: 03/11/13 Receive Date: 03/08/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
049	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
050	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
051	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
052	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
053	Watchmaker Room Entrance Floor - South	02/27/2013	0800-1600	1st QTR Survey
054	Watchmaker Room Floor - S	02/27/2013	0800-1600	1st QTR Survey
055	Watchmaker Room Floor - S	02/27/2013	0800-1600	1st QTR Survey
056	Watchmaker Room Floor - S	02/27/2013	0800-1600	1st QTR Survey
057	Watchmaker Room Floor - E	02/27/2013	0800-1600	1st QTR Survey
058	Watchmaker Room Floor - E	02/27/2013	0800-1600	1st QTR Survey
059	Watchmaker Room Floor - E	02/27/2013	0800-1600	1st QTR Survey
060	Watchmaker Room Floor - N	02/27/2013	0800-1600	1st QTR Survey
061	Watchmaker Room Floor-Center	02/27/2013	0800-1600	1st QTR Survey
062	Watchmaker Room Floor-Center	02/27/2013	0800-1600	1st QTR Survey
063	Watchmaker Room Floor - N	02/27/2013	0800-1600	1st QTR Survey
064	Watchmaker Room Entrance Floor - North	02/27/2013	0800-1600	1st QTR Survey
065	Watchmaker Room Floor - W	02/27/2013	0800-1600	1st QTR Survey
066	Watchmaker Room Floor - W	02/27/2013	0800-1600	1st QTR Survey
067	RSO Workstation Floor	02/27/2013	0800-1600	1st QTR Survey
068	QC Workstation Floor	02/27/2013	0800-1600	1st QTR Survey
069	Parts Room Floor	02/27/2013	0800-1600	1st QTR Survey
070	Radioactive Waste Closet Floor	02/27/2013	0800-1600	1st QTR Survey
071	Radioactive Waste Barrel #1	02/27/2013	0800-1600	1st QTR Survey
072	Radioactive Waste Barrel #2	02/27/2013	0800-1600	1st QTR Survey
073	Radioactive Waste Sample	02/27/2013	0800-1600	1st QTR Survey
074	Radioactive Waste Sample	02/27/2013	0800-1600	1st QTR Survey
075	Parts Closet	02/27/2013	0800-1600	1st QTR Survey
076	Elevator 2nd Floor	02/27/2013	0800-1600	1st QTR Survey
100	BKGD. Sample – OS Building	02/27/2013	0800-1600	1st QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor In Men's Restroom	02/27/2013	0800-1600	1st QTR Survey
019	Office A Hallway Floor	02/27/2013	0800-1600	1st QTR Survey
020	Office C Hallway Floor	02/27/2013	0800-1600	1st QTR Survey
021	Office F Hallway Floor	02/27/2013	0800-1600	1st QTR Survey
022	Floor – OS Copy Room	02/27/2013	0800-1600	1st QTR Survey
023	2nd Floor Hallway @ Safe	02/27/2013	0800-1600	1st QTR Survey
024	2nd Floor Safe Vestibule	02/27/2013	0800-1600	1st QTR Survey
025	2nd Floor Safe Floor	02/27/2013	0800-1600	1st QTR Survey
026	Sales Open Area Floor	02/27/2013	0800-1600	1st QTR Survey
027	Stairway A Floor - 2nd Floor	02/27/2013	0800-1600	1st QTR Survey
028	Polishing Room Floor	02/27/2013	0800-1600	1st QTR Survey
029	Cleaning Room - Sink Counter	02/27/2013	0800-1600	1st QTR Survey
030	QA Area Floor	02/27/2013	0800-1600	1st QTR Survey
031	Change Room Floor	02/27/2013	0800-1600	1st QTR Survey
032	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
033	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
034	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
035	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
036	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
037	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
038	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
039	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
040	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
041	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
042	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
043	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
044	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
045	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
046	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey
047	Watchmaker Workstation	02/27/2013	0800-1600	1st QTR Survey

L53835

WH89D

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: SR Smith	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (203) 558-1213 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	02/27/2013	0800-1600	1st QTR Survey
002	Floor – Shipping/Receiving Area	02/27/2013	0800-1600	1st QTR Survey
003	1st Floor Work Room Floor	02/27/2013	0800-1600	1st QTR Survey
004	1st Floor Vault Floor - North	02/27/2013	0800-1600	1st QTR Survey
005	Hallway @ Restrooms	02/27/2013	0800-1600	1st QTR Survey
006	Pantry Vending Machine Floor	02/27/2013	0800-1600	1st QTR Survey
007	Break Room Floor	02/27/2013	0800-1600	1st QTR Survey
008	Stairway B Landing Floor	02/27/2013	0800-1600	1st QTR Survey
009	Training Room Work Station	02/27/2013	0800-1600	1st QTR Survey
010	Training Room Work Station	02/27/2013	0800-1600	1st QTR Survey
011	Training Room Work Station	02/27/2013	0800-1600	1st QTR Survey
012	Training Room Work Station	02/27/2013	0800-1600	1st QTR Survey
013	Training Room Threshold Floor	02/27/2013	0800-1600	1st QTR Survey
014	Hallway Near Entrance Door-S	02/27/2013	0800-1600	1st QTR Survey
015	Hallway OS Watchmaker Room	02/27/2013	0800-1600	1st QTR Survey
016	Hallway Near Entrance Door-N	02/27/2013	0800-1600	1st QTR Survey
017	Floor OS Women's Bathroom	02/27/2013	0800-1600	1st QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: SR Smith	02/27/2013 0800 - 1600	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	03/05/2013 0800 - 1600	Relinquished by: W. Yee	03/06/13 - 1030
Accepted by: SR Smith	03/06/2013 1030	Relinquished by: SR Smith	03/08/13 - 1630
Accepted by: FEDEX	03/08/2013 1630	Relinquished by	
Accepted by		Relinquished by	

ENERGY*SOLUTIONS*

L53835

W1789D

March 06, 2013
Ref. No.: 137013-183

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Urine/Tritium on swipe/filter

Dear Sir/Mme:

Attached are chain-of-custody forms for a 2013 Bioassay urine sample and First Quarter 2013 loose contamination swipes and Lab Coat air filters. Please analyze the sample in accordance with procedures used for tritium in urine and tritium on swipes and air filters.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Dates:	02/27-03/05/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Urine, Air filters/swipes
Report Level:	QA-I; 3.5E-04 μCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Stewart R Smith

Breitling USA, Project Manager

Recv'd by
Jonathan Simms
3/8/13
10:00

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53835

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID:	100	Collect Start:	02/27/2013 08:00	Matrix:	Swipes (SW)
Station:		Collect Stop:	02/27/2013 16:00	Volume:	
Description:	BKGD Sample - OS Building	Receive Date:	03/08/2013	% Moisture:	
LIMS Number:	L53835-77				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+00	2.32E+00	**3.68E+00**	DPM/TOTAL		100	%		03/18/13	30	M	U

Flag Values

U	=	Compound/Analyte not detected (< MDC) or less than 3 sigma
+	=	Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U*	=	Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High	=	Activity concentration exceeds customer reporting value
Spec	=	MDC exceeds customer technical specification
L	=	Low recovery
H	=	High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum

Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53835

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.27E+02**	1.11E+01	3.26E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 074 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.03E+02**	1.26E+01	3.01E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 075 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: parts closet | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.70E+01**	3.49E+00	3.41E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 076 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.19E+00	2.37E+00	**3.56E+00**	DPM/TOTAL		100	%		03/18/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53835

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 069 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: parts room floor — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.85E+01	3.60E+00	3.48E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 070 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: radioactive waste closet floor — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.03E+02	1.74E+01	4.29E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 071 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: radioactive waste barrel #1 — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.00E+02	1.49E+01	3.61E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 072 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: radioactive waste barrel #2 — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.07E+02	1.01E+01	3.69E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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L53835

Energy Solutions

EN010-3BIOCT-07

Stewart Smith

Sample ID: 065 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.43E+01	3.10E+00	3.71E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 066 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.57E+01	3.59E+00	3.65E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 067 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.31E+01	2.86E+00	3.43E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 068 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: qc workstation floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.25E+00	2.52E+00	3.49E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 061 (SW)
Station:
Description: watchmaker room floor - center
LIMS Number: L53835-61
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.50E+01**	3.09E+00	3.63E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 062 (SW)
Station:
Description: watchmaker room floor - center
LIMS Number: L53835-62
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.30E+01**	2.95E+00	3.58E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 063 (SW)
Station:
Description: watchmaker room floor - n
LIMS Number: L53835-63
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.75E+01**	3.29E+00	3.76E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 064 (SW)
Station:
Description: watchmaker room entrance floor - north
LIMS Number: L53835-64
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.26E+01**	3.07E+00	3.80E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Stewart Smith

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Sample ID: 057 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.51E+00**	2.50E+00	3.13E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 058 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.24E+00**	2.44E+00	3.06E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 059 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	2.80E+00	3.11E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 060 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.82E+00**	2.36E+00	3.19E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 053 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.25E+01**	2.47E+00	2.73E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 054 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.10E+01**	4.06E+00	3.16E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 055 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.99E+00**	2.58E+00	3.11E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 056 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.51E+01**	2.80E+00	3.01E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 049 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.13E+02	8.40E+00	3.17E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 050 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.24E+01	4.11E+00	3.16E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 051 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.28E+02	1.71E+01	3.16E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Sample ID: 052 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.70E+01	5.41E+00	3.01E+00	DPM/TOTAL		100	%		03/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 045 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.42E+01**	3.75E+00	3.10E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 046 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.44E+01**	4.80E+00	3.07E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 047 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.79E+01**	4.73E+00	3.23E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 048 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.16E+01**	4.46E+00	3.17E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 041 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.69E+00**	2.54E+00	3.09E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 042 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.18E+00**	2.53E+00	3.11E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 043 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.22E+01**	5.36E+00	3.10E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Sample ID: 044 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.24E+01**	3.22E+00	3.09E+00	DPM/TOTAL		100	%		03/17/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
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Sample ID: 037 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.39E+00	2.35E+00	3.21E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 038 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.39E+01	3.76E+00	3.13E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 039 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.72E+01	3.04E+00	3.21E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 040 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.95E+02	8.08E+00	3.19E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 033 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.58E+01**	2.71E+00	2.82E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 034 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.17E+01**	4.74E+00	3.10E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 035 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.70E+01**	3.47E+00	3.15E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 036 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.99E+00**	2.45E+00	3.20E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 029 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.24E+01**	3.72E+00	3.16E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 030 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: QA area floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.11E+01**	3.73E+00	3.25E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 031 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: change room floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.65E+01**	2.71E+00	2.77E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 032 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.29E+02**	6.65E+00	3.18E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 025 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+01**	2.63E+00	3.09E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 026 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: sales open area floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.53E+00**	2.26E+00	3.17E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 027 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.69E+00**	2.47E+00	3.27E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 028 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: polishing room floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.85E+00**	2.47E+00	3.15E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 021 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: office F hallway floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.14E+00	2.07E+00	**3.14E+00**	DPM/TOTAL		100	%		03/16/13	30	M	U

Sample ID: 022 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.13E+00**	2.23E+00	3.16E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 023 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.36E+00**	2.27E+00	3.19E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 024 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.12E+01**	2.77E+00	3.31E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 017 (SW)
Station:
Description: floor os womens bathroom
LIMS Number: L53835-17
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.50E+00**	2.44E+00	3.25E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 018 (SW)
Station:
Description: floor in men's restroom
LIMS Number: L53835-18
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.80E+00**	2.30E+00	3.09E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 019 (SW)
Station:
Description: office A hallway floor
LIMS Number: L53835-19
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.28E+00**	2.24E+00	3.17E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 020 (SW)
Station:
Description: office C hallway floor
LIMS Number: L53835-20
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.86E+00**	2.40E+00	3.25E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 013 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: training room threshold floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.91E+00	2.28E+00	3.15E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 014 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: hallway near entrance door-s | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.52E+00	2.57E+00	3.14E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 015 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.24E+01	2.72E+00	3.12E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 016 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: hallway near entrance door-n | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.19E+01	2.82E+00	3.31E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 009 (SW)
Station:
Description: training room work station
LIMS Number: L53835-9
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.28E+02	7.19E+00	3.69E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 010 (SW)
Station:
Description: training room work station
LIMS Number: L53835-10
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.51E+01	2.90E+00	3.16E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 011 (SW)
Station:
Description: training room work station
LIMS Number: L53835-11
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.84E+01	3.04E+00	3.12E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 012 (SW)
Station:
Description: training room work station
LIMS Number: L53835-12
Collect Start: 02/27/2013 08:00
Collect Stop: 02/27/2013 16:00
Receive Date: 03/08/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.52E+01	2.93E+00	3.21E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 005 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: hallway @ restroom | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.22E+00	2.45E+00	3.18E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 006 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.01E+00	2.38E+00	3.09E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 007 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: break room floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.83E+00	2.33E+00	3.14E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 008 | Collect Start: 02/27/2013 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 02/27/2013 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 03/08/2013 | % Moisture:
LIMS Number: L53835-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.49E+00	2.52E+00	3.36E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/19/13 13:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L53835

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: Entrance Floor — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.53E+01	3.10E+00	3.46E+00	DPM/TOTAL		100	%		03/15/13	30	M	+

Sample ID: 002 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: Floor - Shipping/Receiving area — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.91E+00	2.40E+00	3.24E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 003 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: 1st floor work room floor — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.64E+00	2.19E+00	3.04E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Sample ID: 004 — Collect Start: 02/27/2013 08:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 02/27/2013 16:00 — Volume:
Description: 1st floor vault floor - north — Receive Date: 03/08/2013 — % Moisture:
LIMS Number: L53835-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.72E+00	2.39E+00	3.25E+00	DPM/TOTAL		100	%		03/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L53835-52	
053	L53835-53	
054	L53835-54	
055	L53835-55	
056	L53835-56	
057	L53835-57	
058	L53835-58	
059	L53835-59	
060	L53835-60	
061	L53835-61	
062	L53835-62	
063	L53835-63	
064	L53835-64	
065	L53835-65	
066	L53835-66	
067	L53835-67	
068	L53835-68	
069	L53835-69	
070	L53835-70	
071	L53835-71	
072	L53835-72	
073	L53835-73	
074	L53835-74	
075	L53835-75	
076	L53835-76	
100	L53835-77	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L53835-9	
010	L53835-10	
011	L53835-11	
012	L53835-12	
013	L53835-13	
014	L53835-14	
015	L53835-15	
016	L53835-16	
017	L53835-17	
018	L53835-18	
019	L53835-19	
020	L53835-20	
021	L53835-21	
022	L53835-22	
023	L53835-23	
024	L53835-24	
025	L53835-25	
026	L53835-26	
027	L53835-27	
028	L53835-28	
029	L53835-29	
030	L53835-30	
031	L53835-31	
032	L53835-32	
033	L53835-33	
034	L53835-34	
035	L53835-35	
036	L53835-36	
037	L53835-37	
038	L53835-38	
039	L53835-39	
040	L53835-40	
041	L53835-41	
042	L53835-42	
043	L53835-43	
044	L53835-44	
045	L53835-45	
046	L53835-46	
047	L53835-47	
048	L53835-48	
049	L53835-49	
050	L53835-50	
051	L53835-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

03/19/2013

LIMS #:	L53835
Project ID#:	EN010-3BIOCT-07
Received:	03/08/2013
Delivery Date:	04/07/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L53835-1	
002	L53835-2	
003	L53835-3	
004	L53835-4	
005	L53835-5	
006	L53835-6	
007	L53835-7	
008	L53835-8	

03/05/13 11:09

SR #: SR34460

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L53779

Initiated By: RCHARLES
Init Date: 03/05/13 Receive Date: 03/05/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: Entrance Floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.45E+00	1.99E+00	**2.88E+00**	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 002 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.27E+00	1.88E+00	**2.88E+00**	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 003 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.16E-01	1.72E+00	**2.90E+00**	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 004 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.84E-01	1.70E+00	**2.91E+00**	DPM/TOTAL		100	%		06/25/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: insides men's restroom | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.77E+00	1.93E+00	2.89E+00	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 006 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-3.87E-01	1.71E+00	2.89E+00	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 007 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: break room floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.60E+00	1.94E+00	2.94E+00	DPM/TOTAL		100	%		06/25/13	30	M	U

Sample ID: 008 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.66E+00	2.07E+00	2.99E+00	DPM/TOTAL		100	%		06/25/13	30	M	U

Flag Values
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U* = Compound/Analyte not detected, Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 009 (SW)
Station:
Description: training room work station
LIMS Number: L54990-9
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.49E+00**	2.43E+00	2.91E+00	DPM/TOTAL		100	%		06/25/13	30	M	+

Sample ID: 010 (SW)
Station:
Description: training room work station
LIMS Number: L54990-10
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.17E+00**	2.28E+00	2.97E+00	DPM/TOTAL		100	%		06/25/13	30	M	+

Sample ID: 011 (SW)
Station:
Description: training room work station
LIMS Number: L54990-11
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.37E+00**	2.36E+00	2.93E+00	DPM/TOTAL		100	%		06/25/13	30	M	+

Sample ID: 012 (SW)
Station:
Description: training room work station
LIMS Number: L54990-12
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	2.88E+00	2.93E+00	DPM/TOTAL		100	%		06/25/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 013					Collect Start: 05/17/2013 10:00					Matrix: Swipes							(SW)
Station:					Collect Stop: 05/17/2013 16:00					Volume:							
Description: training room threshold floor					Receive Date: 06/19/2013					% Moisture:							
LIMS Number: L54990-13																	
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**				
H-3	2010	**4.16E+00**	2.12E+00	2.84E+00	DPM/TOTAL		100	%		06/26/13	30	M	+				
Sample ID: 014					Collect Start: 05/17/2013 10:00					Matrix: Swipes							(SW)
Station:					Collect Stop: 05/17/2013 16:00					Volume:							
Description: hallway near entrance door					Receive Date: 06/19/2013					% Moisture:							
LIMS Number: L54990-14																	
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**				
H-3	2010	**5.13E+00**	2.28E+00	2.97E+00	DPM/TOTAL		100	%		06/26/13	30	M	+				
Sample ID: 015					Collect Start: 05/17/2013 10:00					Matrix: Swipes							(SW)
Station:					Collect Stop: 05/17/2013 16:00					Volume:							
Description: hallway os watchmaker room					Receive Date: 06/19/2013					% Moisture:							
LIMS Number: L54990-15																	
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**				
H-3	2010	**1.98E+01**	3.21E+00	2.87E+00	DPM/TOTAL		100	%		06/26/13	30	M	+				
Sample ID: 016					Collect Start: 05/17/2013 10:00					Matrix: Swipes							(SW)
Station:					Collect Stop: 05/17/2013 16:00					Volume:							
Description: hallway os watchmaker room					Receive Date: 06/19/2013					% Moisture:							
LIMS Number: L54990-16																	
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**				
H-3	2010	**1.17E+01**	2.70E+00	2.86E+00	DPM/TOTAL		100	%		06/26/13	30	M	+				

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: floor os supplies closet | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.77E+01	3.16E+00	2.97E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 018 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.67E+00**	2.48E+00	2.97E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 019 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: office A hallway floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.57E+00	2.02E+00	**2.92E+00**	DPM/TOTAL		100	%		06/26/13	30	M	U

Sample ID: 020 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: office C hallway floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.96E+00	2.04E+00	**2.89E+00**	DPM/TOTAL		100	%		06/26/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: office F hallway floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.03E+00**	1.74E+00	2.27E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 022 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.44E+01**	2.70E+00	2.28E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 023 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+01**	2.47E+00	2.30E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 024 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.13E+01**	3.17E+00	2.31E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery
Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.
MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 025 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.68E+01**	2.88E+00	2.31E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 026 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: sales open area floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.55E+00**	2.13E+00	2.35E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 027 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.72E+00**	1.89E+00	2.24E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 028 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: polishing room floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.36E+00**	1.95E+00	2.23E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 029 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.02E+00**	2.27E+00	2.24E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 030 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: QA area floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.04E+00**	2.16E+00	2.32E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 031 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: change room floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.53E+00**	2.23E+00	2.24E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 032 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.29E+01**	5.68E+00	2.24E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 033 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.21E+00**	1.97E+00	2.28E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 034 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.05E+01**	4.13E+00	2.29E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 035 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	2.53E+00	2.31E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 036 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.69E+01**	3.99E+00	2.31E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 037 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.99E+00**	2.03E+00	2.28E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 038 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.51E+01**	2.73E+00	2.26E+00	DPM/TOTAL		100	%		06/26/13	30	M	+

Sample ID: 039 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.99E+00	1.62E+00	**2.26E+00**	DPM/TOTAL		100	%		06/26/13	30	M	U

Sample ID: 040 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.53E+00	1.70E+00	**2.29E+00**	DPM/TOTAL		100	%		06/26/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 041					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-41															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**5.35E+02**	1.42E+01	2.28E+00	DPM/TOTAL		100	%		06/27/13	30	M	+		
Sample ID: 042					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-42															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**1.64E+01**	2.85E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+		
Sample ID: 043					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-43															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**2.80E+01**	3.49E+00	2.25E+00	DPM/TOTAL		100	%		06/27/13	30	M	+		
Sample ID: 044					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-44															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**5.49E+00**	1.99E+00	2.29E+00	DPM/TOTAL		100	%		06/27/13	30	M	+		

Flag Values

U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis
06/28/13 08:58

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Sample ID: 045 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.55E+01**	2.79E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 046 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	2.50E+00	2.27E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 047 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.97E+01**	4.57E+00	2.33E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 048 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.92E+01**	3.56E+00	2.26E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report Analysis

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Sample ID: 049 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.74E+01	2.87E+00	2.24E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 050 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.12E+01	4.15E+00	2.28E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 051 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.79E+00	2.35E+00	2.27E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 052 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.95E+01	3.02E+00	2.27E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 053 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.01E+01**	2.22E+00	2.06E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 054 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.15E+02**	1.23E+01	2.21E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 055 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.53E+01**	2.76E+00	2.28E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 056 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	2.45E+00	2.23E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.59E+01**	2.78E+00	2.26E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 058 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	2.50E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 059 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.94E+01**	3.02E+00	2.27E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 060 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.51E+01**	3.38E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory. .

MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.35E+01**	2.63E+00	2.29E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 062 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.68E+01**	5.46E+00	2.25E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 063 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.46E+01**	3.35E+00	2.32E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 064 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes | (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.78E+00**	2.25E+00	2.26E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

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Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.39E+01**	2.64E+00	2.27E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 066 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.02E+01**	3.58E+00	2.25E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 067 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.12E+00**	1.82E+00	2.22E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 068 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: qc workstation floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	2.48E+00	2.28E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: parts room floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.25E+00**	2.00E+00	2.34E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 070 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.93E+01**	4.07E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 071 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.89E+02**	1.62E+01	2.35E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 072 | Collect Start: 05/17/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 05/17/2013 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54990-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.58E+02**	7.78E+00	2.30E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 073 (SW)
Station:
Description: radioactive waste sample
LIMS Number: L54990-73
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.18E+01**	5.06E+00	2.07E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 074 (SW)
Station:
Description: radioactive waste sample
LIMS Number: L54990-74
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.01E+02**	1.67E+01	2.14E+00	DPM/TOTAL		100	%		06/27/13	30	M	+

Sample ID: 075 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L54990-75
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.53E+01**	2.72E+00	2.24E+00	DPM/TOTAL		100	%		06/28/13	30	M	+

Sample ID: 076 (SW)
Station:
Description: elevator 2nd floor
LIMS Number: L54990-76
Collect Start: 05/17/2013 10:00
Collect Stop: 05/17/2013 16:00
Receive Date: 06/19/2013
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.74E+00**	1.82E+00	2.45E+00	DPM/TOTAL		100	%		06/28/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54990

Energy Solutions

Stewart Smith

EN010-3BIOCT-07

Sample ID: 078					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: stairway "a" - floor 1					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-77															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**5.26E+00**	1.96E+00	2.27E+00	DPM/TOTAL		100	%		06/28/13	30	M	+		
Sample ID: 100					Collect Start: 05/17/2013 10:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 05/17/2013 16:00				Volume:						
Description: BKGD Sample - OS Building					Receive Date: 06/19/2013				% Moisture:						
LIMS Number: L54990-78															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	1.69E+00	1.62E+00	**2.32E+00**	DPM/TOTAL		100	%		06/28/13	30	M	U		

Flag Values

U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L54990

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

WHOC

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka	for: Breitling USA, Inc.
Site Contact:; AS ABOVE Phone: (801) 303-1093 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	5/17/2013	1000 -1600	2nd QTR Survey
002	Floor – Shipping Area	5/17/2013	1000 -1600	2nd QTR Survey
003	1st Floor Work Room Floor	5/17/2013	1000 -1600	2nd QTR Survey
004	1st Floor Vault Floor - North	5/17/2013	1000 -1600	2nd QTR Survey
005	Inside Men's Restroom	5/17/2013	1000 -1600	2nd QTR Survey
006	Pantry Vending Machine Floor	5/17/2013	1000 -1600	2nd QTR Survey
007	Break Room Floor	5/17/2013	1000 -1600	2nd QTR Survey
008	Stairway B Landing Floor	5/17/2013	1000 -1600	2nd QTR Survey
009	Training Room Work Station	5/17/2013	1000 -1600	2nd QTR Survey
010	Training Room Work Station	5/17/2013	1000 -1600	2nd QTR Survey
011	Training Room Work Station	5/17/2013	1000 -1600	2nd QTR Survey
012	Training Room Work Station	5/17/2013	1000 -1600	2nd QTR Survey
013	Training Room Threshold Floor	5/17/2013	1000 -1600	2nd QTR Survey
014	Hallway Near Entrance Door	5/17/2013	1000 -1600	2nd QTR Survey
015	Hallway OS Watchmaker Room	5/17/2013	1000 -1600	2nd QTR Survey
016	Hallway OS Watchmaker Room	5/17/2013	1000 -1600	2nd QTR Survey
017	Floor OS Supplies Closet	5/17/2013	1000 -1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	5/17/2013 1000 -1600	Relinquished by: D. Slywka	6/14/2013 1230
Accepted by: FEDEX	6/14/2013 1230	Relinquished by	
Accepted by	6/19/13 10:00	Relinquished by	

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	5/17/2013	1000 -1600	2nd QTR Survey
019	Office A Hallway Floor	5/17/2013	1000 -1600	2nd QTR Survey
020	Office C Hallway Floor	5/17/2013	1000 -1600	2nd QTR Survey
021	Office F Hallway Floor	5/17/2013	1000 -1600	2nd QTR Survey
022	Floor – OS Copy Room	5/17/2013	1000 -1600	2nd QTR Survey
023	2nd Floor Hallway @ Safe	5/17/2013	1000 -1600	2nd QTR Survey
024	2nd Floor Safe Vestibule	5/17/2013	1000 -1600	2nd QTR Survey
025	2nd Floor Safe Floor	5/17/2013	1000 -1600	2nd QTR Survey
026	Sales Open Area Floor	5/17/2013	1000 -1600	2nd QTR Survey
027	Stairway A Floor - 2nd Floor	5/17/2013	1000 -1600	2nd QTR Survey
028	Polishing Room Floor	5/17/2013	1000 -1600	2nd QTR Survey
029	Cleaning Room - Sink Counter	5/17/2013	1000 -1600	2nd QTR Survey
030	QA Area Floor	5/17/2013	1000 -1600	2nd QTR Survey
031	Change Room Floor	5/17/2013	1000 -1600	2nd QTR Survey
032	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
033	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
034	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
035	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
036	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
037	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
038	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
039	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
040	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
041	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
042	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
043	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
044	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
045	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
046	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
047	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
049	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
050	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
051	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
052	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
053	Watchmaker Room Entrance Floor – South	5/17/2013	1000 -1600	2nd QTR Survey
054	Watchmaker Room Floor - S	5/17/2013	1000 -1600	2nd QTR Survey
055	Watchmaker Room Floor - S	5/17/2013	1000 -1600	2nd QTR Survey
056	Watchmaker Room Floor - S	5/17/2013	1000 -1600	2nd QTR Survey
057	Watchmaker Room Floor - E	5/17/2013	1000 -1600	2nd QTR Survey
058	Watchmaker Room Floor - E	5/17/2013	1000 -1600	2nd QTR Survey
059	Watchmaker Room Floor - E	5/17/2013	1000 -1600	2nd QTR Survey
060	Watchmaker Room Floor - N	5/17/2013	1000 -1600	2nd QTR Survey
061	Watchmaker Room Floor - N	5/17/2013	1000 -1600	2nd QTR Survey
062	Watchmaker Room Floor - S	5/17/2013	1000 -1600	2nd QTR Survey
063	Watchmaker Room Floor - N	5/17/2013	1000 -1600	2nd QTR Survey
064	Watchmaker Room Entrance Floor - North	5/17/2013	1000 -1600	2nd QTR Survey
065	Watchmaker Room Floor - W	5/17/2013	1000 -1600	2nd QTR Survey
066	Watchmaker Room Floor - W	5/17/2013	1000 -1600	2nd QTR Survey
067	RSO Workstation Floor	5/17/2013	1000 -1600	2nd QTR Survey
068	QC Workstation Floor	5/17/2013	1000 -1600	2nd QTR Survey
069	Parts Room Floor	5/17/2013	1000 -1600	2nd QTR Survey
070	Radioactive Waste Closet Floor	5/17/2013	1000 -1600	2nd QTR Survey
071	Radioactive Waste Barrel #1	5/17/2013	1000 -1600	2nd QTR Survey
072	Radioactive Waste Barrel #2	5/17/2013	1000 -1600	2nd QTR Survey
073	Radioactive Waste Sample	5/17/2013	1000 -1600	2nd QTR Survey
074	Radioactive Waste Sample	5/17/2013	1000 -1600	2nd QTR Survey
075	Watchmaker Workstation	5/17/2013	1000 -1600	2nd QTR Survey
076	Elevator 2nd Floor	5/17/2013	1000 -1600	2nd QTR Survey
078	Stairway "A" – Floor 1	5/17/2013	1000 -1600	2nd QTR Survey
100	**BKGD. Sample – OS Building**	5/17/2013	1000 -1600	2nd QTR Survey

May 17, 2013
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	5/17/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper) / urine - bioassay
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	26	LSC	60 dpm/cm²	30 days
Bio Assay Sample	2		3.5E-04 µCi/L	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 5/17/2013

Reviewed By: SR Smith Proj. Mgr. Date: 5/17/2013

Approved By: SR Smith Proj. Mgr. Date: 5/17/2013

06/19/13 15:51

SR #: SR35575

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L54990

Initiated By: JSIMMONS
Init Date: 06/19/13 Receive Date: 06/19/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

07/31/2013

LIMS #:	L55262
Project ID#:	EN010-3BIOCT-07
Received:	07/10/2013
Delivery Date:	08/09/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
10	L55262-1	LAB COAT ID #576

Report of Analysis

07/31/13 10:46

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L55262

Energy Solutions

EN010-3BIOCT-07

Sample ID: 10 | Collect Start: 06/27/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: | Volume:
Description: | Receive Date: 07/10/2013 | % Moisture:
LIMS Number: L55262-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.67E+01**	3.95E+00	3.45E+00	DPM/TOTAL		100	%		07/27/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

CP-CHM-101, Rev 01 L55262 WH10B

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
10	Lab Coat ID #576		0800 - 1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	6/27/13 0800	Relinquished by: W. Yee, Breitling, USA	6/28/13 1330
Accepted by: D. Slywka	6/28/13 1330	Relinquished by: D. Slywka	6/28/13 1430
FEDEX	6/28/13 1430		7/10/13 10:06

07/11/13 15:54

SR #: SR35823

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L55262

nitiated By: JSIMMONS
Init Date: 07/11/13 Receive Date: 07/11/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Stewart Smith
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/28/2013

LIMS #:	L54987
Project ID#:	EN010-3BIOCT-07
Received:	06/19/2013
Delivery Date:	07/19/2013
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

FOR KEITH JETER

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
13A-075	L54987-1	
13A-089	L54987-2	

Report of Analysis

06/28/13 08:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L54987

Energy Solutions

EN010-3BIOCT-07

Sample ID: 13A-075 | Collect Start: 05/17/2013 09:06 | Matrix: Urine | (U)
Station: | Collect Stop: | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54987-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	**4.12E-03**	4.65E-04	3.38E-04	uCi/L		10	ml		06/28/13	18.71	M	+

Sample ID: 13A-089 | Collect Start: 05/17/2013 06:55 | Matrix: Urine | (U)
Station: | Collect Stop: | Volume:
Description: | Receive Date: 06/19/2013 | % Moisture:
LIMS Number: L54987-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	**6.19E-04**	1.34E-04	1.66E-04	uCi/L		10	ml		06/28/13	60	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L54987
B9E

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Stewart Smith

Phone: (801) 303-1603 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
	13A-075	5/17/13	0906	
*	13A-089	5/17/13	0655	

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	5/17/13 1000	Relinquished by: W. Yee, Breitling, USA	5/17/13 1200
Accepted by: D. Slywka	5/17/13 1200	Relinquished by: D. Slywka	6/14/13 0900
FEDEX	6/14/13 0800	Jonathan S	6/19/13 10:00

* arrived leaking a little bit.

May 17, 2013
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe Samples, and Lab coat Samples.**

Dear Sir/Mme:

Attached is the chain-of-custody form for a bioassay and filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in urine and filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	5/17/2013
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper) / urine - bioassay
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Stewart R. Smith

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1603
Cell: 203-558-1213
Fax: 203-797-8994
ssmith@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab Coat Samples	26	LSC	60 dpm/cm²	30 days
Bio Assay Sample	2		3.5E-04 µCi/L	30 days

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 5/17/2013

Reviewed By: SR Smith Proj. Mgr. Date: 5/17/2013

Approved By: SR Smith Proj. Mgr. Date: 5/17/2013

06/19/13 14:55

SR #: SR35572

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 **LIMS #L54987**

nitiated By: JSIMMONS
Init Date: 06/19/13 Receive Date: 06/19/13

Notification of Variance

Person Notified: Contacted By:

Notify Date:

Notify Method:

Notify Comment:

Client Response

Person Responding:

Response Date:

Response Method:

Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	N	
	13A-089		This sample arrived leaking a little. Urine was in the bag that the bottle arrived in and was also on the outside of the bottle.
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	Y	
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	
For Hazardous Materials Only:			
10	Paperwork shows TBE and shippers name, address and phone number	NA	
11	Paperwork shows sample quantity information	NA	

BREITLING THIRD QUARTER 2013 SURVEYS
EXECUTIVE SUMMARY

The Breitling third quarter 2013 surveys were performed on August 22 and September 9, 2013. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all analyzed swipe samples are well below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 102 samples (seventy four location swipes, one background location swipe, and twenty seven lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for tritium counting on a LSC. The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was on the floor of the 2nd Floor safe vestibule, with an activity of 121 $dpm/100cm^2$. No remedial action was required in the unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 2190 $dpm/100\ cm^2$ at a watchmaker workstation. No remedial action was required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

Damp swipe samples collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had a maximum removable activity of 41 $dpm/100\ cm^2$ and the maximum

removable activity on the outside of a waste drum was 413 dpm/100 cm^2. The maximum activity for samples taken from cleaning wipes and step-off pads was 430 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (27 filter samples) are shown in Attachment 1. The highest activity found was 384 dpm/sample (Lab Coat #605). Therefore, the lab coats do not require decontamination prior to laundering.

Air Sample Results

Two air samples were collected on 8/22/13 and sent to TBE laboratory for tritium analysis. One sample was a background sample collected at an off-site location and the other sample was collected in the Restricted Area. The samples were collected using with three bubbler impingers containing DI water in a parallel train. The Restricted Area air sample result indicated tritium activity of 6.4E-4 µCi/L, which is not of concern.

Conclusions

Based on the Third Quarter 2013 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ATTACHMENT 1

BREITLING 3rd QUARTER SURVEY DATA SHEET

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 3rd QTR Survey 2013
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Leve 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: See TBE Analysis Report
Serial Number: See TBE Analysis Report

Building Swipe Samples **Survey Date 8/22/2013**

Survey Point	Type	Removable Contamination (dpm/100 cm^2)	Location	Lab Sample ID
001	U	N/A	N/A	N/A
002	U	4.3	Floor - Shipping/Receiving Area	L57040-002
003	U	3.4	1st Floor Work Room Floor	L57040-003
004	U	15.5	1st Floor Vault Floor - North	L57040-004
005	U	5.3	Hallway - Inside Rest Rooms	L57040-005
006	U	2.4	Pantry Vending Machine - Floor	L57040-006
007	U	4.0	Break Room Floor	L57040-007
008	U	N/A	N/A	N/A
009	U	10.7	Training Room Work Station-Southwest	L57040-009
010	U	25.6	Training Room Work Station-Northwest	L57040-010
011	U	45.5	Training Room Work Station-Southeast	L57040-011
012	U	10.5	Training Room Work Station-Northeast	L57040-012
013	U	-0.5	Training Room Threshold Floor	L57040-013
014	U	0.1	Hallway Near Entrance Door-2nd Floor South	L57040-014
015	U	1.7	Hallway Outside Watchmaker's Room	L57040-015
016	U	0.6	Hallway Outside Watchmaker's Room	L57040-016
017	U	21.9	Floor Outside Women's Restroom	L57040-017
018	U	3.4	Floor In Men's Rest Room	L57040-018
019	U	4.5	Office A Hallway Floor	L57040-019
020	U	0.4	Office C Hallway Floor	L57040-020
021	U	0.9	Office F Hallway Floor	L57040-021
022	U	1.8	2nd Floor - Outside Copy Room	L57040-022
023	U	9.7	2nd Floor Hallway Floor @ Safe	L57040-023
024	U	121.0	2nd Floor Safe Vestibule	L57040-024
025	U	21.8	2nd Floor Safe Floor	L57040-025
026	U	4.2	Sales Open Area Floor	L57040-026
027	U	-1.1	Stairway A 2nd Floor	L57040-027
028	R	11.5	Polishing Room Workstation	L57040-028
029	R	54.1	Cleaning Room - Sink Counter	L57040-029
030	R	14.4	QA Area Floor	L57040-030
031	R	22.4	Change Room Floor	L57040-031
032	R	187.0	Watchmaker Workstation	L57040-032
033	R	270.0	Watchmaker Workstation	L57040-033
034	R	17.4	Watchmaker Workstation	L57040-034
035	R	5.8	Watchmaker Workstation	L57040-035
036	R	11.1	Watchmaker Workstation	L57040-036
037	R	4.9	Watchmaker Workstation	L57040-037

ENERGYSOLUTIONS

Survey Point	Type	Removable Contamination (dpm/100 cm²)	Location	Lab Sample ID
038	R	11.4	Watchmaker Workstation	L57040-038
039	R	5.5	Watchmaker Workstation	L57040-039
040	R	8.2	Watchmaker Workstation	L57040-040
041	R	137.0	Watchmaker Workstation	L57040-041
042	R	9.1	Watchmaker Workstation	L57040-042
043	R	45.8	Watchmaker Workstation	L57040-043
044	R	21.5	Watchmaker Workstation	L57040-044
045	R	14.1	Watchmaker Workstation	L57040-045
046	R	133.0	Watchmaker Workstation	L57040-046
047	R	4.9	Watchmaker Workstation	L57040-047
048	R	6.0	Watchmaker Workstation	L57040-048
049	R	2.4	Watchmaker Workstation	L57040-049
050	R	12.0	Watchmaker Workstation	L57040-050
051	R	9.1	Watchmaker Workstation	L57040-051
052	R	2,190	Watchmaker Workstation	L57040-052
053	R	32.5	Watchmaker Room Entrance Door-South	L57040-053
054	R	34.4	Watchmaker Room Floor - South	L57040-054
055	R	23.6	Watchmaker Room Floor - South	L57040-055
056	R	21.1	Watchmaker Room Floor - South	L57040-056
057	R	3.8	Watchmaker Room Floor - East	L57040-057
058	R	10.1	Watchmaker Room Floor - East	L57040-058
059	R	14.7	Watchmaker Room Floor - East	L57040-059
060	R	14.2	Watchmaker Room Floor - North	L57040-060
061	R	9.5	Watchmaker Room Floor - Center	L57040-061
062	R	33.6	Watchmaker Room Floor - Center	L57040-062
063	R	64.3	Watchmaker Room Floor - North	L57040-063
064	R	32.7	Watchmaker Room Entrance Door-North	L57040-064
065	R	40.1	Watchmaker Room Floor - West	L57040-065
066	R	49.1	Watchmaker Room Floor - West	L57040-066
067	R	34.4	RSO Worketation Floor	L57040-067
068	R	5.5	QC Area Floor	L57040-068
069	R	12.9	Parts Room	L57040-069
070	R	40.9	RadWaste Closet Floor	L57040-070
071	R	413.0	RadWaste Barrel #01	L57040-071
072	R	411.0	RadWaste Barrel #02	L57040-072
073	R	430.0	RadWaste Material (Step-off pads, etc)	L57040-073
074	R	120.0	RadWaste Material (Step-off pads, etc)	L57040-074
075	R	337.0	Parts Closet	L57040-075
076	U	N/A	N/A	N/A
077	N/A	N/A	N/A	N/A
078	U	11.9	Stairway "A" - Floor 1	L57040-077
100	U		Background Sample	L57040-078

Type: U = Unrestricted, R = Restricted

Completed by: Dan Slywka Date: 1/24/2014

Reviewed By: Date: 1/28/14

Lab Coat Air Samples Collection Date 9/9/13

Sample #	Type	dpm/sample	Lab Coat #	Sample ID

ENERGYSOLUTIONS

Survey Point	Type	Removable Contamination (dpm/100 cm²)	Location	Lab Sample ID
1	R	56.9	Lab Coat #601	L57039-1
2	R	47.7	Lab Coat #602	L57039-2
3	R	140.0	Lab Coat #604	L57039-3
4	R	384.0	Lab Coat #605	L57039-4
5	R	50.9	Lab Coat #608	L57039-5
6	R	57.8	Lab Coat #616	L57039-6
7	R	38.8	Lab Coat #631	L57039-7
8	R	39.9	Lab Coat #"RE"	L57039-8
9	R	61.0	Lab Coat #575	L57039-9
10	R	56.3	Lab Coat #576	L57039-1
11	R	44.3	Lab Coat "ED"	L57039-11
12	R	26.7	Lab Coat "JA"	L57039-12
13	R	58.5	Lab Coat "MF"	L57039-13
14	R	28.5	Lab Coat #470	L57039-14
15	R	57.6	Lab Coat #473	L57039-15
16	R	43.8	Lab Coat #474	L57039-16
17	R	89.8	Lab Coat #632	L57039-17
18	R	47.9	Lab Coat #612	L57039-18
19	R	58.1	Lab Coat #606	L57039-19
20	R	39.1	Lab Coat #861	L57039-20
21	R	52.1	Lab Coat #607	L57039-21
22	R	40.0	Lab Coat #573	L57039-22
23	R	44.1	Lab Coat #619	L57039-23
24	R	58.6	Lab Coat #634	L57039-24
25	R	36.9	Lab Coat #611	L57039-25
26	R	37.3	Lab Coat #614	L57039-26
27	R	41.1	Lab Coat #450	L57039-27

Type: U = Unrestricted, R = Restricted

Completed by: Dan Slywka Date: 1/24/2014

Reviewed By: Date: 1/28/14

Analytical Results by Liquid Scintillation Counter (Teledyne-Brown Reports #L57041-1 & L57041-2)

Sample# - L57041-1 (Background - 8/22/2013) = -2.30E-05 µCi/Liter Impinger-01 - H2O 2.53E-04 µCi/Liter - MDC

$$\left[\frac{2.53E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = \frac{2.81E\text{-}04}{1200\ Liters_{AIR} \times 1000ml/Liter}\right] = 2.34E\text{-}10\ \mu Ci/ml_{BACKGROUND}$$ **MDC**

Sample# - L57041-2 (BZ Air Sample - 8/22/2013) = 6.41E-04 µCi/Liter Impinger-01 - H2O 2.51E-04 µCi/Liter - MDC

1.00E+06 pCi/µCi

$$\left[\frac{6.41E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = \frac{7.12E\text{-}04}{1200\ Liters_{AIR} \times 1000ml/Liter}\right] = 5.94E\text{-}10\ \mu Ci/ml_{SAMPLE}$$

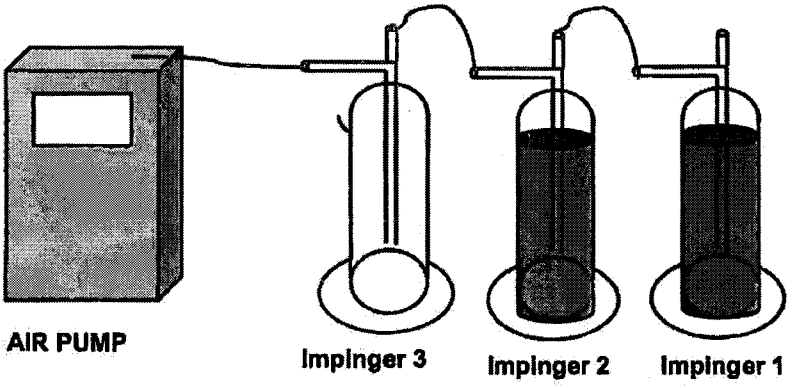
$$\left[5.94E\text{-}10\ \mu Ci/ml_{SAMPLE} - 0.00E+00\ \mu Ci/ml_{BACKGROUND}\right] = \textit{5.94E-10}\ \mu Ci/ml\ SAMPLE - NET$$

Tritium DAC Fraction [10CFR20, Appendix B]

DAC = ***2.00E-05*** **.** ***x 0.1 (10% DAC) =*** ***2.00E-06 µC/ml***

$$\frac{5.94E\text{-}10\ \mu C/ml}{2.00E\text{-}06\ \mu C/ml} = 2.97E\text{-}04$$ **Fraction of 10% DAC 3rd Quarter**

Air Sample Impinger Train



ATTACHMENT 2

BREITLING 3rd QUARTER LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

12/26/2013

LIMS #:	L57041
Project ID#:	EN010-3BIOCT-07
Received:	12/02/2013
Delivery Date:	01/01/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
BACKGROUND AIR SAMPLE	L57041-1	
3RD QTR AIR SAMPLE	L57041-2	

Report of Analysis

12/26/13 15:16

L57041

Energy Solutions

EN010-3BIOCT-07

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

Sample ID: **BACKGROUND AIR SAMPLE** Collect Start: 08/22/2013 16:00 Matrix: Dissolved Air (WA)
Station: Collect Stop: Volume:
Description: Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57041-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	-2.32E-05	1.52E-04	2.53E-04	uCi/L		10	ml		12/18/13	30	M	U

Sample ID: **3RD QTR AIR SAMPLE** Collect Start: 08/22/2013 16:00 Matrix: Dissolved Air (WA)
Station: Collect Stop: Volume:
Description: Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57041-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	**6.41E-04**	2.03E-04	2.51E-04	uCi/L		10	ml		12/18/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

August 22, 2013
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	~~5/17/2013~~ Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

LS7041

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

NH36C

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: D. Slywka, EnergySolutions **for: Breitling USA, Inc.**

Site Contact:; Dan Slywka

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
1 *	Background Air Sample	8/22/2013	1600	3rd QTR Survey
2	3rd ~~Annual~~ Air Sample	8/22/2013	1600	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	8/22/2013 0800 - 1600	Relinquished by: D. Slywka	10/29/2013 1200
Accepted by: FEDEX	10/29/2013 1200		12/2/13
			10:00

* This Sample arrived leaking.

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
3 DS.				
LAB COAT	27	LSC	60 DPM/cm²	30 DAYS
Air Samples (liquid)	2	LSC	3.5E-04 uCi/L	30 DAYS

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: ~~6/4/2013~~ 10/29/13
Reviewed By: Bob McPeak Proj. Mgr. Date: ~~6/4/2013~~ 10/29/13
Approved By: Bob McPeak Proj. Mgr. Date: ~~6/4/2013~~ 10/29/13

12/04/13 07:21

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

SR #: SR37495

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L57041

Initiated By: JSIMMONS
Init Date: 12/03/13 Receive Date: 12/02/13

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)		N		
	Background Air Sample				This sample was not properly sealed and arrived leaking.
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

12/18/2013

LIMS #:	L57040
Project ID#:	EN010-3BIOCT-07
Received:	12/02/2013
Delivery Date:	01/01/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L57040-1	
002	L57040-2	
003	L57040-3	
004	L57040-4	
005	L57040-5	
006	L57040-6	
007	L57040-7	
008	L57040-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L57040-9	
010	L57040-10	
011	L57040-11	
012	L57040-12	
013	L57040-13	
014	L57040-14	
015	L57040-15	
016	L57040-16	
017	L57040-17	
018	L57040-18	
019	L57040-19	
020	L57040-20	
021	L57040-21	
022	L57040-22	
023	L57040-23	
024	L57040-24	
025	L57040-25	
026	L57040-26	
027	L57040-27	
028	L57040-28	
029	L57040-29	
030	L57040-30	
031	L57040-31	
032	L57040-32	
033	L57040-33	
034	L57040-34	
035	L57040-35	
036	L57040-36	
037	L57040-37	
038	L57040-38	
039	L57040-39	
040	L57040-40	
041	L57040-41	
042	L57040-42	
043	L57040-43	
044	L57040-44	
045	L57040-45	
046	L57040-46	
047	L57040-47	
048	L57040-48	
049	L57040-49	
050	L57040-50	
051	L57040-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L57040-52	
053	L57040-53	
054	L57040-54	
055	L57040-55	
056	L57040-56	
057	L57040-57	
058	L57040-58	
059	L57040-59	
060	L57040-60	
061	L57040-61	
062	L57040-62	
063	L57040-63	
064	L57040-64	
065	L57040-65	
066	L57040-66	
067	L57040-67	
068	L57040-68	
069	L57040-69	
070	L57040-70	
071	L57040-71	
072	L57040-72	
073	L57040-73	
074	L57040-74	
075	L57040-75	
076	L57040-76	
078	L57040-77	
100	L57040-78	

Report of Analysis

12/18/ 0:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: Entrance Floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Sample ID: 002 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.29E+00**	2.49E+00	3.51E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 003 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.36E+00	2.42E+00	**3.52E+00**	DPM/TOTAL		100	%		12/13/13	30	M	U

Sample ID: 004 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.55E+01**	3.24E+00	3.52E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18/ :08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: insides men's restroom Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.32E+00**	2.56E+00	3.51E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 006 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: pantry vending machine floor Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.38E+00	2.34E+00	**3.52E+00**	DPM/TOTAL		100	%		12/13/13	30	M	U

Sample ID: 007 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: break room floor Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.98E+00**	2.46E+00	3.52E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 008 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: stairway b landing floor Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18/ 3:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: training room work station | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.07E+01**	2.94E+00	3.52E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 010 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: training room work station | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.56E+01**	3.79E+00	3.52E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 011 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: training room work station | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.55E+01**	4.68E+00	3.52E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 012 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: training room work station | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.05E+01**	2.91E+00	3.50E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18 0:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 013 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: training room threshold floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.85E-01	2.08E+00	**3.50E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Sample ID: 014 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: hallway near entrance door | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.15E-01	2.15E+00	**3.52E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Sample ID: 015 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.66E+00	2.28E+00	**3.52E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Sample ID: 016 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.28E-01	2.28E+00	**3.68E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 017 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: floor os supplies closet | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.19E+01**	3.66E+00	3.69E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 018 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.41E+00	2.51E+00	**3.69E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Sample ID: 019 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: office A hallway floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.47E+00**	2.59E+00	3.69E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 020 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: office C hallway floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.72E-01	2.27E+00	**3.68E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 021 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: office F hallway floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.16E-01	2.31E+00	**3.69E+00**	DPM/TOTAL		100	%		12/14/13	30	M	U

Sample ID: 022 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.83E+00	2.38E+00	**3.68E+00**	DPM/TOTAL		100	%		12/15/13	30	M	U

Sample ID: 023 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.66E+00**	2.96E+00	3.70E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 024 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.21E+02**	7.16E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
1High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 025 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.18E+01**	3.65E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 026 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: sales open area floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.21E+00**	2.57E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 027 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.14E+00	2.13E+00	**3.68E+00**	DPM/TOTAL		100	%		12/15/13	30	M	U

Sample ID: 028 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: polishing room floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.15E+01**	3.06E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 029 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.41E+01**	5.05E+00	3.67E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 030 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: QA area floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.44E+01**	3.23E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 031 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: change room floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.24E+01**	3.68E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 032 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.87E+02**	8.74E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 033 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.70E+02**	1.04E+01	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 034 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.74E+01**	3.42E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 035 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.79E+00**	2.69E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 036 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+01**	3.04E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 037 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.93E+00**	2.63E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 038 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.14E+01**	3.06E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 039 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.45E+00**	2.67E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 040 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.22E+00**	2.85E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 041 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.37E+02**	7.56E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 042 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.10E+00**	2.91E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 043 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.58E+01**	4.74E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 044 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.15E+01**	3.64E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 045 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.41E+01**	3.23E+00	3.70E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 046 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.33E+02**	7.49E+00	3.70E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 047 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.91E+00**	2.63E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 048 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.97E+00**	2.69E+00	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 049 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.38E+00	2.43E+00	**3.69E+00**	DPM/TOTAL		100	%		12/15/13	30	M	U

Sample ID: 050 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.20E+01**	3.10E+00	3.70E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 051 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.07E+00**	2.91E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 052 Collect Start: 08/22/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 08/22/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 12/02/2013 % Moisture:
LIMS Number: L57040-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.19E+03**	2.90E+01	3.68E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18/ 0:08

TELEDYNE BROWN E. IEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 053 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.25E+01**	4.18E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 054 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.44E+01**	4.26E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 055 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.36E+01**	3.74E+00	3.69E+00	DPM/TOTAL		100	%		12/15/13	30	M	+

Sample ID: 056 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.11E+01**	3.61E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18/ .0:08

TELEDYNE BROWN E. ..EERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.80E+00	2.54E+00	**3.68E+00**	DPM/TOTAL		100	%		12/16/13	30	M	U

Sample ID: 058 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.01E+01**	2.97E+00	3.68E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 059 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.47E+01**	3.26E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 060 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.42E+01**	3.23E+00	3.68E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.53E+00**	2.95E+00	3.70E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 062 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.36E+01**	4.23E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 063 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.43E+01**	5.44E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 064 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.27E+01**	4.18E+00	3.68E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18/ 0:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

EN010-3BIOCT-07

Daniel Slywka

Sample ID: 065 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.01E+01**	4.51E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 066 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.91E+01**	4.88E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 067 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.44E+01**	4.26E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 068 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: qc workstation floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.48E+00**	2.67E+00	3.70E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18 10:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: parts room floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.29E+01**	3.16E+00	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 070 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.09E+01**	4.55E+00	3.71E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 071 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.13E+02**	1.28E+01	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 072 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.11E+02**	1.27E+01	3.70E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18 0:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.30E+02**	1.29E+01	3.66E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 074 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.20E+02**	7.14E+00	3.70E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 075 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.37E+02**	1.16E+01	3.69E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID: 076 | Collect Start: 08/22/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 08/22/2013 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57040-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/18 10:08

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57040

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID:	078	Collect Start:	08/22/2013 10:00	Matrix:	Swipes (SW)
Station:		Collect Stop:	08/22/2013 16:00	Volume:	
Description:	stairway "a" - floor 1	Receive Date:	12/02/2013	% Moisture:	
LIMS Number:	L57040-77				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.19E+01	3.10E+00	3.70E+00	DPM/TOTAL		100	%		12/16/13	30	M	+

Sample ID:	100	Collect Start:	08/22/2013 10:00	Matrix:	Swipes (SW)
Station:		Collect Stop:	08/22/2013 16:00	Volume:	
Description:	BKGD Sample - OS Building	Receive Date:	12/02/2013	% Moisture:	
LIMS Number:	L57040-78				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Flag Values

U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L5704D

ENERGYSOLUTIONS

CP-CHM-101, Rev 01 WH35C

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka **for: Breitling USA, Inc.**

Site Contact:; AS ABOVE

Phone: (801) 303-1093 FAX: (203)-797-8894

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	8/22/2013	1000 -1600	3rd QTR Survey
002	Floor – Shipping Area	8/22/2013	1000 -1600	3rd QTR Survey
003	1st Floor Work Room Floor	8/22/2013	1000 -1600	3rd QTR Survey
004	1st Floor Vault Floor – North	8/22/2013	1000 -1600	3rd QTR Survey
005	Inside Men's Restroom	8/22/2013	1000 -1600	3rd QTR Survey
006	Pantry Vending Machine Floor	8/22/2013	1000 -1600	3rd QTR Survey
007	Break Room Floor	8/22/2013	1000 -1600	3rd QTR Survey
008	Stairway B Landing Floor	8/22/2013	1000 -1600	3rd QTR Survey
009	Training Room Work Station	8/22/2013	1000 -1600	3rd QTR Survey
010	Training Room Work Station	8/22/2013	1000 -1600	3rd QTR Survey
011	Training Room Work Station	8/22/2013	1000 -1600	3rd QTR Survey
012	Training Room Work Station	8/22/2013	1000 -1600	3rd QTR Survey
013	Training Room Threshold Floor	8/22/2013	1000 -1600	3rd QTR Survey
014	Hallway Near Entrance Door	8/22/2013	1000 -1600	3rd QTR Survey
015	Hallway OS Watchmaker Room	8/22/2013	1000 -1600	3rd QTR Survey
016	Hallway OS Watchmaker Room	8/22/2013	1000 -1600	3rd QTR Survey
017	Floor OS Supplies Closet	8/22/2013	1000 -1600	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	8/22/2013 1000 -1600	Relinquished by: D. Slywka	~~8/23/2013~~ 10/25/13 1230
Accepted by: FEDEX	10/28/13 ~~8/23/2013~~ 1230	Relinquished by	
Accepted by		Relinquished by	

Rec'd by: Jonathan
12/2/13 10:00

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	8/22/2013	1000 -1600	3rd QTR Survey
019	Office A Hallway Floor	8/22/2013	1000 -1600	3rd QTR Survey
020	Office C Hallway Floor	8/22/2013	1000 -1600	3rd QTR Survey
021	Office F Hallway Floor	8/22/2013	1000 -1600	3rd QTR Survey
022	Floor – OS Copy Room	8/22/2013	1000 -1600	3rd QTR Survey
023	2nd Floor Hallway @ Safe	8/22/2013	1000 -1600	3rd QTR Survey
024	2nd Floor Safe Vestibule	8/22/2013	1000 -1600	3rd QTR Survey
025	2nd Floor Safe Floor	8/22/2013	1000 -1600	3rd QTR Survey
026	Sales Open Area Floor	8/22/2013	1000 -1600	3rd QTR Survey
027	Stairway A Floor - 2nd Floor	8/22/2013	1000 -1600	3rd QTR Survey
028	Polishing Room Floor	8/22/2013	1000 -1600	3rd QTR Survey
029	Cleaning Room - Sink Counter	8/22/2013	1000 -1600	3rd QTR Survey
030	QA Area Floor	8/22/2013	1000 -1600	3rd QTR Survey
031	Change Room Floor	8/22/2013	1000 -1600	3rd QTR Survey
032	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
033	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
034	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
035	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
036	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
037	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
038	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
039	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
040	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
041	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
042	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
043	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
044	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
045	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
046	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
047	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey

Recd by: Jonathan S
12/2/13
10:00

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
049	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
050	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
051	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
052	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
053	Watchmaker Room Entrance Floor - South	8/22/2013	1000 -1600	3rd QTR Survey
054	Watchmaker Room Floor - S	8/22/2013	1000 -1600	3rd QTR Survey
055	Watchmaker Room Floor - S	8/22/2013	1000 -1600	3rd QTR Survey
056	Watchmaker Room Floor - S	8/22/2013	1000 -1600	3rd QTR Survey
057	Watchmaker Room Floor - E	8/22/2013	1000 -1600	3rd QTR Survey
058	Watchmaker Room Floor - E	8/22/2013	1000 -1600	3rd QTR Survey
059	Watchmaker Room Floor - E	8/22/2013	1000 -1600	3rd QTR Survey
060	Watchmaker Room Floor - N	8/22/2013	1000 -1600	3rd QTR Survey
061	Watchmaker Room Floor - N	8/22/2013	1000 -1600	3rd QTR Survey
062	Watchmaker Room Floor - S	8/22/2013	1000 -1600	3rd QTR Survey
063	Watchmaker Room Floor - N	8/22/2013	1000 -1600	3rd QTR Survey
064	Watchmaker Room Entrance Floor - North	8/22/2013	1000 -1600	3rd QTR Survey
065	Watchmaker Room Floor - W	8/22/2013	1000 -1600	3rd QTR Survey
066	Watchmaker Room Floor - W	8/22/2013	1000 -1600	3rd QTR Survey
067	RSO Workstation Floor	8/22/2013	1000 -1600	3rd QTR Survey
068	QC Workstation Floor	8/22/2013	1000 -1600	3rd QTR Survey
069	Parts Room Floor	8/22/2013	1000 -1600	3rd QTR Survey
070	Radioactive Waste Closet Floor	8/22/2013	1000 -1600	3rd QTR Survey
071	Radioactive Waste Barrel #1	8/22/2013	1000 -1600	3rd QTR Survey
072	Radioactive Waste Barrel #2	8/22/2013	1000 -1600	3rd QTR Survey
073	Radioactive Waste Sample	8/22/2013	1000 -1600	3rd QTR Survey
074	Radioactive Waste Sample	8/22/2013	1000 -1600	3rd QTR Survey
075	Watchmaker Workstation	8/22/2013	1000 -1600	3rd QTR Survey
076	Elevator 2nd Floor	8/22/2013	1000 -1600	3rd QTR Survey
078	Stairway "A" – Floor 1	8/22/2013	1000 -1600	3rd QTR Survey
100	BKGD. Sample – OS Building	8/22/2013	1000 -1600	3rd QTR Survey

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

12/16/2013

LIMS #:	L57039
Project ID#:	EN010-3BIOCT-07
Received:	12/02/2013
Delivery Date:	01/01/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L57039-1	LAB COAT ID #601
2	L57039-2	LAB COAT ID #602
3	L57039-3	LAB COAT ID #604
4	L57039-4	LAB COAT ID #605
5	L57039-5	LAB COAT ID #608
6	L57039-6	LAB COAT ID #616
7	L57039-7	LAB COAT ID #631
8	L57039-8	LAB COAT ID "RE"

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L57039-9	LAB COAT ID #575
10	L57039-10	LAB COAT ID #576
11	L57039-11	LAB COAT ID "ED"
12	L57039-12	LAB COAT ID "JA"
13	L57039-13	LAB COAT ID "MF"
14	L57039-14	LAB COAT ID #470
15	L57039-15	LAB COAT ID #473
16	L57039-16	LAB COAT ID #474
17	L57039-17	LAB COAT ID #632
18	L57039-18	LAB COAT ID #612
19	L57039-19	LAB COAT ID #606
20	L57039-20	LAB COAT ID #861
21	L57039-21	LAB COAT ID #607
22	L57039-22	LAB COAT ID #573
23	L57039-23	LAB COAT ID #619
24	L57039-24	LAB COAT ID #634
25	L57039-25	LAB COAT ID #611
26	L57039-26	LAB COAT ID #614
27	L57039-27	LAB COAT ID #450

Report of Analysis

12/16/ .:56

TELEDYNE BROWN EN EERING, INC.
A Teledyne Techn. .s Company

L57039

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.69E+01**	5.12E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 2 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.77E+01**	4.77E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 3 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.40E+02**	7.61E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 4 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+02**	1.23E+01	3.53E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/16/ 1:56

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.09E+01**	4.90E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 6 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.78E+01**	5.16E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 7 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.88E+01**	4.44E+00	3.57E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 8 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.99E+01**	4.45E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

12/16 1:56

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.10E+01**	5.27E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 10 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.63E+01**	5.11E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 11 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "ED" | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.43E+01**	4.63E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 12 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.67E+01**	3.84E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

12/16 1:56

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.85E+01**	5.18E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 14 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.85E+01**	3.92E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 15 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.76E+01**	5.15E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 16 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.38E+01**	4.61E+00	3.51E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

12/16 :1:56

TELEDYNE BROWN E IEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.98E+01**	6.23E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 18 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.79E+01**	4.78E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 19 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.81E+01**	5.17E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Sample ID: 20 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.91E+01**	4.42E+00	3.52E+00	DPM/TOTAL		100	%		12/14/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/1(:1:56

TELEDYNE BROWN E NEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.21E+01**	4.93E+00	3.49E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 22 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.00E+01**	4.43E+00	3.49E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 23 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.41E+01**	4.61E+00	3.49E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 24 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.86E+01**	5.17E+00	3.49E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Flag Values
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\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

12/1(:1:56

TELEDYNE BROWN E NEERING, INC.
A Teledyne Technologies Company

L57039

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 25 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.69E+01**	4.30E+00	3.49E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 26 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.73E+01**	4.32E+00	3.50E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Sample ID: 27 | Collect Start: 09/09/2013 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #450 | Collect Stop: 09/09/2013 16:00 | Volume:
Description: | Receive Date: 12/02/2013 | % Moisture:
LIMS Number: L57039-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.11E+01**	4.46E+00	3.47E+00	DPM/TOTAL		100	%		12/13/13	30	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

L57039

WH35C

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Dan Slywka

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collec/tion Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
1	Lab Coat ID #601	9/9/2013	0800 - 1600	2nd QTR Survey
2	Lab Coat ID #602	9/9/2013	0800 - 1600	2nd QTR Survey
3	Lab Coat ID #604	9/9/2013	0800 - 1600	2nd QTR Survey
4	Lab Coat ID #605	9/9/2013	0800 - 1600	2nd QTR Survey
5	Lab Coat ID #608	9/9/2013	0800 - 1600	2nd QTR Survey
6	Lab Coat ID #616	9/9/2013	0800 - 1600	2nd QTR Survey
7	Lab Coat ID #631	9/9/2013	0800 - 1600	2nd QTR Survey
8	Lab Coat ID "RE"	9/9/2013	0800 - 1600	2nd QTR Survey
9	Lab Coat ID #575	9/9/2013	0800 - 1600	2nd QTR Survey
10	Lab Coat ID #576	9/9/2013	0800 - 1600	2nd QTR Survey
11	Lab Coat ID "ED"	9/9/2013	0800 - 1600	2nd QTR Survey
12	Lab Coat ID "JA"	9/9/2013	0800 - 1600	2nd QTR Survey
13	Lab Coat ID "MF"	9/9/2013	0800 - 1600	2nd QTR Survey
14	Lab Coat ID #470	9/9/2013	0800 - 1600	2nd QTR Survey
15	Lab Coat ID #473	9/9/2013	0800 - 1600	2nd QTR Survey
16	Lab Coat ID #474	9/9/2013	0800 - 1600	2nd QTR Survey
17	Lab Coat ID #632	9/9/2013	0800 - 1600	2nd QTR Survey
18	Lab Coat ID #612	9/9/2013	0800 - 1600	2nd QTR Survey
19	Lab Coat ID #606	9/9/2013	0800 - 1600	2nd QTR Survey
20	Lab Coat ID #861	9/9/2013	0800 - 1600	2nd QTR Survey
21	Lab Coat ID #607	9/9/2013	0800 - 1600	2nd QTR Survey
22	Lab Coat ID #573	9/9/2013	0800 - 1600	2nd QTR Survey
23	Lab Coat ID #619	9/9/2013	0800 - 1600	2nd QTR Survey
24	Lab Coat ID #634	9/9/2013	0800 - 1600	2nd QTR Survey
25	Lab Coat ID #611	9/9/2013	0800 - 1600	2nd QTR Survey
26	Lab Coat ID #614	9/9/2013	0800 - 1600	2nd QTR Survey
27	Lab Coat ID #450	9/9/2013	0800 - 1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	9/9/2013 0800-1600	Relinquished by: W. Yee, Breitling, USA	9/10/2013 1200
Accepted by: D. Slywka	9/10/2013 1200	Relinquished by: D. Slywka	10/29/2013 1200
FEDEX	10/29/2013 1200		12/2/13 10:00

August 22, 2013
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	~~5/17/2013~~ Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
3.D8.				
LAB COAT	27	LSC	60 DPM/cm²	30 DAYS
Air Samples (liquid)	2	LSC	3.5E-04 µCi/L	30 DAYS

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: ~~6/4/2013~~ 10/29/13

Reviewed By: Bob McPeak Proj. Mgr. Date: ~~6/4/2013~~ 10/29/13

Approved By: Bob McPeak Proj. Mgr. Date: ~~6/4/2013~~ 10/29/13

12/03/13 12:25

SR #: SR37493

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L57039

tiated By: JSIMMONS
Init Date: 12/03/13 Receive Date: 12/02/13

Notification of Variance

Person Notified: Contacted By:

Notify Date:

Notify Method:

Notify Comment:

Client Response

Person Responding:

Response Date:

Response Method:

Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	Y	
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	Y	
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	
For Hazardous Materials Only:			
10	Paperwork shows TBE and shippers name, address and phone number	NA	
11	Paperwork shows sample quantity information	NA	

BREITLING FOURTH QUARTER 2013 SURVEYS
EXECUTIVE SUMMARY

The Breitling fourth quarter 2013 surveys were performed on November 8, 2013. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all analyzed swipe samples are well below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 104 samples (seventy-seven location swipes, one background location swipe, and twenty-six lab coat filters) were sent to Teledyne–Brown Engineering, Inc. for tritium counting on a Liquid Scintillation Counter (LSC). The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The wipe results reported in Attachment 1 are TBE laboratory analytical results multiplied by a factor of 2 to reflect a wipe collection efficiency of approximately 50% of the *in-situ* removable contamination present. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was on the 2nd Floor safe vestibule, with an activity of 196 $dpm/100cm^2$. No remedial action was required in the unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 684 $dpm/100\ cm^2$ at a watchmaker workstation. No remedial action was required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

Damp swipe samples collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had a maximum removable activity of 4 dpm/100 cm^2 and the maximum removable activity on the outside of a waste drum was 5 dpm/100 cm^2. The maximum activity for samples taken from cleaning wipes and step-off pads was 167 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (26 filter samples) are shown in Attachment 1. The highest activity was 39 dpm/sample on Lab Coat #607. Therefore the lab coats do not require decontamination prior to laundering.

Air Sample Results

Two air samples were collected on November 7th and 8th 2013 and sent to TBE laboratory for tritium analysis. One sample was a background sample collected at an off-site location and the other sample was collected in the Restricted Area. The samples were collected using with three bubbler impingers containing DI water in a serial train. The Restricted Area air sample result indicated tritium activity of 1.44E-10 uCi/ml, which is not of concern.

Conclusions

Based on the Fourth Quarter 2013 survey, Breitling has maintained compliance with the Radiation Protection Manual.

Signed: Arthur J. Palmer

Arthur J. Palmer, CHP

Date: 5/9/2014

ATTACHMENT 1

BREITLING 4th QUARTER SURVEY DATA SHEET

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 4th QTR Survey 2013
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100cm^2
Restricted Area Action Level: 100,000 dpm/100cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	Removable Activity dpm/100 cm^2	Location	Lab Sample ID	
001	U	5	Entrance Vestibule	L58208	001
002	U	22	Floor - Shipping/Receiving Area	L58208	002
003	U	5	1st Floor Work Room Floor	L58208	003
004	U	4	1st Floor Vault Floor - North	L58208	004
005	U	10	Inside Men's Restroom	L58208	005
006	U	2	Pantry Vending Machine - Floor	L58208	006
007	U	-1	Break Room Floor	L58208	007
008	U	27	Stairway B Landing Floor	L58208	008
009	U	17	Training Room Work Station-Southwest	L58208	009
010	U	11	Training Room Work Station-Northwest	L58208	010
011	U	5	Training Room Work Station-Southeast	L58208	011
012	U	80	Training Room Work Station-Northeast	L58208	012
013	U	9	Training Room Threshold Floor	L58208	013
014	U	-4	Hallway Near Entrance Door-2nd Floor South	L58208	014
015	U	3	Hallway Outside Watchmaker's Room	L58208	015
016	U	7	Hallway Outside Watchmaker's Room	L58208	016
017	U	4	Floor Outside Supplies Closet	L58208	017
018	U	-2	Floor In Men's Restroom	L58208	018
019	U	12	Office A Hallway Floor	L58208	019
020	U	-5	Office C Hallway Floor	L58208	020
021	U	7	Office F Hallway Floor	L58208	021
022	U	-1	2nd Floor - Outside Copy Room	L58208	022
023	U	-4	2nd Floor Hallway Floor @ Safe	L58208	023
024	U	196	2nd Floor Safe Vestibule	L58208	024
025	U	34	2nd Floor Safe Floor	L58208	025
026	U	5	Sales Open Area Floor	L58208	026
027	U	-5	Stairway A 2nd Floor	L58208	027
028	R	31	Polishing Room Floor	L58208	028
029	R	224	Cleaning Room - Sink Counter	L58208	029
030	R	36	QA Area Floor	L58208	030
031	R	24	Change Room Floor	L58208	031
032	R	117	Watchmaker Workstation	L58208	032
033	R	74	Watchmaker Workstation	L58208	033
034	R	41	Watchmaker Workstation	L58208	034
035	R	70	Watchmaker Workstation	L58208	035
036	R	121	Watchmaker Workstation	L58208	036
037	R	1	Watchmaker Workstation	L58208	037

ENERGYSOLUTIONS

Survey Point	Type	Removable Activity dpm/100 cm²	Location	Lab Sample ID	
038	R	10	Watchmaker Workstation	L58208	038
039	R	32	Watchmaker Workstation	L58208	039
040	R	34	Watchmaker Workstation	L58208	040
041	R	-5	Watchmaker Workstation	L58208	041
042	R	8	Watchmaker Workstation	L58208	042
043	R	85	Watchmaker Workstation	L58208	043
044	R	3	Watchmaker Workstation	L58208	044
045	R	9	Watchmaker Workstation	L58208	045
046	R	3	Watchmaker Workstation	L58208	046
047	R	13	Watchmaker Workstation	L58208	047
048	R	3	Watchmaker Workstation	L58208	048
049	R	16	Watchmaker Workstation	L58208	049
050	R	684	Watchmaker Workstation	L58208	050
051	R	6	Watchmaker Workstation	L58208	051
052	R	4	Watchmaker Workstation	L58208	052
053	R	22	Watchmaker Room Entrance Floor-South	L58208	053
054	R	3	Watchmaker Room Floor - South	L58208	054
055	R	25	Watchmaker Room Floor - South	L58208	055
056	R	10	Watchmaker Room Floor - South	L58208	056
057	R	18	Watchmaker Room Floor - East	L58208	057
058	R	168	Watchmaker Room Floor - East	L58208	058
059	R	8	Watchmaker Room Floor - East	L58208	059
060	R	-1	Watchmaker Room Floor - North	L58208	060
061	R	45	Watchmaker Room Floor - North	L58208	061
062	R	81	Watchmaker Room Floor - South	L58208	062
063	R	9	Watchmaker Room Floor - North	L58208	063
064	R	3	Watchmaker Room Entrance Floor-North	L58208	064
065	R	20	Watchmaker Room Floor - West	L58208	065
066	R	68	Watchmaker Room Floor - West	L58208	066
067	R	24	RSO Workstation Floor	L58208	067
068	R	41	QC WorkstationFloor	L58208	068
069	R	8	Parts Room Floor	L58208	069
070	R	4	RadWaste Closet Floor	L58208	070
071	R	4	RadWaste Barrel #01	L58208	071
072	R	5	RadWaste Barrel #02	L58208	072
073	R	167	RadWaste Material (Step-off pads, etc)	L58208	073
074	R	44	RadWaste Material (Step-off pads, etc)	L58208	074
075	R	34	Wacthmaker Workstation	L58208	075
076	U	11	Elevator Vestibule 2nd Floor	L58208	076
078	U	0	Starirway "A" - Floor 1	L58208	077
100	**U**	**9.2**	**Background Sample - Outside Building**	**L58208**	**078**

Completed by: _____ Date: _____

Reviewed By: _____ Date: _____

ENERGYSOLUTIONS

Survey Point	Type	Filter dpm	Location	Lab Sample ID	
1	R	7	Lab Coat #601	L58207	001
2	R	19	Lab Coat #602	L58207	002
3	R	23	Lab Coat #604	L58207	003
4	R	16	Lab Coat #605	L58207	004
5	R	36	Lab Coat #608	L58207	005
6	R	14	Lab Coat #616	L58207	006
7	R	19	Lab Coat #631	L58207	007
8	R	26	Lab Coat #"RE"	L58207	008
9	R	14	Lab Coat #575	L58207	009
10	R	15	Lab Coat #576	L58207	010
11	R	22	Lab Coat "ED"	L58207	011
12	R	17	Lab Coat "JA"	L58207	012
13	R	12	Lab Coat "MF"	L58207	013
14	R	11	Lab Coat #470	L58207	014
15	R	37	Lab Coat #474	L58207	015
16	R	29	Lab Coat #632	L58207	016
17	R	26	Lab Coat #612	L58207	017
18	R	10	Lab Coat #606	L58207	018
19	R	23	Lab Coat #861	L58207	019
20	R	39	Lab Coat #607	L58207	020
21	R	20	Lab Coat #573	L58207	021
22	R	19	Lab Coat #619	L58207	022
23	R	22	Lab Coat #634	L58207	023
24	R	11	Lab Coat #611	L58207	024
25	R	22	Lab Coat #614	L58207	025
26	R	21	Lab Coat #450	L58207	026

Completed by: _____ Date: _____

Reviewed By: _____ Date: _____

The following coats require decontamination action: None

Air Sampling & DAC Fractional Values

Background

		Date:	
		Start	Stop
Impingers (Qty. - 2 x 500 ml) Total Volume =	1.0 Liter		
Air Sampler Flow Rate (LPM) =	2.5 LPM	11/8/2013	11/8/2013
Total Sampler Time (Background) =	540 Minutes	8:00	17:00
Total Volume Air (Background) =	1350 Liters		

Breitling Air Sample

		Date:	
		Start	Stop
Impingers (Qty. - 2 x 500 ml) Total Volume =	1.0 Liter		
Air Sampler Flow Rate (LPM) =	2.5 LPM	11/7/2013	11/7/2013
Total Sampler Time (Air Sample) =	540 Minutes	8:00	17:00
Total Volume Air (Sample) =	1350 Liters		

Analytical Results by Liquid Scintillation Counter (Teledyne-Brown Reports #L58209-1 & L58209-2'

Sample # - L58209-1 (Background - 11/8/2013) = -1.46E-05 uCi/l Impinger H_2O 1.90E-04 uCi/l Impinger H_2O MDC

$$\left[\frac{1.90E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = 2.11E\text{-}04\right] = 1.56E\text{-}10\ \mu Ci/ml_{BACKGROUND}$$

MDC

Sample # - L58209-2 (Air Sample - 11/7/2013) = 1.75E-04 uCi/L Impinger H_2O

$$\left[\frac{1.75E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = 1.94E\text{-}04\right] = 1.44E\text{-}10\ \mu Ci/ml_{SAMPLE}$$

$$\left[1.44E\text{-}10\ \mu Ci/ml_{SAMPLE} - 0.00E+00\ \mu Ci/ml_{BACKGROUND} =\right] \quad \textit{1.44E-10}\ \mu Ci/ml_{SAMPLE\text{-}NET}$$

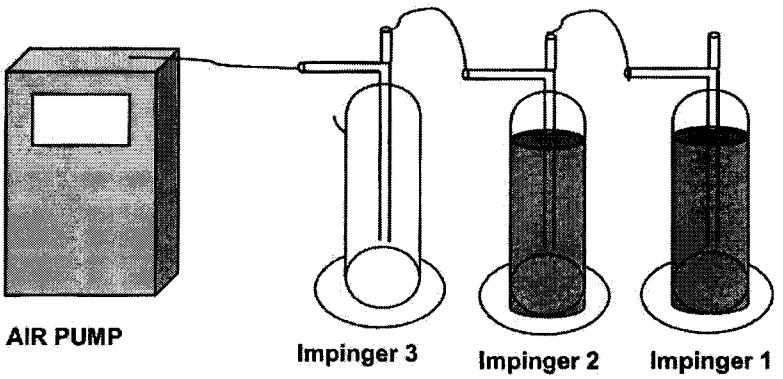
DAC Fraction [10CFR20, Appendix B]

2.00E-05 x 0.1 (10% DAC) = 2.00E-06 µC/ml

$$\frac{1.440E\text{-}10\ \mu C/ml}{2.00E\text{-}06\ \mu C/ml} = 7.202E\text{-}05$$ Fraction of 10% DAC 4th Quarter

Prepared: _____ Date: _____

Reviewed: _____ Date: _____



Breitling Tritum Air Sampling Apparatus

ATTACHMENT 2

BREITLING 4th QUARTER LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

04/04/2014

LIMS #: L58207
Project ID#: EN010-3BIOCT-07
Received: 03/31/2014
Delivery Date: 04/05/2014
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L58207-1	LAB COAT ID #601
2	L58207-2	LAB COAT ID #602
3	L58207-3	LAB COAT ID #604
4	L58207-4	LAB COAT ID #605
5	L58207-5	LAB COAT ID #608
6	L58207-6	LAB COAT ID #616
7	L58207-7	LAB COAT ID #631
8	L58207-8	LAB COAT ID "RE"

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L58207-9	LAB COAT ID #575
10	L58207-10	LAB COAT ID #576
11	L58207-11	LAB COAT ID "ED"
12	L58207-12	LAB COAT ID "JA"
13	L58207-13	LAB COAT ID "MF"
14	L58207-14	LAB COAT ID #470
15	L58207-15	LAB COAT ID #474
16	L58207-16	LAB COAT ID #632
17	L58207-17	LAB COAT ID #612
18	L58207-18	LAB COAT ID #606
19	L58207-19	LAB COAT ID #861
20	L58207-20	LAB COAT ID #607
21	L58207-21	LAB COAT ID #573
22	L58207-22	LAB COAT ID #619
23	L58207-23	LAB COAT ID #634
24	L58207-24	LAB COAT ID #611
25	L58207-25	LAB COAT ID #614
26	L58207-26	LAB COAT ID #450

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58207

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.72E+00	5.80E+00	**7.07E+00**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 2 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.91E+01**	7.84E+00	7.04E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 3 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.30E+01**	8.37E+00	7.02E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 4 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.59E+01**	7.41E+00	7.11E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58207

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.62E+01**	9.99E+00	7.03E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 6 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	7.06E+00	7.08E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 7 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.87E+01**	7.96E+00	7.30E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 8 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "RE" | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.56E+01**	8.68E+00	6.97E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.42E+01**	7.13E+00	7.10E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 10 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.45E+01**	7.29E+00	7.26E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 11 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "ED" | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.15E+01**	8.21E+00	7.08E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 12 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.68E+01**	7.47E+00	7.01E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.17E+01	6.67E+00	7.01E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 14 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+01	6.45E+00	6.98E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 15 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.65E+01	1.01E+01	7.15E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 16 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.88E+01	9.15E+00	7.06E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
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L58207

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.55E+01**	8.73E+00	7.06E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 18 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.01E+01**	6.40E+00	7.03E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 19 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.30E+01**	8.50E+00	7.20E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 20 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.88E+01**	1.05E+01	7.24E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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TELEDYNE BROWN ENGINEERING, INC.
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L58207

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.00E+01**	7.92E+00	6.97E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 22 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.92E+01**	7.82E+00	7.00E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 23 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.19E+01**	8.35E+00	7.20E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 24 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.08E+01**	6.59E+00	7.14E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58207

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 25 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.18E+01**	8.22E+00	7.05E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 26 | Collect Start: 11/08/2013 00:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #450 | Collect Stop: | Volume:
Description: | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58207-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.10E+01**	8.20E+00	7.18E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
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L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
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MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS CP-CHM-108, Rev. 0

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	5day
Air samples	2	LSC	60 dpm/cm²	5day
Annual Urine samples	34	LSC	60 dpm/cm²	5day
LAB Count	26	LSC	60 dpm/cm²	5 day

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 1/20/2014

Reviewed By: Bob McPeak Proj. Mgr. Date: 1/20/2014

Approved By: Bob McPeak Proj. Mgr. Date: 1/20/2014

January 20, 2014
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), water, urine
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

- Please Email results to DRSLYWKA@ENERGYSOLUTIONS.com

ASAP

LS8207

WA53E

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: W. Yee, Breitling **for: Breitling USA, Inc.**

Site Contact:; Dan Slywka

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Collected by: W. Yee BREITLING			; 0800 - 1600	
1	Lab Coat ID #601		0800 - 1600	4th QTR Survey
2	Lab Coat ID #602		0800 - 1600	4th QTR Survey
3	Lab Coat ID #604		0800 - 1600	4th QTR Survey
4	Lab Coat ID #605		0800 - 1600	4th QTR Survey
5	Lab Coat ID #608		0800 - 1600	4th QTR Survey
6	Lab Coat ID #616		0800 - 1600	4th QTR Survey
7	Lab Coat ID #631		0800 - 1600	4th QTR Survey
8	Lab Coat ID "RE"		0800 - 1600	4th QTR Survey
9	Lab Coat ID #575		0800 - 1600	4th QTR Survey
10	Lab Coat ID #576		0800 - 1600	4th QTR Survey
11	Lab Coat ID "ED"		0800 - 1600	4th QTR Survey
12	Lab Coat ID "JA"		0800 - 1600	4th QTR Survey
13	Lab Coat ID "MF"		0800 - 1600	4th QTR Survey
14	Lab Coat ID #470		0800 - 1600	4th QTR Survey
~~15~~	~~Lab Coat ID #473~~		~~0800 - 1600~~	~~4th QTR Survey~~
~~16~~ 15	Lab Coat ID #474		0800 - 1600	4th QTR Survey
~~17~~ 16	Lab Coat ID #632		0800 - 1600	4th QTR Survey
~~18~~ 17	Lab Coat ID #612		0800 - 1600	4th QTR Survey
~~19~~ 18	Lab Coat ID #606		0800 - 1600	4th QTR Survey
~~20~~ 19	Lab Coat ID #861		0800 - 1600	4th QTR Survey
~~21~~ 20	Lab Coat ID #607		0800 - 1600	4th QTR Survey
~~22~~ 21	Lab Coat ID #573		0800 - 1600	4th QTR Survey
~~23~~ 22	Lab Coat ID #619		0800 - 1600	4th QTR Survey
~~24~~ 23	Lab Coat ID #634		0800 - 1600	4th QTR Survey
~~25~~ 24	Lab Coat ID #611		0800 - 1600	4th QTR Survey
~~26~~ 25	Lab Coat ID #614		0800 - 1600	4th QTR Survey
~~27~~ 26	Lab Coat ID #450		0800 - 1600	4th QTR Survey

DL

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: W. Yee, Breitling, USA	0800-1600	Relinquished by: W. Yee, Breitling, USA	1200
Accepted by: D. Slywka	1200	Relinquished by: D. Slywka	1200
FEDEX	1200	Recd by:	

3/31/14 10:00

04/01/14 09:22

SR #: SR38582

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L58207

Initiated By: JSIMMONS
Init Date: 04/01/14 Receive Date: 03/31/14

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	Y	
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received	Y	
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	N	Client did not provide a collection date for the samples.
For Hazardous Materials Only:			
10	Paperwork shows TBE and shippers name, address and phone number	NA	
11	Paperwork shows sample quantity information	NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

04/04/2014

LIMS #:	L58208
Project ID#:	EN010-3BIOCT-07
Received:	03/31/2014
Delivery Date:	04/05/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L58208-1	
002	L58208-2	
003	L58208-3	
004	L58208-4	
005	L58208-5	
006	L58208-6	
007	L58208-7	
008	L58208-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L58208-9	
010	L58208-10	
011	L58208-11	
012	L58208-12	
013	L58208-13	
014	L58208-14	
015	L58208-15	
016	L58208-16	
017	L58208-17	
018	L58208-18	
019	L58208-19	
020	L58208-20	
021	L58208-21	
022	L58208-22	
023	L58208-23	
024	L58208-24	
025	L58208-25	
026	L58208-26	
027	L58208-27	
028	L58208-28	
029	L58208-29	
030	L58208-30	
031	L58208-31	
032	L58208-32	
033	L58208-33	
034	L58208-34	
035	L58208-35	
036	L58208-36	
037	L58208-37	
038	L58208-38	
039	L58208-39	
040	L58208-40	
041	L58208-41	
042	L58208-42	
043	L58208-43	
044	L58208-44	
045	L58208-45	
046	L58208-46	
047	L58208-47	
048	L58208-48	
049	L58208-49	
050	L58208-50	
051	L58208-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L58208-52	
053	L58208-53	
054	L58208-54	
055	L58208-55	
056	L58208-56	
057	L58208-57	
058	L58208-58	
059	L58208-59	
060	L58208-60	
061	L58208-61	
062	L58208-62	
063	L58208-63	
064	L58208-64	
065	L58208-65	
066	L58208-66	
067	L58208-67	
068	L58208-68	
069	L58208-69	
070	L58208-70	
071	L58208-71	
072	L58208-72	
073	L58208-73	
074	L58208-74	
075	L58208-75	
076	L58208-76	
078	L58208-77	
100	L58208-78	

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: Entrance Floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.45E+00	6.35E+00	9.74E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 002 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.11E+01	8.05E+00	1.03E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 003 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.41E+00	6.46E+00	9.91E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 004 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.96E+00	6.49E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: insides men's restroom | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.76E+00	6.97E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 006 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.09E+00	6.31E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 007 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: break room floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.88E-01	6.00E+00	1.00E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 008 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.35E+01	8.34E+00	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: training room work station | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.72E+00	7.68E+00	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 010 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: training room work station | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.44E+00	7.10E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 011 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: training room work station | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.42E+00	6.50E+00	9.98E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 012 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: training room work station | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.00E+01	1.14E+01	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 013 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: training room threshold floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.54E+00	6.90E+00	1.00E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 014 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: hallway near entrance door | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.19E+00	5.24E+00	9.34E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 015 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.63E+00	6.26E+00	9.82E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 016 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.55E+00	6.77E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: floor os supplies closet | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.94E+00	6.60E+00	1.03E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 018 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-9.76E-01	5.91E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 019 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: office A hallway floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.18E+00	7.09E+00	9.93E+00	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 020 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: office C hallway floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.71E+00	5.66E+00	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: office F hallway floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.54E+00	7.01E+00	**1.05E+01**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 022 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.84E-01	5.96E+00	**9.96E+00**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 023 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.79E+00	5.79E+00	**1.01E+01**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 024 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.81E+01**	1.63E+01	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 025 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.70E+01**	8.66E+00	9.94E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 026 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: sales open area floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.55E+00	6.48E+00	**9.91E+00**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 027 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.64E+00	5.44E+00	**9.82E+00**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 028 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: polishing room floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.53E+01**	8.64E+00	1.03E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery
Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.12E+02**	1.74E+01	1.03E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 030 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: QA area floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.82E+01**	8.86E+00	9.99E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 031 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: change room floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+01	8.08E+00	**1.01E+01**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 032 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.83E+01**	1.32E+01	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 033 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.68E+01**	1.09E+01	9.92E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 034 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.07E+01**	9.29E+00	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 035 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.52E+01**	1.08E+01	9.93E+00	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 036 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.03E+01**	1.33E+01	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Daniel Slywka

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Sample ID: 037 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.75E-01	6.21E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 038 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.20E+00	6.95E+00	**9.95E+00**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 039 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.61E+01**	8.63E+00	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 040 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.68E+01**	8.77E+00	1.02E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Daniel Slywka

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Sample ID: 041 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.36E+00	5.64E+00	**1.01E+01**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 042 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.07E+00	6.89E+00	**1.02E+01**	DPM/TOTAL		100	%		04/02/14	5	M	U

Sample ID: 043 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.25E+01**	1.16E+01	1.01E+01	DPM/TOTAL		100	%		04/02/14	5	M	+

Sample ID: 044 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.66E+00	6.37E+00	**9.99E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Daniel Slywka

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Sample ID: 045 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.52E+00	6.88E+00	**1.00E+01**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 046 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.61E+00	5.70E+00	**8.83E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 047 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.52E+00	6.47E+00	**8.56E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 048 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.42E+00	5.50E+00	**8.57E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Daniel Slywka

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Sample ID: 049 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.94E+00	6.81E+00	**8.72E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 050 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.42E+02**	3.50E+01	1.07E+01	DPM/TOTAL		100	%		04/03/14	3.31	M	+

Sample ID: 051 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.18E+00	5.95E+00	**8.72E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 052 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.03E+00	5.75E+00	**8.77E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 053 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker room entrance floor - south Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.09E+01	7.30E+00	**8.73E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 054 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker room floor - s Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.44E+00	5.60E+00	**8.73E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 055 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker room floor - s Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.23E+01**	7.45E+00	8.62E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 056 Collect Start: 11/08/2013 10:00 Matrix: Swipes (SW)
Station: Collect Stop: 11/08/2013 16:00 Volume:
Description: watchmaker room floor - s Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58208-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.93E+00	6.31E+00	**8.76E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
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EN010-3BIOCT-07

Daniel Slywka

Sample ID: 057 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.88E+00	6.93E+00	8.65E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 058 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.39E+01	1.48E+01	8.65E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 059 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.95E+00	6.16E+00	8.83E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 060 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-7.41E-01	5.27E+00	8.95E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
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L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.23E+01**	8.94E+00	8.74E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 062 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.05E+01**	1.11E+01	8.87E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 063 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.56E+00	6.23E+00	**8.76E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 064 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.65E+00	5.64E+00	**8.72E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 065 — Collect Start: 11/08/2013 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/08/2013 16:00 — Volume:
Description: watchmaker room floor - w — Receive Date: 03/31/2014 — % Moisture:
LIMS Number: L58208-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.81E+00	7.25E+00	**8.92E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 066 — Collect Start: 11/08/2013 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/08/2013 16:00 — Volume:
Description: watchmaker room floor - w — Receive Date: 03/31/2014 — % Moisture:
LIMS Number: L58208-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.39E+01**	1.02E+01	8.60E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 067 — Collect Start: 11/08/2013 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/08/2013 16:00 — Volume:
Description: RSO workstation floor — Receive Date: 03/31/2014 — % Moisture:
LIMS Number: L58208-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.19E+01**	7.47E+00	8.75E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 068 — Collect Start: 11/08/2013 10:00 — Matrix: Swipes (SW)
Station: — Collect Stop: 11/08/2013 16:00 — Volume:
Description: qc workstation floor — Receive Date: 03/31/2014 — % Moisture:
LIMS Number: L58208-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.05E+01**	8.67E+00	8.71E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: parts room floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.78E+00	6.09E+00	8.77E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 070 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.99E+00	5.64E+00	8.60E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 071 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.09E+00	5.68E+00	8.64E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Sample ID: 072 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.62E+00	5.88E+00	8.79E+00	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.33E+01**	1.58E+01	9.72E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 074 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.19E+01**	8.48E+00	8.16E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 075 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.68E+01**	8.28E+00	8.87E+00	DPM/TOTAL		100	%		04/03/14	5	M	+

Sample ID: 076 | Collect Start: 11/08/2013 10:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 11/08/2013 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 03/31/2014 | % Moisture:
LIMS Number: L58208-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.62E+00	6.40E+00	**8.71E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

04/04/14 13:17

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58208

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 078					Collect Start: 11/08/2013 10:00				Matrix: Swipes							(SW)
Station:					Collect Stop: 11/08/2013 16:00				Volume:							
Description: stairway "a" - floor 1					Receive Date: 03/31/2014				% Moisture:							
LIMS Number: L58208-77																
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**			
H-3	2010	-1.42E-01	5.17E+00	**8.57E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U			
Sample ID: 100					Collect Start: 11/08/2013 10:00				Matrix: Swipes							(SW)
Station:					Collect Stop: 11/08/2013 16:00				Volume:							
Description: BKGD Sample - OS Building					Receive Date: 03/31/2014				% Moisture:							
LIMS Number: L58208-78																
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**			
H-3	2010	4.58E+00	5.71E+00	**7.90E+00**	DPM/TOTAL		100	%		04/03/14	5	M	U			

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

L58208
WH53E

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: Daniel Slywka **for: Breitling USA, Inc.**

Site Contact:; AS ABOVE

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	11/8/13	1000 -1600	4th QTR Survey
002	Floor – Shipping Area		1000 -1600	4th QTR Survey
003	1st Floor Work Room Floor		1000 -1600	4th QTR Survey
004	1st Floor Vault Floor - North		1000 -1600	4th QTR Survey
005	Inside Men's Restroom		1000 -1600	4th QTR Survey
006	Pantry Vending Machine Floor		1000 -1600	4th QTR Survey
007	Break Room Floor		1000 -1600	4th QTR Survey
008	Stairway B Landing Floor		1000 -1600	4th QTR Survey
009	Training Room Work Station		1000 -1600	4th QTR Survey
010	Training Room Work Station		1000 -1600	4th QTR Survey
011	Training Room Work Station		1000 -1600	4th QTR Survey
012	Training Room Work Station		1000 -1600	4th QTR Survey
013	Training Room Threshold Floor		1000 -1600	4th QTR Survey
014	Hallway Near Entrance Door		1000 -1600	4th QTR Survey
015	Hallway OS Watchmaker Room		1000 -1600	4th QTR Survey
016	Hallway OS Watchmaker Room		1000 -1600	4th QTR Survey
017	Floor OS Supplies Closet		1000 -1600	4th QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	11/8/13 1000 -1600	Relinquished by: D. Slywka	3/5/14 1230
Accepted by: FEDEX	3/6/14 1230	Relinquished by	
Accepted by		Relinquished by	

Rec'd by: Jonathan L
3/31/14
10:00

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	11/8/13	1000 -1600	4th QTR Survey
019	Office A Hallway Floor		1000 -1600	4th QTR Survey
020	Office C Hallway Floor		1000 -1600	4th QTR Survey
021	Office F Hallway Floor		1000 -1600	4th QTR Survey
022	Floor – OS Copy Room		1000 -1600	4th QTR Survey
023	2nd Floor Hallway @ Safe		1000 -1600	4th QTR Survey
024	2nd Floor Safe Vestibule		1000 -1600	4th QTR Survey
025	2nd Floor Safe Floor		1000 -1600	4th QTR Survey
026	Sales Open Area Floor		1000 -1600	4th QTR Survey
027	Stairway A Floor - 2nd Floor		1000 -1600	4th QTR Survey
028	Polishing Room Floor		1000 -1600	4th QTR Survey
029	Cleaning Room - Sink Counter		1000 -1600	4th QTR Survey
030	QA Area Floor		1000 -1600	4th QTR Survey
031	Change Room Floor		1000 -1600	4th QTR Survey
032	Watchmaker Workstation		1000 -1600	4th QTR Survey
033	Watchmaker Workstation		1000 -1600	4th QTR Survey
034	Watchmaker Workstation		1000 -1600	4th QTR Survey
035	Watchmaker Workstation		1000 -1600	4th QTR Survey
036	Watchmaker Workstation		1000 -1600	4th QTR Survey
037	Watchmaker Workstation		1000 -1600	4th QTR Survey
038	Watchmaker Workstation		1000 -1600	4th QTR Survey
039	Watchmaker Workstation		1000 -1600	4th QTR Survey
040	Watchmaker Workstation		1000 -1600	4th QTR Survey
041	Watchmaker Workstation		1000 -1600	4th QTR Survey
042	Watchmaker Workstation		1000 -1600	4th QTR Survey
043	Watchmaker Workstation		1000 -1600	4th QTR Survey
044	Watchmaker Workstation		1000 -1600	4th QTR Survey
045	Watchmaker Workstation		1000 -1600	4th QTR Survey
046	Watchmaker Workstation		1000 -1600	4th QTR Survey
047	Watchmaker Workstation		1000 -1600	4th QTR Survey

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	11/8/13	1000 -1600	4th QTR Survey
049	Watchmaker Workstation		1000 -1600	4th QTR Survey
050	Watchmaker Workstation		1000 -1600	4th QTR Survey
051	Watchmaker Workstation		1000 -1600	4th QTR Survey
052	Watchmaker Workstation		1000 -1600	4th QTR Survey
053	Watchmaker Room Entrance Floor - South		1000 -1600	4th QTR Survey
054	Watchmaker Room Floor - S		1000 -1600	4th QTR Survey
055	Watchmaker Room Floor - S		1000 -1600	4th QTR Survey
056	Watchmaker Room Floor - S		1000 -1600	4th QTR Survey
057	Watchmaker Room Floor - E		1000 -1600	4th QTR Survey
058	Watchmaker Room Floor - E		1000 -1600	4th QTR Survey
059	Watchmaker Room Floor - E		1000 -1600	4th QTR Survey
060	Watchmaker Room Floor - N		1000 -1600	4th QTR Survey
061	Watchmaker Room Floor - N		1000 -1600	4th QTR Survey
062	Watchmaker Room Floor - S		1000 -1600	4th QTR Survey
063	Watchmaker Room Floor - N		1000 -1600	4th QTR Survey
064	Watchmaker Room Entrance Floor - North		1000 -1600	4th QTR Survey
065	Watchmaker Room Floor - W		1000 -1600	4th QTR Survey
066	Watchmaker Room Floor - W		1000 -1600	4th QTR Survey
067	RSO Workstation Floor		1000 -1600	4th QTR Survey
068	QC Workstation Floor		1000 -1600	4th QTR Survey
069	Parts Room Floor		1000 -1600	4th QTR Survey
070	Radioactive Waste Closet Floor		1000 -1600	4th QTR Survey
071	Radioactive Waste Barrel #1		1000 -1600	4th QTR Survey
072	Radioactive Waste Barrel #2		1000 -1600	4th QTR Survey
073	Radioactive Waste Sample		1000 -1600	4th QTR Survey
074	Radioactive Waste Sample		1000 -1600	4th QTR Survey
075	Watchmaker Workstation		1000 -1600	4th QTR Survey
076	Elevator 2nd Floor		1000 -1600	4th QTR Survey
078	Stairway "A" – Floor 1		1000 -1600	4th QTR Survey
100	BKGD. Sample – OS Building		1000 -1600	4th QTR Survey

04/01/14 10:00

SR #: SR38583

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L58208

Initiated By: JSIMMONS
Init Date: 04/01/14 Receive Date: 03/31/14

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

04/07/2014

LIMS #:	L58209
Project ID#:	EN010-3BIOCT-07
Received:	03/31/2014
Delivery Date:	04/05/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
BACKGROUND AIR SAMPLE	L58209-1	
ANNUAL AIR SAMPLE	L58209-2	

Report of Analysis

04/07/14 12:58

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L58209

Energy Solutions

EN010-3BIOCT-07

Sample ID: **BACKGROUND AIR SAMPLE** Collect Start: 11/08/2013 08:00 Matrix: Dissolved Air (WA)
Station: Collect Stop: 11/08/2013 17:00 Volume:
Description: Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58209-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	-1.46E-05	1.14E-04	**1.90E-04**	uCi/L		10	ml		04/03/14	50	M	U

Sample ID: **ANNUAL AIR SAMPLE** Collect Start: 11/07/2013 08:00 Matrix: Dissolved Air (WA)
Station: Collect Stop: 11/07/2013 17:00 Volume:
Description: Receive Date: 03/31/2014 % Moisture:
LIMS Number: L58209-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	1.75E-04	1.27E-04	**1.90E-04**	uCi/L		10	ml		04/03/14	50	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
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L = Low recovery
H = High recovery

Bolded text indicates reportable value.

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Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

January 20, 2014
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), water, urine
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

- Please Email results to DRSLYWKA@ENERGYSOLUTIONS.COM

ASAP

ENERGYSOLUTIONS

CP-CHM-108, Rev. 0

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME: Breitling, USA – Radiological Control Program Support
PROJECT LOCATION: Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE: Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN: Tritium [H-3]
NON RADIONUCLIDES OF CONCERN: None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	5day
Air samples	2	LSC	60 dpm/cm²	5day
Annual Urine samples	34	LSC	60 dpm/cm²	5day
LAB coat	26	LSC	60 dpm/cm²	5 day

TYPE OF QC SAMPLES TO BE COLLECTED: Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED: None
SAMPLE HOLD TIMES: None
SAMPLE DISPOSITION: Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED: Report results in dpm/sample
REMARKS: NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES: USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 1/20/2014

Reviewed By: Bob McPeak Proj. Mgr. Date: 1/20/2014

Approved By: Bob McPeak Proj. Mgr. Date: 1/20/2014

L 58209

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

WHS3E

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: D. Slywka, EnergySolutions **for: Breitling USA, Inc.**

Site Contact:; Dan Slywka

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
1	Background Air Sample	11/8/2013	0800-1700	4th QTR Survey
2	Annual Air Sample	11/7/2013	0800-1700	4th QTR Survey
3	13b-089			Annual Urine Survey
4	14a-090			Annual Urine Survey
5	14a-091			Annual Urine Survey
6	13b-088			Annual Urine Survey
7	13b-086			Annual Urine Survey
8	13b-015			Annual Urine Survey
9	13b-053			Annual Urine Survey
10	13b-078			Annual Urine Survey
11	13b-009			Annual Urine Survey
12	13b-003			Annual Urine Survey
13	13b-032			Annual Urine Survey
14	13b-077			Annual Urine Survey
15	13b-013			Annual Urine Survey
16	13b-082			Annual Urine Survey
17	13b-084			Annual Urine Survey
18	13b-062			Annual Urine Survey
19	13b-063			Annual Urine Survey
20	13b-081			Annual Urine Survey
21	13b-025			Annual Urine Survey
22	13b-055			Annual Urine Survey
23	13b-083			Annual Urine Survey
24	13b-048			Annual Urine Survey
25	13b-001			Annual Urine Survey
26	13b-087			Annual Urine Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	0800 - 1600	Relinquished by: D. Slywka	1200
Accepted by: FEDEX	1200		3/31/14
			3/31/14 (2.0)

ENERGYSOLUTIONS

CP-CHM-101, Rev 01

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: D. Slywka, EnergySolutions **for: Breitling USA, Inc.**

Site Contact:; Dan Slywka

Phone: (801) 303-1093 FAX: (203)-797-8994

Address:
EnergySolutions, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
27	13b-012			Annual Urine Survey
28	13b-060			Annual Urine Survey
29	13b-085			Annual Urine Survey
30	13b-036			Annual Urine Survey
31	13b-075			Annual Urine Survey
32	13b-056			Annual Urine Survey
33	13b-011			Annual Urine Survey
34	13b-072			Annual Urine Survey
35	13b-067			Annual Urine Survey
36	13b-040			Annual Urine Survey

04/01/14 10:54

SR #: SR38584

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L58209

Initiated By: JSIMMONS
Init Date: 04/01/14 Receive Date: 03/31/14

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

LICENSE COMPLIANCE ASSESSMENT SUMMARY

1.0 ORGANIZATION AND SCOPE OF PROGRAM

1.1 ***Criteria:*** *Breitling, U.S.A.'s Radiation Protection Program (the Program) requires the Radiation Safety Officer (RSO) to manage the Program on a day-to-day basis. A Management Oversight process is required to ensure that the Program is administered properly.*

Assessment: Mr. Willie Yee is currently the Breitling Radiation Safety Officer. Energy*Solutions* has been contracted to provide technical oversight of the RPP. Any changes that affect the RPP are reviewed and approved by the RSO.

Conclusion: Breitling has met the RPP requirement to have a RSO who is qualified to implement the program. Management oversight is sufficient to provide the Breitling U.S.A. staff with adequate resources and authority to administer the RPP.

1.2 ***Criteria:*** *10CFR33.13 requires a licensee to provide sufficient support for implementation of the RPP, including an administrative system in place to implement policies and procedures.*

Assessment: Energy*Solutions,* LLC provides the Breitling, USA RSO with sufficient support for implementation of the RPP including technical support, preparation of plans and procedures, conducting quarterly surveys and, at the request of the RSO, employee refresher training.

Conclusion: Breitling has met the NRC requirements to provide sufficient support for implementation of the RPP.

2.0 TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

2.1 ***Criteria:*** *The RPP requires that all personnel working in radioactive material area(s) have adequate radiological training commensurate with their job duties.*

Assessment: There were no new watch repair employees hired in 2014 and radiological refresher training is a biannual requirement last conducted in 2013.

Conclusion: Since there were no new employees in 2014 assigned to work in the Radiological Materials Area(s) and radiation worker refresher training is a biannual requirement, Breitling has met the RPP requirement to provide radiation safety training for all radiation workers.

2.2 ***Criteria:*** *The RPP requires biannual refresher training for all radiation workers.*

Assessment: The Breitling RSO provided refresher training in 2013. Refresher training was not required in 2014.

Conclusion: Breitling has met the RPP requirement to provide refresher training for all radiation workers.

2.3 ***Criteria:*** *As required in 10CFR20, workers must be instructed on the NRC policy that female workers voluntarily inform the employee, in writing, of a pregnancy.*

Assessment: Based on a review of the employee training records, training included discussion of a female's right to inform Breitling, in writing, of her pregnancy.

Conclusion: Breitling has met the NRC requirement to instruct workers on this NRC policy.

3.0 INTERNAL AUDITS, REVIEWS OR INSPECTIONS

3.1 ***Criteria:*** *10CFR20.1101(c) requires a licensee to review the Radiation Protection Program (RPP) for content and implementation at least annually.*

Assessment: The Radiation Protection Program was evaluated for adequacy by Energy*Solutions* on 04/02/2014 and found to continue to be suitable for providing compliance with the Breitling radioactive materials license.

The RPP calls for bioassay sampling annually as "informational" monitoring. As no bioassay sampling was conducted in 2014, this requirement in Section 3.3 of the RPP was not satisfied.

Conclusion: Aside from the RPP being suitable for compliant management of the Breitling facility, no H3 bearing watch repairs are being undertaken. This condition likely led to the missed bioassay sampling for 2014.

As the watch making and repair activities at Breitling no longer involve working with H3, consideration toward decontaminating and surveying the facility toward license termination should be given.

4.0 FACILITIES

4.1 ***Criteria:*** *The RPP requires Breitling to secure all tritium-containing material from unauthorized removal or access while in storage and control and maintain constant surveillance over materials that are in active use according to the requirements of 10CFR 20.1801 and 20.1802. When not in use, tritium-containing materials are stored in locked storage cabinets or in locked rooms.*

Assessment: Approximately half of the second floor is dedicated to the repair of watches and is maintained as a Radioactive Materials Area (Restricted Area). Areas of licensed materials receipt, use and storage are adequately secured with access cards and locked doors to prevent unauthorized access or removal. No periods of open access to the Restricted Area, the second floor safe, or first floor vault were observed during the four quarterly assessments during 2014.

Conclusion: Breitling has met the RPP requirement for security of licensed materials.

4.2 ***Criteria:*** *Section 4.0 of the RPP discusses the radiological controls required at the Breitling facility for protecting health and minimizing danger to property.*

Assessment: Housekeeping practices are well maintained throughout the Breitling facility. Work stations are wiped daily with cleaning towels that are stored in 30 gallon open top metal drums, locked in a separate closet in the Restricted Area. The RSO maintains control over the closet access key. Samples of cleaning towels and rags are taken during quarterly surveys and analyzed prior to disposal. No prohibited materials or activities (e.g., food, beverages, application of make-up) were observed in the Restricted Area. The Restricted Area is well defined with radiation labels and postings. Throughout the Breitling facility, "Caution Radioactive Material(s)" signs are posted on the doors of the Restricted Area. Multi-layer disposable adhesive threshold step-off pads are used both inside and outside the Restricted Area to reduce any spread of contamination to areas other than the Restricted Area.

Conclusion: Breitling has met RPP requirement to provide engineering controls adequate to protect health and minimize danger to life or property. Housekeeping practices are well maintained throughout the Breitling facility.

Housekeeping includes minimization of radioactive material in the work space, and considering the conditions reported in the quarterly surveys, the legacy H3 contamination could be eliminated with a thorough decontamination of the Breitling facility.

5.0 MATERIAL USE, CONTROL AND TRANSFER

5.1 ***Criteria:*** *Item 6 of the Breitling NRC license # 06-23863-01 details the radionuclide type (Hydrogen-3), physical form (Radium Chemia PS 362 luminous paint) and maximum quantity (200 curies) that may be possessed at any one time.*

Assessment: Type, physical form and quantities of Hydrogen-3 (tritium, H3) used at Breitling are within the scope of the NRC license. Energy*Solutions* personnel have reviewed the reduction of tritium-bearing watch parts in the physical inventory, as required by Item 13 of License 06-23863-01 to ensure that Breitling U.S.A.'s quantity of tritium is within the scope of the license.

The current inventory indicates that approximately 462.7 mCi (Section 8.1, page 13) of H3 bearing parts in the waste inventory on site. No inventory of H3 bearing repair parts is maintained at the Breitling facility.

Conclusion: Breitling has met the NRC license requirement to use the radionuclide type, chemical form, and quantities that are within the scope of the license.

5.2 ***Criteria:*** *10CFR32.14 requires a licensee to maintain records of transfer of material and report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, a description or identification of the type of each product; the total quantity of the radionuclide; and the number of units of each type of product transferred during the reporting period. The licensee is required to file the report after five years of filing the preceding report or after filing an application for renewal of the license under Part 30.37. The licensee is required to maintain the record of a transfer for a period of one year after the event is included in a report to the Commission.*

Assessment: There have been no transfers of material since 05/15/2007, other than repair and return of consumer products. The RSO or Breitling management will report material transfers to the NRC as required.

Conclusion: Breitling meets the NRC requirements to maintain receipt, transfer and disposal records.

6.0 RADIOACTIVE MATERIAL INVENTORY

6.1 ***Criteria:*** *Item 13 of NRC License 06-23863-01 requires Breitling to conduct a physical inventory every six months to account for all sources and devices received and possessed under the license.*

Assessment: There are no H3 bearing parts or watches on hand at the licensed facility. The current inventory of H3 bearing waste indicates that there are approximately 898 watch hands and 508 watch faces staged as waste for disposal in the future. The estimated total H3 activity on site at the end of 2014 was 462.7 mCi, approximately 0.23% of the license limit (from page 13) and now containerized and staged as waste.

Conclusion: Breitling has met the license requirement to conduct a physical inventory every six months to account for all watches received and possessed under the license.

7.0 RADIOLOGICAL MONITORING

7.1 ***Criteria:*** *The RPP requires quantitative loose contamination surveys to be performed in the Restricted Area and quantitative loose and fixed contamination surveys to be performed in Unrestricted Areas at a frequency of not less than four quarterly surveys per year.*

Assessment: As part of the Breitling quarterly survey program, Energy*Solutions* performed four quarterly surveys of the Restricted and Unrestricted Areas for contamination in 2014. Maps with predetermined survey point locations were used to collect survey data to analyze the spread of contamination over time. If any survey location was contaminated near or above the facility limits, the Breitling RSO had the area decontaminated. Subsequent quarterly surveys have confirmed the effectiveness of the Breitling control of radioactive material. In addition to quarterly surveys, one air sample was collected in the Restricted Area for quantitative tritium analysis.

The quarterly surveys identify several areas bearing small concentrations of loose surface H3 including watchmakers work stations and lab coats.

Conclusion: Breitling has met the RPP requirement to perform quarterly surveys.

7.2 ***Criteria:*** *The RPP requires quantitative air sampling to be performed in the de-casing area annually.*

Assessment: An air sample was collected in September of 2014 in the Restricted Area using two distilled water filled impingers. Sampling was performed over seven hour duration during high watch repair volume working hours. The sampling location was selected adjacent to the watchmaker work station known to have the highest loose contamination from previous quarterly surveys. Background measurements were obtained at the Energy*Solutions* facility in Middlebury, CT. The Energy*Solutions* Middlebury office is an Unaffected Area that has no radioactive materials present. Results of 2014 air sampling reported airborne tritium levels below the Minimum Detectable Concentration (MDC) of

the laboratory counting system (6.84E-7 DAC) and well below 1/10th of the DAC. The 1/10th DAC values are documented as follows:

Air Sampling 3rd Quarter 2014

Air Sampling & DAC Fractional Values		Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0 Liter		9/19/2014 8:00	9/19/2014 15:00
Air Sampler Flow Rate =	2.5 LPM			
Total Sampler Time (Background) =	420 Minutes			
Total Volume Air (Background) =	1050 Liters			
		Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0 Liter		9/19/2014 8:00	9/19/2014 14:30
Air Sampler Flow Rate =	2.5 LPM			
Total Sampler Time (Air Sample) =	390 Minutes			
Total Volume Air (Sample) =	975 Liters			

Analytical Results by Liquid Scintillation Counter (Teledyne-Brown Reports #L62410-1 & L62410-2)

Sample# - L62410-1 (Background 09/19/2014) = 2.99E-05 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

Sample# - L62410-1 MDC = 1.82E-04 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

$$\left[\frac{\frac{1.82E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = 2.02E\text{-}04}{1050\ Liters_{AIR} \times 1000ml/Liter}\right] = \mathbf{1.93E\text{-}10}\ \mu Ci/ml_{BACKGROUND}^{*}$$

Sample# - L62410-2 (BZ Air Sample - 09/19/2014) = 2.97E-05 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

Sample# - L62410-1 MDC = 1.81E-04 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

$$\left[\frac{\frac{1.81E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = 2.01E\text{-}04}{975\ Liters_{AIR} \times 1000ml/Liter}\right] = \mathbf{2.06E\text{-}10}\ \mu Ci/ml_{SAMPLE}^{*}$$

$$2.06E\text{-}10\ \mu Ci/ml_{SAMPLE} - 1.93E\text{-}10\ \mu Ci/ml_{BACKGROUND} = \mathbf{1.37E\text{-}11}\ \mu Ci/ml_{SAMPLE\text{-}NET}$$

DAC Fraction [10CFR20, Appendix B]

0.1 DAC = 2.00E-05 x 0.1 = 2.00E-06 µC/ml

$$\frac{1.37E\text{-}11\ \mu C/ml}{2.00E\text{-}06\ \mu C/ml} = \mathbf{6.84E\text{-}06}$$ Fraction of 10% $DAC_{3rd\ Quarter}$

* Both Air Samples (background and restricted area sample) had reported values <MDC. MDC value was used to perform the calculations

Conclusion: Breitling has met the RPP requirement to perform annual air sampling and the tritium air concentration fraction is substantially below 0.1 DAC.

7.3 ***Criteria:*** *The RPP requires the collection and analysis of "informational" bioassays annually.*

Assessment: As noted earlier, Section 3.3 of the Breitling RPP provides that "informational" in-vitro bioassays will be collected and analyzed annually as a benchmark for the assertion that no employees approach 0.1 times the occupational exposure limits. In preparation of this assessment it was discovered that no bioassay sampling had been performed in 2014.

Conclusion: As noted earlier, the RPP required annual "informational" bioassays for radiation workers were not collected in 2014. It is not likely that a worker would be exposed to 0.1 times the annual internal exposure limit provided in 10CFR20.1201 (a). The H3 concentrations measured (~100 dpm/100cm^2 average in 2014) in the Restricted Area(s) are small both in surface area and concentration.

8.0 RADIOACTIVE WASTE MANAGEMENT

8.1 ***Criteria:*** *The RPP requires an interim storage area for radioactive waste.*

Assessment: Currently, Breitling U.S.A. stores all radioactive waste in drums located in a locked closet within the Restricted Area. The waste is picked up and disposed of by a radioactive waste broker. An estimate and characterization (per 10CFR61.55 & 49CFR173.425) of the current radioactive waste is as follows:

Total Estimated Watch Parts in Waste

No H3 bearing watch parts (faces and hands) have been generated since 2012. Consequently, waste in the form of watch parts is static at 508 watch faces and 898 hands. Watch part radioactivity is conservatively decayed to 12/31/1990 as the Breitling RSO confirms no new tritiated watch parts were produced after the early 1980s.

Year Generated	Watch Faces	Watch Hands
2008	193	166
2009	109	207
2010	91	207
2011	68	152
2012	47	166
2013	0	0
2014	0	0
Number in Waste Inventory	508	898

Waste Watch Parts H3 Radioactivity

number of waste H3 watch hands in inventory 12/31/13	898
watch hand H3 radioactivity A_o (mCi)	1.1
watch hand H3 radioactivity decayed 12/31/90 to 12/31/14 (mCi)	0.29
total waste watch hand H3 radioactivity (mCi)	260.5
number of H3 watch dials in inventory 12/31/13	508
watch face H3 radioactivity A_o (mCi)	1.5
watch face H3 radioactivity decayed 12/31/90 to 12/31/14 (mCi)	0.40
total waste watch face H3 radioactivity (mCi)	201.0
total H3 radioactivity of waste watch parts inventory 12/31/14 (mCi)	**461.54**

Radioactive waste is routinely generated as a result of changing step-off pads and housekeeping at watchmaker workstations. Samples of radioactive waste materials were taken throughout 2014 and results of their analysis are used to determine the H3 radioactivity of waste generated in 2014. The average of waste sample data was used to determine 2014 waste step-off pad H3 radioactivity and the average restricted area loose surface radioactivity was used to determine the radioactivity of wipes generated in 2014.

H3 Waste Samples 2014

Survey Point	Type	Activity dpm/100 cm²	Location	Lab Sample ID	
073	R	153.0	Q1 RadWaste Material (Step-off pads, etc)	L59236	073
074	R	154.0	Q1 RadWaste Material (Step-off pads, etc)	L59236	074
073	R	31.5	Q2 RadWaste Material (Step-off pads, etc)	L62406	-73
074	R	73.6	Q2 RadWaste Material (Step-off pads, etc)	L62406	-74
073	R	731.0	Q3 Radwaste Sample	L62398	073
074	R	3.2	Q3 Radwaste Sample	L62398	074
073	R	707.0	Q4 Radwaste Sample	L62408	073
074	R	157.0	Q4 Radwaste Sample	L62408	074
average of 2014 waste samples (dpm/100cm²)		**251.3**			

Removable H3 Radioactivity in Restricted Areas 2014

Period	average dpm/100cm²	Lab Sample ID	
Q1	101.3	L59236	028 through 075
Q2	156.4	L62406	-28 through -74
Q3	101.7	L62398	028 through 075
Q4	83.6	L62408	028 through 075
average removable H3 in restricted areas 2014 (dpm/100cm²)			**110.7**

The radioactivity of waste step-off pads and waste wipes on 12/31/2014:

Step Off Pad Waste Inventory	
number of step off pads	52
length (in)	36
width (in)	24
step off pad surface area (in^2)	864
step off pad surface area (cm^2)	5.57E+03
step off pad replacement frequency ($week^{-1}$)	2
number of waste step off pads generated per year	104
step off pad surface area generated per year (cm^2)	5.80E+05
H3 waste generated by replacement of step off pads 2014 (dpm)	1.46E+06
H3 waste generated by replacement of step off pads 2014 (µCi)	0.66
waste step off pad inventory 12/31/13 (µCi)	13.67
12/31/13 waste step off pad inventory decayed to 12/31/14 (µCi)	12.93
total H3 radioactivity of waste step off pad inventory 12/31/14 (mCi)	**0.01**

Waste Wipes Inventory	
average work area length (in)	48
average work area width (in)	48
average work area (in^2)	2.30E+03
average work area (cm^2)	1.49E+04
number of work areas	21
total of work areas (cm^2)	3.12E+05
work area wipe frequency ($year^{-1}$)	260
annual work area wiped (cm^2)	8.12E+07
H3 waste generated by wipes of work areas 2014 (dpm)	8.99E+07
H3 waste generated by wipes of work areas 2014 (µCi)	40.48
waste wipe inventory 12/31/13 (µCi)	1.17E+03
12/31/13 waste wipe inventory decayed to 12/31/14 (µCi)	1.10E+03
total H3 radioactivity of waste wipe inventory 12/31/14 (mCi)	**1.14**

The total H3 radioactivity of waste step-off pads and wipes is 1.14 mCi and stored in two 30 gallon drums along with waste watch parts. The H3 radioactivity contained in the two drums is 462.7 mCi and makes up the Breitling facility inventory as no inventory of tritiated watch parts for repair or production is maintained.

H3 Radioactivity of Waste Inventory 12/31/14 (mCi)	
H3 radioactivity of waste step off pad inventory (mCi)	0.01
H3 radioactivity of waste wipe inventory (mCi)	1.14
H3 radioactivity of lab coats (mCi)	0.01
H3 radioactivity of waste watch parts inventory (mCi)	461.54
waste inventory H3 radioactivity (mCi)	**462.70**

An assessment of the Brietling waste inventory was made to inform NRC waste classification and DOT transportation requirements:

Watch Parts Waste Classification	
number of waste H3 watch hands in inventory 12/31/13	898
volume of watch hand (cm^3)*	0.04
volume of waste H3 watch hands in inventory 12/31/13 (cm^3)	35.92
number of H3 watch faces in inventory 12/31/13	508
volume of watch face (cm^3)*	1.26
volume of waste H3 watch faces in inventory 12/31/13 (cm^3)	640.08
volume of waste watch parts in inventory 12/31/14 (cm^3)	676
H3 concentration of waste watch parts ($\mu Ci/cm^3$)	6.83E+02
10CFR61.55, Table 2 Class A limit for H3 (Ci/m^3)	40
waste watch parts NRC Waste Class	**B**

* watch part volumes from CS-RS-RP-010, Breitling 2013 Monitoring Report, Rev 0.

Watch Parts Transportation	
number of waste H3 watch hands in inventory 12/31/13	898
volume of watch hand (cm^3)*	0.04
volume of waste H3 watch hands in inventory 12/31/13 (cm^3)	35.92
number of H3 watch faces in inventory 12/31/13	508
volume of watch face (cm^3)*	1.26
volume of waste H3 watch faces in inventory 12/31/13 (cm^3)	640.08
volume of waste watch parts in inventory 12/31/14 (cm^3)	676
density of watch part material-brass (g/cm^3)	8.52
mass of waste watch parts in inventory 12/31/14 (g)	5.76E+03
H3 radioactivity of waste watch parts inventory 12/31/14 (Ci)	0.46
H3 concentration of waste watch parts inventory 12/31/14 (Ci/g)	8.01E-05
49CFR173.435 A_2 value (Ci)	1.10E+03
49CFR173.425 Table 4-excepted package, instruments and articles limit (Ci/g)	22
49CFR173.425 Table 4-excepted package, instruments and articles package limit (Ci)	220
waste watch parts proper shipping name:	**Radioactive Materials-excepted package-articles**

* watch part volumes from CS-RS-RP-010, Breitling 2013 Monitoring Report, Rev 0.

Conclusion: Breitling has met the RPP requirement to manage Low Level Radioactive Waste.

9.0 RADIATION PROTECTION

9.1 ***Criteria:*** *According to 10CFR20.1101, each licensee will develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part. Each licensee will maintain records of the program, including the provisions of the program; and audits and other reviews of program content and implementation.*

Assessment: The Breitling RPP is commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with NRC regulations.

Conclusion: Breitling has met the RPP requirement to develop, document and implement a radiation protection program and retain all applicable records.

9.2 ***Criteria:*** *10CFR20.1101(b) requires that licensees use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as reasonably achievable (ALARA). Licensees are required to address and document ALARA considerations in all aspects of their programs, including established administrative action levels and monitoring programs.*

Assessment: ALARA concepts, discussed in detail throughout the RPP, address the requirement to perform quarterly surveys that adhere to administrative action levels, wear protective clothing, wash hands prior to leaving the Radioactive Material Area (Restricted Area), wipe down tools, floors and work areas and lock the Restricted Area when not in use.

Conclusion: Breitling has met the NRC requirements to implement ALARA policies.

9.3 ***Criteria:*** *At a minimum, the RPP requires lab coats to be donned upon entering the Watchmaker Room and must be removed upon exiting the Watchmaker Room.*

Assessment: The PPE used at Breitling, consisting of cotton lab coats and surgeons gloves, when necessary, is adequate for the work activities performed at Breitling. Workers were observed using their lab coats in the Restricted Area and doffing them prior to exit from the Restricted Area.

Conclusion: Breitling has met the RPP requirement to minimize levels of contamination by requiring employees to wear PPE when working with tritium.

9.4 **Criteria:** According to 10CFR20.2104, licensees must obtain current year occupational radiation dose for each individual who is likely to receive in a year, an occupational dose requiring monitoring pursuant to 10CFR20.1502.

Assessment: 10CFR20.2104 was amended in December 2007. It is no longer necessary to obtain cumulative occupational dose UNLESS the worker is going to receive a planned special exposure per SECY-07-0162. No Breitling USA worker has ever been required to receive a planned special exposure. With the substantial reduction in the inventory, there would be little or no chance for a Breitling USA worker to receive a dose in excess of the "Occupational Dose Limits" described in 10CFR20.1201.

Conclusion: Breitling has met the requirement to obtain records of current year occupational radiation dose for each individual, as applicable.

9.5 ***Criteria:*** *The RPP requires records of radiation surveys, instrument calibrations, dosimetry, incident reports or unusual event reports, inventory records, disposal of licensed materials and decontamination/remediation activities to be retained by the RSO for the life of the license. Radiation worker training records are maintained for two years. Records of receipt and transfer of all licensed material are maintained for as long as the material is possessed until 3 years after transfer.*

Assessment: Records are maintained by the RSO or the Breitling radiation safety consultant, since issuance of the license.

Conclusion: Breitling has met the RPP requirements for good record keeping and storing of documents.

10.0 NOTIFICATION AND REPORTS

Criteria: *The RPP requires that records of radiation doses be maintained for all individuals for whom personnel monitoring are required. As required by 10CFR19.13(a), radiation exposure data and the results of any measurements, analysis and calculations of radioactive material deposited or retained in the body must be reported to the individual.*

Assessment: As workers are now unlikely to receive an annual dose of 0.1 times the annual dose limits of 10CFR20 Appendix B, the regulatory requirement for personnel monitoring in 10CFR20.1502 is no longer applicable at Breitling. During 2014, no H3 bearing watches were received or repaired at Breitling and the entire H3 radioactivity of large area wipes from watchmaker workstations in 2014 was 40 μCi. Assuming the contamination found on large area wipes is representative of maximum potential exposure, it would be impossible for a worker to approach a potential uptake of 8 mCi (0.1 times the ALI of 80 mCi).

Conclusion: Breitling has met the RPP requirement to maintain dose records and report results to employees.

11.0 POSTING AND LABELING

11.1 ***Criteria:*** *The RPP requires that* the Restricted Area be posted with a conspicuous sign(s) bearing the radiation symbol and the words "CAUTION - RADIOACTIVE MATERIALS."

Assessment: Work areas are well defined with radiation labels and postings. Throughout the Breitling facility, "Caution, Radiation Materials" signs are posted on the doors of the Restricted Area.

Conclusion: Breitling has met the RPP requirement to conspicuously post the Restricted Area.

11.2 ***Criteria:*** *10 CFR 19.11 requires each licensee to prominently post NRC Form 3, "Notice to Employees," (5 – 2005).*

Assessment: Posting of NRC Form 3 can be found in the employee Break Room on the first floor.

Conclusion: Breitling has met the NRC requirement to post NRC Form 3.

12.0 OTHER OBSERVATIONS

12.1 *Decasing Activities and Inventory - 2014*

No H3 bearing watches were de-cased in 2014 and an inventory of estimated H3 radioactivity on-hand was conducted based upon the total number of watch parts now staged in waste containers for disposal. Watches now being manufactured by Breitling do not use tritium luminescent radiochemicals and in 2014, no H3 bearing watches were de-cased and no tritium bearing repair or replacement parts are kept on hand. The total inventory of tritium bearing replacement parts on hand at any time during 2014 was zero.

12.2 *Lab Coat Surveys - 2014*

Prior to laundering the lab coats used by the Watch Repair workers, Breitling surveys the lab coats to determine if they contain removable contamination and to ensure compliance with 10CFR20 limits on effluent concentration. To estimate the removable radioactivity on watchmaker's lab coats, Breitling uses an air sampler to collect a sample across the surface of the lab coats across an air filter. The sample is collected onto the filter and counted on a liquid scintillation counter. Results indicate that average total H3 radioactivity on the lab coat inventory at 10% removal efficiency is approximately 2.98 E-1 µCi.

If the entire lab coat radioactivity was included in the daily sewerage volume and released directly to the environment on a single day (considered to be the worst case release of this radioactivity), the H3 discharge concentration would be 5.45 E-6 µCi/ml and well below the effluent concentration limit of 1.0E-02 µCi/ml for H3 found in 10CFR20, Appendix B-Table 2, Column 2[1].

[1] 10CFR20, Appendix B, Tables 2 & 3, Hydrogen-3, verified 04/08/2015

If the lab coat laundry water along with the other sources of waste water was released to sewerage, the average monthly concentration would be 2.51 E-7, well below the 1.0E-03 µCi/ml monthly average concentration limit for discharge to sewerage prescribed by 10CFR20, Appendix B, Table 2, Column 3. Therefore lab coats did not require decontamination prior to laundering.

Breitling liquid effluents are in compliance with the limits of 10CFR20, Appendix B, Tables 2 and 3.

2014 Lab Coat Surveys

1st quarter total of lab coat removable H3 radioactivity (dpm/100cm^2)	395.3
2nd quarter total of lab coat removable H3 radioactivity (dpm/100cm^2)	608.1
3rd quarter total of lab coat removable H3 radioactivity (dpm/100cm^2)	387.8
4th quarter total of lab coat removable H3 radioactivity (dpm/100cm^2)	390.8
average removable H3 (dpm/100 cm^2)*	446
f_r**	0.1
average lab coat total H3 concentration (dpm/100 cm^2)	4.46E+03
estimated lab coat surface area (cm^2)	1.49E+04
lab coat inventory	24
surface area of lab coat inventory (cm^2)	3.57E+05
average lab coat H3 radioactivity (µCi)	2.98E-01
lab coat inventory H3 radioactivity (dpm)	1.59E+07
lab coat inventory H3 radioactivity (µCi)	**7.16E+00**

* lab coat survey assumed to represent the removable H3 radioactivity per 100 cm^2

**f_r is the removable fraction of total radioactivity

H3 Liquid Effluent

annual sewerage discharge (litres)*	3.42E+05
monthly sewerage discharge (ml)	2.85E+07
daily volume discharged to sewerage (ml)	1.31E+06
H3 concentration if discharged as liquid effluent (µCi/ml)	**5.45E-06**
H3 monthly average concentration if discharged to sewer (µCi/ml)	**2.51E-07**

*annual sewerage discharge volume from 82A9415, Breitling U.S.A., Radiation Protection Program, Revision 5

12.3 Radioactive Waste Estimate & Surveys - 2014

Bags containing rags, step-off pads and disposable paper towels were sampled directly by removing swatches for liquid scintillation counting for contamination. Radioactive waste material counting results showed the highest concentration was 251 dpm/100 cm². The estimated amount of radioactive waste in the two disposal/transportation containers is 463 mCi. The radioactive waste containers had a maximum of 1690 dpm/100 cm² removable surface contamination during quarterly surveys. The drum will be decontaminated by Breitling and broker staff prior to removal for disposal.

Positive results from the quarterly surveys reveal small concentrations of H3 on watchmaker's workstations and lab coats. As there are no H3 bearing parts being removed or replaced, consideration should be given to the thorough decontamination of work stations and areas to remove the legacy radioactivity from previous operations and replacement of the contaminated lab coats.

The estimated H3 radioactivity of Breitling waste materials is:

H3 Radioactivity of Waste Inventory 12/31/14 (mCi)	
H3 radioactivity of waste step off pad inventory (mCi)	0.01
H3 radioactivity of waste wipe inventory (mCi)	1.14
H3 radioactivity of lab coats (mCi)	0.01
H3 radioactivity of waste watch parts inventory (mCi)	461.54
waste inventory H3 radioactivity (mCi)	**462.70**

13.0 Records

Quarterly reports for 2014 are attached as appendices A through D.

14.0 Conclusions

With one exception being the missed bioassay sampling for 2014 and based on observations made during the four quarterly inspections and the annual program review, Breitling U.S.A. has been in compliance with the requirements of the Licenses 06-23863-01 and 06-23863-02E. Breitling plans to collect an additional round of bioassay data in 2015.

As Breitling U.S.A. no longer builds or repairs watches that contain tritium-based luminous paint, residual contamination from legacy operations is present on work surfaces and protective clothing. Consideration should be given to decontamination and survey of the facility toward license termination.

BREITLING FIRST QUARTER 2014 SURVEYS
EXECUTIVE SUMMARY

The Breitling first quarter 2014 surveys were performed on March 23-24, 2014. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all of the analyzed swipe samples are below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 103 samples (seventy seven location swipes, one background location swipe, and twenty five lab coat filters) were sent to TBE for tritium counting on a Liquid Scintillation Counter (LSC). The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was on the floor of the 2nd Floor Safe Floor, with an activity of 49.7 $dpm/100cm^2$. No remedial action is required in unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 1,690 $dpm/100\ cm^2$ on Radioactive Waste Barrel #1. No remedial action is required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

A damp swipe sample collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had removable activity of 193 dpm/100 cm^2 and the maximum removable activity on the outside of a waste drum was 1,690 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (25 filter samples) are shown in Attachment 1. The highest activity found was 65.3 dpm/sample (Lab Coat #604). Therefore, the lab coats do not require decontamination prior to laundering.

Air Sample Results

Two air samples were collected and sent to TBE laboratory for tritium analysis. One sample was a background sample collected at an off-site location on 3/23/14 and the other sample was collected in the Restricted Area on 3/24/14. The samples were collected using bubbler impingers containing DI water in a parallel train. The Restricted Area air sample result indicated tritium activity of 1.14E-10 µCi/mL, which is not of concern.

Conclusions

Based on the First Quarter 2014 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ATTACHMENT 1

BREITLING 1st QUARTER 2014 SURVEY DATA SHEET

ENERGYSOLUTIONS

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 1st QTR Survey 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	Activity dpm/100 cm^2	Location	Lab Sample ID	
001	U	-3.9	Entrance Vestibule	L59236	001
002	U	5.2	Floor - Shipping/Receiving Area	L59236	002
003	U	7.0	1st Floor Work Room Floor	L59236	003
004	U	1.7	1st Floor Vault Floor - North	L59236	004
005	U	8.0	Hallway - Outside Rest Rooms	L59236	005
006	U	-2.8	Pantry Vending Machine - Floor	L59236	006
007	U	-1.5	Break Room Floor	L59236	007
008	U	-5.3	Stairway B Floor	L59236	008
009	U	0.0	Training Room Work Station-Southwest	L59236	009
010	U	-1.1	Training Room Work Station-Northwest	L59236	010
011	U	-1.7	Training Room Work Station-Southeast	L59236	011
012	U	1.8	Training Room Work Station-Northeast	L59236	012
013	U	-1.7	Training Room Threshold Floor	L59236	013
014	U	-2.3	Hallway Near Entrance Door-2nd Floor South	L59236	014
015	U	36.1	Hallway Outside Watchmaker's Room	L59236	015
016	U	36.1	Hallway Outside Watchmaker's Room	L59236	016
017	U	9.7	Floor Outside Women's Restroom	L59236	017
018	U	-0.5	Floor In Men's Rest Room	L59236	018
019	U	0.6	Office A Hallway Floor	L59236	019
020	U	16.6	Office C Hallway Floor	L59236	020
021	U	16.6	Office F Hallway Floor	L59236	021
022	U	6.9	2nd Floor - Outside Copy Room	L59236	022
023	U	2.4	2nd Floor Hallway Floor @ Safe	L59236	023
024	U	16.8	2nd Floor Safe Vestibule	L59236	024
025	U	49.7	2nd Floor Safe Floor	L59236	025
026	U	5.3	Sales Open Area Floor	L59236	026
027	U	-2.1	Stairway A 2nd Floor	L59236	027
028	R	74.4	Polishing Room Floor	L59236	028
029	R	96.7	Cleaning Room - Sink Counter	L59236	029
030	R	59.5	QA Area Floor	L59236	030
031	R	4.6	Change Room Floor	L59236	031
032	R	6.9	Watchmaker Workstation	L59236	032
033	R	5.1	Watchmaker Workstation	L59236	033
034	R	90.6	Watchmaker Workstation	L59236	034
035	R	84.5	Watchmaker Workstation	L59236	035
036	R	53.8	Watchmaker Workstation	L59236	036
037	R	-1.1	Watchmaker Workstation	L59236	037

038	R	16.6	Watchmaker Workstation	L59236	038
039	R	1.3	Watchmaker Workstation	L59236	039
040	R	-1.1	Watchmaker Workstation	L59236	040
041	R	30.2	Watchmaker Workstation	L59236	041
042	R	8.6	Watchmaker Workstation	L59236	042
043	R	16.0	Watchmaker Workstation	L59236	043
044	R	5.1	Watchmaker Workstation	L59236	044
045	R	-2.3	Watchmaker Workstation	L59236	045
046	R	5.9	Watchmaker Workstation	L59236	046
047	R	0.6	Watchmaker Workstation	L59236	047
048	R	13.3	Watchmaker Workstation	L59236	048
049	R	21.3	Watchmaker Workstation	L59236	049
050	R	4.7	Watchmaker Workstation	L59236	050
051	R	1.3	Watchmaker Workstation	L59236	051
052	R	-2.9	Watchmaker Workstation	L59236	052
053	R	11.6	Watchmaker Room Entrance Door-South	L59236	053
054	R	4.8	Watchmaker Room Floor - South	L59236	054
055	R	64.8	Watchmaker Room Floor - South	L59236	055
056	R	36.0	Watchmaker Room Floor - South	L59236	056
057	R	-1.8	Watchmaker Room Floor - East	L59236	057
058	R	72.1	Watchmaker Room Floor - East	L59236	058
059	R	102.0	Watchmaker Room Floor - East	L59236	059
060	R	357.0	Watchmaker Room Floor - North	L59236	060
061	R	71.2	Watchmaker Room Floor - Center	L59236	061
062	R	195.0	Watchmaker Room Floor - Center	L59236	062
063	R	-1.7	Watchmaker Room Floor - North	L59236	063
064	R	6.9	Watchmaker Room Entrance Door-North	L59236	064
065	R	355.0	Watchmaker Room Floor - West	L59236	065
066	R	397.0	Watchmaker Room Floor - West	L59236	066
067	R	57.1	RSO Workstation Floor	L59236	067
068	R	126.0	QC Area Floor	L59236	068
069	R	51.7	Parts Room	L59236	069
070	R	193.0	RadWaste Closet Floor	L59236	070
071	R	1,690.0	RadWaste Barrel #01	L59236	071
072	R	74.1	RadWaste Barrel #02	L59236	072
073	R	153.0	RadWaste Material (Step-off pads, etc)	L59236	073
074	R	154.0	RadWaste Material (Step-off pads, etc)	L59236	074
075	R	53.4	Parts Closet	L59236	075
076	U	-2.3	Elevator Vestibule 2nd Floor	L59236	076
078	U	14.1	Stairway "A" - Floor 1	L59236	077
100	**U**	**3.4**	**Background Sample**	**L59236**	**078**

Completed by: Dan Slyuka Date: 3/24/2014

Reviewed By: [signature] Date: 3/16/2015

ENERGYSOLUTIONS

Survey Point	Type	Activity dpm/sample	Lab Coat #	Lab Sample ID	
	R	10.5	Lab Coat #602	L59237	002
3	R	63.5	Lab Coat #604	L59237	003
4	N/A	N/A	N/A	N/A	N/A
5	R	12.8	Lab Coat #608	L59237	005
6	R	22.6	Lab Coat #616	L59237	006
7	R	11.6	Lab Coat #631	L59237	007
8	R	2.5	Lab Coat #630	L59237	008
9	R	9.9	Lab Coat #575	L59237	009
10	R	19.8	Lab Coat #576	L59237	010
11	R	8.0	Lab Coat "JA"	L59237	011
12	R	27.0	Lab Coat "MF"	L59237	012
13	R	28.2	Lab Coat #470	L59237	013
14	R	26.5	Lab Coat #473	L59237	014
15	R	6.4	Lab Coat #474	L59237	015
16	R	13.2	Lab Coat #632	L59237	016
17	R	10.7	Lab Coat #612	L59237	017
18	R	8.2	Lab Coat #606	L59237	018
19	R	12.2	Lab Coat #861	L59237	019
20	R	5.8	Lab Coat #607	L59237	020
21	R	17.2	Lab Coat #573	L59237	021
22	R	11.5	Lab Coat #619	L59237	022
23	R	25.2	Lab Coat #634	L59237	023
24	R	4.6	Lab Coat #611	L59237	024
25	R	16.0	Lab Coat #614	L59237	025
26	R	11.6	Lab Coat "EV"	L59237	026
27	R	9.8	Lab Coat #609	L59237	027

Completed by: Dan Slyngka Date: 3/24/2014

Reviewed By: [signature] Date: 3/16/2015

The following coats require decontamination action: None

Air Sampling 1st Quarter 2014

Air Sampling & DAC Fractional Values

		Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0 Liter		3/23/2014 8:00	3/23/2014 17:00
Air Sampler Flow Rate =	2.5 LPM			
Total Sampler Time (Background) =	540 Minutes			
Total Volume Air (Background) =	1350 Liters			

		Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0 Liter		3/24/2014 9:00	3/24/2014 16:00
Air Sampler Flow Rate =	2.5 LPM			
Total Sampler Time (Air Sample) =	420 Minutes			
Total Volume Air (Sample) =	1050 Liters			

Analytical Results by Liquid Scintillation Counter (Teledyne-Brown Reports #L59233-1 & L59233-2)

Sample# - L59233-1 (Background 03/23/2014) = 1.60E-04 $\mu Ci/Liter_{Impinger\text{-}01\text{-}H2O}$

$$\left[\frac{1.60E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = \frac{1.78E\text{-}04}{1350\ Liters_{AIR} \times 1000ml/Liter}\right] = 1.32E\text{-}10\ \mu Ci/ml_{BACKGROUND}$$

Sample# - L59233-2 (BZ Air Sample - 03/24/2014) = 2.32E-04 $\mu Ci/Liter_{Impinger\text{-}01\text{-}H2O}$

$$\left[\frac{2.32E\text{-}04\ \mu Ci/Liter_{H2O}}{0.9\ \varepsilon_{Impinger}} = \frac{2.58E\text{-}04}{1050\ Liters_{AIR} \times 1000ml/Liter}\right] = 2.46E\text{-}10\ \mu Ci/ml_{SAMPLE}$$

$$\left[2.46E\text{-}10\ \mu Ci/ml_{SAMPLE} - 1.32E\text{-}10\ \mu Ci/ml_{BACKGROUND} =\right] \quad \textit{1.14E-10}\ \mu Ci/ml_{SAMPLE\text{-}NET}$$

DAC Fraction [10CFR20, Appendix B]

2.00E-05 x 0.1 (10% DAC) = 2.00E-06 µC/ml

$$\frac{1.14E\text{-}10\ \mu C/ml}{2.00E\text{-}06\ \mu C/ml} = 5.691E\text{-}05 \text{ Fraction of 10\% } DAC_{1st\ Quarter}$$

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 1st QTR 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: H-3 Air Sample

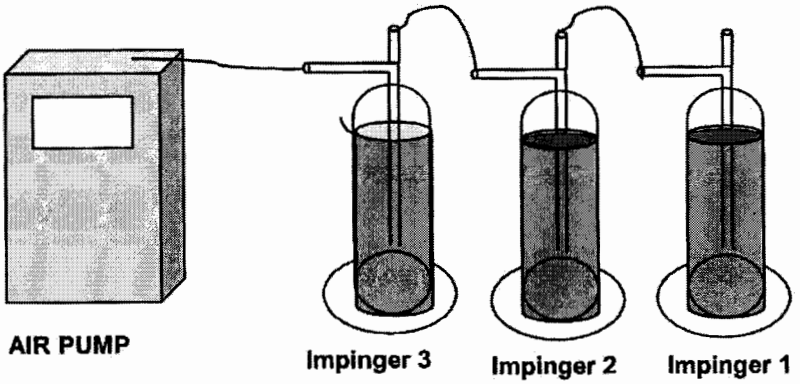
Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	µci/L	Location	Lab Sample ID	
1	R	2.46E-10	Breiting Air Sample	L59233-2	002
2	U	1.32E-10	Background Air Sample	L59233-1	001

Completed by: Dan Slywka Date: 3/24/2014

Reviewed By: [signature] Date: 3/17/2015


AIR PUMP
Impinger 3
Impinger 2
Impinger 1

ATTACHMENT 2

BREITLING 1st QUARTER 2014 LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

07/14/2014

LIMS #:	L59233
Project ID#:	EN010-3BIOCT-07
Received:	06/24/2014
Delivery Date:	07/24/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Mark K Shaw for Keith Jeter

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
BACKGROUND AIR SAMPLE	L59233-1	
1ST QTR AIR SAMPLE	L59233-2	

Report of Analysis

07/14/14 12:46

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59233

Energy Solutions

EN010-3BIOCT-07

Sample ID:	BACKGROUND AIR SAMPLE				Collect Start: 03/23/2014 08:00				Matrix: Dissolved Air					(WA)
Station:					Collect Stop: 03/23/2014 17:00				Volume:					
Description:					Receive Date: 06/24/2014				% Moisture:					
LIMS Number:	L59233-1													
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**	
H-3 (DIST)	2011	1.06E-04	1.15E-04	**1.79E-04**	uCi/L		10	ml		07/09/14	60	M	U	

Sample ID:	1ST QTR AIR SAMPLE				Collect Start: 03/24/2014 09:00				Matrix: Dissolved Air					(WA)
Station:					Collect Stop: 03/24/2014 16:00				Volume:					
Description:					Receive Date: 06/24/2014				% Moisture:					
LIMS Number:	L59233-2													
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**	
H-3 (DIST)	2011	**2.32E-04**	1.21E-04	1.77E-04	uCi/L		10	ml		07/09/14	60	M	+	

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum

Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L 59233

WH68D

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: SR Smith	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (203) 558-1213 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
14C-082	###-##-7415	04/9/2014	13:01:00	Urine Sample
	Background Air Sample	3/23/2014	0800-1700	Air Sample
	1st Quarter Air Sample	3/24/2014	0900-1600	Air Sample

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	03/24/2014 0800 - 1600	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	04/9/2014 0800 - 1600	Relinquished by: W. Yee	04/9/14 - 1200
Accepted by: D. Slywka	04/9/2014 1200	Relinquished by: D. Slywka	06/20/14 - 1630
Accepted by: FEDEX	06/20/2014 1630	Relinquished by	

Rec'd by: Jonathan Aminov 6/24/14

10:00

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab coat samples	27	LSC	60 dpm/cm²	30 days
Urine sample	1	LSC	60 dpm/cm²	30 days
Air samples	21	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/21/2014

Reviewed By: Bob McPeak Proj. Mgr. Date: 6/21/2014

Approved By: Bob McPeak Proj. Mgr. Date: 6/21/2014

June 21, 2014
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper), Urine (Liquid), Air Samples (Liquid)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

06/24/14 14:02

SR #: SR39558

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L59233

Initiated By: JSIMMONS
Init Date: 06/24/14 Receive Date: 06/24/14

Notification of Variance

Person Notified: Contacted By:

Notify Date:

Notify Method:

Notify Comment:

Client Response

Person Responding:

Response Date:

Response Method:

Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

07/17/2014

LIMS #:	L59235
Project ID#:	EN010-3BIOCT-07
Received:	06/24/2014
Delivery Date:	07/24/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
14C-082	L59235-1	

Report of Analysis

07/17/14 11:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59235

Energy Solutions

EN010-3BIOCT-07

Sample ID: 14C-082		Collect Start: 04/09/2014 13:01	Matrix: Urine	(U)
Station:		Collect Stop:	Volume:	
Description:		Receive Date: 06/24/2014	% Moisture:	
LIMS Number: L59235-1				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	**2.53E-03**	3.08E-04	2.65E-04	uCi/L		10	ml		07/14/14	28.88	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L59235

B11E

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: SR Smith	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (203) 558-1213 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
14C-082	###-##-7415	04/9/2014	13:01:00	Urine Sample
	Background Air Sample	3/23/2014	0800-1700	Air Sample
	1st Quarter Air Sample	3/24/2014	0900-1600	Air Sample

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	03/24/2014 0800 - 1600	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	04/9/2014 0800 - 1600	Relinquished by: W. Yee	04/9/14 - 1200
Accepted by: D. Slywka	04/9/2014 1200	Relinquished by: D. Slywka	06/20/14 - 1630
Accepted by: FEDEX	06/20/2014 1630	Relinquished by	

Recvd by: Jonathan Simmons
6/24/14 10:00

June 21, 2014
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper), Urine (Liquid), Air Samples (Liquid)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

06/24/14 14:32

SR #: SR39560

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L59235

Initiated By: JSIMMONS
Init Date: 06/24/14 Receive Date: 06/24/14

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/27/2014

LIMS #:	L59236
Project ID#:	EN010-3BIOCT-07
Received:	06/24/2014
Delivery Date:	07/24/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L59236-1	
002	L59236-2	
003	L59236-3	
004	L59236-4	
005	L59236-5	
006	L59236-6	
007	L59236-7	
008	L59236-8	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L59236-9	
010	L59236-10	
011	L59236-11	
012	L59236-12	
013	L59236-13	
014	L59236-14	
015	L59236-15	
016	L59236-16	
017	L59236-17	
018	L59236-18	
019	L59236-19	
020	L59236-20	
021	L59236-21	
022	L59236-22	
023	L59236-23	
024	L59236-24	
025	L59236-25	
026	L59236-26	
027	L59236-27	
028	L59236-28	
029	L59236-29	
030	L59236-30	
031	L59236-31	
032	L59236-32	
033	L59236-33	
034	L59236-34	
035	L59236-35	
036	L59236-36	
037	L59236-37	
038	L59236-38	
039	L59236-39	
040	L59236-40	
041	L59236-41	
042	L59236-42	
043	L59236-43	
044	L59236-44	
045	L59236-45	
046	L59236-46	
047	L59236-47	
048	L59236-48	
049	L59236-49	
050	L59236-50	
051	L59236-51	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L59236-52	
053	L59236-53	
054	L59236-54	
055	L59236-55	
056	L59236-56	
057	L59236-57	
058	L59236-58	
059	L59236-59	
060	L59236-60	
061	L59236-61	
062	L59236-62	
063	L59236-63	
064	L59236-64	
065	L59236-65	
066	L59236-66	
067	L59236-67	
068	L59236-68	
069	L59236-69	
070	L59236-70	
071	L59236-71	
072	L59236-72	
073	L59236-73	
074	L59236-74	
075	L59236-75	
076	L59236-76	
078	L59236-77	
100	L59236-78	

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: Entrance Floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-3.86E+00	5.27E+00	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 002 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: Floor - Shipping area | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.19E+00	7.01E+00	1.00E+01	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 003 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.01E+00	7.27E+00	9.98E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 004 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.72E+00	6.37E+00	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report o1 Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: Hallway @ restrooms | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.01E+00	7.42E+00	**9.98E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 006 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.77E+00	5.50E+00	**9.97E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 007 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: break room floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.51E+00	5.75E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 008 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.32E+00	5.05E+00	**1.01E+01**	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: training room work station | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	.00E+00	6.04E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 010 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: training room work station | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.14E+00	5.82E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 011 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: training room work station | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.71E+00	5.71E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 012 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: training room work station | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.78E+00	6.62E+00	**1.04E+01**	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 013 Collect Start: 03/24/2014 08:00 Matrix: Swipes (SW)
Station: Collect Stop: 03/24/2014 16:00 Volume:
Description: training room threshold floor Receive Date: 06/24/2014 % Moisture:
LIMS Number: L59236-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.71E+00	5.70E+00	9.94E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 014 Collect Start: 03/24/2014 08:00 Matrix: Swipes (SW)
Station: Collect Stop: 03/24/2014 16:00 Volume:
Description: hallway near entrance door-s Receive Date: 06/24/2014 % Moisture:
LIMS Number: L59236-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.28E+00	5.58E+00	9.92E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 015 Collect Start: 03/24/2014 08:00 Matrix: Swipes (SW)
Station: Collect Stop: 03/24/2014 16:00 Volume:
Description: hallway os watchmaker room Receive Date: 06/24/2014 % Moisture:
LIMS Number: L59236-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.61E+01	1.09E+01	9.99E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 016 Collect Start: 03/24/2014 08:00 Matrix: Swipes (SW)
Station: Collect Stop: 03/24/2014 16:00 Volume:
Description: hallway near entrance door-n Receive Date: 06/24/2014 % Moisture:
LIMS Number: L59236-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.61E+01	1.09E+01	9.95E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: floor os women's bathroom | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.70E+00	7.65E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 018 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.71E-01	5.93E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 019 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: office A hallway floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.72E-01	6.16E+00	**9.97E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 020 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: office C hallway floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.66E+01**	8.62E+00	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: office F hallway floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.66E+01	8.64E+00	9.98E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 022 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.85E+00	7.22E+00	9.95E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 023 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.37E+00	6.47E+00	9.94E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 024 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.68E+01	8.66E+00	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 025 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.97E+01**	1.22E+01	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 026 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: sales open area floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.34E+00	6.99E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 027 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.14E+00	5.63E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 028 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: polishing room floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.44E+01**	1.44E+01	9.98E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

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Sample ID: 029 (SW)
Station:
Description: cleaning room - sink counter
LIMS Number: L59236-29
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**9.67E+01**	1.61E+01	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 030 (SW)
Station:
Description: QA area floor
LIMS Number: L59236-30
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.95E+01**	1.31E+01	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 031 (SW)
Station:
Description: change room floor
LIMS Number: L59236-31
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.58E+00	6.88E+00	**9.99E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 032 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L59236-32
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.92E+00	7.24E+00	**9.97E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 033					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-33															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	5.14E+00	6.95E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U		
Sample ID: 034					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-34															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**9.06E+01**	1.56E+01	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+		
Sample ID: 035					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-35															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**8.45E+01**	1.52E+01	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+		
Sample ID: 036					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-36															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**5.38E+01**	1.26E+01	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	+		

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 037 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L59236-37
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.14E+00	5.83E+00	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 038 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L59236-38
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.66E+01**	8.63E+00	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 039 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L59236-39
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.28E+00	6.27E+00	**9.94E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 040 (SW)
Station:
Description: watchmaker workstation
LIMS Number: L59236-40
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.08E+00	5.83E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

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Sample ID: 041					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-41															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**3.02E+01**	1.04E+01	1.01E+01	DPM/TOTAL		100	%		06/26/14	5	M	+		
Sample ID: 042					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-42															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	8.56E+00	7.48E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U		
Sample ID: 043					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-43															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**1.60E+01**	8.54E+00	9.95E+00	DPM/TOTAL		100	%		06/26/14	5	M	+		
Sample ID: 044					Collect Start: 03/24/2014 08:00				Matrix: Swipes						(SW)
Station:					Collect Stop: 03/24/2014 16:00				Volume:						
Description: watchmaker workstation					Receive Date: 06/24/2014				% Moisture:						
LIMS Number: L59236-44															
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	5.13E+00	6.94E+00	**9.94E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U		

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 045 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.28E+00	5.59E+00	9.95E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 046 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.85E+00	7.06E+00	9.96E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 047 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.72E-01	6.16E+00	9.98E+00	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 048 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.31E+01	8.17E+00	9.97E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

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Daniel Slywka

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Sample ID: 049 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.13E+01**	9.22E+00	9.95E+00	DPM/TOTAL		100	%		06/26/14	5	M	+

Sample ID: 050 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.72E+00	6.89E+00	**9.97E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 051 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.34E+00	6.29E+00	**9.95E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Sample ID: 052 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.86E+00	5.48E+00	**9.96E+00**	DPM/TOTAL		100	%		06/26/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 053 (SW)
Station:
Description: watchmaker room entrance floor - south
LIMS Number: L59236-53
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.16E+02**	1.75E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 054 (SW)
Station:
Description: watchmaker room floor - s
LIMS Number: L59236-54
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.80E+00	6.93E+00	**1.00E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 055 (SW)
Station:
Description: watchmaker room floor - s
LIMS Number: L59236-55
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.48E+01**	1.36E+01	9.99E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 056 (SW)
Station:
Description: watchmaker room floor - s
LIMS Number: L59236-56
Collect Start: 03/24/2014 08:00
Collect Stop: 03/24/2014 16:00
Receive Date: 06/24/2014
Matrix: Swipes
Volume:
% Moisture:

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.60E+01**	1.09E+01	9.96E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.75E+00	5.82E+00	**1.02E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 058 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.21E+01**	1.42E+01	9.97E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 059 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.02E+02**	1.68E+01	1.04E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 060 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.57E+02**	2.96E+01	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.12E+01	1.43E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 062 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.95E+02	2.22E+01	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 063 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.72E+00	5.73E+00	9.98E+00	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 064 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.86E+00	7.23E+00	9.97E+00	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.55E+02**	2.93E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 066 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.97E+02**	3.09E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 067 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.71E+01**	1.29E+01	9.99E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 068 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: qc workstation floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.26E+02**	1.82E+01	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: parts room floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.17E+01**	1.25E+01	1.00E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 070 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.93E+02**	2.22E+01	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 071 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.69E+03**	6.29E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 072 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.41E+01**	1.44E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.53E+02**	1.96E+01	9.94E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 074 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+02**	1.97E+01	9.97E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 075 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: parts closet | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.34E+01**	1.27E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 076 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: | Collect Stop: 03/24/2014 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59236-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.29E+00	5.61E+00	**9.99E+00**	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:39

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59236

Energy Solutions

EN010-3BIOCT-07

Daniel Slywka

Sample ID:	078	Collect Start:	03/24/2014 08:00	Matrix:	Swipes (SW)
Station:		Collect Stop:	03/24/2014 16:00	Volume:	
Description:	Stairway "A"	Receive Date:	06/24/2014	% Moisture:	
LIMS Number:	L59236-77				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.41E+01**	8.44E+00	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID:	100	Collect Start:	03/24/2014 08:00	Matrix:	Swipes (SW)
Station:		Collect Stop:	03/24/2014 16:00	Volume:	
Description:	BKGD Sample - OS Building	Receive Date:	06/24/2014	% Moisture:	
LIMS Number:	L59236-78				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.44E+00	6.68E+00	**9.99E+00**	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

L 59236

WH68C

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: D. Slywka	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (203) 558-1213 FAX: (203)-797-8994	Address: EnergySolutions, LLC 100 Mill Plain Road, Mailbox 106 Danbury, CT 06811

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	03/24/2014	0800-1600	1st QTR Survey
002	Floor – Shipping/Receiving Area	03/24/2014	0800-1600	1st QTR Survey
003	1st Floor Work Room Floor	03/24/2014	0800-1600	1st QTR Survey
004	1st Floor Vault Floor - North	03/24/2014	0800-1600	1st QTR Survey
005	Hallway @ Restrooms	03/24/2014	0800-1600	1st QTR Survey
006	Pantry Vending Machine Floor	03/24/2014	0800-1600	1st QTR Survey
007	Break Room Floor	03/24/2014	0800-1600	1st QTR Survey
008	Stairway B Landing Floor	03/24/2014	0800-1600	1st QTR Survey
009	Training Room Work Station	03/24/2014	0800-1600	1st QTR Survey
010	Training Room Work Station	03/24/2014	0800-1600	1st QTR Survey
011	Training Room Work Station	03/24/2014	0800-1600	1st QTR Survey
012	Training Room Work Station	03/24/2014	0800-1600	1st QTR Survey
013	Training Room Threshold Floor	03/24/2014	0800-1600	1st QTR Survey
014	Hallway Near Entrance Door-S	03/24/2014	0800-1600	1st QTR Survey
015	Hallway OS Watchmaker Room	03/24/2014	0800-1600	1st QTR Survey
016	Hallway Near Entrance Door-N	03/24/2014	0800-1600	1st QTR Survey
017	Floor OS Women's Bathroom	03/24/2014	0800-1600	1st QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	03/24/2014 0800 - 1600	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	03/24/2014 0800 - 1600	Relinquished by: W. Yee	03/24/14 - 1030
Accepted by: D. Slywka	03/24/2014 1030	Relinquished by: SR Smith	03/24/14 - 1630
Accepted by: FEDEX	06/20/2014 1630	Relinquished by	
Accepted by		Relinquished by	

Rec'd by: [signature] 6/25/14 JMS

6/24/14 10:00

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor In Men's Restroom	03/24/2014	0800-1600	1st QTR Survey
019	Office A Hallway Floor	03/24/2014	0800-1600	1st QTR Survey
020	Office C Hallway Floor	03/24/2014	0800-1600	1st QTR Survey
021	Office F Hallway Floor	03/24/2014	0800-1600	1st QTR Survey
022	Floor – OS Copy Room	03/24/2014	0800-1600	1st QTR Survey
023	2nd Floor Hallway @ Safe	03/24/2014	0800-1600	1st QTR Survey
024	2nd Floor Safe Vestibule	03/24/2014	0800-1600	1st QTR Survey
025	2nd Floor Safe Floor	03/24/2014	0800-1600	1st QTR Survey
026	Sales Open Area Floor	03/24/2014	0800-1600	1st QTR Survey
027	Stairway A Floor - 2nd Floor	03/24/2014	0800-1600	1st QTR Survey
028	Polishing Room Floor	03/24/2014	0800-1600	1st QTR Survey
029	Cleaning Room - Sink Counter	03/24/2014	0800-1600	1st QTR Survey
030	QA Area Floor	03/24/2014	0800-1600	1st QTR Survey
031	Change Room Floor	03/24/2014	0800-1600	1st QTR Survey
032	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
033	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
034	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
035	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
036	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
037	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
038	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
039	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
040	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
041	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
042	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
043	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
044	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
045	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
046	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
047	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
049	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
050	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
051	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
052	Watchmaker Workstation	03/24/2014	0800-1600	1st QTR Survey
053	Watchmaker Room Entrance Floor - South	03/24/2014	0800-1600	1st QTR Survey
054	Watchmaker Room Floor - S	03/24/2014	0800-1600	1st QTR Survey
055	Watchmaker Room Floor - S	03/24/2014	0800-1600	1st QTR Survey
056	Watchmaker Room Floor - S	03/24/2014	0800-1600	1st QTR Survey
057	Watchmaker Room Floor - E	03/24/2014	0800-1600	1st QTR Survey
058	Watchmaker Room Floor - E	03/24/2014	0800-1600	1st QTR Survey
059	Watchmaker Room Floor - E	03/24/2014	0800-1600	1st QTR Survey
060	Watchmaker Room Floor - N	03/24/2014	0800-1600	1st QTR Survey
061	Watchmaker Room Floor-Center	03/24/2014	0800-1600	1st QTR Survey
062	Watchmaker Room Floor-Center	03/24/2014	0800-1600	1st QTR Survey
063	Watchmaker Room Floor - N	03/24/2014	0800-1600	1st QTR Survey
064	Watchmaker Room Entrance Floor - North	03/24/2014	0800-1600	1st QTR Survey
065	Watchmaker Room Floor - W	03/24/2014	0800-1600	1st QTR Survey
066	Watchmaker Room Floor - W	03/24/2014	0800-1600	1st QTR Survey
067	RSO Workstation Floor	03/24/2014	0800-1600	1st QTR Survey
068	QC Workstation Floor	03/24/2014	0800-1600	1st QTR Survey
069	Parts Room Floor	03/24/2014	0800-1600	1st QTR Survey
070	Radioactive Waste Closet Floor	03/24/2014	0800-1600	1st QTR Survey
071	Radioactive Waste Barrel #1	03/24/2014	0800-1600	1st QTR Survey
072	Radioactive Waste Barrel #2	03/24/2014	0800-1600	1st QTR Survey
073	Radioactive Waste Sample	03/24/2014	0800-1600	1st QTR Survey
074	Radioactive Waste Sample	03/24/2014	0800-1600	1st QTR Survey
075	Parts Closet	03/24/2014	0800-1600	1st QTR Survey
076	Elevator 2nd Floor	03/24/2014	0800-1600	1st QTR Survey
100	**BKGD. Sample – OS Building**	03/24/2014	**0800-1600**	**1st QTR Survey**

* 78 was received but is NOT on COC.

June 21, 2014
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe samples. Please analyze the sample in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper), Urine (Liquid), Air Samples (Liquid)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
100 Mill Plain Road, Mailbox 106
Danbury, CT 06811

Office: 801-303-1092
Fax: 203-797-8994

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab coat samples	27	LSC	60 dpm/cm²	30 days
Urine sample	1	LSC	60 dpm/cm²	30 days
Air samples	21	LSC	60 dpm/cm²	30 days.

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/21/2014

Reviewed By: Bob McPeak Proj. Mgr. Date: 6/21/2014

Approved By: Bob McPeak Proj. Mgr. Date: 6/21/2014

06/26/14 16:25

SR #: SR39561

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L59236

Initiated By: JSIMMONS
Init Date: 06/25/14 Receive Date: 06/24/14

Notification of Variance

Person Notified: Daniel Slywka Contacted By: K. Thurman
Notify Date: 06/25/14
Notify Method: Email
Notify Comment: See variance.

Client Response

Person Responding: Daniel Slywka
Response Date: 06/26/14
Response Method: Email
Response Comment: Add sample #78 to the chain #078 - Stairway "A"

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition			Y	
4	Chain of custody received with samples			Y	
5	All samples listed on chain of custody received			N	
	078				This sample arrived but was not listed on the COC.
6	Sample container labels present and legible.			Y	
7	Information on container labels correspond with chain of custody			Y	
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
100 Mill Plain Road
Mailbox 106
Danbury, CT 06811

Report of Analysis/Certificate of Conformance

06/27/2014

LIMS #:	L59237
Project ID#:	EN010-3BIOCT-07
Received:	06/24/2014
Delivery Date:	07/24/2014
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L59237-1	LAB COAT ID #601
2	L59237-2	LAB COAT ID #602
3	L59237-3	LAB COAT ID #604
4	L59237-4	LAB COAT ID #605
5	L59237-5	LAB COAT ID #608
6	L59237-6	LAB COAT ID #616
7	L59237-7	LAB COAT ID #631
8	L59237-8	LAB COAT ID #630

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L59237-9	LAB COAT ID #575
10	L59237-10	LAB COAT ID #576
11	L59237-11	LAB COAT ID "JA"
12	L59237-12	LAB COAT ID "MF"
13	L59237-13	LAB COAT ID #470
14	L59237-14	LAB COAT ID #473
15	L59237-15	LAB COAT ID #474
16	L59237-16	LAB COAT ID #632
17	L59237-17	LAB COAT ID #612
18	L59237-18	LAB COAT ID #606
19	L59237-19	LAB COAT ID #861
20	L59237-20	LAB COAT ID #607
21	L59237-21	LAB COAT ID #573
22	L59237-22	LAB COAT ID #619
23	L59237-23	LAB COAT ID #634
24	L59237-24	LAB COAT ID #611
25	L59237-25	LAB COAT ID #614
26	L59237-26	LAB COAT ID "EV"
27	L59237-27	LAB COAT ID #609

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #601 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Comment: 1 Did not arrive

Sample ID: 2 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #602 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.05E+01	7.93E+00	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 3 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.35E+01	1.35E+01	9.98E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 4 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
SAMPLE													

Comment: 1 Did not arrive

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- + = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.28E+01**	8.18E+00	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 6 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.26E+01**	9.84E+00	1.06E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 7 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.16E+01	8.01E+00	**1.01E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 8 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.51E+00	6.56E+00	**1.01E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

EN010-3BIOCT-07

Daniel Slywka

Sample ID: 9 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.86E+00	7.75E+00	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 10 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.98E+01	9.14E+00	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 11 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.02E+00	7.42E+00	9.99E+00	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 12 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.70E+01	9.92E+00	9.98E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.82E+01**	1.01E+01	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 14 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.65E+01**	9.86E+00	9.98E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 15 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.39E+00	7.17E+00	**9.99E+00**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 16 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.32E+01**	8.17E+00	9.97E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.07E+01	7.85E+00	1.00E+01	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 18 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.18E+00	7.46E+00	1.00E+01	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 19 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.22E+01	8.08E+00	1.01E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 20 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.83E+00	7.19E+00	1.02E+01	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.72E+01**	8.73E+00	1.00E+01	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 22 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.15E+01	7.99E+00	**1.01E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 23 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.52E+01**	9.72E+00	9.99E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 24 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #611 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.59E+00	6.88E+00	**9.99E+00**	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

06/27/14 10:42

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L59237

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 25 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.60E+01**	8.58E+00	9.99E+00	DPM/TOTAL		100	%		06/27/14	5	M	+

Sample ID: 26 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "EV" | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.16E+01	8.03E+00	**1.01E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Sample ID: 27 | Collect Start: 03/24/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #609 | Collect Stop: 03/24/2014 16:00 | Volume:
Description: | Receive Date: 06/24/2014 | % Moisture:
LIMS Number: L59237-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.80E+00	7.70E+00	**1.00E+01**	DPM/TOTAL		100	%		06/27/14	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

L59237
WH68C

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 03/19/2012; 0800 - 1600				
* 1	Lab Coat ID #601	03/24/2014	0800 - 1600	1st QTR Survey
2	Lab Coat ID #602	03/24/2014	0800 - 1600	1st QTR Survey
3	Lab Coat ID #604	03/24/2014	0800 - 1600	1st QTR Survey
* 4	Lab Coat ID #605	03/24/2014	0800 - 1600	1st QTR Survey
5	Lab Coat ID #608	03/24/2014	0800 - 1600	1st QTR Survey
6	Lab Coat ID #616	03/24/2014	0800 - 1600	1st QTR Survey
7	Lab Coat ID #631	03/24/2014	0800 - 1600	1st QTR Survey
** 8	Lab Coat ID #630	03/24/2014	0800 - 1600	1st QTR Survey
9	Lab Coat ID #575	03/24/2014	0800 - 1600	1st QTR Survey
10	Lab Coat ID #576	03/24/2014	0800 - 1600	1st QTR Survey
11	Lab Coat ID "JA"	03/24/2014	0800 - 1600	1st QTR Survey
12	Lab Coat ID "MF"	03/24/2014	0800 - 1600	1st QTR Survey
13	Lab Coat ID #470	03/24/2014	0800 - 1600	1st QTR Survey
14	Lab Coat ID #473	03/24/2014	0800 - 1600	1st QTR Survey
15	Lab Coat ID #474	03/24/2014	0800 - 1600	1st QTR Survey
16	Lab Coat ID #632	03/24/2014	0800 - 1600	1st QTR Survey
17	Lab Coat ID #612	03/24/2014	0800 - 1600	1st QTR Survey
18	Lab Coat ID #606	03/24/2014	0800 - 1600	1st QTR Survey
19	Lab Coat ID #861	03/24/2014	0800 - 1600	1st QTR Survey
20	Lab Coat ID #607	03/24/2014	0800 - 1600	1st QTR Survey
21	Lab Coat ID #573	03/24/2014	0800 - 1600	1st QTR Survey
22	Lab Coat ID #619	03/24/2014	0800 - 1600	1st QTR Survey
23	Lab Coat ID #634	03/24/2014	0800 - 1600	1st QTR Survey
24	Lab Coat ID #611	03/24/2014	0800 - 1600	1st QTR Survey
25	Lab Coat ID #614	03/24/2014	0800 - 1600	1st QTR Survey
26	Lab Coat ID "EV"	03/24/2014	0800 - 1600	1st QTR Survey
27	Lab Coat ID #609	03/24/2014	0800 - 1600	1st QTR Survey

* DID NOT ARRIVE

** ARRIVED BROKEN

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	30 days
Lab coat samples	27	LSC	60 dpm/cm²	30 days
Urine sample	1	LSC	60 dpm/cm²	30 days
Air samples	21	LSC	60 dpm/cm²	30 days

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 6/21/2014

Reviewed By: Bob McPeak Proj. Mgr. Date: 6/21/2014

Approved By: Bob McPeak Proj. Mgr. Date: 6/21/2014

Recd by: Jonathan S 6/24/14 10:22

06/26/14 16:26

SR #: SR39562

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L59237

Initiated By: JSIMMONS
Init Date: 06/25/14 Receive Date: 06/24/14

Notification of Variance

Person Notified: Daniel Slywka Contacted By: K. Thurman
Notify Date: 06/25/14
Notify Method: Email
Notify Comment: See variance notes.

Client Response

Person Responding: Daniel Slywka
Response Date: 06/26/14
Response Method: Email
Response Comment: Analyze the samples we received and omit samples 1 & 4 which were not received.

	Criteria	Yes No NA	Comment
1	Shipping container custody seals present and intact.	NA	
2	Sample container custody seals present and intact.	NA	
3	Sample containers received in good condition	N	Many samples arrived with the lids off and sample #8 arrived broken. Sample had to be placed in a new vial.
4	Chain of custody received with samples	Y	
5	All samples listed on chain of custody received 1 and 4	N	These samples were listed on the COC but did not arrive.
6	Sample container labels present and legible.	Y	
7	Information on container labels correspond with chain of custody	Y	
8	Sample(s) properly preserved and in appropriate container(s)	NA	
9	Other (Describe)	NA	
For Hazardous Materials Only:			
10	Paperwork shows TBE and shippers name, address and phone number	NA	
11	Paperwork shows sample quantity information	NA	

BREITLING SECOND QUARTER 2014 SURVEYS
EXECUTIVE SUMMARY

The Breitling second quarter 2014 surveys were performed on June 18 and 20, 2014. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all of the analyzed swipe samples are below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 103 samples (seventy eight location swipes, one background location swipe, and twenty four lab coat filters) were sent to TBE for tritium counting on a Liquid Scintillation Counter (LSC). The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was observed in the 2nd Floor Safe Vestibule, with an activity of 264 $dpm/100cm^2$. No remedial action is required in unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 2,540 $dpm/100\ cm^2$ at a Watchmaker Workstation. No remedial action is required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

A damp swipe sample collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had removable activity of 60.9 dpm/100 cm^2 and the maximum removable activity on the outside of a waste drum was 596 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (24 filter samples) are shown in Attachment 1. The highest activity found was 79.7 dpm/sample (Lab Coat #630). Therefore, the lab coats do not require decontamination prior to laundering.

Air Sample Results

No air sampling was performed this period.

Conclusions

Based on the Second Quarter 2014 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ATTACHMENT 1

BREITLING 2nd QUARTER 2014 SURVEY DATA SHEET

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 2nd QTR Survey 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H-3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

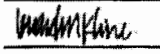
Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
001	U	-1.64	8.83	<=MDC	Entrance Vestibule	L62406	001
002	U	5.09	9.13	<=MDC	Floor - Shipping/Receiving Area	L62406	002
003	U	4.05	9.01	<=MDC	1st Floor Work Room Floor	L62406	003
004	U	4.45	8.81	<=MDC	1st Floor Vault Floor - North	L62406	004
005	U	8.22	9.32	<=MDC	Hallway - Outside Rest Rooms	L62406	005
006	U	-0.55	8.83	<=MDC	Pantry Vending Machine - Floor	L62406	006
007	U	5.58	8.79	<=MDC	Break Room Floor	L62406	007
008	U	2.37	9.21	<=MDC	Stairway B Floor	L62406	008
009	U	7.36	8.96	<=MDC	Training Room Work Station-Southwest	L62406	009
010	U	7.63	8.64	<=MDC	Training Room Work Station-Northwest	L62406	010
011	U	11.10	8.94	11.10	Training Room Work Station-Southeast	L62406	011
012	U	60.20	8.89	60.20	Training Room Work Station-Northeast	L62406	012
013	U	4.51	9.10	<=MDC	Training Room Threshold Floor	L62406	013
014	U	9.26	8.80	9.26	Hallway Near Entrance Door-2nd Floor South	L62406	014
015	U	3.35	9.01	<=MDC	Hallway Outside Watchmaker's Room	L62406	015
016	U	19.40	8.94	19.40	Hallway Near Entrance Door-2nd Floor North	L62406	016
017	U	-1.63	8.75	<=MDC	Floor Outside Women's Restroom	L62406	017
018	U	9.98	9.15	9.98	Floor In Men's Rest Room	L62406	018
019	U	3.86	8.35	<=MDC	Office A Hallway Floor	L62406	019
020	U	5.97	8.27	<=MDC	Office C Hallway Floor	L62406	020
021	U	5.87	8.13	<=MDC	Office F Hallway Floor	L62406	021
022	U	3.09	8.07	<=MDC	2nd Floor - Outside Copy Room	L62406	022
023	U	-1.71	8.15	<=MDC	2nd Floor Hallway Floor @ Safe	L62406	023
024	U	264.00	9.17	264.00	2nd Floor Safe Vestibule	L62406	024
025	U	19.70	8.27	19.70	2nd Floor Safe Floor	L62406	025
026	U	-1.86	8.24	<=MDC	Sales Open Area Floor	L62406	026
027	U	2.08	8.35	<=MDC	Stairway A 2nd Floor	L62406	027
028	R	24.40	8.35	24.40	Polishing Room Workstation	L62406	028
029	R	62.20	8.38	62.20	Cleaning Room - Sink Counter	L62406	029
030	R	5.01	8.51	<=MDC	QA Area Floor	L62406	030
031	R	20.00	8.22	20.00	Change Room Floor	L62406	031
032	R	22.80	8.23	22.80	Watchmaker Workstation	L62406	032
033	R	8.71	8.26	8.71	Watchmaker Workstation	L62406	033
034	R	42.70	8.28	42.70	Watchmaker Workstation	L62406	034
035	R	2.50	8.18	<=MDC	Watchmaker Workstation	L62406	035
036	R	27.10	8.22	27.10	Watchmaker Workstation	L62406	036
037	R	1.00	8.16	<=MDC	Watchmaker Workstation	L62406	037

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
038	R	16.20	8.21	16.20	Watchmaker Workstation	L62406	038
039	R	1.98	8.27	<=MDC	Watchmaker Workstation	L62406	039
040	R	4.86	8.34	<=MDC	Watchmaker Workstation	L62406	040
041	R	5.28	8.26	<=MDC	Watchmaker Workstation	L62406	041
042	R	4.66	8.15	<=MDC	Watchmaker Workstation	L62406	042
043	R	7.73	8.24	<=MDC	Watchmaker Workstation	L62406	043
044	R	25.50	8.22	25.50	Watchmaker Workstation	L62406	044
045	R	9.04	8.19	9.04	Watchmaker Workstation	L62406	045
046	R	2.54	8.29	<=MDC	Watchmaker Workstation	L62406	046
047	R	2540.00	25.80	2540.00	Watchmaker Workstation	L62406	047
048	R	9.45	8.30	9.45	Watchmaker Workstation	L62406	048
049	R	3.11	8.34	<=MDC	Watchmaker Workstation	L62406	049
050	R	8.95	8.28	8.95	Watchmaker Workstation	L62406	050
051	R	9.41	8.47	9.41	Watchmaker Workstation	L62406	051
052	R	41.20	8.16	41.20	Watchmaker Workstation	L62406	052
053	R	4.17	9.22	<=MDC	Watchmaker Room Entrance Door-South	L62406	053
054	R	39.20	9.03	39.20	Watchmaker Room Floor - South	L62406	054
055	R	1.20	8.97	<=MDC	Watchmaker Room Floor - South	L62406	055
056	R	0.13	9.04	<=MDC	Watchmaker Room Floor - South	L62406	056
057	R	5.63	9.06	<=MDC	Watchmaker Room Floor - East	L62406	057
058	R	9.94	9.07	9.94	Watchmaker Room Floor - East	L62406	058
059	R	0.54	9.07	<=MDC	Watchmaker Room Floor - East	L62406	059
060	R	5.98	8.94	<=MDC	Watchmaker Room Floor - North	L62406	060
061	R	3.91	9.06	<=MDC	Watchmaker Room Floor - Center	L62406	061
062	R	3.20	8.95	<=MDC	Watchmaker Room Floor - Center	L62406	062
063	R	24.50	9.12	24.50	Watchmaker Room Floor - North	L62406	063
064	R	19.70	9.18	19.70	Watchmaker Room Entrance Door-North	L62406	064
065	R	3.27	9.16	<=MDC	Watchmaker Room Floor - West	L62406	065
066	R	54.10	8.89	54.10	Watchmaker Room Floor - West	L62406	066
067	R	7.51	9.01	<=MDC	RSO Workstation Floor	L62406	067
068	R	3.41	9.16	<=MDC	QC Workstation Floor	L62406	068
069	R	18.10	8.97	18.10	Parts Room Floor	L62406	069
070	R	60.90	9.14	60.90	RadWaste Closet Floor	L62406	070
071	R	596.00	15.00	596.00	RadWaste Barrel #01	L62406	071
072	R	271.00	10.20	271.00	RadWaste Barrel #02	L62406	072
073	R	31.50	8.50	31.50	RadWaste Material (Step-off pads, etc)	L62406	073
074	R	73.60	9.44	73.60	RadWaste Material (Step-off pads, etc)	L62406	074
075	U	411.00	12.30	411.00	Parts Closet	L62406	075
076	U	6.90	9.28	<=MDC	Elevator Vestibule 2nd Floor	L62406	076
078	U	4.89	9.04	<=MDC	Stairway "A" - Floor 1	L62406	077
100	U	**-2.12**	**8.91**	<=MDC	**Background Sample**	L62406	078

Completed by: **Dan Sywka** Date: 6/20/2014

Reviewed By:  Date: 4/10/2015

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm)	Lab Coat #	Lab Sample ID	
1	R	46.50	9.19	46.50	Lab Coat #604	L62407	-1
2	R	38.40	9.29	38.40	Lab Coat #605	L62407	-2
3	R	9.80	9.15	9.80	Lab Coat #608	L62407	-3
4	R	43.70	9.50	43.70	Lab Coat #616	L62407	-4
5	R	15.40	9.54	15.40	Lab Coat #631	L62407	-5
6	R	79.70	9.17	79.70	Lab Coat #630	L62407	-6
7	R	29.50	9.19	29.50	Lab Coat #575	L62407	-7
8	R	21.80	9.40	21.80	Lab Coat #576	L62407	-8
9	R	2.94	9.23	<=MDA	Lab Coat "JA"	L62407	-9
10	R	9.41	9.19	9.41	Lab Coat "MF"	L62407	-10
11	R	8.40	9.26	<=MDA	Lab Coat #470	L62407	-11
12	R	11.40	9.11	11.40	Lab Coat #473	L62407	-12
13	R	25.10	9.15	25.10	Lab Coat #474	L62407	-13
14	R	5.42	9.10	<=MDA	Lab Coat #632	L62407	-14
15	R	57.80	9.13	57.80	Lab Coat #612	L62407	-15
16	R	37.60	9.02	37.60	Lab Coat #606	L62407	-16
17	R	16.40	9.33	16.40	Lab Coat #607	L62407	-17
18	R	9.92	9.26	9.92	Lab Coat #573	L62407	-18
19	R	19.20	9.38	19.20	Lab Coat #619	L62407	-19
20	R	8.67	9.10	<=MDA	Lab Coat #634	L62407	-20
21	R	15.10	9.39	15.10	Lab Coat #614	L62407	-21
22	R	8.61	9.34	<=MDA	Lab Coat "EV"	L62407	-22
23	R	10.50	9.14	10.50	Lab Coat #609	L62407	-23
24	R	76.80	9.22	76.80	Lab Coat #861	L62407	-24

Completed by: Dan Sywka Date: 6/18/2014

Reviewed By: [signature] Date: 4/10/2015

The following coats require decontamination action: None

ATTACHMENT 2

BREITLING 2nd QUARTER 2014 LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/24/2015

LIMS #:	L62407
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L62407-1	LAB COAT ID #604
2	L62407-2	LAB COAT ID #605
3	L62407-3	LAB COAT ID #608
4	L62407-4	LAB COAT ID #616
5	L62407-5	LAB COAT ID #631
6	L62407-6	LAB COAT ID #630
7	L62407-7	LAB COAT ID #575
8	L62407-8	LAB COAT ID #576

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L62407-9	LAB COAT ID "JA"
10	L62407-10	LAB COAT ID "MF"
11	L62407-11	LAB COAT ID #470
12	L62407-12	LAB COAT ID #473
13	L62407-13	LAB COAT ID #474
14	L62407-14	LAB COAT ID #632
15	L62407-15	LAB COAT ID #612
16	L62407-16	LAB COAT ID #606
17	L62407-17	LAB COAT ID #607
18	L62407-18	LAB COAT ID #573
19	L62407-19	LAB COAT ID #619
20	L62407-20	LAB COAT ID #634
21	L62407-21	LAB COAT ID #614
22	L62407-22	LAB COAT ID "EV"
23	L62407-23	LAB COAT ID #609
24	L62407-24	LAB COAT ID #861

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.65E+01**	1.15E+01	9.19E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 2 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.84E+01**	1.08E+01	9.29E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 3 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.80E+00	7.22E+00	**9.15E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 4 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.37E+01**	1.15E+01	9.50E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.54E+01	8.28E+00	9.54E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 6 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.97E+01	1.43E+01	9.17E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 7 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.95E+01	9.78E+00	9.19E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 8 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.18E+01	9.02E+00	9.40E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.94E+00	6.15E+00	**9.23E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 10 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.41E+00	7.19E+00	**9.19E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 11 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.40E+00	7.08E+00	**9.26E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 12 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.14E+01**	7.43E+00	9.11E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.51E+01**	9.25E+00	9.15E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 14 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.42E+00	6.50E+00	**9.10E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 15 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.78E+01**	1.25E+01	9.13E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 16 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.76E+01**	1.05E+01	9.02E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.64E+02**	1.99E+01	9.33E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 18 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.92E+00	7.31E+00	**9.26E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 19 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.92E+01**	8.68E+00	**9.38E+00**	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 20 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.67E+00	7.02E+00	**9.10E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:31

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62407

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.51E+01**	8.14E+00	9.39E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 22 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "EV" | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.61E+00	7.16E+00	**9.34E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 23 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #609 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.05E+01	7.32E+00	**9.14E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 24 | Collect Start: 06/18/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 06/18/2014 16:00 | Volume:
Description: 2Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62407-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.68E+01**	1.41E+01	9.22E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe, Lab Coat filter samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe, lab coat samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R. Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	24	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

ENERGYSOLUTIONS

L624107

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 06/18/2014; 0800 - 1600				
1	Lab Coat ID #604	06/18/2014	0800 - 1600	2nd QTR Survey
2	Lab Coat ID #605	06/18/2014	0800 - 1600	2nd QTR Survey
3	Lab Coat ID #608	06/18/2014	0800 - 1600	2nd QTR Survey
4	Lab Coat ID #616	06/18/2014	0800 - 1600	2nd QTR Survey
5	Lab Coat ID #631	06/18/2014	0800 - 1600	2nd QTR Survey
6	Lab Coat ID #630	06/18/2014	0800 - 1600	2nd QTR Survey
7	Lab Coat ID #575	06/18/2014	0800 - 1600	2nd QTR Survey
8	Lab Coat ID #576	06/18/2014	0800 - 1600	2nd QTR Survey
9	Lab Coat ID "JA"	06/18/2014	0800 - 1600	2nd QTR Survey
10	Lab Coat ID "MF"	06/18/2014	0800 - 1600	2nd QTR Survey
11	Lab Coat ID #470	06/18/2014	0800 - 1600	2nd QTR Survey
12	Lab Coat ID #473	06/18/2014	0800 - 1600	2nd QTR Survey
13	Lab Coat ID #474	06/18/2014	0800 - 1600	2nd QTR Survey
14	Lab Coat ID #632	06/18/2014	0800 - 1600	2nd QTR Survey
15	Lab Coat ID #612	06/18/2014	0800 - 1600	2nd QTR Survey
16	Lab Coat ID #606	06/18/2014	0800 - 1600	2nd QTR Survey
24	Lab Coat ID #861	06/18/2014	0800 - 1600	2nd QTR Survey
17	Lab Coat ID #607	06/18/2014	0800 - 1600	2nd QTR Survey
18	Lab Coat ID #573	06/18/2014	0800 - 1600	2nd QTR Survey
19	Lab Coat ID #619	06/18/2014	0800 - 1600	2nd QTR Survey
20	Lab Coat ID #634	06/18/2014	0800 - 1600	2nd QTR Survey
21	Lab Coat ID #614	06/18/2014	0800 - 1600	2nd QTR Survey
22	Lab Coat ID "EV"	06/18/2014	0800 - 1600	2nd QTR Survey
23	Lab Coat ID #609	06/18/2014	0800 - 1600	2nd QTR Survey

03/16/15 12:28

SR #: SR42393

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62407

Initiated By: RCHARLES
Init Date: 03/16/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/24/2015

LIMS #:	L62406
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L62406-1	2Q14
002	L62406-2	2Q14
003	L62406-3	2Q14
004	L62406-4	2Q14
005	L62406-5	2Q14
006	L62406-6	2Q14
007	L62406-7	2Q14
008	L62406-8	2Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L62406-9	2Q14
010	L62406-10	2Q14
011	L62406-11	2Q14
012	L62406-12	2Q14
013	L62406-13	2Q14
014	L62406-14	2Q14
015	L62406-15	2Q14
016	L62406-16	2Q14
017	L62406-17	2Q14
018	L62406-18	2Q14
019	L62406-19	2Q14
020	L62406-20	2Q14
021	L62406-21	2Q14
022	L62406-22	2Q14
023	L62406-23	2Q14
024	L62406-24	2Q14
025	L62406-25	2Q14
026	L62406-26	2Q14
027	L62406-27	2Q14
028	L62406-28	2Q14
029	L62406-29	2Q14
030	L62406-30	2Q14
031	L62406-31	2Q14
032	L62406-32	2Q14
033	L62406-33	2Q14
034	L62406-34	2Q14
035	L62406-35	2Q14
036	L62406-36	2Q14
037	L62406-37	2Q14
038	L62406-38	2Q14
039	L62406-39	2Q14
040	L62406-40	2Q14
041	L62406-41	2Q14
042	L62406-42	2Q14
043	L62406-43	2Q14
044	L62406-44	2Q14
045	L62406-45	2Q14
046	L62406-46	2Q14
047	L62406-47	2Q14
048	L62406-48	2Q14
049	L62406-49	2Q14
050	L62406-50	2Q14
051	L62406-51	2Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L62406-52	2Q14
053	L62406-53	2Q14
054	L62406-54	2Q14
055	L62406-55	2Q14
056	L62406-56	2Q14
057	L62406-57	2Q14
058	L62406-58	2Q14
059	L62406-59	2Q14
060	L62406-60	2Q14
061	L62406-61	2Q14
062	L62406-62	2Q14
063	L62406-63	2Q14
064	L62406-64	2Q14
065	L62406-65	2Q14
066	L62406-66	2Q14
067	L62406-67	2Q14
068	L62406-68	2Q14
069	L62406-69	2Q14
070	L62406-70	2Q14
071	L62406-71	2Q14
072	L62406-72	2Q14
073	L62406-73	2Q14
074	L62406-74	2Q14
075	L62406-75	2Q14
076	L62406-76	2Q14
078	L62406-77	2Q14
100	L62406-78	2Q14

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: Entrance Floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.64E+00	5.01E+00	**8.83E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 002 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: Floor - Shipping/receiving area | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.09E+00	6.50E+00	**9.13E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 003 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.05E+00	6.24E+00	**9.01E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 004 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.45E+00	6.19E+00	**8.81E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: Hallway @ restrooms | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.22E+00	7.14E+00	**9.32E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 006 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.47E-01	5.25E+00	**8.83E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 007 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: break room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.58E+00	6.37E+00	**8.79E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 008 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.37E+00	6.06E+00	**9.21E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.36E+00	6.78E+00	**8.96E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 010 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.63E+00	6.62E+00	**8.64E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 011 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+01**	7.35E+00	8.94E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 012 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.02E+01**	1.27E+01	8.89E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID:	013				Collect Start:	06/20/2014 08:00			Matrix:	Swipes					(SW)
Station:	2Q14				Collect Stop:	06/20/2014 16:00			Volume:						
Description:	training room threshold floor				Receive Date:	03/13/2015			% Moisture:						
LIMS Number:	L62406-13														
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	4.51E+00	6.38E+00	**9.10E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U		
Sample ID:	014				Collect Start:	06/20/2014 08:00			Matrix:	Swipes					(SW)
Station:	2Q14				Collect Stop:	06/20/2014 16:00			Volume:						
Description:	hallway near entrance door-s				Receive Date:	03/13/2015			% Moisture:						
LIMS Number:	L62406-14														
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	9.26E+00	6.98E+00	**8.80E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U		
Sample ID:	015				Collect Start:	06/20/2014 08:00			Matrix:	Swipes					(SW)
Station:	2Q14				Collect Stop:	06/20/2014 16:00			Volume:						
Description:	hallway os watchmaker room				Receive Date:	03/13/2015			% Moisture:						
LIMS Number:	L62406-15														
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	3.35E+00	6.12E+00	**9.01E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U		
Sample ID:	016				Collect Start:	06/20/2014 08:00			Matrix:	Swipes					(SW)
Station:	2Q14				Collect Stop:	06/20/2014 16:00			Volume:						
Description:	hallway near entrance door-n				Receive Date:	03/13/2015			% Moisture:						
LIMS Number:	L62406-16														
Radionuclide	**SOP#**	**Activity Conc**	**Uncertainty 2 Sigma**	**MDC**	**Units**	**Run #**	**Aliquot Volume**	**Aliquot Units**	**Reference Date**	**Count Date**	**Count Time**	**Count Units**	**Flag Values**		
H-3	2010	**1.94E+01**	8.51E+00	8.94E+00	DPM/TOTAL		100	%		03/22/15	5	M	+		

Flag Values
- U = Compound/Analyte not detected (< MDC) or less than 3 sigma
- \+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
- U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
- High = Activity concentration exceeds customer reporting value
- Spec = MDC exceeds customer technical specification
- L = Low recovery
- H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum

Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: floor os women's bathroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.63E+00	4.97E+00	**8.75E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 018 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.98E+00	7.31E+00	**9.15E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 019 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: office A hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.86E+00	5.85E+00	**8.35E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 020 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: office C hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.97E+00	6.19E+00	**8.27E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but fixed activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: office F hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.87E+00	6.09E+00	**8.13E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 022 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.09E+00	5.53E+00	**8.07E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 023 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.71E+00	4.56E+00	**8.15E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 024 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.64E+02**	2.72E+01	9.17E+00	DPM/TOTAL		100	%		03/22/15	4.12	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 025 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.97E+01	8.28E+00	8.27E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 026 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: sales open area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.86E+00	4.58E+00	8.24E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 027 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.08E+00	5.51E+00	8.35E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 028 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: polishing room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.44E+01	8.95E+00	8.35E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.22E+01**	1.28E+01	8.38E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 030 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: QA area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.01E+00	6.17E+00	**8.51E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 031 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: change room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.00E+01**	8.29E+00	8.22E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 032 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.28E+01**	8.65E+00	8.23E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 033 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.71E+00	6.65E+00	**8.26E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 034 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.27E+01**	1.09E+01	8.28E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 035 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.50E+00	5.48E+00	**8.18E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 036 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.71E+01**	9.17E+00	8.22E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 037 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.00E+00	5.17E+00	**8.16E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 038 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.62E+01**	7.76E+00	8.21E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 039 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.98E+00	5.44E+00	**8.27E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 040 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.86E+00	6.03E+00	**8.34E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: **041** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.28E+00	6.06E+00	**8.26E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: **042** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.66E+00	5.88E+00	**8.15E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: **043** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.73E+00	6.48E+00	**8.24E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: **044** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.55E+01**	8.98E+00	8.22E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 045 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.04E+00	6.66E+00	**8.19E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 046 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.54E+00	5.56E+00	**8.29E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 047 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.54E+03**	2.37E+02	2.58E+01	DPM/TOTAL		100	%		03/22/15	.49	M	+

Sample ID: 048 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.45E+00	6.80E+00	**8.30E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

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Sample ID: 049 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.11E+00	5.70E+00	**8.34E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 050 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.95E+00	6.70E+00	**8.28E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 051 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.41E+00	6.90E+00	**8.47E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 052 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.12E+01**	1.07E+01	8.16E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 053 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.17E+00	6.36E+00	**9.22E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 054 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.92E+01**	1.07E+01	9.03E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 055 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.20E+00	5.68E+00	**8.97E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 056 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.34E-01	5.51E+00	**9.04E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.63E+00	6.51E+00	9.06E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 058 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.94E+00	7.20E+00	9.07E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 059 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.40E-01	5.61E+00	9.07E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 060 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.98E+00	6.49E+00	8.94E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.91E+00	6.22E+00	**9.06E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 062 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.20E+00	6.02E+00	**8.95E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 063 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.45E+01**	9.16E+00	9.12E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 064 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.97E+01**	8.61E+00	9.18E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes | (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.27E+00	6.16E+00	**9.16E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 066 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes | (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.41E+01**	1.20E+01	8.89E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 067 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes | (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.51E+00	6.78E+00	9.01E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 068 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes | (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: qc workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.41E+00	6.19E+00	**9.16E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: parts room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.81E+01**	8.27E+00	8.97E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 070 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.09E+01**	1.28E+01	9.14E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 071 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.96E+02**	6.02E+01	1.50E+01	DPM/TOTAL		100	%		03/22/15	1.77	M	+

Sample ID: 072 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.71E+02**	2.81E+01	1.02E+01	DPM/TOTAL		100	%		03/22/15	3.84	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Boided text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report 01 Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.15E+01**	9.51E+00	8.50E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 074 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.36E+01**	1.41E+01	9.44E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 075 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: parts closet | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.11E+02**	4.18E+01	1.23E+01	DPM/TOTAL		100	%		03/22/15	2.51	M	+

Sample ID: 076 | Collect Start: 06/20/2014 08:00 | Matrix: Swipes (SW)
Station: 2Q14 | Collect Stop: 06/20/2014 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62406-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.90E+00	6.85E+00	**9.28E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:29

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62406

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: **078** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: Stairway "A" Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.89E+00	6.37E+00	**9.04E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: **100** Collect Start: 06/20/2014 08:00 Matrix: Swipes (SW)
Station: 2Q14 Collect Stop: 06/20/2014 16:00 Volume:
Description: BKGD Sample - OS Building Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62406-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.12E+00	4.97E+00	**8.91E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyts not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe, Lab Coat filter samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe, lab coat samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R - Charles 3/18/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	24	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

ENERGYSOLUTIONS

L62406
WH713

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: D. Slywka	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (801) 303-1093	Address: EnergySolutions, LLC 984 Southford Rd, Suite 8 Middlebury, CT 06762

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	06/20/2014	0800-1600	2nd QTR Survey
002	Floor – Shipping/Receiving Area	06/20/2014	0800-1600	2nd QTR Survey
003	1st Floor Work Room Floor	06/20/2014	0800-1600	2nd QTR Survey
004	1st Floor Vault Floor - North	06/20/2014	0800-1600	2nd QTR Survey
005	Hallway @ Restrooms	06/20/2014	0800-1600	2nd QTR Survey
006	Pantry Vending Machine Floor	06/20/2014	0800-1600	2nd QTR Survey
007	Break Room Floor	06/20/2014	0800-1600	2nd QTR Survey
008	Stairway B Landing Floor	06/20/2014	0800-1600	2nd QTR Survey
009	Training Room Work Station	06/20/2014	0800-1600	2nd QTR Survey
010	Training Room Work Station	06/20/2014	0800-1600	2nd QTR Survey
011	Training Room Work Station	06/20/2014	0800-1600	2nd QTR Survey
012	Training Room Work Station	06/20/2014	0800-1600	2nd QTR Survey
013	Training Room Threshold Floor	06/20/2014	0800-1600	2nd QTR Survey
014	Hallway Near Entrance Door-S	06/20/2014	0800-1600	2nd QTR Survey
015	Hallway OS Watchmaker Room	06/20/2014	0800-1600	2nd QTR Survey
016	Hallway Near Entrance Door-N	06/20/2014	0800-1600	2nd QTR Survey
017	Floor OS Women's Bathroom	06/20/2014	0800-1600	2nd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	06/20/2014 0800 - 1600	Relinquished by: N/A	N/A
Collected by: W. Yee, Breitling, USA	06/18/2014 0800 - 1600	Relinquished by: W. Yee	06/20/14 - 1030
Accepted by: D. Slywka	06/20/2014 1030	Relinquished by: D. Slywka	03/11/15 - 1630
Accepted by: FEDEX	03/11/2015 1630	Relinquished by	
Accepted by		Relinquished by	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor in Men's Restroom	06/20/2014	0800-1600	2nd QTR Survey
019	Office A Hallway Floor	06/20/2014	0800-1600	2nd QTR Survey
020	Office C Hallway Floor	06/20/2014	0800-1600	2nd QTR Survey
021	Office F Hallway Floor	06/20/2014	0800-1600	2nd QTR Survey
022	Floor – OS Copy Room	06/20/2014	0800-1600	2nd QTR Survey
023	2nd Floor Hallway @ Safe	06/20/2014	0800-1600	2nd QTR Survey
024	2nd Floor Safe Vestibule	06/20/2014	0800-1600	2nd QTR Survey
025	2nd Floor Safe Floor	06/20/2014	0800-1600	2nd QTR Survey
026	Sales Open Area Floor	06/20/2014	0800-1600	2nd QTR Survey
027	Stairway A Floor - 2nd Floor	06/20/2014	0800-1600	2nd QTR Survey
028	Polishing Room Floor	06/20/2014	0800-1600	2nd QTR Survey
029	Cleaning Room - Sink Counter	06/20/2014	0800-1600	2nd QTR Survey
030	QA Area Floor	06/20/2014	0800-1600	2nd QTR Survey
031	Change Room Floor	06/20/2014	0800-1600	2nd QTR Survey
032	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
033	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
034	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
035	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
036	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
037	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
038	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
039	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
040	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
041	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
042	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
043	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
044	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
045	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
046	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
047	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
049	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
050	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
051	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
052	Watchmaker Workstation	06/20/2014	0800-1600	2nd QTR Survey
053	Watchmaker Room Entrance Floor - South	06/20/2014	0800-1600	2nd QTR Survey
054	Watchmaker Room Floor - S	06/20/2014	0800-1600	2nd QTR Survey
055	Watchmaker Room Floor - S	06/20/2014	0800-1600	2nd QTR Survey
056	Watchmaker Room Floor - S	06/20/2014	0800-1600	2nd QTR Survey
057	Watchmaker Room Floor - E	06/20/2014	0800-1600	2nd QTR Survey
058	Watchmaker Room Floor - E	06/20/2014	0800-1600	2nd QTR Survey
059	Watchmaker Room Floor - E	06/20/2014	0800-1600	2nd QTR Survey
060	Watchmaker Room Floor - N	06/20/2014	0800-1600	2nd QTR Survey
061	Watchmaker Room Floor-Center	06/20/2014	0800-1600	2nd QTR Survey
062	Watchmaker Room Floor-Center	06/20/2014	0800-1600	2nd QTR Survey
063	Watchmaker Room Floor - N	06/20/2014	0800-1600	2nd QTR Survey
064	Watchmaker Room Entrance Floor - North	06/20/2014	0800-1600	2nd QTR Survey
065	Watchmaker Room Floor - W	06/20/2014	0800-1600	2nd QTR Survey
066	Watchmaker Room Floor - W	06/20/2014	0800-1600	2nd QTR Survey
067	RSO Workstation Floor	06/20/2014	0800-1600	2nd QTR Survey
068	QC Workstation Floor	06/20/2014	0800-1600	2nd QTR Survey
069	Parts Room Floor	06/20/2014	0800-1600	2nd QTR Survey
070	Radioactive Waste Closet Floor	06/20/2014	0800-1600	2nd QTR Survey
071	Radioactive Waste Barrel #1	06/20/2014	0800-1600	2nd QTR Survey
072	Radioactive Waste Barrel #2	06/20/2014	0800-1600	2nd QTR Survey
073	Radioactive Waste Sample	06/20/2014	0800-1600	2nd QTR Survey
074	Radioactive Waste Sample	06/20/2014	0800-1600	2nd QTR Survey
075	Parts Closet	06/20/2014	0800-1600	2nd QTR Survey
076	Elevator 2nd Floor	06/20/2014	0800-1600	2nd QTR Survey
078	Stairway A	06/20/2014	0800-1600	2nd QTR Survey
100	**BKGD. Sample – OS Building**	06/20/2014	**0800-1600**	2nd QTR Survey

03/16/15 12:26

SR #: SR42392

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62406

Initiated By: RCHARLES
Init Date: 03/16/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:

Notify Date:

Notify Method:

Notify Comment:

Client Response

Person Responding:

Response Date:

Response Method:

Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

BREITLING THIRD QUARTER 2014 SURVEYS
EXECUTIVE SUMMARY

The Breitling third quarter 2014 surveys were performed on September 17 and 19, 2014. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all of the analyzed swipe samples are below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 103 samples (seventy eight location swipes, one background location swipe, and twenty four lab coat filters) were sent to TBE for tritium counting on a Liquid Scintillation Counter (LSC). The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was observed in the 2nd Floor Safe Vestibule, with an activity of 173 $dpm/100cm^2$. No remedial action is required in unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 731 $dpm/100\ cm^2$ on a Radwaste Sample. No remedial action is required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

A damp swipe sample collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had removable activity of 214 dpm/100 cm^2 and the maximum removable activity on the outside of a waste drum was 525 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (24 filter samples) are shown in Attachment 1. The highest activity found was 180 dpm/sample (Lab Coat "JA"). Therefore, the lab coats do not require decontamination prior to laundering.

Air Sample Results

Two air samples were collected and sent to TBE laboratory for tritium analysis. One sample was a background sample collected at an off-site location on 9/19/14 and the other sample was collected in the Restricted Area on 9/19/14. The samples were collected using bubbler impingers containing DI water in a parallel train. The Restricted Area air sample result indicated tritium activity of 3.16E-11 µCi/mL, which is not of concern.

Conclusions

Based on the Third Quarter 2014 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ATTACHMENT 1

BREITLING 3rd QUARTER 2014 SURVEY DATA SHEET

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 3rd QTR Survey 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
001	U	4.60	8.83	<=MDC	Entrance Vestibule	L62398	-1
002	U	7.30	9.13	<=MDC	Floor - Shipping/Receiving Area	L62398	-2
003	U	-2.20	9.01	<=MDC	1st Floor Work Room Floor	L62398	-3
004	U	7.20	8.81	<=MDC	1st Floor Vault Floor - North	L62398	-4
005	U	-3.08	9.32	<=MDC	Hallway - Outside Rest Rooms	L62398	-5
006	U	0.54	8.83	<=MDC	Pantry Vending Machine - Floor	L62398	-6
007	U	-0.58	8.79	<=MDC	Break Room Floor	L62398	-7
008	U	-0.41	9.21	<=MDC	Stairway B Floor	L62398	-8
009	U	-1.60	8.96	<=MDC	Training Room Work Station-Southwest	L62398	-9
010	U	-3.14	8.64	<=MDC	Training Room Work Station-Northwest	L62398	-10
011	U	-4.09	8.94	<=MDC	Training Room Work Station-Southeast	L62398	-11
012	U	-1.77	8.89	<=MDC	Training Room Work Station-Northeast	L62398	-12
013	U	-2.24	9.10	<=MDC	Training Room Threshold Floor	L62398	-13
014	U	2.33	8.80	<=MDC	Hallway Near Entrance Door-2nd Floor South	L62398	-14
015	U	-1.50	9.01	<=MDC	Hallway Outside Watchmaker's Room	L62398	-15
016	U	-1.14	8.94	<=MDC	Hallway Near Entrance Door-2nd Floor North	L62398	-16
017	U	2.35	8.75	<=MDC	Floor Outside Women's Restroom	L62398	-17
018	U	-2.84	9.15	<=MDC	Floor In Men's Rest Room	L62398	-18
019	U	-0.43	8.35	<=MDC	Office A Hallway Floor	L62398	-19
020	U	-1.10	8.27	<=MDC	Office C Hallway Floor	L62398	-20
021	U	-2.37	8.13	<=MDC	Office F Hallway Floor	L62398	-21
022	U	-0.43	8.07	<=MDC	2nd Floor - Outside Copy Room	L62398	-22
023	U	-2.22	8.15	<=MDC	2nd Floor Hallway Floor @ Safe	L62398	-23
024	U	173.00	9.17	173.00	2nd Floor Safe Vestibule	L62398	-24
025	U	15.30	8.27	15.30	2nd Floor Safe Floor	L62398	-25
026	U	5.91	8.24	<=MDC	Sales Open Area Floor	L62398	-26
027	U	-3.68	8.35	<=MDC	Stairway A 2nd Floor	L62398	-27
028	R	21.10	8.35	21.10	Polishing Room Workstation	L62398	-28
029	R	65.00	8.38	65.00	Cleaning Room - Sink Counter	L62398	-29
030	R	83.10	8.51	83.10	QA Area Floor	L62398	-30
031	R	10.30	8.22	10.30	Change Room Floor	L62398	-31
032	R	0.93	8.23	<=MDC	Watchmaker Workstation	L62398	-32
033	R	2.23	8.26	<=MDC	Watchmaker Workstation	L62398	-33
034	R	3.41	8.28	<=MDC	Watchmaker Workstation	L62398	-34
035	R	9.20	8.18	9.20	Watchmaker Workstation	L62398	-35
036	R	-1.61	8.22	<=MDC	Watchmaker Workstation	L62398	-36
037	R	-0.23	8.16	<=MDC	Watchmaker Workstation	L62398	-37

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
038	R	-2.99	8.21	<=MDC	Watchmaker Workstation	L62398	-38
039	R	1.6	8.27	<=MDC	Watchmaker Workstation	L62398	-39
040	R	116.0	8.34	116.00	Watchmaker Workstation	L62398	-40
041	R	10.4	8.26	10.40	Watchmaker Workstation	L62398	-41
042	R	32.9	8.15	32.90	Watchmaker Workstation	L62398	-42
043	R	1.6	8.24	<=MDC	Watchmaker Workstation	L62398	-43
044	R	-1.1	8.22	<=MDC	Watchmaker Workstation	L62398	-44
045	R	3.2	8.19	<=MDC	Watchmaker Workstation	L62398	-45
046	R	3.9	8.29	<=MDC	Watchmaker Workstation	L62398	-46
047	R	-2.8	25.80	<=MDC	Watchmaker Workstation	L62398	-47
048	R	1.1	8.30	<=MDC	Watchmaker Workstation	L62398	-48
049	R	-1.6	8.34	<=MDC	Watchmaker Workstation	L62398	-49
050	R	3.4	8.28	<=MDC	Watchmaker Workstation	L62398	-50
051	R	19.7	8.47	19.70	Watchmaker Workstation	L62398	-51
052	R	116.0	8.16	116.00	Watchmaker Workstation	L62398	-52
053	R	8.9	9.22	<=MDC	Watchmaker Room Entrance Door-South	L62398	-53
054	R	6.2	9.03	<=MDC	Watchmaker Room Floor - South	L62398	-54
055	R	2.2	8.97	<=MDC	Watchmaker Room Floor - South	L62398	-55
056	R	6.6	9.04	<=MDC	Watchmaker Room Floor - South	L62398	-56
057	R	2.8	9.06	<=MDC	Watchmaker Room Floor - East	L62398	-57
058	R	9.0	9.07	<=MDC	Watchmaker Room Floor - East	L62398	-58
059	R	10.1	9.07	10.10	Watchmaker Room Floor - East	L62398	-59
060	R	3.8	8.94	<=MDC	Watchmaker Room Floor - North	L62398	-60
061	R	6.6	9.06	<=MDC	Watchmaker Room Floor - Center	L62398	-61
062	R	12.0	8.95	12.00	Watchmaker Room Floor - Center	L62398	-62
063	R	12.6	9.12	12.60	Watchmaker Room Floor - North	L62398	-63
064	R	48.6	9.18	48.60	Watchmaker Room Entrance Door-North	L62398	-64
065	R	12.4	9.16	12.40	Watchmaker Room Floor - West	L62398	-65
066	R	9.5	8.89	9.54	Watchmaker Room Floor - West	L62398	-66
067	R	6.0	9.01	<=MDC	RSO Workstation Floor	L62398	-67
068	R	11.8	9.16	11.80	QC Workstation Floor	L62398	-68
069	R	20.6	8.97	20.60	Parts Room Floor	L62398	-69
070	R	214.0	9.14	214.00	RadWaste Closet Floor	L62398	-70
071	R	145.0	15.00	145.00	RadWaste Barrel #01	L62398	-71
072	R	525.0	10.20	525.00	RadWaste Barrel #02	L62398	-72
073	R	731.0	8.50	731.00	RadWaste Material (Step-off pads, etc)	L62398	-73
074	R	3.2	9.44	<=MDC	RadWaste Material (Step-off pads, etc)	L62398	-74
075	U	1.7	12.30	<=MDC	Parts Closet	L62398	-75
076	U	6.2	9.28	<=MDC	Elevator Vestibule 2nd Floor	L62398	-76
078	U	-2.2	9.04	<=MDC	Stairway "A" - Floor 1	L62398	-77
100	U	**-1.7**	**8.91**	<=MDC	**Background Sample**	L62406	-78

Completed by: Dan Sywka Date: 9/19/2014

Reviewed By: [signature] Date: 4/10/2015

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm)	Lab Coat #	Lab Sample ID	
1	R	5.32	8.59	<=MDA	Lab Coat #604	L62391	-1
2	R	6.13	9.00	<=MDA	Lab Coat #605	L62391	-2
3	R	8.53	8.61	<=MDA	Lab Coat #608	L62391	-3
4	R	2.82	7.99	<=MDA	Lab Coat #616	L62391	-4
5	R	11.80	8.69	11.80	Lab Coat #631	L62391	-5
6	R	7.62	8.73	<=MDA	Lab Coat #630	L62391	-6
7	R	7.31	8.81	<=MDA	Lab Coat #575	L62391	-7
8	R	8.58	8.65	<=MDA	Lab Coat #576	L62391	-8
9	R	180.00	8.77	180.00	Lab Coat "JA"	L62391	-9
10	R	11.20	9.01	11.20	Lab Coat "MF"	L62391	-10
11	R	10.50	8.85	10.50	Lab Coat #470	L62391	-11
12	R	8.42	8.91	<=MDA	Lab Coat #473	L62391	-12
13	R	27.10	9.07	27.10	Lab Coat #474	L62391	-13
14	R	9.36	8.78	9.36	Lab Coat #632	L62391	-14
15	R	5.21	8.71	<=MDA	Lab Coat #612	L62391	-15
16	R	2.19	8.85	<=MDA	Lab Coat #606	L62391	-16
17	R	8.17	8.80	<=MDA	Lab Coat #861	L62391	-17
18	R	10.40	8.83	10.40	Lab Coat #607	L62391	-18
19	R	11.20	8.77	11.20	Lab Coat #573	L62391	-19
20	R	10.10	8.59	10.10	Lab Coat #619	L62391	-20
21	R	7.59	8.76	<=MDA	Lab Coat #634	L62391	-21
22	R	12.30	8.66	12.30	Lab Coat #614	L62391	-22
23	R	9.85	8.52	9.85	Lab Coat "EV"	L62391	-23
24	R	6.09	8.82	<=MDA	Lab Coat #609	L62391	-24

Completed by: Dan Sywka Date: 9/17/2014

Reviewed By: [signature] Date: 4/10/2015

The following coats require decontamination action: None

Air Sampling 3rd Quarter 2014

Air Sampling & DAC Fractional Values			Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0	Liter		9/19/2014 8:00	9/19/2014 15:00
Air Sampler Flow Rate =	2.5	LPM			
Total Sampler Time (Background) =	420	Minutes			
Total Volume Air (Background) =	1050	Liters			
			Date:	Start	Stop
Impingers (Qty. - 1) Total Volume -	1.0	Liter		9/19/2014 8:00	9/19/2014 14:30
Air Sampler Flow Rate =	2.5	LPM			
Total Sampler Time (Air Sample) =	390	Minutes			
Total Volume Air (Sample) =	975	Liters			

Analytical Results by Liquid Scintillation Counter (Teledyne-Brown Reports #L62410-1 & L62410-2)

Sample# - L62410-1 (Background 09/19/2014) = 2.99E-05 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

Sample# - L62410-1 MDC = 1.82E-04 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

$$\left[\frac{1.82E\text{-}04\ \mu Ci/Liter_{H2O} = 2.02E\text{-}04}{0.9\ \varepsilon_{Impinger} \quad 1050\ Liters_{AIR} \times 1000ml/Liter}\right] = 1.93E\text{-}10\ \mu Ci/ml_{BACKGROUND}^{*}$$

Sample# - L62410-2 (BZ Air Sample - 09/19/2014) = 2.97E-05 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

Sample# - L62410-1 MDC = 1.81E-04 $\mu Ci/Liter_{Impinger\text{-}01 - H2O}$

$$\left[\frac{1.81E\text{-}04\ \mu Ci/Liter_{H2O} = 2.01E\text{-}04}{0.9\ \varepsilon_{Impinger} \quad 975\ Liters_{AIR} \times 1000ml/Liter}\right] = 2.06E\text{-}10\ \mu Ci/ml_{SAMPLE}^{*}$$

$$2.06E\text{-}10\ \mu Ci/ml_{SAMPLE} - 1.93E\text{-}10\ \mu Ci/ml_{BACKGROUND} = 1.37E\text{-}11\ \mu Ci/ml_{SAMPLE\text{-}NET}$$

DAC Fraction [10CFR20, Appendix B]

0.1 DAC = 2.00E-05 x 0.1 = 2.00E-06 µC/ml

$$\frac{1.37E\text{-}11\ \mu C/ml}{2.00E\text{-}06\ \mu C/ml} = 6.84E\text{-}06\ \text{Fraction of 10\% DAC}_{3rd\ Quarter}$$

* Both Air Samples (background and restricted area sample) had reported values <MDC. MDC value was used to perform the calculations

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 3rd QTR 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: H-3 Air Sample

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	µcl/L	Location	Lab Sample ID	
1	R	2.06E-10	Breiting Air Sample*	L62410	-2
2	U	1.93E-10	Background Air Sample*	L62410	-1

* Both Air Samples (background and restricted area sample) had reported values <MDC. MDC value was used to perform the calculations

Completed by: Dan Sywka Date: 9/19/2014

Reviewed By: [signature] Date: 4/1/2015

ATTACHMENT 2

BREITLING 3rd QUARTER 2014 LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/24/2015

LIMS #:	L62398
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L62398-1	3Q14
002	L62398-2	3Q14
003	L62398-3	3Q14
004	L62398-4	3Q14
005	L62398-5	3Q14
006	L62398-6	3Q14
007	L62398-7	3Q14
008	L62398-8	3Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L62398-9	3Q14
010	L62398-10	3Q14
011	L62398-11	3Q14
012	L62398-12	3Q14
013	L62398-13	3Q14
014	L62398-14	3Q14
015	L62398-15	3Q14
016	L62398-16	3Q14
017	L62398-17	3Q14
018	L62398-18	3Q14
019	L62398-19	3Q14
020	L62398-20	3Q14
021	L62398-21	3Q14
022	L62398-22	3Q14
023	L62398-23	3Q14
024	L62398-24	3Q14
025	L62398-25	3Q14
026	L62398-26	3Q14
027	L62398-27	3Q14
028	L62398-28	3Q14
029	L62398-29	3Q14
030	L62398-30	3Q14
031	L62398-31	3Q14
032	L62398-32	3Q14
033	L62398-33	3Q14
034	L62398-34	3Q14
035	L62398-35	3Q14
036	L62398-36	3Q14
037	L62398-37	3Q14
038	L62398-38	3Q14
039	L62398-39	3Q14
040	L62398-40	3Q14
041	L62398-41	3Q14
042	L62398-42	3Q14
043	L62398-43	3Q14
044	L62398-44	3Q14
045	L62398-45	3Q14
046	L62398-46	3Q14
047	L62398-47	3Q14
048	L62398-48	3Q14
049	L62398-49	3Q14
050	L62398-50	3Q14
051	L62398-51	3Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L62398-52	3Q14
053	L62398-53	3Q14
054	L62398-54	3Q14
055	L62398-55	3Q14
056	L62398-56	3Q14
057	L62398-57	3Q14
058	L62398-58	3Q14
059	L62398-59	3Q14
060	L62398-60	3Q14
061	L62398-61	3Q14
062	L62398-62	3Q14
063	L62398-63	3Q14
064	L62398-64	3Q14
065	L62398-65	3Q14
066	L62398-66	3Q14
067	L62398-67	3Q14
068	L62398-68	3Q14
069	L62398-69	3Q14
070	L62398-70	3Q14
071	L62398-71	3Q14
072	L62398-72	3Q14
073	L62398-73	3Q14
074	L62398-74	3Q14
075	L62398-75	3Q14
076	L62398-76	3Q14
078	L62398-77	3Q14
100	L62398-78	3Q14

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

EN010-3BIOCT-07

Sample ID: **001** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: Entrance Floor Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.60E+00	6.34E+00	**9.01E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: **002** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: Floor - Shipping/receiving area Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.30E+00	6.83E+00	**9.06E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: **003** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: 1st floor work room floor Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.20E+00	4.92E+00	**8.88E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: **004** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: 1st floor vault floor - north Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.20E+00	6.74E+00	**8.94E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: Hallway @ restrooms | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-3.08E+00	4.57E+00	**8.64E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 006 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.43E-01	5.43E+00	**8.76E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 007 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: break room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.79E-01	5.55E+00	**9.34E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 008 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.14E-01	5.33E+00	**8.92E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.60E+00	4.88E+00	8.60E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 010 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-3.14E+00	5.07E+00	9.47E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 011 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.09E+00	4.82E+00	9.43E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 012 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.77E+00	5.40E+00	9.51E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 013 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: training room threshold floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.24E+00	5.37E+00	**9.62E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 014 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: hallway near entrance door-s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.33E+00	5.84E+00	**8.87E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 015 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.50E+00	5.04E+00	**8.82E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 016 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: hallway near entrance door-n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.14E+00	5.36E+00	**9.22E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: floor os women's bathroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.35E+00	6.30E+00	9.64E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 018 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.84E+00	5.20E+00	9.53E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 019 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: office A hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.28E-01	5.73E+00	9.58E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 020 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: office C hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.10E+00	5.39E+00	9.25E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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03/24/15 15:32

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 021 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: office F hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.37E+00	5.56E+00	9.96E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 022 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-4.26E-01	5.71E+00	9.55E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 023 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.22E+00	5.21E+00	9.34E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 024 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.73E+02**	2.02E+01	9.18E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 025 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.53E+01**	8.02E+00	9.17E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 026 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: sales open area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.91E+00	6.53E+00	**9.02E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 027 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-3.68E+00	5.49E+00	**1.03E+01**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 028 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: polishing room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.11E+01**	8.77E+00	9.17E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Flag Values
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U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 029 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.50E+01**	1.35E+01	9.58E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 030 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: QA area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**8.31E+01**	1.46E+01	9.18E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 031 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: change room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.03E+01	7.28E+00	**9.11E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 032 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.30E-01	5.76E+00	**9.19E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 033 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.23E+00	5.96E+00	**9.13E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 034 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.41E+00	6.06E+00	**8.94E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 035 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.20E+00	7.10E+00	**9.09E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 036 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.61E+00	5.16E+00	**9.04E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 037 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.34E+00	5.48E+00	**9.81E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 038 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.99E+00	4.92E+00	**9.12E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 039 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.62E+00	5.83E+00	**9.09E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 040 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.16E+02**	1.67E+01	9.06E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: **041** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.04E+01	7.35E+00	**9.21E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: **042** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.29E+01**	1.01E+01	9.06E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: **043** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.62E+00	5.81E+00	**9.06E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: **044** Collect Start: 09/19/2014 08:00 Matrix: Swipes (SW)
Station: 3Q14 Collect Stop: 09/19/2014 16:00 Volume:
Description: watchmaker workstation Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62398-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.09E+00	5.32E+00	**9.13E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 045 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.21E+00	6.04E+00	8.98E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 046 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.87E+00	6.35E+00	9.29E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 047 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.76E+00	5.30E+00	9.66E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 048 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.08E+00	5.70E+00	9.04E+00	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 049 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.58E+00	5.24E+00	9.15E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Sample ID: 050 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.38E+00	6.14E+00	9.09E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Sample ID: 051 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.97E+01	8.62E+00	9.19E+00	DPM/TOTAL		100	%		03/20/15	5	M	+

Sample ID: 052 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.16E+02	1.71E+01	9.41E+00	DPM/TOTAL		100	%		03/20/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 053 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.90E+00	7.21E+00	9.35E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Sample ID: 054 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.15E+00	6.75E+00	9.32E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Sample ID: 055 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.20E+00	5.90E+00	9.03E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Sample ID: 056 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.56E+00	6.74E+00	9.18E+00	DPM/TOTAL		100	%		03/20/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 057 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.82E+00	5.81E+00	**8.67E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 058 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.02E+00	6.80E+00	**8.57E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 059 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.01E+01	6.94E+00	**8.55E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 060 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.84E+00	6.11E+00	**8.85E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report on Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.63E+00	6.45E+00	**8.63E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 062 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.20E+01**	7.28E+00	8.61E+00	DPM/TOTAL		100	%		03/21/15	5	M	+

Sample ID: 063 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.26E+01**	7.57E+00	8.94E+00	DPM/TOTAL		100	%		03/21/15	5	M	+

Sample ID: 064 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.86E+01**	1.15E+01	8.72E+00	DPM/TOTAL		100	%		03/21/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.24E+01**	7.37E+00	**8.68E+00**	DPM/TOTAL		100	%		03/21/15	5	M	+

Sample ID: 066 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.54E+00	7.10E+00	**8.93E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 067 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.98E+00	6.44E+00	**8.78E+00**	DPM/TOTAL		100	%		03/21/15	5	M	U

Sample ID: 068 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: qc workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	7.54E+00	9.07E+00	DPM/TOTAL		100	%		03/21/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: parts room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.06E+01**	8.55E+00	8.77E+00	DPM/TOTAL		100	%		03/21/15	5	M	+

Sample ID: 070 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.14E+02**	2.24E+01	8.82E+00	DPM/TOTAL		100	%		03/21/15	4.9	M	+

Sample ID: 071 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.45E+02**	1.84E+01	8.67E+00	DPM/TOTAL		100	%		03/22/15	5	M	+

Sample ID: 072 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.25E+02**	5.31E+01	1.36E+01	DPM/TOTAL		100	%		03/22/15	2.02	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.31E+02	7.34E+01	1.58E+01	DPM/TOTAL		100	%		03/22/15	1.44	M	+

Sample ID: 074 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.16E+00	5.48E+00	8.02E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 075 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: parts closet | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.72E+00	5.95E+00	9.24E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 076 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.24E+00	6.64E+00	9.04E+00	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery
Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum
**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/24/15 15:32

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62398

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 078 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: Stairway "A" | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-2.22E+00	4.97E+00	**8.97E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Sample ID: 100 | Collect Start: 09/19/2014 08:00 | Matrix: Swipes (SW)
Station: 3Q14 | Collect Stop: 09/19/2014 16:00 | Volume:
Description: BKGD Sample - OS Building | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62398-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.72E+00	5.25E+00	**9.25E+00**	DPM/TOTAL		100	%		03/22/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

3rd

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe, Lab Coat filter, and Air samples**

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe, lab coat, and air samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper), Air Samples (Liquid)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R. Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	24	LSC	60 dpm/cm²	3 week per R. Charles
Air Samples	2	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

ENERGYSOLUTIONS

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: D. Slywka	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (801) 303-1093	Address: EnergySolutions, LLC 984 Southford Rd, Suite 8 Middlebury, CT 06762

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	09/19/2014	0800-1600	3rd QTR Survey
002	Floor – Shipping/Receiving Area	09/19/2014	0800-1600	3rd QTR Survey
003	1st Floor Work Room Floor	09/19/2014	0800-1600	3rd QTR Survey
004	1st Floor Vault Floor - North	09/19/2014	0800-1600	3rd QTR Survey
005	Hallway @ Restrooms	09/19/2014	0800-1600	3rd QTR Survey
006	Pantry Vending Machine Floor	09/19/2014	0800-1600	3rd QTR Survey
007	Break Room Floor	09/19/2014	0800-1600	3rd QTR Survey
008	Stairway B Landing Floor	09/19/2014	0800-1600	3rd QTR Survey
009	Training Room Work Station	09/19/2014	0800-1600	3rd QTR Survey
010	Training Room Work Station	09/19/2014	0800-1600	3rd QTR Survey
011	Training Room Work Station	09/19/2014	0800-1600	3rd QTR Survey
012	Training Room Work Station	09/19/2014	0800-1600	3rd QTR Survey
013	Training Room Threshold Floor	09/19/2014	0800-1600	3rd QTR Survey
014	Hallway Near Entrance Door-S	09/19/2014	0800-1600	3rd QTR Survey
015	Hallway OS Watchmaker Room	09/19/2014	0800-1600	3rd QTR Survey
016	Hallway Near Entrance Door-N	09/19/2014	0800-1600	3rd QTR Survey
017	Floor OS Women's Bathroom	09/19/2014	0800-1600	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	09/19/2014 0800 - 1600	Relinquished by: N/A	3/11/2015 1630
Collected by: W. Yee, Breitling, USA	09/17/2014 0800 - 1600	Relinquished by: W. Yee	09/17/14 - 1030
Accepted by: D. Slywka	09/19/2014 1030	Relinquished by: D. Slywka	03/11/15 - 1630
Accepted by: FEDEX	03/11/2015 1630	Relinquished by	
Accepted by		Relinquished by	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor In Men's Restroom	09/19/2014	0800-1600	3rd QTR Survey
019	Office A Hallway Floor	09/19/2014	0800-1600	3rd QTR Survey
020	Office C Hallway Floor	09/19/2014	0800-1600	3rd QTR Survey
021	Office F Hallway Floor	09/19/2014	0800-1600	3rd QTR Survey
022	Floor – OS Copy Room	09/19/2014	0800-1600	3rd QTR Survey
023	2nd Floor Hallway @ Safe	09/19/2014	0800-1600	3rd QTR Survey
024	2nd Floor Safe Vestibule	09/19/2014	0800-1600	3rd QTR Survey
025	2nd Floor Safe Floor	09/19/2014	0800-1600	3rd QTR Survey
026	Sales Open Area Floor	09/19/2014	0800-1600	3rd QTR Survey
027	Stairway A Floor - 2nd Floor	09/19/2014	0800-1600	3rd QTR Survey
028	Polishing Room Floor	09/19/2014	0800-1600	3rd QTR Survey
029	Cleaning Room - Sink Counter	09/19/2014	0800-1600	3rd QTR Survey
030	QA Area Floor	09/19/2014	0800-1600	3rd QTR Survey
031	Change Room Floor	09/19/2014	0800-1600	3rd QTR Survey
032	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
033	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
034	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
035	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
036	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
037	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
038	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
039	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
040	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
041	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
042	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
043	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
044	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
045	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
046	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
047	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
049	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
050	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
051	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
052	Watchmaker Workstation	09/19/2014	0800-1600	3rd QTR Survey
053	Watchmaker Room Entrance Floor - South	09/19/2014	0800-1600	3rd QTR Survey
054	Watchmaker Room Floor - S	09/19/2014	0800-1600	3rd QTR Survey
055	Watchmaker Room Floor - S	09/19/2014	0800-1600	3rd QTR Survey
056	Watchmaker Room Floor - S	09/19/2014	0800-1600	3rd QTR Survey
057	Watchmaker Room Floor - E	09/19/2014	0800-1600	3rd QTR Survey
058	Watchmaker Room Floor - E	09/19/2014	0800-1600	3rd QTR Survey
059	Watchmaker Room Floor - E	09/19/2014	0800-1600	3rd QTR Survey
060	Watchmaker Room Floor - N	09/19/2014	0800-1600	3rd QTR Survey
061	Watchmaker Room Floor-Center	09/19/2014	0800-1600	3rd QTR Survey
062	Watchmaker Room Floor-Center	09/19/2014	0800-1600	3rd QTR Survey
063	Watchmaker Room Floor - N	09/19/2014	0800-1600	3rd QTR Survey
064	Watchmaker Room Entrance Floor - North	09/19/2014	0800-1600	3rd QTR Survey
065	Watchmaker Room Floor - W	09/19/2014	0800-1600	3rd QTR Survey
066	Watchmaker Room Floor - W	09/19/2014	0800-1600	3rd QTR Survey
067	RSO Workstation Floor	09/19/2014	0800-1600	3rd QTR Survey
068	QC Workstation Floor	09/19/2014	0800-1600	3rd QTR Survey
069	Parts Room Floor	09/19/2014	0800-1600	3rd QTR Survey
070	Radioactive Waste Closet Floor	09/19/2014	0800-1600	3rd QTR Survey
071	Radioactive Waste Barrel #1	09/19/2014	0800-1600	3rd QTR Survey
072	Radioactive Waste Barrel #2	09/19/2014	0800-1600	3rd QTR Survey
073	Radioactive Waste Sample	09/19/2014	0800-1600	3rd QTR Survey
074	Radioactive Waste Sample	09/19/2014	0800-1600	3rd QTR Survey
075	Parts Closet	09/19/2014	0800-1600	3rd QTR Survey
076	Elevator 2nd Floor	09/19/2014	0800-1600	3rd QTR Survey
078	Stairway A	09/19/2014	0800-1600	3rd QTR Survey
100	**BKGD. Sample – OS Building**	09/19/2014	**0800-1600**	3rd QTR Survey

03/16/15 12:24

SR #: SR42384

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62398

Initiated By: RCHARLES
Init Date: 03/13/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/23/2015

LIMS #: L62410
Project ID#: EN010-3BIOCT-07
Received: 03/13/2015
Delivery Date: 04/03/2015
P.O.#: PO-002173
Release #:
SDG#:

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
BACKGROUND AIR SAMPLE	L62410-1	3RD QTR SURVEY
3RD QTR AIR SAMPLE	L62410-2	3RD QTR SURVEY

Report of Analysis

03/23/15 14:06

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62410

Energy Solutions

EN010-3BIOCT-07

Sample ID: **BACKGROUND AIR SAMPLE** Collect Start: 09/19/2014 08:00 Matrix: Dissolved Air (WA)
Station: 3RD QTR SURVEY Collect Stop: 09/19/2014 16:00 Volume:
Description: Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62410-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	2.99E-05	1.13E-04	**1.82E-04**	uCi/L		10	ml		03/20/15	50	M	U

Sample ID: **3RD QTR AIR SAMPLE** Collect Start: 09/19/2014 08:00 Matrix: Dissolved Air (WA)
Station: 3RD QTR SURVEY Collect Stop: 09/19/2014 16:00 Volume:
Description: Receive Date: 03/13/2015 % Moisture:
LIMS Number: L62410-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3 (DIST)	2011	2.97E-05	1.12E-04	**1.81E-04**	uCi/L		10	ml		03/20/15	50	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe, Lab Coat filter samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe, lab coat samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R - Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	24	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

ATTACHMENT 6.1
CHAIN OF CUSTODY RECORD

Collected by: D. Slywka, EnergySolutions for: Breitling USA, Inc.

Site Contact: Dan Slywka

Phone: (801) 303-1093

Address:
EnergySolutions, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
1	Background Air Sample	09/19/2014	0800-1500	3rd QTR Survey
2	3rd Quarter Air Sample	09/19/2014	0830-1430	3rd QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	9/19/2014 1500	Relinquished by: D. Slywka	3/11/2015 1000
Accepted by: FEDEX	3/11/2015 1000		

03/16/15 12:32

SR #: SR42396

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62410

Initiated By: RCHARLES
Init Date: 03/16/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/23/2015

LIMS #:	L62391
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L62391-1	LAB COAT ID #604
2	L62391-2	LAB COAT ID #605
3	L62391-3	LAB COAT ID #608
4	L62391-4	LAB COAT ID #616
5	L62391-5	LAB COAT ID #631
6	L62391-6	LAB COAT ID #630
7	L62391-7	LAB COAT ID #575
8	L62391-8	LAB COAT ID #576

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L62391-9	LAB COAT ID "JA"
10	L62391-10	LAB COAT ID "MF"
11	L62391-11	LAB COAT ID #470
12	L62391-12	LAB COAT ID #473
13	L62391-13	LAB COAT ID #474
14	L62391-14	LAB COAT ID #632
15	L62391-15	LAB COAT ID #612
16	L62391-16	LAB COAT ID #606
17	L62391-17	LAB COAT ID #861
18	L62391-18	LAB COAT ID #607
19	L62391-19	LAB COAT ID #573
20	L62391-20	LAB COAT ID #619
21	L62391-21	LAB COAT ID #634
22	L62391-22	LAB COAT ID #614
23	L62391-23	LAB COAT ID "EV"
24	L62391-24	LAB COAT ID #609

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.32E+00	6.21E+00	**8.59E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 2 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.13E+00	6.60E+00	**9.00E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 3 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.53E+00	6.75E+00	**8.61E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 4 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.82E+00	5.39E+00	**7.99E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	7.30E+00	8.69E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 6 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.62E+00	6.67E+00	**8.73E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 7 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.31E+00	6.68E+00	**8.81E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 8 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.58E+00	6.78E+00	**8.65E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 9 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.80E+02**	2.05E+01	8.77E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 10 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.12E+01**	7.41E+00	9.01E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 11 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.05E+01	7.20E+00	**8.85E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 12 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.42E+00	6.92E+00	**8.91E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.71E+01**	9.54E+00	9.07E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 14 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.36E+00	6.99E+00	**8.78E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 15 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #612 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.21E+00	6.26E+00	**8.71E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 16 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.19E+00	5.80E+00	**8.85E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.17E+00	6.81E+00	**8.80E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 18 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.04E+01	7.17E+00	**8.83E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 19 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.12E+01**	7.26E+00	8.77E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 20 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.01E+01	6.98E+00	**8.59E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/23/15 14:05

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62391

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 21 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.59E+00	6.69E+00	**8.76E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 22 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #614 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.23E+01**	7.36E+00	8.66E+00	DPM/TOTAL		100	%		03/19/15	5	M	+

Sample ID: 23 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "EV" | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.85E+00	6.90E+00	**8.52E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Sample ID: 24 | Collect Start: 09/17/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #609 | Collect Stop: 09/17/2014 16:00 | Volume:
Description: 3Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62391-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.09E+00	6.48E+00	**8.82E+00**	DPM/TOTAL		100	%		03/19/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

1162391

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 09/17/2014; 0800 - 1600				
1	Lab Coat ID #604	09/17/2014	0800 - 1600	3rd QTR Survey
2	Lab Coat ID #605	09/17/2014	0800 - 1600	3rd QTR Survey
3	Lab Coat ID #608	09/17/2014	0800 - 1600	3rd QTR Survey
4	Lab Coat ID #616	09/17/2014	0800 - 1600	3rd QTR Survey
5	Lab Coat ID #631	09/17/2014	0800 - 1600	3rd QTR Survey
6	Lab Coat ID #630	09/17/2014	0800 - 1600	3rd QTR Survey
7	Lab Coat ID #575	09/17/2014	0800 - 1600	3rd QTR Survey
8	Lab Coat ID #576	09/17/2014	0800 - 1600	3rd QTR Survey
9	Lab Coat ID "JA"	09/17/2014	0800 - 1600	3rd QTR Survey
10	Lab Coat ID "MF"	09/17/2014	0800 - 1600	3rd QTR Survey
11	Lab Coat ID #470	09/17/2014	0800 - 1600	3rd QTR Survey
12	Lab Coat ID #473	09/17/2014	0800 - 1600	3rd QTR Survey
13	Lab Coat ID #474	09/17/2014	0800 - 1600	3rd QTR Survey
14	Lab Coat ID #632	09/17/2014	0800 - 1600	3rd QTR Survey
15	Lab Coat ID #612	09/17/2014	0800 - 1600	3rd QTR Survey
16	Lab Coat ID #606	09/17/2014	0800 - 1600	3rd QTR Survey
17	Lab Coat ID #861	09/17/2014	0800 - 1600	3rd QTR Survey
18	Lab Coat ID #607	09/17/2014	0800 - 1600	3rd QTR Survey
19	Lab Coat ID #573	09/17/2014	0800 - 1600	3rd QTR Survey
20	Lab Coat ID #619	09/17/2014	0800 - 1600	3rd QTR Survey
21	Lab Coat ID #634	09/17/2014	0800 - 1600	3rd QTR Survey
22	Lab Coat ID #614	09/17/2014	0800 - 1600	3rd QTR Survey
23	Lab Coat ID "EV"	09/17/2014	0800 - 1600	3rd QTR Survey
24	Lab Coat ID #609	09/17/2014	0800 - 1600	3rd QTR Survey

3rd

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: **Request for Analysis – Tritium in Filter Swipe, Lab Coat filter, and Air samples**

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe, lab coat, and air samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Paper), Air Samples (Liquid)
Report Level:	QA-I; 3.5E-04 µCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R. Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	24	LSC	60 dpm/cm²	3 week per R. Charles
Air Samples	2	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

03/16/15 12:22

SR #: SR42377

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62391

Initiated By: RCHARLES
Init Date: 03/13/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

BREITLING FOURTH QUARTER 2014 SURVEYS
EXECUTIVE SUMMARY

The Breitling fourth quarter 2014 surveys were performed on December 19, 2014. The Contamination Action Levels specified in the Breitling U.S.A., Inc. Radiation Protection Manual are provided in Table 1 below.

Table 1 - Breitling Contamination Action Levels

Location	Tritium Activity ($dpm/100cm^2$)	Required Remediation
Unrestricted Areas – areas outside the RMA including, but not limited to, access paths, bathrooms and ventilation systems.	1,000 removable	Decontaminate area. Resurvey to ensure activity levels are reduced. Perform dose assessment.
Restricted Areas – areas within the RMA including, but not limited to radiological waste closet, tables, tools, floors, walls, ceilings, drawers, watches and clothing.	100,000 removable	Decontaminate item/area. Potentially exposed personnel must submit a bioassay sample. Resurvey to ensure activity levels are reduced.

Swipe Samples

Analytical results for tritium reported by Teledyne-Brown Engineering (TBE) laboratory indicate that all of the analyzed swipe samples are below the Action Levels shown in Table 1.

Damp swipe samples were collected at locations in the Unrestricted Area and in the Restricted Area. A total of 100 samples (seventy eight location swipes, one background location swipe, and twenty one lab coat filters) were sent to TBE for tritium counting on a Liquid Scintillation Counter (LSC). The results of these analyses are summarized on the Survey Data Sheet included as Attachment 1. The TBE laboratory analytical results are included as Attachment 2.

In the unrestricted area, the highest removable activity was observed in the 2nd Floor Safe Vestibule, with an activity of 176 $dpm/100cm^2$. No remedial action is required in unrestricted areas per Table 1.

In the Restricted Areas, the highest removable contamination result was 707 $dpm/100\ cm^2$ on a Radwaste Sample. No remedial action is required in the Restricted Area per Table 1. The RSO was provided with the results for the sampling of the highest workstation.

A damp swipe sample collected in the Radioactive Waste Closet in the Restricted Area indicated that the floor had removable activity of 57.9 dpm/100 cm^2 and the maximum removable activity on the outside of a waste drum was 251 dpm/100 cm^2.

Lab Coat Surveys

Prior to laundering the lab coats used by the Watch Repair workers, Breitling sampled the lab coats to determine the levels of removable contamination. Breitling used an air sampler to draw air from the lab coats, which was collected on a standard particulate air filter. The samples were counted on a LSC for tritium. The results (21 filter samples) are shown in Attachment 1. The highest activity found was 34.4 dpm/sample (Lab Coat #632). Therefore, the lab coats do not require decontamination prior to laundering.

Air Sample Results

No air sampling was performed this period

Conclusions

Based on the Fourth Quarter 2014 survey, Breitling has maintained compliance with the Radiation Protection Manual.

ATTACHMENT 1

BREITLING 4th QUARTER 2014 SURVEY DATA SHEET

Survey Data Sheet

PROJECT: Breitling U.S.A, Inc.
QUARTER: 3rd QTR Survey 2014
LOCATION: Wilton, Connecticut
SURVEY TYPE: Removable H3

Unrestricted Area Action Level: 1,000 dpm/100 cm^2
Restricted Area Action Level: 100,000 dpm/100 cm^2

Instrument: Analysis by TBE
Serial Number: Analysis by TBE

Type: U = Unrestricted, R = Restricted

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
001	U	11.60	8.12	11.60	Entrance Vestibule	L62408	-1
002	U	13.10	8.11	13.10	Floor - Shipping/Receiving Area	L62408	-2
003	U	7.38	8.15	<=MDC	1st Floor Work Room Floor	L62408	-3
004	U	11.80	8.29	11.80	1st Floor Vault Floor - North	L62408	-4
005	U	1.76	8.78	<=MDC	Hallway - Outside Rest Rooms	L62408	-5
006	U	10.60	8.18	10.60	Pantry Vending Machine - Floor	L62408	-6
007	U	16.80	8.12	16.80	Break Room Floor	L62408	-7
008	U	-1.01	7.83	<=MDC	Stairway B Floor	L62408	-8
009	U	15.20	8.09	15.20	Training Room Work Station-Southwest	L62408	-9
010	U	10.90	8.03	10.90	Training Room Work Station-Northwest	L62408	-10
011	U	11.70	8.25	11.70	Training Room Work Station-Southeast	L62408	-11
012	U	16.30	8.30	16.30	Training Room Work Station-Northeast	L62408	-12
013	U	13.60	8.42	13.60	Training Room Threshold Floor	L62408	-13
014	U	13.30	8.11	13.30	Hallway Near Entrance Door-2nd Floor South	L62408	-14
015	U	12.40	8.06	12.40	Hallway Outside Watchmaker's Room	L62408	-15
016	U	7.95	8.09	<=MDC	Hallway Near Entrance Door-2nd Floor North	L62408	-16
017	U	7.72	8.73	<=MDC	Floor Outside Women's Restroom	L62408	-17
018	U	12.40	8.95	12.40	Floor in Men's Rest Room	L62408	-18
019	U	14.60	9.01	14.60	Office A Hallway Floor	L62408	-19
020	U	4.48	9.00	<=MDC	Office C Hallway Floor	L62408	-20
021	U	6.79	8.88	<=MDC	Office F Hallway Floor	L62408	-21
022	U	2.11	9.12	<=MDC	2nd Floor - Outside Copy Room	L62408	-22
023	U	8.50	9.02	<=MDC	2nd Floor Hallway Floor @ Safe	L62408	-23
024	U	176.00	8.88	176.00	2nd Floor Safe Vestibule	L62408	-24
025	U	70.80	8.92	70.80	2nd Floor Safe Floor	L62408	-25
026	U	8.74	8.72	8.74	Sales Open Area Floor	L62408	-26
027	U	1.67	8.94	<=MDC	Stairway A 2nd Floor	L62408	-27
028	R	9.20	9.18	9.20	Polishing Room Workstation	L62408	-28
029	R	55.20	9.21	55.20	Cleaning Room - Sink Counter	L62408	-29
030	R	14.30	8.88	14.30	QA Area Floor	L62408	-30
031	R	15.40	8.90	15.40	Change Room Floor	L62408	-31
032	R	154.00	8.95	154.00	Watchmaker Workstation	L62408	-32
033	R	18.40	8.83	18.40	Watchmaker Workstation	L62408	-33
034	R	3.14	8.82	<=MDC	Watchmaker Workstation	L62408	-34
035	R	35.30	8.90	35.30	Watchmaker Workstation	L62408	-35
036	R	10.30	9.03	10.30	Watchmaker Workstation	L62408	-36
037	R	16.00	8.91	16.00	Watchmaker Workstation	L62408	-37

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm/100cm^2)	Location	Lab Sample ID	
038	R	8.03	9.09	<=MDC	Watchmaker Workstation	L62408	-38
039	R	25.10	8.94	25.10	Watchmaker Workstation	L62408	-39
040	R	242.00	9.56	242.00	Watchmaker Workstation	L62408	-40
041	R	24.90	8.95	24.90	Watchmaker Workstation	L62408	-41
042	R	24.80	8.93	24.80	Watchmaker Workstation	L62408	-42
043	R	34.00	8.96	34.00	Watchmaker Workstation	L62408	-43
044	R	10.90	9.23	10.90	Watchmaker Workstation	L62408	-44
045	R	16.60	8.76	16.60	Watchmaker Workstation	L62408	-45
046	R	37.70	8.97	37.70	Watchmaker Workstation	L62408	-46
047	R	122.00	8.93	122.00	Watchmaker Workstation	L62408	-47
048	R	56.20	8.85	56.20	Watchmaker Workstation	L62408	-48
049	R	293.00	10.60	293.00	Watchmaker Workstation	L62408	-49
050	R	23.20	8.84	23.20	Watchmaker Workstation	L62408	-50
051	R	682.00	14.20	682.00	Watchmaker Workstation	L62408	-51
052	R	14.80	8.84	14.80	Watchmaker Workstation	L62408	-52
053	R	21.50	8.87	21.50	Watchmaker Room Entrance Door-South	L62408	-53
054	R	19.70	8.79	19.70	Watchmaker Room Floor - South	L62408	-54
055	R	13.80	8.89	13.80	Watchmaker Room Floor - South	L62408	-55
056	R	16.20	9.05	16.20	Watchmaker Room Floor - South	L62408	-56
057	R	55.20	8.88	55.20	Watchmaker Room Floor - East	L62408	-57
058	R	14.20	8.89	14.20	Watchmaker Room Floor - East	L62408	-58
059	R	23.20	9.11	23.20	Watchmaker Room Floor - East	L62408	-59
060	R	106.00	9.01	106.00	Watchmaker Room Floor - North	L62408	-60
061	R	26.20	8.86	26.20	Watchmaker Room Floor - Center	L62408	-61
062	R	45.30	8.80	45.30	Watchmaker Room Floor - Center	L62408	-62
063	R	14.60	8.78	14.60	Watchmaker Room Floor - North	L62408	-63
064	R	19.60	8.89	19.60	Watchmaker Room Entrance Door-North	L62408	-64
065	R	17.80	8.88	17.80	Watchmaker Room Floor - West	L62408	-65
066	R	21.50	8.81	21.50	Watchmaker Room Floor - West	L62408	-66
067	R	12.50	8.84	12.50	RSO Workstation Floor	L62408	-67
068	R	15.40	8.71	15.40	QC Workstation Floor	L62408	-68
069	R	7.38	8.89	<=MDC	Parts Room Floor	L62408	-69
070	R	57.90	9.11	57.90	RadWaste Closet Floor	L62408	-70
071	R	127.00	9.02	127.00	RadWaste Barrel #01	L62408	-71
072	R	251.00	9.88	251.00	RadWaste Barrel #02	L62408	-72
073	R	707.00	28.60	707.00	RadWaste Material (Step-off pads, etc)	L62408	-73
074	R	157.00	8.67	157.00	RadWaste Material (Step-off pads, etc)	L62408	-74
075	U	37.90	8.77	37.90	Parts Closet	L62408	-75
076	U	1.52	8.83	<=MDC	Elevator Vestibule 2nd Floor	L62408	-76
078	U	2.06	8.58	<=MDC	Stairway "A" - Floor 1	L62408	-77
100	**U**	-5.91	**8.70**	<=MDC	**Background Sample**	L62406	-78

Completed by: Dan Slywka Date: 9/19/2014

Reviewed By: [signature] Date: 4/10/2015

Survey Point	Type	Reported Activity (dpm)	MDA (dpm)	Result (dpm)	Lab Coat #	Lab Sample ID	
1	R	5.20	8.52	<=MDA	Lab Coat #604	L62409	-1
2	R	15.70	8.49	15.70	Lab Coat #605	L62409	-2
3	R	31.00	8.36	31.00	Lab Coat #608	L62409	-3
4	R	20.80	8.39	20.80	Lab Coat #616	L62409	-4
5	R	24.30	8.93	24.30	Lab Coat #631	L62409	-5
6	R	20.70	7.81	20.70	Lab Coat #630	L62409	-6
7	R	26.40	7.75	26.40	Lab Coat #575	L62409	-7
8	R	15.50	8.34	15.50	Lab Coat #576	L62409	-8
9	R	11.10	8.51	11.10	Lab Coat "JA"	L62409	-9
10	R	14.50	8.35	14.50	Lab Coat "MF"	L62409	-10
11	R	15.40	8.63	15.40	Lab Coat #470	L62409	-11
12	R	19.70	8.43	19.70	Lab Coat #473	L62409	-12
13	R	7.84	8.53	<=MDA	Lab Coat #474	L62409	-13
14	R	34.40	8.44	34.40	Lab Coat #632	L62409	-14
15	R	11.30	8.34	11.30	Lab Coat #606	L62409	-15
16	R	18.40	8.52	18.40	Lab Coat #861	L62409	-16
17	R	17.20	8.22	17.20	Lab Coat #607	L62409	-17
18	R	17.30	8.79	17.30	Lab Coat #573	L62409	-18
19	R	21.50	8.47	21.50	Lab Coat #619	L62409	-19
20	R	28.30	8.47	28.30	Lab Coat #634	L62409	-20
21	R	14.30	8.55	14.30	Lab Coat "ED"	L62409	-21

Completed by: Dan Sywka Date: 9/17/2014

Reviewed By: [signature] Date: 4/10/2015

The following coats require decontamination action: None

ATTACHMENT 2

BREITLING 4th QUARTER 2014 LABORATORY RESULTS

Teledyne-Brown Engineering Laboratory Analysis Report

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/27/2015

LIMS #:	L62409
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
1	L62409-1	LAB COAT ID #604
2	L62409-2	LAB COAT ID #605
3	L62409-3	LAB COAT ID #608
4	L62409-4	LAB COAT ID #616
5	L62409-5	LAB COAT ID #631
6	L62409-6	LAB COAT ID #630
7	L62409-7	LAB COAT ID #575
8	L62409-8	LAB COAT ID #576

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
9	L62409-9	LAB COAT ID "JA"
10	L62409-10	LAB COAT ID "MF"
11	L62409-11	LAB COAT ID #470
12	L62409-12	LAB COAT ID #473
13	L62409-13	LAB COAT ID #474
14	L62409-14	LAB COAT ID #632
15	L62409-15	LAB COAT ID #606
16	L62409-16	LAB COAT ID #861
17	L62409-17	LAB COAT ID #607
18	L62409-18	LAB COAT ID #573
19	L62409-19	LAB COAT ID #619
20	L62409-20	LAB COAT ID #634
21	L62409-21	LAB COAT ID "ED"

Report of Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

EN010-3BIOCT-07

Sample ID: 1 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #604 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.20E+00	6.14E+00	**8.52E+00**	DPM/TOTAL		100	%		03/24/15	5	M	U

Sample ID: 2 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #605 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.57E+01**	7.71E+00	8.49E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 3 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #608 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.10E+01**	9.48E+00	8.36E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 4 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #616 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.08E+01**	8.31E+00	8.39E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 5 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #631 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.43E+01**	9.11E+00	8.93E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 6 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #630 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.07E+01**	7.89E+00	7.81E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 7 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #575 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.64E+01**	8.52E+00	7.75E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 8 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #576 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.55E+01**	7.57E+00	8.34E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

EN010-3BIOCT-07

Daniel Slywka

Sample ID: 9 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "JA" | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.11E+01**	7.07E+00	8.51E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 10 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID "MF" | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.45E+01**	7.45E+00	8.35E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 11 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #470 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+01**	7.76E+00	8.63E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 12 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #473 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.97E+01**	8.20E+00	8.43E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 13 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #474 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.84E+00	6.58E+00	**8.53E+00**	DPM/TOTAL		100	%		03/24/15	5	M	U

Sample ID: 14 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #632 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.44E+01**	9.89E+00	8.44E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 15 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #606 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.13E+01**	6.98E+00	8.34E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 16 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #861 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.84E+01**	8.08E+00	8.52E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report on Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 17 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #607 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.72E+01**	7.73E+00	8.22E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 18 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #573 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.73E+01**	8.12E+00	8.79E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 19 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #619 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.15E+01**	8.45E+00	8.47E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 20 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: LAB COAT ID #634 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 4Q14 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62409-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.83E+01**	9.24E+00	8.47E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/27/15 08:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62409

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID:	21	Collect Start:	12/19/2014 08:00	Matrix:	Swipes (SW)
Station:	LAB COAT ID "ED"	Collect Stop:	12/19/2014 16:00	Volume:	
Description:	4Q14	Receive Date:	03/13/2015	% Moisture:	
LIMS Number:	L62409-21				

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.43E+01	7.55E+00	8.55E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

ENERGYSOLUTIONS

LC2409

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
Lab Coat Samples				
Collected by: W. Yee BREITLING 12/19/2014; 0800 - 1600				
1	Lab Coat ID #604	12/19/2014	0800 - 1600	4th QTR Survey
2	Lab Coat ID #605	12/19/2014	0800 - 1600	4th QTR Survey
3	Lab Coat ID #608	12/19/2014	0800 - 1600	4th QTR Survey
4	Lab Coat ID #616	12/19/2014	0800 - 1600	4th QTR Survey
5	Lab Coat ID #631	12/19/2014	0800 - 1600	4th QTR Survey
6	Lab Coat ID #630	12/19/2014	0800 - 1600	4th QTR Survey
7	Lab Coat ID #575	12/19/2014	0800 - 1600	4th QTR Survey
8	Lab Coat ID #576	12/19/2014	0800 - 1600	4th QTR Survey
9	Lab Coat ID "JA"	12/19/2014	0800 - 1600	4th QTR Survey
10	Lab Coat ID "MF"	12/19/2014	0800 - 1600	4th QTR Survey
11	Lab Coat ID #470	12/19/2014	0800 - 1600	4th QTR Survey
12	Lab Coat ID #473	12/19/2014	0800 - 1600	4th QTR Survey
13	Lab Coat ID #474	12/19/2014	0800 - 1600	4th QTR Survey
14	Lab Coat ID #632	12/19/2014	0800 - 1600	4th QTR Survey
15	Lab Coat ID #606	12/19/2014	0800 - 1600	4th QTR Survey
16	Lab Coat ID #861	12/19/2014	0800 - 1600	4th QTR Survey
17	Lab Coat ID #607	12/19/2014	0800 - 1600	4th QTR Survey
18	Lab Coat ID #573	12/19/2014	0800 - 1600	4th QTR Survey
19	Lab Coat ID #619	12/19/2014	0800 - 1600	4th QTR Survey
20	Lab Coat ID #634	12/19/2014	0800 - 1600	4th QTR Survey
21				

4th

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe, Lab Coat filter Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe and lab coat filter samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Filter Paper)
Report Level:	QA-I; 3.5E-04 μCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	20	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

03/17/15 07:59

SR #: SR42395

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62409

Initiated By: RCHARLES
Init Date: 03/16/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: rcharles Contacted By: Dan Slywka
Notify Date: 03/17/15
Notify Method: phone
Notify Comment: extra sample

Client Response

Person Responding: Dan Slywka
Response Date: 02/17/15
Response Method: phone
Response Comment: sample is EB

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition	Y			
4	Chain of custody received with samples	Y			
5	All samples listed on chain of custody received	Y			
6	Sample container labels present and legible.	Y			
7	Information on container labels correspond with chain of custody	Y			
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)		N		
	sample 21				only 20 samples on COC, but 21 samples received
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Daniel Slywka
Energy Solutions
984 S. Ford Rd
Mailbox 106
Middlebury, CT 06762

Report of Analysis/Certificate of Conformance

03/26/2015

LIMS #:	L62408
Project ID#:	EN010-3BIOCT-07
Received:	03/13/2015
Delivery Date:	04/03/2015
P.O.#:	PO-002173
Release #:	
SDG#:	

This is to certify that Teledyne Brown Engineering - Environmental Services located at 2508 Quality Lane, Knoxville, Tennessee, 37931, has analyzed, tested and documented samples, as received by the laboratory, as specified in the applicable purchase order.

This also certifies that requirements of applicable codes, standards and specifications have been fully met and that any quality assurance documentation which verified conformance to the purchase order is on file and may be examined upon request.

I hereby certify that the above statements are true and correct.

Keith Jeter
Operations Manager

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
001	L62408-1	4Q14
002	L62408-2	4Q14
003	L62408-3	4Q14
004	L62408-4	4Q14
005	L62408-5	4Q14
006	L62408-6	4Q14
007	L62408-7	4Q14
008	L62408-8	4Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
009	L62408-9	4Q14
010	L62408-10	4Q14
011	L62408-11	4Q14
012	L62408-12	4Q14
013	L62408-13	4Q14
014	L62408-14	4Q14
015	L62408-15	4Q14
016	L62408-16	4Q14
017	L62408-17	4Q14
018	L62408-18	4Q14
019	L62408-19	4Q14
020	L62408-20	4Q14
021	L62408-21	4Q14
022	L62408-22	4Q14
023	L62408-23	4Q14
024	L62408-24	4Q14
025	L62408-25	4Q14
026	L62408-26	4Q14
027	L62408-27	4Q14
028	L62408-28	4Q14
029	L62408-29	4Q14
030	L62408-30	4Q14
031	L62408-31	4Q14
032	L62408-32	4Q14
033	L62408-33	4Q14
034	L62408-34	4Q14
035	L62408-35	4Q14
036	L62408-36	4Q14
037	L62408-37	4Q14
038	L62408-38	4Q14
039	L62408-39	4Q14
040	L62408-40	4Q14
041	L62408-41	4Q14
042	L62408-42	4Q14
043	L62408-43	4Q14
044	L62408-44	4Q14
045	L62408-45	4Q14
046	L62408-46	4Q14
047	L62408-47	4Q14
048	L62408-48	4Q14
049	L62408-49	4Q14
050	L62408-50	4Q14
051	L62408-51	4Q14

TELEDYNE
BROWN ENGINEERING, INC.
A Teledyne Technologies Company
2508 Quality Lane
Knoxville, TN 37931-3133
865-690-6819

Cross Reference Table

Client ID	Laboratory ID	Station ID (if applicable)
052	L62408-52	4Q14
053	L62408-53	4Q14
054	L62408-54	4Q14
055	L62408-55	4Q14
056	L62408-56	4Q14
057	L62408-57	4Q14
058	L62408-58	4Q14
059	L62408-59	4Q14
060	L62408-60	4Q14
061	L62408-61	4Q14
062	L62408-62	4Q14
063	L62408-63	4Q14
064	L62408-64	4Q14
065	L62408-65	4Q14
066	L62408-66	4Q14
067	L62408-67	4Q14
068	L62408-68	4Q14
069	L62408-69	4Q14
070	L62408-70	4Q14
071	L62408-71	4Q14
072	L62408-72	4Q14
073	L62408-73	4Q14
074	L62408-74	4Q14
075	L62408-75	4Q14
076	L62408-76	4Q14
078	L62408-77	4Q14
100	L62408-78	4Q14

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62408

Energy Solutions

EN010-3BIOCT-07

Sample ID: 001 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: Entrance Floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-1

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.16E+01**	6.97E+00	8.12E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 002 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: Floor - Shipping/receiving area | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-2

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.31E+01**	7.19E+00	8.11E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 003 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 1st floor work room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-3

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.38E+00	6.33E+00	**8.15E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 004 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 1st floor vault floor - north | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-4

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.18E+01**	7.12E+00	8.29E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U[a] = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62408

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 005 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: Hallway @ restrooms | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-5

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.76E+00	5.69E+00	8.78E+00	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 006 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: pantry vending machine floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-6

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+01	6.86E+00	8.18E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 007 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: break room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-7

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.68E+01	7.72E+00	8.12E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 008 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: stairway b landing floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-8

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-1.01E+00	4.53E+00	7.83E+00	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62408

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 009 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-9

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.52E+01**	7.48E+00	8.09E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 010 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-10

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.09E+01**	6.82E+00	8.03E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 011 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-11

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.17E+01**	7.08E+00	8.25E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 012 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: training room work station | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-12

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.63E+01**	7.77E+00	8.30E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
A Teledyne Technologies Company

L62408

Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 013 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: training room threshold floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-13

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.36E+01**	7.47E+00	8.42E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 014 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: hallway near entrance door-s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-14

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.33E+01**	7.23E+00	8.11E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 015 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: hallway os watchmaker room | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-15

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.24E+01**	7.05E+00	8.06E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 016 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: hallway near entrance door-n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-16

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.95E+00	6.38E+00	**8.09E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 017 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: floor os women's bathroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-17

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.72E+00	6.64E+00	**8.73E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 018 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: floor in men's restroom | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-18

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.24E+01**	7.47E+00	8.95E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 019 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: office A hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-19

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.46E+01**	7.81E+00	9.01E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 020 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: office C hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-20

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	4.48E+00	6.28E+00	**9.00E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values

U	=	Compound/Analyte not detected (< MDC) or less than 3 sigma
+	=	Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U*	=	Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High	=	Activity concentration exceeds customer reporting value
Spec	=	MDC exceeds customer technical specification
L	=	Low recovery
H	=	High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 021 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: office F hallway floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-21

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	6.79E+00	6.59E+00	**8.88E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 022 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: floor - OS copy room | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-22

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.11E+00	5.93E+00	**9.12E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 023 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 2nd floor hallway @safe | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-23

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.50E+00	6.94E+00	**9.02E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 024 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 2nd floor safe vestibule | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-24

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.76E+02**	2.00E+01	8.88E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

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Sample ID: 025 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: 2nd floor safe floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-25

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**7.08E+01**	1.34E+01	8.92E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 026 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: sales open area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-26

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.74E+00	6.79E+00	**8.72E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 027 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: stairway a floor - 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-27

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.67E+00	5.74E+00	**8.94E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 028 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: polishing room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-28

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	9.20E+00	7.15E+00	**9.18E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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Sample ID: 029 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: cleaning room - sink counter | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-29

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.52E+01**	1.23E+01	9.21E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 030 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: QA area floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-30

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.43E+01**	7.69E+00	8.88E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 031 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: change room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-31

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+01**	7.85E+00	8.90E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 032 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-32

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.54E+02**	1.89E+01	8.95E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 033 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-33

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.84E+01**	8.20E+00	8.83E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 034 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-34

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.14E+00	5.94E+00	**8.82E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 035 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-35

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.53E+01**	1.02E+01	8.90E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 036 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-36

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.03E+01	7.21E+00	**9.03E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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Sample ID: 037 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-37

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.60E+01**	7.94E+00	8.91E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 038 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-38

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	8.03E+00	6.91E+00	**9.09E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Sample ID: 039 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-39

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.51E+01**	9.09E+00	8.94E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 040 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-40

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.42E+02**	2.50E+01	9.56E+00	DPM/TOTAL		100	%		03/23/15	4.23	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Daniel Slywka

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Sample ID: 041 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-41

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.49E+01**	9.08E+00	8.95E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 042 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-42

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.48E+01**	9.05E+00	8.93E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 043 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-43

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.40E+01**	1.01E+01	8.96E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 044 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-44

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.09E+01	7.43E+00	**9.23E+00**	DPM/TOTAL		100	%		03/23/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 045 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-45

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.66E+01**	7.92E+00	8.76E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 046 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-46

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**3.77E+01**	1.05E+01	8.97E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 047 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-47

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.22E+02**	1.70E+01	8.93E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 048 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-48

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.62E+01**	1.21E+01	8.85E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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Energy Solutions

Daniel Slywka

EN010-3BIOCT-07

Sample ID: 049 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-49

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.93E+02**	3.02E+01	1.06E+01	DPM/TOTAL		100	%		03/23/15	3.52	M	+

Sample ID: 050 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-50

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.32E+01**	8.79E+00	8.84E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 051 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-51

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**6.82E+02**	6.06E+01	1.42E+01	DPM/TOTAL		100	%		03/23/15	2.01	M	+

Sample ID: 052 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker workstation | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-52

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.48E+01**	7.73E+00	8.84E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

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Sample ID: 053 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room entrance floor - south | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-53

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.15E+01**	8.61E+00	8.87E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 054 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-54

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.97E+01**	8.34E+00	8.79E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 055 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-55

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.38E+01**	7.62E+00	8.89E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Sample ID: 056 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - s | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-56

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.62E+01**	8.05E+00	9.05E+00	DPM/TOTAL		100	%		03/23/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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Sample ID: 057 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-57

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	5.52E+01	1.21E+01	8.88E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 058 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-58

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.42E+01	7.68E+00	8.89E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 059 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - e | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-59

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.32E+01	8.98E+00	9.11E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 060 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-60

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.06E+02	1.60E+01	9.01E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 061 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-61

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.62E+01**	9.17E+00	8.86E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 062 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - center | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-62

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**4.53E+01**	1.11E+01	8.80E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 063 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - n | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-63

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.46E+01**	7.67E+00	8.78E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 064 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room entrance floor - north | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-64

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.96E+01**	8.39E+00	8.89E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

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EN010-3BIOCT-07

Sample ID: 065 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-65

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.78E+01	8.16E+00	8.88E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 066 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: watchmaker room floor - w | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-66

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.15E+01	8.58E+00	8.81E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 067 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: RSO workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-67

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.25E+01	7.42E+00	8.84E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 068 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: qc workstation floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-68

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.54E+01	7.74E+00	8.71E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
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EN010-3BIOCT-07

Sample ID: 069 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: parts room floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-69

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.38E+00	6.68E+00	**8.89E+00**	DPM/TOTAL		100	%		03/24/15	5	M	U

Sample ID: 070 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: radioactive waste closet floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-70

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**5.79E+01**	1.25E+01	9.11E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 071 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: radioactive waste barrel #1 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-71

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**1.27E+02**	1.74E+01	9.02E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 072 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: radioactive waste barrel #2 | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-72

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	**2.51E+02**	2.61E+01	9.88E+00	DPM/TOTAL		100	%		03/24/15	4.12	M	+

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

03/26/15 14:47

TELEDYNE BROWN ENGINEERING, INC.
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Daniel Slywka

EN010-3BIOCT-07

Sample ID: 073 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-73

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	7.07E+02	7.35E+01	2.86E+01	DPM/TOTAL		100	%		03/24/15	4.4	M	+

Sample ID: 074 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: radioactive waste sample | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-74

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.57E+02	1.87E+01	8.67E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 075 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: parts closet | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-75

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	3.79E+01	1.04E+01	8.77E+00	DPM/TOTAL		100	%		03/24/15	5	M	+

Sample ID: 076 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: elevator 2nd floor | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-76

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	1.52E+00	5.65E+00	8.83E+00	DPM/TOTAL		100	%		03/24/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

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MDC - Minimum Detectable Concentration

Report of Analysis

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EN010-3BIOCT-07

Sample ID: 078 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: Stairway "A" | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-77

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	2.06E+00	5.61E+00	**8.58E+00**	DPM/TOTAL		100	%		03/24/15	5	M	U

Sample ID: 100 | Collect Start: 12/19/2014 08:00 | Matrix: Swipes (SW)
Station: 4Q14 | Collect Stop: 12/19/2014 16:00 | Volume:
Description: BKGD Sample - OS Building | Receive Date: 03/13/2015 | % Moisture:
LIMS Number: L62408-78

Radionuclide	SOP#	Activity Conc	Uncertainty 2 Sigma	MDC	Units	Run #	Aliquot Volume	Aliquot Units	Reference Date	Count Date	Count Time	Count Units	Flag Values
H-3	2010	-5.91E-01	5.16E+00	**8.70E+00**	DPM/TOTAL		100	%		03/24/15	5	M	U

Flag Values
U = Compound/Analyte not detected (< MDC) or less than 3 sigma
\+ = Activity concentration exceeds MDC and 3 sigma; peak identified(gamma only)
U* = Compound/Analyte not detected. Peak not identified, but forced activity concentration exceeds MDC and 3 sigma
High = Activity concentration exceeds customer reporting value
Spec = MDC exceeds customer technical specification
L = Low recovery
H = High recovery

Bolded text indicates reportable value.

No = Peak not identified in gamma spectrum
Yes = Peak identified in gamma spectrum

**** Unless otherwise noted, the analytical results reported are related only to the samples tested in the condition they are received by the laboratory.

MDC - Minimum Detectable Concentration

4th

March 11, 2015
Ref. No.:

Teledyne-Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
Attn.: Sample Receiving

Subject: Request for Analysis – Tritium in Filter Swipe, Lab Coat filter Samples

Dear Sir/Mme:

Attached is the chain-of-custody form for filter swipe and lab coat filter samples. Please analyze the samples in accordance with procedures used for tritium in filter swipe samples.

Customer:	Energy*Solutions*, LLC
Customer PO #:	PO-002173
Project #:	137013
Project Name:	Breitling USA
Sample Date:	Various
Sample Time:	Various (see Chain of Custody Form)
Matrix:	Filter Swipes (Paper), Lab coats (Filter Paper)
Report Level:	QA-I; 3.5E-04 μCi/Liter; 60 dpm/swipe or filter [MDC Reported];

Sincerely yours,

Bob McPeak

Breitling USA, Project Manager

Energy*Solutions*, LLC
984 Southford Rd, Suite 8
Middlebury, CT 06762

Office: 801-303-1092

RMcPeak@energysolutions.com

Attachments: Chain-of-Custody Form
Request for Analyses

R Charles 3/13/15

ATTACHMENT 1 - SAMPLE ANALYSIS REQUEST FORM

PROJECT NAME Breitling, USA – Radiological Control Program Support
PROJECT LOCATION Breitling, U.S.A., Inc. 206 Danbury Road Wilton, CT 06897
PROJECT SCOPE Conduct Surveys & Samples Analysis
RADIONUCLIDES OF CONCERN Tritium [H-3]
NON RADIONUCLIDES OF CONCERN None

SAMPLE ANALYSES

Type Of Samples	Number Of Samples	Analyses To Be Performed	Required Minimum Detectable Activities	Required Turn-Around Time
Swipe Samples	78	LSC	60 dpm/cm²	3 week per R. Charles
Lab coat samples	20	LSC	60 dpm/cm²	3 week per R. Charles

TYPE OF QC SAMPLES TO BE COLLECTED Customer Supplied Samples
NUMBER OF QC SAMPLES TO BE COLLECTED None
SAMPLE HOLD TIMES None
SAMPLE DISPOSITION Disposed by Teledyne-Brown Engineering
TYPE OF DATA PACKAGE TO BE REQUESTED Report results in dpm/sample
REMARKS NOTE: Customer uses chemo-luminescent paint – check for false positives
PROJECT SPECIFIC REFERENCES USNRC Reg. Guide 8.9

Prepared By: Dan Slywka Date: 3/11/2015
Reviewed By: Bob McPeak Proj. Mgr. Date: 3/11/2015
Approved By: Bob McPeak Proj. Mgr. Date: 3/11/2015

Charles, Rebecca

From: Charles, Rebecca
Sent: Friday, March 13, 2015 3:28 PM
To: 'Daniel R. Slywka'
Subject: RE: Breitling sample submission
Attachments: 201503131527.pdf

One sample came broken. 4th qtr lab coat #15. I have the swipe and can still analyze if you like.
Also, the paperwork for 2nd quarter say 24 lab coats and there are 24 smears, but the sheet that lists the smears only has 23 entries (see attached)

Rebecca Charles
Teledyne Brown Engineering
2508 Quality Lane
Knoxville, TN 37931
865 934-0379

From: Daniel R. Slywka [mailto:drslywka@energysolutions.com]
Sent: Thursday, March 12, 2015 9:32 AM
To: Charles, Rebecca
Subject: Breitling sample submission

Rebecca, I found this on my desk, I might not have included it with the COCs for the two air samples I sent with the 3rd quarter sample set.

Let me know if you have any questions.

Thanks
Dan Slywka
801-303-1093

From: mictcolor@energysolutions.com [mailto:mictcolor@energysolutions.com]
Sent: Thursday, March 12, 2015 10:32 AM
To: Daniel R. Slywka
Subject: Message from KM_C454e

ENERGYSOLUTIONS

L624108

ATTACHMENT 6.1

CHAIN OF CUSTODY RECORD

Collected by: D. Slywka	**for: Breitling USA, Inc.**
Site Contact:; AS ABOVE Phone: (801) 303-1093	Address: EnergySolutions, LLC 984 Southford Rd, Suite 8 Middlebury, CT 06762

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
001	Entrance Floor	12/19/2014	0800-1600	4th QTR Survey
002	Floor – Shipping/Receiving Area	12/19/2014	0800-1600	4th QTR Survey
003	1st Floor Work Room Floor	12/19/2014	0800-1600	4th QTR Survey
004	1st Floor Vault Floor - North	12/19/2014	0800-1600	4th QTR Survey
005	Hallway @ Restrooms	12/19/2014	0800-1600	4th QTR Survey
006	Pantry Vending Machine Floor	12/19/2014	0800-1600	4th QTR Survey
007	Break Room Floor	12/19/2014	0800-1600	4th QTR Survey
008	Stairway B Landing Floor	12/19/2014	0800-1600	4th QTR Survey
009	Training Room Work Station	12/19/2014	0800-1600	4th QTR Survey
010	Training Room Work Station	12/19/2014	0800-1600	4th QTR Survey
011	Training Room Work Station	12/19/2014	0800-1600	4th QTR Survey
012	Training Room Work Station	12/19/2014	0800-1600	4th QTR Survey
013	Training Room Threshold Floor	12/19/2014	0800-1600	4th QTR Survey
014	Hallway Near Entrance Door-S	12/19/2014	0800-1600	4th QTR Survey
015	Hallway OS Watchmaker Room	12/19/2014	0800-1600	4th QTR Survey
016	Hallway Near Entrance Door-N	12/19/2014	0800-1600	4th QTR Survey
017	Floor OS Women's Bathroom	12/19/2014	0800-1600	4th QTR Survey

CUSTODY LOG

Name	Date/Time	Name	Date/Time
Collected by: D. Slywka	12/19/2014 0800 - 1600	Relinquished by: N/A	3/11/2015 1000
Collected by: W. Yee, Breitling, USA	12/19/2014 0800 - 1600	Relinquished by: W. Yee	12/19/14 - 1030
Accepted by: D. Slywka	12/19/2014 1030	Relinquished by: D. Slywka	3/11/2015 1000
Accepted by: FEDEX	3/11/2015 1000	Relinquished by	
Accepted by		Relinquished by	

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
018	Floor In Men's Restroom	12/19/2014	0800-1600	4th QTR Survey
019	Office A Hallway Floor	12/19/2014	0800-1600	4th QTR Survey
020	Office C Hallway Floor	12/19/2014	0800-1600	4th QTR Survey
021	Office F Hallway Floor	12/19/2014	0800-1600	4th QTR Survey
022	Floor – OS Copy Room	12/19/2014	0800-1600	4th QTR Survey
023	2nd Floor Hallway @ Safe	12/19/2014	0800-1600	4th QTR Survey
024	2nd Floor Safe Vestibule	12/19/2014	0800-1600	4th QTR Survey
025	2nd Floor Safe Floor	12/19/2014	0800-1600	4th QTR Survey
026	Sales Open Area Floor	12/19/2014	0800-1600	4th QTR Survey
027	Stairway A Floor - 2nd Floor	12/19/2014	0800-1600	4th QTR Survey
028	Polishing Room Floor	12/19/2014	0800-1600	4th QTR Survey
029	Cleaning Room - Sink Counter	12/19/2014	0800-1600	4th QTR Survey
030	QA Area Floor	12/19/2014	0800-1600	4th QTR Survey
031	Change Room Floor	12/19/2014	0800-1600	4th QTR Survey
032	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
033	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
034	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
035	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
036	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
037	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
038	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
039	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
040	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
041	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
042	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
043	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
044	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
045	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
046	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
047	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey

ENERGYSOLUTIONS

Sample Number	Sample Location	Collection Date	Collection Time	Remarks
048	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
049	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
050	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
051	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
052	Watchmaker Workstation	12/19/2014	0800-1600	4th QTR Survey
053	Watchmaker Room Entrance Floor - South	12/19/2014	0800-1600	4th QTR Survey
054	Watchmaker Room Floor - S	12/19/2014	0800-1600	4th QTR Survey
055	Watchmaker Room Floor - S	12/19/2014	0800-1600	4th QTR Survey
056	Watchmaker Room Floor - S	12/19/2014	0800-1600	4th QTR Survey
057	Watchmaker Room Floor - E	12/19/2014	0800-1600	4th QTR Survey
058	Watchmaker Room Floor - E	12/19/2014	0800-1600	4th QTR Survey
059	Watchmaker Room Floor - E	12/19/2014	0800-1600	4th QTR Survey
060	Watchmaker Room Floor - N	12/19/2014	0800-1600	4th QTR Survey
061	Watchmaker Room Floor-Center	12/19/2014	0800-1600	4th QTR Survey
062	Watchmaker Room Floor-Center	12/19/2014	0800-1600	4th QTR Survey
063	Watchmaker Room Floor - N	12/19/2014	0800-1600	4th QTR Survey
064	Watchmaker Room Entrance Floor - North	12/19/2014	0800-1600	4th QTR Survey
065	Watchmaker Room Floor - W	12/19/2014	0800-1600	4th QTR Survey
066	Watchmaker Room Floor - W	12/19/2014	0800-1600	4th QTR Survey
067	RSO Workstation Floor	12/19/2014	0800-1600	4th QTR Survey
068	QC Workstation Floor	12/19/2014	0800-1600	4th QTR Survey
069	Parts Room Floor	12/19/2014	0800-1600	4th QTR Survey
070	Radioactive Waste Closet Floor	12/19/2014	0800-1600	4th QTR Survey
071	Radioactive Waste Barrel #1	12/19/2014	0800-1600	4th QTR Survey
072	Radioactive Waste Barrel #2	12/19/2014	0800-1600	4th QTR Survey
073	Radioactive Waste Sample	12/19/2014	0800-1600	4th QTR Survey
074	Radioactive Waste Sample	12/19/2014	0800-1600	4th QTR Survey
075	Parts Closet	12/19/2014	0800-1600	4th QTR Survey
076	Elevator 2nd Floor	12/19/2014	0800-1600	4th QTR Survey
078	Stairway A	12/19/2014	0800-1600	4th QTR Survey
100	**BKGD. Sample – OS Building**	12/19/2014	**0800-1600**	4th QTR Survey

03/16/15 12:29

SR #: SR42394

Teledyne Brown Engineering
Sample Receipt Verification/Variance Report

Client: Energy Solutions Project #: EN010-3BIOCT-07 LIMS #L62408

Initiated By: RCHARLES
Init Date: 03/16/15 Receive Date: 03/13/15

Notification of Variance

Person Notified: Contacted By:
Notify Date:
Notify Method:
Notify Comment:

Client Response

Person Responding:
Response Date:
Response Method:
Response Comment

	Criteria	Yes	No	NA	Comment
1	Shipping container custody seals present and intact.			NA	
2	Sample container custody seals present and intact.			NA	
3	Sample containers received in good condition		N		
	#15				glass container was broken . Sample intact
4	Chain of custody received with samples		Y		
5	All samples listed on chain of custody received		Y		
6	Sample container labels present and legible.		Y		
7	Information on container labels correspond with chain of custody		Y		
8	Sample(s) properly preserved and in appropriate container(s)			NA	
9	Other (Describe)			NA	
For Hazardous Materials Only:					
10	Paperwork shows TBE and shippers name, address and phone number			NA	
11	Paperwork shows sample quantity information			NA	

Searched Inquiry Number:
1ZW067W90301973215

Tracking Number:
1ZW067W90301973215

Service Level:
GROUND

Accessorial

Associated Tracking/Reference Numbers:
[redacted]
CT REPAIRS

Search

Select an Associated Tracking Number or Reference Number and click on Search to execute the search

Customer Information

Shipper W067W9

BREITLING USA
206 DANBURY RD
WILTON CT 06897
UNITED STATES

Ship To:
DIVISION OF NUCLEAR MATERIAL SAFETY
US NUCLEAR REGULATORY COMMISSION, R
2100 RENAISSANCE BLVD
SUITE 100
KING OF PRUSSIA PA 194062723
UNITED STATES

Customer Phone Number:
(203)762-1180

Packages in Shipment:
1

Manifest Date:
09/23/15

Upload Date/Time/Source:
09/23/15 17:14
CONNECTSHIP RETAIL VERSION

Billing Type:
PREPAID (AKA PRE)

Service Level:
GROUND

Signature Required:
No

Bill My Account:
No

Packed by UPS Store:
No

Electronic Package Release Authorization:
No

COD
Original Due Amount:

Package Contents:

Original Payment Type:

Weight/Dim Weight:
5.50 LBS / 5.50 LBS

Declared Value:
1.00 USD

Control Number:

Hazmat:
NO

Hold for Pickup:
NO

This is to acknowledge the receipt of your letter/application dated

09/25/2015, and to inform you that the initial processing which includes an administrative review has been performed.

06-23863-01 (Termination)

[X] There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

[ ] Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 588975.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader