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February 24, 2016

VIA OVERNIGHT DELIVERY

Mr. Scott Anderson
Director
Division of Waste Management and Radiation Control
Utah Department of Environmental Quality
195 North 1950 West
P.O. Box 144880
Salt Lake City, UT 84114-4820

Mr. Anderson:

Re: State of Utah Radioactive Material License No. UT1900479
White Mesa Mill, Blanding, Utah
Semi-Annual Effluent Monitoring Report for Period
July 1 through December 31, 2015

As required by Utah Administrative Code, R 313-24-4 (incorporating by reference 10 CFR 40.65 (subpart1)), and License Condition 11.3A of State of Utah Radioactive Materials License No. UT1900479, enclosed is the Semi-Annual Effluent Monitoring Report for the White Mesa Mill for the period July 1 through December 31, 2015.

If you have any questions regarding this report, please contact the undersigned at (303) 389-4134.

Yours very truly,

Kathy Weinel

ENERGY FUELS RESOURCES (USA) INC.
Kathy Weinel
Quality Assurance Manager

cc: David C. Frydenlund
Harold R. Roberts
David E. Turk
Scott A. Bakken
Logan Shumway

White Mesa Uranium Mill
Radioactive Materials License UT900479
Semi-Annual Effluent Monitoring Report
(July through December 2015)

Prepared For:
Utah Department of Environmental Quality
Division of Waste Management and Radiation Control

Prepared by:

Energy Fuels Resources (USA) Inc.
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February 24, 2016

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WHITE MESA URANIUM MILL
SEMI-ANNUAL EFFLUENT REPORT, JULY THROUGH DECEMBER 2015

1.0 INTRODUCTION

The White Mesa Mill (the "Mill") has established monitoring programs to evaluate compliance with effluent limitations and to assess the potential for release of radioactive material into the local environment. These monitoring programs were developed and implemented at the time of Mill construction, operated with appropriate adaptation over time, and are consistent with the Mill's State of Utah Radioactive Materials License No. UT1900479 (the "License") and guidelines developed by the United States Nuclear Regulatory Commission ("NRC") (NRC Regulatory Guide 4.14, *Radiological Effluent and Environmental Monitoring at Uranium Mills-Rev. 1, ML003739941)*, 1980).

1.1 Modifications to the Monitoring Programs in 2014

As stated above, the monitoring programs implemented to date are consistent with the Mill's License and guidelines developed by the NRC and described in Regulatory Guide 4.14. The Mill's License was amended by the Division of Waste Management and Radiation Control ("DWMRC") (formerly the Division of Radiation Control) on July 10, 2014. License Amendment 7 ("Amendment 7") dated July 10, 2014, among other things, modified and expanded the effluent monitoring programs implemented at the Mill. Amendment 7 required additional monitoring beyond what is regularly required by NRC Regulatory Guide 4.14. DWMRC requested the additional monitoring be documented in a revision to the Mill's Environmental Protection Manual ("EPM"). As required, EFRI submitted a revised EPM for DWMRC approval on September 8, 2014. A subsequent DWMRC Request for Information ("RFI") dated October 14, 2014 and e-mail correspondence dated October 20, 2014 added additional monitoring requirements beyond those specified in Amendment 7. EFRI incorporated the modifications resulting from the RFI and e-mail correspondence into an EPM revision submitted to DWMRC on November 18, 2014. The November 18, 2014 EPM was approved by DWMRC in a letter dated December 10, 2014. Specific changes to the individual monitoring programs resulting from Amendment 7, the RFI and the e-mail correspondence are discussed in the subsequent sections of this report.

In a letter dated July 23, 2014, DWMRC stated that because "Tailings Cell 2 is no longer in operation (receiving tailings), the Division of Air Quality and the Division of Radiation Control agree that Subpart W NESHAPs requirements (40 CFR Part 61) no longer apply; however, at this phase of cell 2 closure activities, the requirements of 10 CFR Part 40, Appendix A, Criterion 6 do apply." The July 23, 2014 letter further requires that radon flux measurements for Cell 2 be collected semi-annually in accordance with methodology specified in 40 CFR Part 61, Appendix B, Method 115 and that the measured results be included in the Semi-Annual Effluent Reports submitted to DWMRC. As a result of the July 23, 2014 letter, Cell 2 radon flux monitoring data are

reported herein. Additional details regarding the monitoring and data collection activities for the Cell 2 radon flux are included in Section 9.0.

As specified by the License and the documents described above, the Mill monitors the following environmental media and conditions:

a) Airborne particulate radionuclide concentrations obtained from the following sampling stations:

- North, east and south of the Mill Site: BHV-1, BHV-2, and BHV-8 (north), BHV-5 and BHV-7 (east), and BHV-4 (south). BHV-1 and BHV-8 serve as surrogates for the nearest resident (BHV-1 and BHV-8 are approximately 1.2 miles north of the Mill, but approximately 0.4 miles closer to the Mill than the nearest resident);
- A background location distant to and west of the Mill (BHV-3) that was monitored for airborne particulates up until November, 1995 (at which time background was established), which is no longer monitored for air particulates; and
- A station specifically requested by the White Mesa Ute Community south of the Mill Site (BVH-6);

b) External (direct) gamma radiation measured at air monitoring stations BHV-1, BHV-2, BHV-3, BHV-4, BHV-5, BHV-6, BHV-7, and BHV-8;

c) Vegetation at three site periphery locations, for uptake of radionuclides;

d) Stack release rates from the Mill's air emissions sources;

e) Surface water at Cottonwood Creek and, when flowing, Westwater Creek, both located west of the Mill;

f) Soil radionuclide activity during the third quarter of each year;

g) Radon-222 at the air particulate monitoring stations (BHV-1 through BHV-8);

h) Radon flux of the Cell 2 cover as specified by the DWMRC in correspondence dated July 23, 2014;

i) Groundwater (up and down gradient) of the Mill facility; and[1]

j) Seeps and springs in the vicinity of the Mill.[1]

[1] Groundwater sampling and seeps and springs sampling are reported separately pursuant to the Mill's State of Utah Ground Water Discharge Permit No. UGW370004, and are not included with this report.

This semi-annual effluent report provides the results of the specific monitoring and sampling activities that were undertaken during the subject reporting period.

2.0 ENVIRONMENTAL AIR PARTICULATE SAMPLING

2.1 Program Overview

Prior to Amendment 7, the environmental airborne particulate monitoring program at the Mill utilized four air sampling stations. Four high-volume continuous air sampling stations (BHV-1, BHV-2, BHV-4, and BHV-5) were required by the License. In addition to these four environmental air sampling locations, an additional station (BHV-6) was installed at the request of the White Mesa Ute Community. This station began operation in July of 1999 and provides airborne particulate information in the southerly direction between the Mill and the White Mesa Ute Community.

As stated in Section 1.1 above, Amendment 7 expanded the air particulate monitoring program. Amendment 7 included the following expansion of the air particulate monitoring program:

- Addition of two air monitoring stations (BHV-7 and BHV-8);
- Addition of thorium-232 ("Th-232") to the list of air particulate analytes;

These sampling stations serve as sentinels for airborne particulate which could potentially emanate from the Mill site. In addition to its general site monitoring function, BHV-1 and BHV-8 also serve as conservative surrogates for concentrations at the nearest resident, because they are located approximately 1.2 miles north of the Mill just south of the nearest resident but between the Mill and that resident.

With regard to background monitoring, the Mill previously operated a continuous high-volume air sampling station (BHV-3) which was located approximately 3.5 miles west of the Mill site. With the approval of NRC, this station (BHV-3) was removed from the active air monitoring program in November 1995. At that time, NRC determined that a sufficient air monitoring database had been compiled at BHV-3 to establish a representative airborne radionuclide background for the Mill. The NRC approval to remove BHV-3 from the active air monitoring program specified background radionuclide concentrations based on the historic data. These concentrations are shown on the graphs and tables in Tab B3. While air sampling was discontinued at this location, gamma measurements and soil sampling continue at BHV-3.

2.2 Sampling Protocol and Analytical Results

Airborne particulate monitors are operated continuously at each of the high-volume air sampling stations except BHV-3, BHV-7 and BHV-8. As noted above, BHV-3 was removed from the active air monitoring program in November 1995, but the NRC

specified background concentrations are shown in Attachment B. BHV-7 and BHV-8 are discussed in detail below.

Particulate sample collection filters are gathered by site technicians weekly in accordance with the Mill's environmental air sampling procedures and are composited on a quarterly basis for laboratory analyses. The collected filters are analyzed for Unat activity, Th-230 activity, Ra-226 activity, Th-232 and Pb-210 activity. Fugitive dust standards for the facility are limited by the Mill's State of Utah Air Approval Order. The specific locations of the Mill's airborne particulate monitoring stations are depicted on the figure entitled Particulate Monitoring Stations included as Attachment A. Station BHV-3, which is no longer sampled for air particulates, is located approximately 3.5 miles west of the Mill facility and is not shown on the Figure.

The analytical results of radionuclide particulate sampling for each monitoring station operated during this reporting period are provided in Attachment B under separate sampling station attachment tabs (Tabs 1-8). Each tab contains graphical illustrations of the radionuclide concentrations in log-scale presentation format. The graphs display reported data over time since the 1981 inception of the Mill's environmental air particulate monitoring program or the installation of the locations, whichever is appropriate. The actual analytical results (and associated QA/QC information) reported by the laboratory for the reporting period are provided under Attachment C. In addition to the analyses for radionuclides, particulate loading is determined for each filter and composited as a quarterly mass-loading estimate for review purposes only. Graphs showing particulate loading at each station and the underlying data are included as Attachment D.

Analytical data were reviewed against the laboratory established acceptance limits specified in the data packages. The analytical data are usable for their intended purpose. Any deviations noted did not affect the quality or usability of the data.

For graphical illustration purposes, values reported at zero, values reported at less than the prescribed detection limit ($< 1 \times 10^{-16}$ uCi/ml), and missing values were plotted as 1×10^{-16} uCi/ml concentrations. Where other "less than" values were indicated (i.e., where detection limits for the data varied from 1×10^{-16} uCi/ml), the detection limit concentration was utilized for plotting the data point. This graphing convention is not utilized to formulate station average information, nor is it intended as a precedent for data treatment. Rather, the intent is to provide a conservative viewable depiction of site airborne radionuclide information. This is considered to be a conservative approach, because the actual concentration below the detection limit cannot be determined and, as a result, the plotted point will be at the same or a higher concentration than the actual activity concentration of the collected sample.

2.3 General Observations

The results of environmental air monitoring for this semi-annual period indicate that for all radionuclides at all monitoring stations, airborne radionuclide particulate activity concentrations were well below regulatory Effluent Concentration Limits ("ECL's") and the Mill's ALARA goals, which are set at 25% of the ECLs, except as noted below.

It is noteworthy and expected that Pb-210 concentrations are elevated when compared to the other parent radionuclide concentrations (i.e. U-nat, Th-230 and Ra-226). This phenomenon is due to the well-established controlling effect experienced worldwide as a result of the ubiquitous presence of radon in the earth's atmosphere. Accordingly, the elevated Pb-210 presence in disequilibrium with parent radionuclides measured here is not associated with uranium milling operations. Rn-222 emanates as a decay-chain progeny of the Ra-226 contained in the soil of the earth's crust and is dispersed generally throughout the earth's atmosphere. The electrically charged short and long-lived decay products of Rn-222 attach to ambient dust particles found naturally in the atmosphere and are carried with the air. Pb-210 is the longest lived of these decay products and is the decay product of the shorter-lived radon progeny. As such, it accumulates as an electrical attachment on the natural ambient dust in the atmosphere and is generally measured at elevated activity when compared to local decay-chain parent radionuclide activity, regardless of uranium milling activity. At the Mill's BHV air monitoring stations, all dust (ambient natural and mill derived) is collected by the sample filter. Because of the natural elevation of Pb-210 accumulated as an attachment to the naturally occurring ambient dust particles collected by the air sampling equipment, Pb-210 is commonly elevated and in disequilibrium when compared to parent radionuclide activity, regardless of the Mill's presence. By way of illustration, average ground-level concentrations have been reported for selected States (NCRP Report 94, 1992) and are summarized in Table 1 in the Tables Tab of this report, demonstrating that elevated Pb-210 activity is present where no uranium milling operations are located nearby. In April 1977, prior to Mill construction and Mill operations, air particulate Pb-210 was measured at the Mill site to be 1.3E-14 uCi/ml (13.0E-3 pCi/m^3)[2].

2.4 Site Specific Sampling Data

The results of airborne particulate monitoring for the period (without background subtraction) are provided by sampling station and radionuclide in Tables 2 through 6 in the Tables Tab of this report. Along with these data, the tables present comparative ECL's and the ECL percentage measured at each of the monitoring stations sampled during the period. A review of these data support the conclusion that airborne particulates are well controlled at the Mill. In all cases, the measured activity concentrations were well within the ECL, as well as the Mill's ALARA goal (i.e. 25% of the ECL). Lower

[2] See the *Environmental Report, White Mesa Uranium Project, San Juan County, Utah for Energy Fuels Nuclear, Inc.* prepared by Dames & Moore, January 30, 1978, Section 2.9.1.1

Limits of Detection consistent with NRC Regulatory Guide 4.14 were maintained by the Mill's contract analytical laboratory for this reporting period.

The data obtained since program inception in 1981 indicates that only one individual quarterly measurement (Th-230 at BHV-5 for the 2nd Quarter of 1996) has ever exceeded the ECL at the Mill. While it is important to consider and evaluate an individual measurement exceeding the ECL, it is the average annual concentration that is of primary significance for public dose estimation purposes. In that instance, the average annual concentration of Th-230 for BHV-5 in 1996 was well below the ECL. Data obtained since program inception in 1981 also indicate that, with very few exceptions, the gross (background inclusive) measurements do not exceed the site's ALARA goal (i.e. only ten of the several thousand total gross radionuclide determinations to date exceeded the Mill's self-imposed 25% ALARA goal).

2.5 Radon-222

With the approval of the NRC, Radon-222 monitoring at BHV stations at the Mill was discontinued in 1995 due to the unavailability of monitoring equipment to detect the revised 10 CFR Part 20 standard. Instead, compliance with these limits and the requirements of R313-15-301 was demonstrated by a calculation, authorized by the NRC and as contemplated by R313-15-302(2)(a) which states "A licensee or registrant shall show compliance with the annual dose limit in Section R313-15-301 by: (a) Demonstrating by measurement or calculation that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed or registered operation does not exceed the annual dose limit;". This calculation is performed by use of the MILDOS code for estimating environmental radiation doses for uranium recovery operations. R313-15-302(2)(a) contemplates demonstrating compliance either through modeling or measurement.

In order to determine whether or not detection equipment has improved since 1995, EFRI voluntarily began ambient Radon-222 monitoring at the BHV stations in 2013. The Radon-222 data collected from 2013 through present are presented in Attachment J. As stated in Section 1.1 above, Amendment 7 expanded the Mill's effluent monitoring programs in 2014. Amendment 7 included expanding the monitoring programs to require the collection of Radon-222 data at all of the BHV stations. For the BHV stations EFRI calculated ECLs using methodology shown in Attachment J. The calculated ECLs for all of the BHV stations are included on the data table included in Attachment J. The radon-222 results are below the calculated ECLs as shown in Attachment J.

Radon-222 monitoring is completed using track etch detectors with an effective reporting limit of 0.06 pCi/L. Field blank detectors are collected quarterly and the results (with background included) are included in Attachment J.

During the reporting period, one field blank was collected during each quarter. Field blanks are opened at the beginning of the monitoring period and immediately sealed with

the manufacturer supplied foil seals. The field blanks are stored in a sealed foil pouch in the environmental office until the end of the monitoring period, when they are packaged with the field samples and shipped to the laboratory for processing. While relatively low concentrations were reported for the field blanks, the field blank data show detections which are greater than the highest detection reported for any of the samples collected at the high volume stations. The field blank data have been consistently higher than the samples. Despite the detections reported for the field blanks, there is no indication that the results reflect contamination during shipping. If the detections on the field blanks indicated contamination resulting from shipment, then all of the detectors would be affected in the same manner and the sample data are below the field blank levels. It appears that the field blanks have been affected by the storage prior to shipping. EFRI is conducting an investigation into the possible causes of the anomalous field blank detections.

3.0 EXTERNAL RADIATION (DIRECT GAMMA)

Gamma exposure rate estimates were measured for the reporting period utilizing optically stimulated luminescence dosimeters ("OSLs"). Previously, these dosimeters were located at each of the Mill's high-volume air sampling stations (BHV-1, BHV-2, BHV-4, BHV-5 and BHV-6) and at the designated background monitoring station (BHV-3). As noted in Section 1.1 of this report, Amendment 7 expanded the effluent monitoring programs at the Mill. Amendment 7 included expansion of the gamma exposure monitoring program through the addition of gamma monitoring at the two new air monitoring stations (BHV-7 and BHV-8).

Measurements obtained from location BHV-3 have been designated as background due to BHV-3's remoteness from the Mill site (i.e., BHV-3 is located approximately 3.5 miles west of the Mill site). The results of the environmental OSL measurements and semi-annual cumulative above-background data are provided in Table 7 in the Tables Tab of this report. In addition, measurement data obtained at these locations are graphically presented in Attachment E to this report.

The results for this period indicate that above background measurements for stations BHV-1, BHV-2, BHV-4, BHV-5, BHV-6, BHV-7, and BHV-8 are within regulatory limits. BHV-1 and BHV-8 are at the location of the nearest potential residence. The nearest actual residence is approximately 0.4 miles north of BHV-1 and BHV-8. The annual limit for an individual member of the public is 100 mrem/yr for combined internal and external exposure.

4.0 VEGETATION SAMPLES

Vegetation samples are collected at three locations around the Mill property. The sampling locations are: 1) northeast, 2) northwest and 3) southwest of the Mill facility. The NRC Regulatory Guide 4.14 requires that three samples be collected during the grazing season, without specifying exact months or times during the season. As noted in

Section 1.1, Amendment 7 and the associated RFI expanded the vegetation sampling program through the addition of Th-232 and U-Nat. Implementation of the expanded analyte list began this reporting period.

During the 2015 grazing season, samples were collected on April 21, 2015, June 15, 2015, and November 23, 2015. The data from the April and June sampling were included in the January through June 2015 Semi-Annual Effluent Report ("SAER") which was submitted to the DRC on August 28, 2015. Data from the November sampling event are included in this report.

Graphical log-scale presentation of the vegetation sampling results, together with the analytical results reported by the Mill's contract laboratory (including QA/QC information) for this sampling period, are included as Attachment F of this report. The 2015 data results are within the variation of previous sampling episodes.

Analytical data were reviewed against the laboratory established acceptance limits specified in the data packages. The analytical data are usable for their intended purpose. Any deviations noted did not affect the quality or usability of the data.

5.0 STACK SAMPLING

Under Section 5.0 of Tab 1.4 of the Mill's *Environmental Protection Manual,* Revision: EFR-4, 11/14 (the "*Environmental Protection Manual*") as modified in response to DWMRC e-mail correspondence dated October 20, 2014, gas stack samples are collected at the Mill in accordance with the schedule shown below:

Stack Sampling Requirements

Frequency	Grizzly Baghouse Stack	North and/or South Yellowcake Dryer Stacks	Yellowcake Packaging Baghouse Stack	Vanadium Dryer Stack	Vanadium Packaging Stack
Quarterly	If operating, U-nat, Th-230, Ra-226, Pb-210, Th-232, Ra-228, and Th-228.	If operating, U-nat, Th-230, Ra-226, Pb-210, Th-232, Ra-228, and Th-228.	If operating, U-nat, Th-230, Ra-226, Pb-210, Th-232, Ra-228, and Th-228.	If operating, U-nat, Th-230, Ra-226, Pb-210, Th-232, Ra-228, and Th-228.	If operating, U-nat, Th-230, Ra-226, Pb-210, Th-232, Ra-228, and Th-228.

The analytical results of stack sampling conducted in the third quarter of 2015, as well as for the previous two quarters, are provided in Table 8 in the Tables Tab of this report. No drying or packaging was conducted during the second quarter of 2015 or during the fourth quarter of 2015, and therefore, no sampling was completed. The actual analytical results reported by the laboratory for the third quarter of 2015 are provided in Attachment

G to this report.

The south yellowcake dryer and yellowcake baghouse operated during the third quarter of 2015. The north yellowcake dryer has not been in operation since the third quarter of 2012, and therefore, has not been sampled since it was last in operation. The vanadium dryer and vanadium packaging stack did not operate during the reporting period and were not sampled.

It is also important to note that stack effluent concentrations are not comparable to environmental air sampling station ECLs for regulatory compliance purposes. The ECL is a limit that applies to the receptor locations and is not applicable to effluents from mill processes on the Mill site. These stack release data are more appropriately utilized for dose modeling purposes, and dose modeling is not computed for semi-annual reporting purposes.

Analytical data were reviewed against the laboratory established acceptance limits specified in the data packages. The analytical data are usable for their intended purpose. Any deviations noted did not affect the quality or usability of the data.

6.0 SURFACE WATER MONITORING

Under the License, Part 11.2 B surface water samples are required to be obtained and analyzed for annually from Westwater Canyon and semi-annually from Cottonwood Creek. Sediment samples from Westwater Canyon are taken in place of the Westwater Canyon surface water sample where surface water is not available for sampling. Westwater Canyon surface water was sampled in the third quarter of 2015 and analyzed for dissolved and suspended radionuclides including Gross Alpha, U-nat, Ra-226, and Th-230.

The Mill's *Environmental Protection Manual* requires that samples from Cottonwood Creek be analyzed for TDS and total suspended solids ("TSS") quarterly, and the License, Part 11.2 B requires that samples from Cottonwood Creek be analyzed for dissolved and suspended radionuclides including Gross Alpha, U-nat, Ra-226, and Th-230 semi-annually. In accordance with these requirements, Cottonwood Creek was sampled for TDS and TSS during the 3rd quarter, and was sampled for TDS, TSS, and the radionuclides during the 4th quarter.

The field data sheets for the surface water sampling events, along with graphs showing current and historic results are included as Attachment H. The results of this sampling indicate that surface water concentrations remain low and within the range of a typical surface water.

Analytical data were reviewed against the laboratory established acceptance limits specified in the data packages. The analytical data are usable for their intended purpose. Any deviations noted did not affect the quality or usability of the data.

7.0 SOIL SAMPLING

As mentioned in Section 1.1 above, specific changes to the individual monitoring programs has been made as a result of Amendment 7, the RFI, and e-mail correspondence with DWMRC. In accordance with the Mill's EPM and the changes specified by Amendment 7, surface soils were collected during the third quarter of 2015 reflecting the new sampling requirements and additional sampling locations.

In accordance with the Mill's *Environmental Protection Manual*, surface soils were collected in August 2015. The soil samples were analyzed, on a dry basis, for Ra-226, U-nat, Pb-210, and Th-232. The results of these samplings indicate that soil activity levels at the air monitoring stations remain low and within the range of historic levels. A graphical presentation of the historical results for soils at the air monitoring stations, together with analytical sample results for the August 2015 sampling are provided in Attachment I.

Graphical presentation of radionuclide data for the samples collected on the Mill boundaries (north, south, east and west) and the Pb-210 and Th-232 at the BHV locations will be included when two or more data points are available.

Analytical data were reviewed against the laboratory established acceptance limits specified in the data packages. The analytical data are usable for their intended purpose. Any deviations noted did not affect the quality or usability of the data.

Field duplicate sample results were assessed as required by the SOP. Duplicate results were within the acceptance limits specified in the SOP and no further actions were necessary. Field duplicate results are shown in Attachment I.

8.0 METEOROLOGICAL MONITORING

As in prior reporting periods, an independent contractor has prepared the White Mesa Mill Semi-annual Meteorological Monitoring Report for the period of July through December 2015. This information is retained at the Mill site for agency review.

9.0 CELL 2 RADON FLUX

The July 23, 2014 letter, DWMRC stated that because "Tailings Cell 2 is no longer in operation (receiving tailings), the Division of Air Quality and the Division of Radiation Control agree that Subpart W NESHAPs requirements (40 CFR Part 61) no longer apply; however, at this phase of cell 2 closure activities, the requirements of 10 CFR Part 40, Appendix A, Criterion 6 do apply."

Further, the DWMRC July 23, 2014 letter states that "since the MILDOS-Area Models that have been run to show compliance with dose limits for releases from the Mill were

based on a limit of 20 picocuries per square meter second (pCi/m^{2}-sec), in order to ensure compliance with previously analyzed conditions, the DWMRC will require the licensee to continue to measure the radon flux in accordance with 40 CFR 61, Appendix B, Method 115, "Monitoring for Radon-222 Emissions" (2013). The measured radon flux for Cell 2 shall not exceed a value of 20 (pCi/m^2-sec) until a new MILDOS-Area Model to analyze a higher radon flux is completed and demonstrates compliance with dose limits based on the releases from the Mill. As required by Method 115, a minimum of 100 measurements are required and shall be performed on a semi-annual basis."

Per the requirements detailed above, EFRI sampled Cell 2 radon flux in January 2015 for the January through June 2015 reporting period and in July 2015 for the July through December 2015 reporting period. The January 2015 measurement was 12.1 $pCi/(m^2$-sec) and the July 2015 measurement was 9.5 $pCi/(m^2$-sec). The average measurement for 2015 was 10.8 $pCi/(m^2$-sec) which is below the 20.0 $pCi/(m^2$-sec) standard. The full data report for the July 2015 Cell 2 radon flux sampling is provided in Attachment K.

10.0 SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc. on February 24, 2016.

ENERGY FUELS RESOURCES (USA) INC.

By:

Scott A. Bakken
Senior Director Regulatory Affairs

Certification:

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Scott A. Bakken
Senior Director Regulatory Affairs
Energy Fuels Resources (USA) Inc.

TABLES

Table 1- NCRP Report 94-Global Pb-210 Concentration Example

State	Pb-210 Concentration	
	uBq/M^3	uCi/ml
California	600	1.60E-14
Illinois	1500	4.10E-14
Ohio	300	8.10E-15
Massachusetts	700	1.90E-14

Table 2 - Air Monitoring Station Results U-Nat (Comparison to Limits) 3rd and 4th Quarter 2015

Monitoring Station	3rd Qtr.Result (uCi/ml)	4th Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	1.60E-15	2.20E-16	9.00E-14	1.01E+00
BHV2	5.00E-16	1.00E-16	9.00E-14	3.33E-01
BHV4	5.00E-15	4.50E-16	9.00E-14	3.03E+00
BHV5	1.20E-14	7.40E-16	9.00E-14	7.08E+00
BHV6	1.00E-14	8.40E-16	9.00E-14	6.02E+00
BHV7	4.20E-15	3.60E-16	9.00E-14	2.53E+00
BHV8	1.80E-15	2.10E-16	9.00E-14	1.12E+00

Table 3 - Air Monitoring Station Results Th-230 (Comparison to Limits) 3rd and 4th Quarter 2015

Monitoring Station	3rd Qtr.Result (uCi/ml)	4th Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	8.00E-17	5.00E-17	2.00E-14	3.25E-01
BHV2	9.00E-17	5.00E-17	2.00E-14	3.50E-01
BHV4	1.00E-16	7.00E-17	2.00E-14	4.25E-01
BHV5	4.00E-16	1.00E-16	2.00E-14	1.25E+00
BHV6	2.00E-16	1.00E-16	2.00E-14	7.50E-01
BHV7	2.00E-16	7.00E-17	2.00E-14	6.75E-01
BHV8	4.00E-17	9.00E-17	2.00E-14	3.25E-01

Table 4 - Air Monitoring Station Results Ra-226 (Comparison to Limits) 3rd and 4th Quarter 2015

Monitoring Station	3rd Qtr.Result (uCi/ml)	4th Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	6.00E-16	2.00E-16	9.00E-13	4.44E-02
BHV2	1.00E-16	3.00E-16	9.00E-13	2.22E-02
BHV4	1.00E-16	6.00E-17	9.00E-13	8.89E-03
BHV5	9.80E-16	1.90E-16	9.00E-13	6.50E-02
BHV6	3.00E-16	1.00E-16	9.00E-13	2.22E-02
BHV7	4.00E-16	2.00E-16	9.00E-13	3.33E-02
BHV8	4.00E-16	9.00E-16	9.00E-13	7.22E-02

Table 5 - Air Monitoring Station Results Pb-210 (Comparison to Limits) 3rd and 4th Quarter 2015

Monitoring Station	3rd Qtr.Result (uCi/ml)	4th Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	1.00E-14	1.20E-14	6.00E-13	1.83E+00
BHV2	1.00E-14	2.20E-14	6.00E-13	2.67E+00
BHV4	7.00E-15	2.00E-14	6.00E-13	2.25E+00
BHV5	1.20E-14	2.20E-14	6.00E-13	2.83E+00
BHV6	1.10E-14	2.00E-14	6.00E-13	2.58E+00
BHV7	1.00E-14	2.00E-14	6.00E-13	2.50E+00
BHV8	8.00E-15	2.00E-14	6.00E-13	2.33E+00

Table 6 - Air Monitoring Station Results Th-232 (Comparison to Limits) 3rd and 4th Quarter 2015

Monitoring Station	3rd Qtr.Result (uCi/ml)	4th Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	7.00E-18	1.00E-18	4.00E-15	1.00E-01
BHV2	6.00E-18	3.00E-18	4.00E-15	1.13E-01
BHV4	7.00E-18	8.00E-19	4.00E-15	9.75E-02
BHV5	1.00E-17	2.00E-17	4.00E-15	3.75E-01
BHV6	2.00E-18	6.00E-18	4.00E-15	1.00E-01
BHV7	6.00E-18	3.00E-18	4.00E-15	1.13E-01
BHV8	3.00E-18	4.00E-18	4.00E-15	8.75E-02

Table 7 - Environmental Optically Stimulated Luminescence Dosimeter Measurements (Gamma)

Monitoring Station	3rd Quarter Result (mrem)	4th Quarter Result (mrem)	3rd Quarter Result Less Background (mrem)	4th Quarter Result Less Background (mrem)	Cumulative Semiannual Estimate (mrem)
BHV1	43.7	45.5	12.3	11.4	23.7
BHV2	33.7	38.4	2.3	4.3	6.6
BHV3	31.4	34.1	0	0	0
BHV4	37.5	37.7	6.1	3.6	9.7
BHV5	41.5	47.2	10.1	13.1	23.2
BHV6	37.5	34.7	6.1	0.6	6.7
BHV7	38.6	37.4	7.2	3.3	10.5
BHV8	40.9	37.5	9.5	3.4	12.9

Table 8 Stack Effluent Concentrations and Release Rates

1st Qtr. 2015

	U-Nat uCi/cc	U-Nat. uCi/sec	Th-228 uCi/cc	Th-228 uCi/sec	Th-230 uCi/cc	Th-230 uCi/sec	Th-232 uCi/cc	Th-232 uCi/sec	Pb-210 uCi/cc	Pb-210 uCi/sec	Ra-226 uCi/cc	Ra-226 uCi/sec	Ra-228 uCi/cc	Ra-228 uCi/sec
SYC Dryer Scrubber 1	2.46E-09	1.06E-03	1.07E-15	4.62E-10	1.48E-14	6.36E-09	4.46E-16	1.92E-10	3.16E-12	1.36E-06	5.99E-15	2.58E-09	NA	NA
SYC Dryer Scrubber 2	5.22E-09	2.32E-03	1.33E-15	5.90E-10	2.27E-14	1.01E-08	1.80E-16	7.98E-11	5.20E-12	2.31E-06	9.54E-15	4.24E-09	NA	NA
YC Packaging Baghouse	6.32E-11	1.07E-04	3.05E-15	5.16E-09	6.32E-14	1.07E-07	2.02E-15	3.42E-09	3.94E-14	6.66E-08	4.79E-14	8.09E-08	NA	NA

2nd Qtr. 2015

No stack sampling was conducted as the dryers did not run. No grinding or packaging was completed during the 2nd quarter.

NA - not analyzed. Pursuant to the approved Environmental Protection Manual, EFRI requested analysis of Ra-228. The COC was completed correctly, however, the laboratory inadvertently omitted this analysis at sample receipt, and therefore, there are no Ra-228 results reported. Per the letter attached in Tab G of this report, the laboratory took full responsibility for this omission.

3rd Qtr. 2015

	U-Nat uCi/cc	U-Nat. uCi/sec	Th-228 uCi/cc	Th-228 uCi/sec	Th-230 uCi/cc	Th-230 uCi/sec	Th-232 uCi/cc	Th-232 uCi/sec	Pb-210 uCi/cc	Pb-210 uCi/sec	Ra-226 uCi/cc	Ra-226 uCi/sec	Ra-228 uCi/cc	Ra-228 uCi/sec
SYC Dryer Scrubber 1	2.70E-09	1.21E-03	2.86E-15	1.28E-09	6.90E-14	3.10E-08	2.76E-15	1.24E-09	4.95E-12	2.23E-06	1.30E-14	5.86E-09	1.06E-12	4.76E-07
SYC Dryer Scrubber 2	2.91E-09	1.30E-03	9.19E-16	4.09E-10	5.32E-14	2.37E-08	7.39E-16	3.29E-10	5.15E-12	2.29E-06	1.79E-14	7.98E-09	1.04E-12	4.65E-07
YC Packaging Baghouse	7.70E-10	1.06E-03	1.48E-14	2.03E-08	1.92E-13	2.64E-07	1.34E-14	1.84E-08	1.15E-12	1.58E-06	2.60E-14	3.57E-08	3.41E-12	4.68E-06

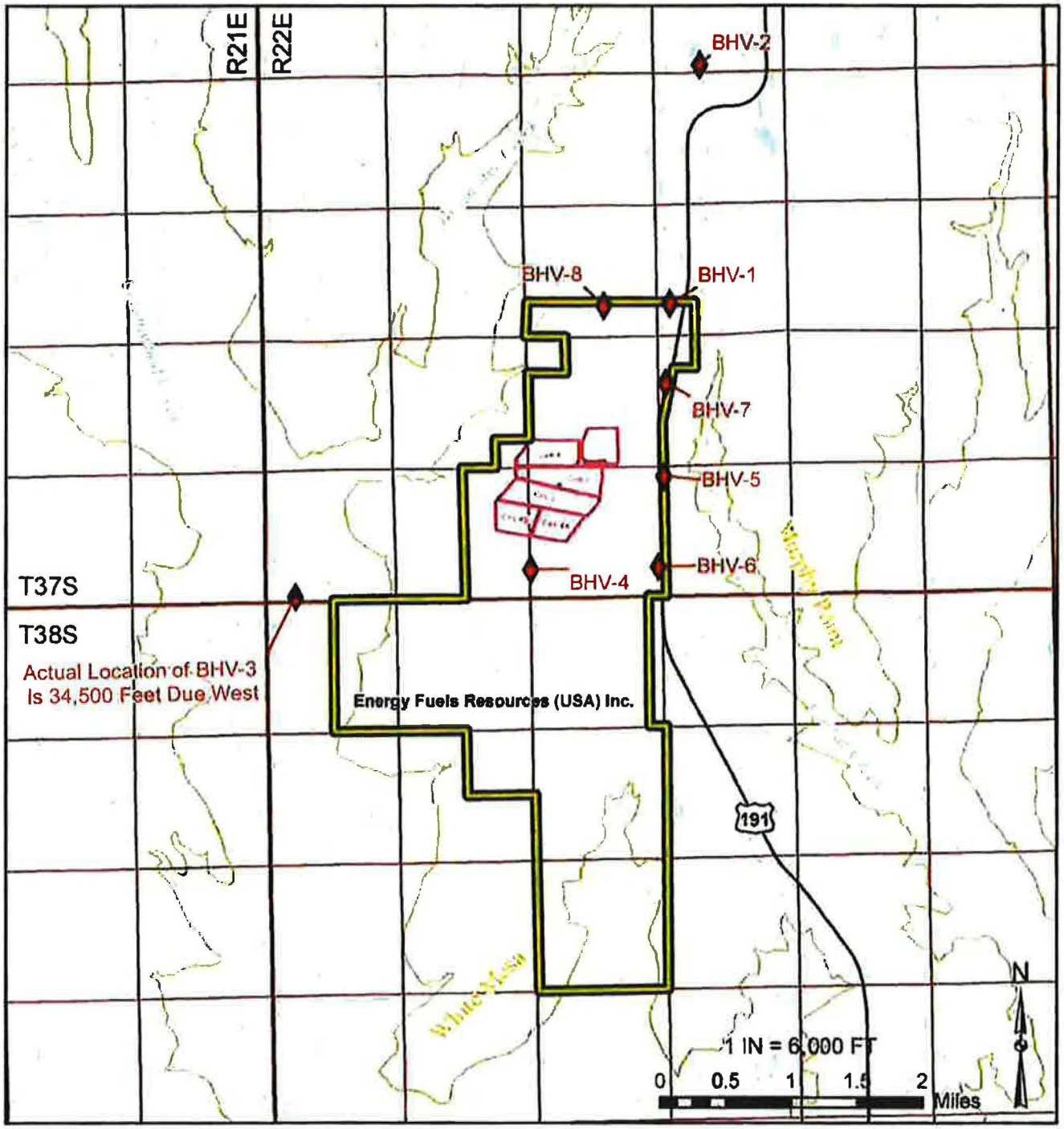
4th Qtr. 2015

No stack sampling was conducted as the dryers did not run. No grinding or packaging was completed during the 4th quarter.

ND - These results were reported as non-detect

ATTACHMENT A

HIGH VOLUME AIR MONITORING STATIONS



Legend

- Air Monitoring Station
- Property Boundary
- Tailings Cell
- Road
- Canyon Rim
- Township and Range
- Section
- Pond
- Drainage

Coordinate System: NAD 1983 StatePlane Utah South FIPS 4303 Feet

ENERGY FUELS

REVISIONS		Project: WHITE MESA MILL	
Date:	By:	County: San Juan	State: Utah
		Location: -	

ATTACHMENT A

PARTICULATE MONITORING STATIONS

Author: areither	Date: 2/13/2015	Drafted By: areither

S:\Soroes\UT\WhiteMesaMill\MapsMill_ParticMonitoring.mxd 2/13/2015 2:35:08 PM by areither

Energy Fuels Resources Inc. White Mesa Mill			
High Volume Air Monitoring Stations Coordinates			
Air Station	**Northing**	**Easting**	**Ground Elevation***
BHV-1	10171106.23	2222420.22	5678.37
BHV-2	10180701.63	2223565.12	5789.20
BHV-4	10159480.63	2216380.00	5544.79
BHV-5	10164004.22	2221859.34	5590.50
BHV-6	10160451.77	2221996.62	5578.61
BHV-7	10170920.58	2219311.48	5660.72
BHV-8	10167873.94	2222236.08	5634.74

Coordinate System: Modified Utah State Plane - NAD83 - South Zone - US Survey Feet

* Using Fisher Survey Vertical Datum

ATTACHMENT B

BHV AIR SAMPLING GRAPHS AND DATA TABLES

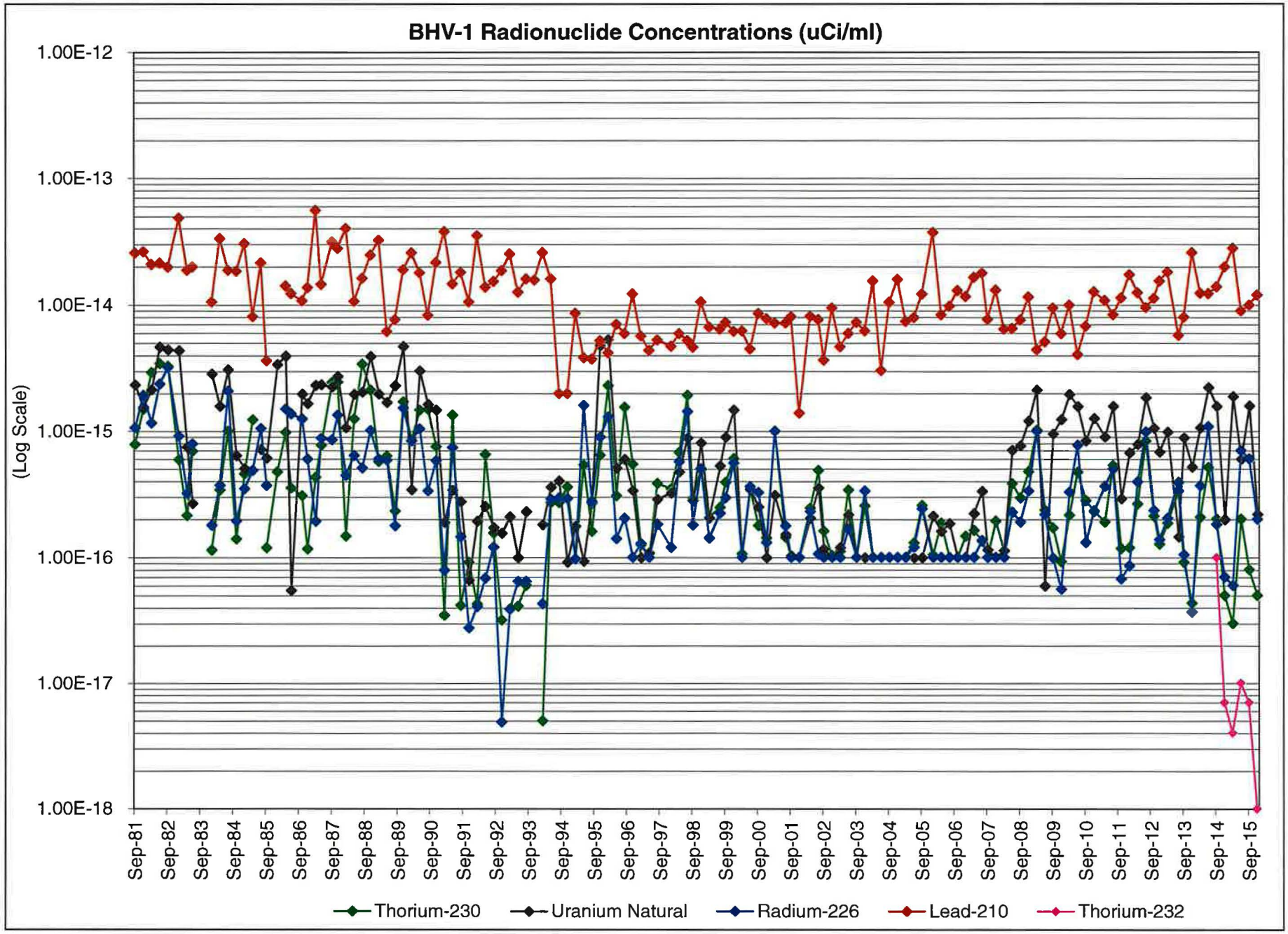
TAB 1

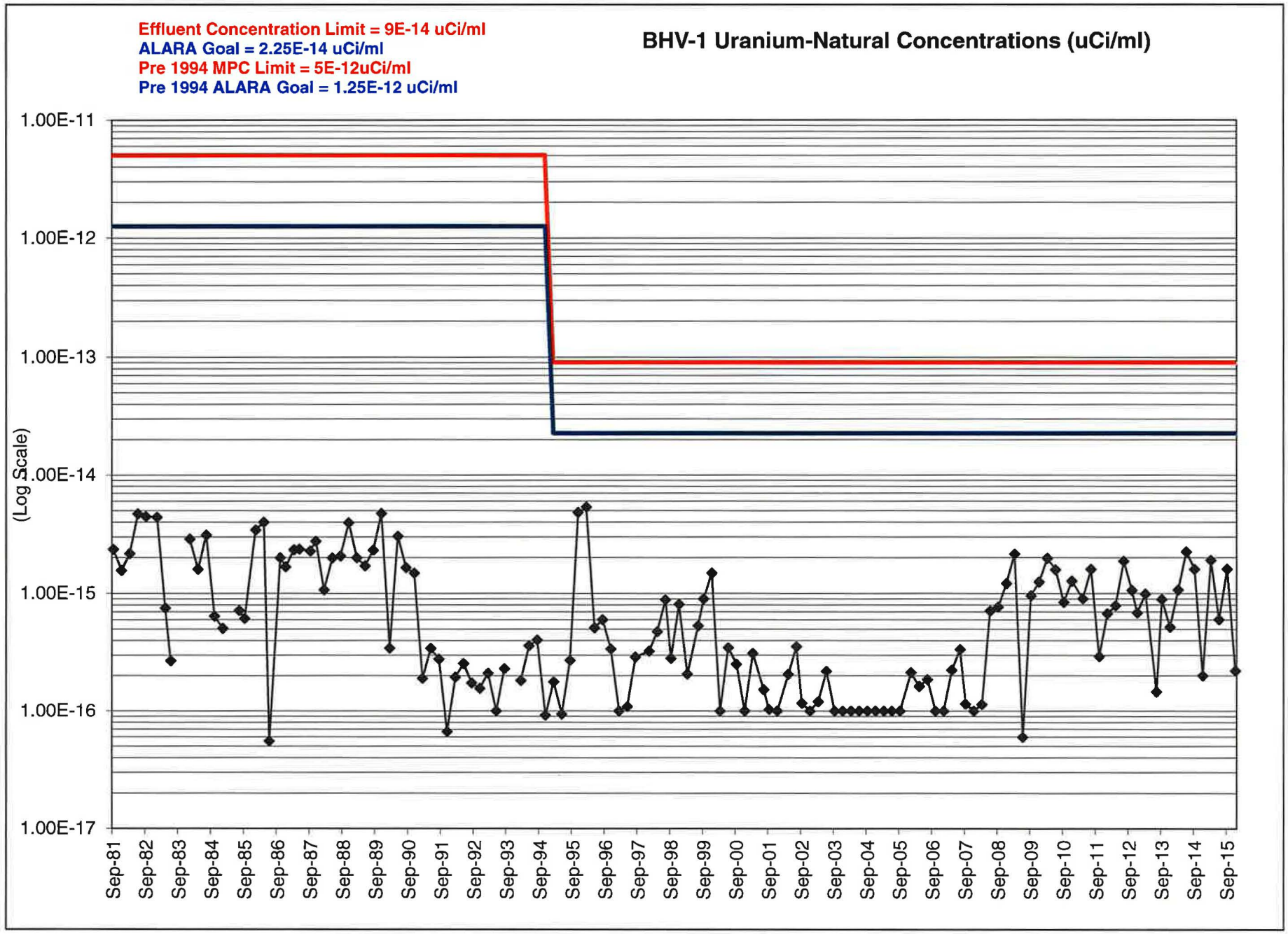
BHV-1 AIR SAMPLING GRAPHS AND DATA TABLE

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-1U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-1T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-1R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-1PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-1T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981	2.35E-15	5.00E-12	1.25E-12	7.82E-16	8.00E-14	2.00E-14	1.06E-15	2.00E-12	5.00E-13	2.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/14/1981	1.56E-15	5.00E-12	1.25E-12	1.49E-15	8.00E-14	2.00E-14	1.93E-15	2.00E-12	5.00E-13	2.64E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/29/1982	2.16E-15	5.00E-12	1.25E-12	2.93E-15	8.00E-14	2.00E-14	1.16E-15	2.00E-12	5.00E-13	2.09E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1982	4.69E-15	5.00E-12	1.25E-12	3.46E-15	8.00E-14	2.00E-14	2.38E-15	2.00E-12	5.00E-13	2.14E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/27/1982	4.45E-15	5.00E-12	1.25E-12	3.29E-15	8.00E-14	2.00E-14	3.23E-15	2.00E-12	5.00E-13	1.99E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1983	4.39E-15	5.00E-12	1.25E-12	5.91E-16	8.00E-14	2.00E-14	9.14E-16	2.00E-12	5.00E-13	4.87E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/4/1983	7.51E-16	5.00E-12	1.25E-12	2.13E-16	8.00E-14	2.00E-14	3.20E-16	2.00E-12	5.00E-13	1.88E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1983	2.68E-16	5.00E-12	1.25E-12	6.92E-16	8.00E-14	2.00E-14	7.92E-16	2.00E-12	5.00E-13	2.00E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/3/1983		5.00E-12	1.25E-12		8.00E-14	2.00E-14	0.00E+00	2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1984	2.87E-15	5.00E-12	1.25E-12	1.14E-16	8.00E-14	2.00E-14	1.79E-16	2.00E-12	5.00E-13	1.06E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/2/1984	1.59E-15	5.00E-12	1.25E-12	3.40E-16	8.00E-14	2.00E-14	3.71E-16	2.00E-12	5.00E-13	3.34E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/2/1984	3.10E-15	5.00E-12	1.25E-12	1.00E-15	8.00E-14	2.00E-14	2.09E-15	2.00E-12	5.00E-13	1.88E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/1/1984	6.42E-16	5.00E-12	1.25E-12	1.39E-16	8.00E-14	2.00E-14	1.94E-16	2.00E-12	5.00E-13	1.85E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1985	5.06E-16	5.00E-12	1.25E-12	4.56E-16	8.00E-14	2.00E-14	3.49E-16	2.00E-12	5.00E-13	3.03E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1985	0.00E+00	5.00E-12	1.25E-12	1.23E-15	8.00E-14	2.00E-14	4.88E-16	2.00E-12	5.00E-13	8.06E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/1/1985	7.17E-16	5.00E-12	1.25E-12		8.00E-14	2.00E-14	1.05E-15	2.00E-12	5.00E-13	2.15E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/30/1985	6.13E-16	5.00E-12	1.25E-12	1.18E-16	8.00E-14	2.00E-14	3.71E-16	2.00E-12	5.00E-13	3.64E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1986	3.42E-15	5.00E-12	1.25E-12	4.74E-16	8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1986	3.98E-15	5.00E-12	1.25E-12	9.74E-16	8.00E-14	2.00E-14	1.50E-15	2.00E-12	5.00E-13	1.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1986	5.51E-17	5.00E-12	1.25E-12	3.52E-16	8.00E-14	2.00E-14	1.37E-15	2.00E-12	5.00E-13	1.23E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/27/1986	1.99E-15	5.00E-12	1.25E-12	3.06E-16	8.00E-14	2.00E-14	1.25E-15	2.00E-12	5.00E-13	1.08E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/15/1986	1.67E-15	5.00E-12	1.25E-12	1.16E-16	8.00E-14	2.00E-14	5.98E-16	2.00E-12	5.00E-13	1.37E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/16/1987	2.33E-15	5.00E-12	1.25E-12	4.30E-16	8.00E-14	2.00E-14	1.92E-16	2.00E-12	5.00E-13	5.59E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1987	2.36E-15	5.00E-12	1.25E-12	7.69E-16	8.00E-14	2.00E-14	8.76E-16	2.00E-12	5.00E-13	1.45E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/9/1987	2.27E-15	5.00E-12	1.25E-12	2.44E-15	8.00E-14	2.00E-14	8.51E-16	2.00E-12	5.00E-13	3.14E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/2/1987	2.75E-15	5.00E-12	1.25E-12	2.46E-15	8.00E-14	2.00E-14	1.34E-15	2.00E-12	5.00E-13	2.79E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/16/1988	1.07E-15	5.00E-12	1.25E-12	1.47E-16	8.00E-14	2.00E-14	4.44E-16	2.00E-12	5.00E-13	4.01E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/18/1988	1.98E-15	5.00E-12	1.25E-12	1.25E-15	8.00E-14	2.00E-14	6.40E-16	2.00E-12	5.00E-13	1.07E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/15/1988	2.06E-15	5.00E-12	1.25E-12	3.41E-15	8.00E-14	2.00E-14	5.08E-16	2.00E-12	5.00E-13	1.62E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/14/1988	3.94E-15	5.00E-12	1.25E-12	2.12E-15	8.00E-14	2.00E-14	1.01E-15	2.00E-12	5.00E-13	2.47E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/13/1989	1.99E-15	5.00E-12	1.25E-12	5.73E-16	8.00E-14	2.00E-14	5.99E-16	2.00E-12	5.00E-13	3.23E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/15/1989	1.70E-15	5.00E-12	1.25E-12	6.32E-16	8.00E-14	2.00E-14	5.86E-16	2.00E-12	5.00E-13	6.16E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/14/1989	2.31E-15	5.00E-12	1.25E-12	2.31E-16	8.00E-14	2.00E-14	1.77E-16	2.00E-12	5.00E-13	7.65E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/13/1989	4.72E-15	5.00E-12	1.25E-12	1.71E-15	8.00E-14	2.00E-14	1.52E-15	2.00E-12	5.00E-13	1.89E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/12/1990	3.44E-16	5.00E-12	1.25E-12	8.39E-16	8.00E-14	2.00E-14	8.31E-16	2.00E-12	5.00E-13	2.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/14/1990	3.03E-15	5.00E-12	1.25E-12	1.47E-15	8.00E-14	2.00E-14	1.04E-15	2.00E-12	5.00E-13	1.79E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/13/1990	1.64E-15	5.00E-12	1.25E-12	1.49E-15	8.00E-14	2.00E-14	3.34E-16	2.00E-12	5.00E-13	8.27E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/12/1990	1.48E-15	5.00E-12	1.25E-12	7.50E-16	8.00E-14	2.00E-14	5.80E-16	2.00E-12	5.00E-13	2.16E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/11/1991	1.90E-16	5.00E-12	1.25E-12	3.48E-17	8.00E-14	2.00E-14	7.91E-17	2.00E-12	5.00E-13	3.79E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/13/1991	3.42E-16	5.00E-12	1.25E-12	1.34E-15	8.00E-14	2.00E-14	7.39E-16	2.00E-12	5.00E-13	1.46E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/12/1991	2.77E-16	5.00E-12	1.25E-12	4.17E-17	8.00E-14	2.00E-14	1.45E-16	2.00E-12	5.00E-13	1.80E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/11/1991	6.65E-17	5.00E-12	1.25E-12	9.13E-17	8.00E-14	2.00E-14	2.77E-17	2.00E-12	5.00E-13	1.06E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/10/1992	1.94E-16	5.00E-12	1.25E-12	4.28E-17	8.00E-14	2.00E-14	4.08E-17	2.00E-12	5.00E-13	3.51E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1992	2.54E-16	5.00E-12	1.25E-12	6.49E-16	8.00E-14	2.00E-14	6.86E-17	2.00E-12	5.00E-13	1.38E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1992	1.73E-16	5.00E-12	1.25E-12	1.55E-16	8.00E-14	2.00E-14	1.20E-16	2.00E-12	5.00E-13	1.53E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/9/1992	1.56E-16	5.00E-12	1.25E-12	3.19E-17	8.00E-14	2.00E-14	4.90E-18	2.00E-12	5.00E-13	1.86E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/9/1993	2.10E-16	5.00E-12	1.25E-12		8.00E-14	2.00E-14	3.89E-17	2.00E-12	5.00E-13	2.52E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/10/1993	1.00E-16	5.00E-12	1.25E-12	4.11E-17	8.00E-14	2.00E-14	6.43E-17	2.00E-12	5.00E-13	1.26E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1993	2.30E-16	5.00E-12	1.25E-12	6.00E-17	8.00E-14	2.00E-14	6.43E-17	2.00E-12	5.00E-13	1.60E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/8/1993		5.00E-12	1.25E-12		8.00E-14	2.00E-14	0.00E+00	2.00E-12	5.00E-13	1.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-1U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-1T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-1R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-1PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-1T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
2/7/1994	1.82E-16	5.00E-12	1.25E-12	5.00E-18	8.00E-14	2.00E-14	4.30E-17	2.00E-12	5.00E-13	2.59E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/9/1994	3.60E-16	5.00E-12	1.25E-12	2.70E-16	8.00E-14	2.00E-14	2.87E-16	2.00E-12	5.00E-13	1.60E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/9/1994	4.04E-16	5.00E-12	1.25E-12	2.70E-16	8.00E-14	2.00E-14	2.94E-16	2.00E-12	5.00E-13	2.00E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/7/1994	9.18E-17	5.00E-12	1.25E-12	3.60E-16	8.00E-14	2.00E-14	2.91E-16	2.00E-12	5.00E-13	2.00E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1995	1.77E-16	9.00E-14	2.25E-14	9.70E-17	2.00E-14	5.00E-15	9.70E-17	9.00E-13	2.25E-13	8.60E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/9/1995	9.40E-17	9.00E-14	2.25E-14	5.36E-16	2.00E-14	5.00E-15	1.60E-15	9.00E-13	2.25E-13	3.84E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/9/1995	2.70E-16	9.00E-14	2.25E-14	1.60E-16	2.00E-14	5.00E-15	2.76E-16	9.00E-13	2.25E-13	3.76E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/11/1995	4.80E-15	9.00E-14	2.25E-14	6.41E-16	2.00E-14	5.00E-15	8.93E-16	9.00E-13	2.25E-13	5.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/5/1996	5.34E-15	9.00E-14	2.25E-14	2.30E-15	2.00E-14	5.00E-15	1.30E-15	9.00E-13	2.25E-13	4.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/6/1996	5.11E-16	9.00E-14	2.25E-14	3.06E-16	2.00E-14	5.00E-15	1.40E-16	9.00E-13	2.25E-13	7.03E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/5/1996	5.99E-16	9.00E-14	2.25E-14	1.55E-15	2.00E-14	5.00E-15	2.03E-16	9.00E-13	2.25E-13	5.94E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/6/1996	3.38E-16	9.00E-14	2.25E-14	5.45E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.22E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/6/1997	1.00E-16	9.00E-14	2.25E-14	1.25E-16	2.00E-14	5.00E-15	1.28E-16	9.00E-13	2.25E-13	5.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/5/1997	1.09E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.39E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/11/1997	2.88E-16	9.00E-14	2.25E-14	3.83E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	5.29E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/5/1998	3.24E-16	9.00E-14	2.25E-14	3.47E-16	2.00E-14	5.00E-15	1.19E-16	9.00E-13	2.25E-13	4.73E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/28/1998	4.75E-16	9.00E-14	2.25E-14	6.73E-16	2.00E-14	5.00E-15	5.69E-16	9.00E-13	2.25E-13	5.94E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/31/1998	8.84E-16	9.00E-14	2.25E-14	1.93E-15	2.00E-14	5.00E-15	1.43E-15	9.00E-13	2.25E-13	5.22E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/28/1998	2.81E-16	9.00E-14	2.25E-14	2.89E-16	2.00E-14	5.00E-15	1.80E-16	9.00E-13	2.25E-13	4.64E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1998	8.08E-16	9.00E-14	2.25E-14	4.93E-16	2.00E-14	5.00E-15	5.01E-16	9.00E-13	2.25E-13	1.06E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/1999	2.06E-16	9.00E-14	2.25E-14	2.06E-16	2.00E-14	5.00E-15	1.42E-16	9.00E-13	2.25E-13	6.69E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/1999	5.31E-16	9.00E-14	2.25E-14	2.47E-16	2.00E-14	5.00E-15	2.23E-16	9.00E-13	2.25E-13	6.44E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/1999	8.98E-16	9.00E-14	2.25E-14	3.90E-16	2.00E-14	5.00E-15	2.96E-16	9.00E-13	2.25E-13	7.29E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1999	1.48E-15	9.00E-14	2.25E-14	6.00E-16	2.00E-14	5.00E-15	5.57E-16	9.00E-13	2.25E-13	6.19E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/27/2000	1.00E-16	9.00E-14	2.25E-14	1.06E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.23E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/26/2000	3.47E-16	9.00E-14	2.25E-14	3.46E-16	2.00E-14	5.00E-15	3.62E-16	9.00E-13	2.25E-13	4.50E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2000	2.51E-16	9.00E-14	2.25E-14	1.78E-16	2.00E-14	5.00E-15	3.25E-16	9.00E-13	2.25E-13	8.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/26/2000	1.00E-16	9.00E-14	2.25E-14	1.42E-16	2.00E-14	5.00E-15	1.31E-16	9.00E-13	2.25E-13	7.77E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/26/2001	3.10E-16	9.00E-14	2.25E-14	1.00E-15	2.00E-14	5.00E-15	1.00E-15	9.00E-13	2.25E-13	7.19E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/29/2001	1.52E-16	9.00E-14	2.25E-14	1.44E-16	2.00E-14	5.00E-15	1.77E-16	9.00E-13	2.25E-13	7.21E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/24/2001	1.03E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.09E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2001	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.39E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/1/2002	2.05E-16	9.00E-14	2.25E-14	2.44E-16	2.00E-14	5.00E-15	2.29E-16	9.00E-13	2.25E-13	8.15E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/1/2002	3.55E-16	9.00E-14	2.25E-14	4.85E-16	2.00E-14	5.00E-15	1.06E-16	9.00E-13	2.25E-13	7.65E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2002	1.17E-16	9.00E-14	2.25E-14	1.61E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2002	1.00E-16	9.00E-14	2.25E-14	1.03E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.46E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2003	1.20E-16	9.00E-14	2.25E-14	1.12E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2003	2.18E-16	9.00E-14	2.25E-14	3.40E-16	2.00E-14	5.00E-15	1.67E-16	9.00E-13	2.25E-13	5.96E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/29/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.28E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/29/2003	1.00E-16	9.00E-14	2.25E-14	2.54E-16	2.00E-14	5.00E-15	3.35E-16	9.00E-13	2.25E-13	6.25E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.54E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.04E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.05E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.59E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/28/2005	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.42E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/29/2005	1.00E-16	9.00E-14	2.25E-14	1.30E-16	2.00E-14	5.00E-15	1.20E-16	9.00E-13	2.25E-13	7.94E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2005	1.00E-16	9.00E-14	2.25E-14	2.56E-16	2.00E-14	5.00E-15	2.42E-16	9.00E-13	2.25E-13	1.22E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2006	2.13E-16	9.00E-14	2.25E-14	1.04E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.73E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2006	1.62E-16	9.00E-14	2.25E-14	1.86E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.36E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/2006	1.86E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.77E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-1U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-1T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-1R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-1PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-1T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
10/2/2006	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.30E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/1/2007	1.00E-16	9.00E-14	2.25E-14	1.47E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.17E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/2/2007	2.23E-16	9.00E-14	2.25E-14	1.63E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.65E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2007	3.35E-16	9.00E-14	2.25E-14	1.34E-16	2.00E-14	5.00E-15	1.36E-16	9.00E-13	2.25E-13	1.78E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2007	1.15E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2007	1.00E-16	9.00E-14	2.25E-14	1.93E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2008	1.14E-16	9.00E-14	2.25E-14	1.13E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.44E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2008	7.09E-16	9.00E-14	2.25E-14	3.83E-16	2.00E-14	5.00E-15	2.27E-16	9.00E-13	2.25E-13	6.52E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2008	7.69E-16	9.00E-14	2.25E-14	2.94E-16	2.00E-14	5.00E-15	1.90E-16	9.00E-13	2.25E-13	7.64E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2008	1.21E-15	9.00E-14	2.25E-14	4.76E-16	2.00E-14	5.00E-15	3.34E-16	9.00E-13	2.25E-13	1.16E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/15/2009	2.14E-15	9.00E-14	2.25E-14	1.02E-15	2.00E-14	5.00E-15	1.00E-15	9.00E-13	2.25E-13	4.44E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/15/2009	5.97E-17	9.00E-14	2.25E-14	2.35E-16	2.00E-14	5.00E-15	2.18E-16	9.00E-13	2.25E-13	5.13E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/15/2009	9.55E-16	9.00E-14	2.25E-14	1.71E-16	2.00E-14	5.00E-15	9.87E-17	9.00E-13	2.25E-13	9.47E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/15/2009	1.24E-15	9.00E-14	2.25E-14	9.25E-17	2.00E-14	5.00E-15	5.60E-17	9.00E-13	2.25E-13	5.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2010	1.97E-15	9.00E-14	2.25E-14	2.15E-16	2.00E-14	5.00E-15	3.27E-16	9.00E-13	2.25E-13	1.00E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2010	1.58E-15	9.00E-14	2.25E-14	4.71E-16	2.00E-14	5.00E-15	7.70E-16	9.00E-13	2.25E-13	4.07E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2010	8.42E-16	9.00E-14	2.25E-14	2.80E-16	2.00E-14	5.00E-15	1.31E-16	9.00E-13	2.25E-13	6.80E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2010	1.27E-15	9.00E-14	2.25E-14	2.32E-16	2.00E-14	5.00E-15	2.30E-16	9.00E-13	2.25E-13	1.27E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/4/2011	9.01E-16	9.00E-14	2.25E-14	1.90E-16	2.00E-14	5.00E-15	3.64E-16	9.00E-13	2.25E-13	1.09E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/4/2011	1.59E-15	9.00E-14	2.25E-14	5.31E-16	2.00E-14	5.00E-15	4.99E-16	9.00E-13	2.25E-13	8.38E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/3/2011	2.92E-16	9.00E-14	2.25E-14	1.17E-16	2.00E-14	5.00E-15	6.76E-17	9.00E-13	2.25E-13	1.14E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2012	6.73E-16	9.00E-14	2.25E-14	1.19E-16	2.00E-14	5.00E-15	8.58E-17	9.00E-13	2.25E-13	1.73E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2012	7.87E-16	9.00E-14	2.25E-14	2.64E-16	2.00E-14	5.00E-15	3.95E-16	9.00E-13	2.25E-13	1.25E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2012	1.86E-15	9.00E-14	2.25E-14	8.33E-16	2.00E-14	5.00E-15	9.85E-16	9.00E-13	2.25E-13	9.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/1/2012	1.06E-15	9.00E-14	2.25E-14	2.11E-16	2.00E-14	5.00E-15	2.34E-16	9.00E-13	2.25E-13	1.13E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2012	6.86E-16	9.00E-14	2.25E-14	1.27E-16	2.00E-14	5.00E-15	1.38E-16	9.00E-13	2.25E-13	1.54E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/25/2013	9.91E-16	9.00E-14	2.25E-14	1.86E-16	2.00E-14	5.00E-15	2.04E-16	9.00E-13	2.25E-13	1.82E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2013	1.46E-16	9.00E-14	2.25E-14	3.34E-16	2.00E-14	5.00E-15	3.91E-16	9.00E-13	2.25E-13	5.78E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2013	8.89E-16	9.00E-14	2.25E-14	9.13E-17	2.00E-14	5.00E-15	1.05E-16	9.00E-13	2.25E-13	8.00E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2013	5.21E-16	9.00E-14	2.25E-14	4.34E-17	2.00E-14	5.00E-15	3.70E-17	9.00E-13	2.25E-13	2.59E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2014	1.07E-15	9.00E-14	2.25E-14	2.07E-16	2.00E-14	5.00E-15	3.69E-16	9.00E-13	2.25E-13	1.24E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2014	2.24E-15	9.00E-14	2.25E-14	5.14E-16	2.00E-14	5.00E-15	1.09E-15	9.00E-13	2.25E-13	1.23E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2014	1.59E-15	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.39E-14	6.00E-13	1.50E-13	1.00E-16	4.00E-15	1.00E-15
12/29/2014	2.00E-16	9.00E-14	2.25E-14	5.00E-17	2.00E-14	5.00E-15	7.00E-17	9.00E-13	2.25E-13	2.00E-14	6.00E-13	1.50E-13	7.00E-18	4.00E-15	1.00E-15
3/30/2015	1.90E-15	9.00E-14	2.25E-14	3.00E-17	2.00E-14	5.00E-15	6.00E-17	9.00E-13	2.25E-13	2.80E-14	6.00E-13	1.50E-13	4.00E-18	4.00E-15	1.00E-15
6/29/2015	6.00E-16	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	7.00E-16	9.00E-13	2.25E-13	9.00E-15	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
9/28/2015	1.60E-15	9.00E-14	2.25E-14	8.00E-17	2.00E-14	5.00E-15	6.00E-16	9.00E-13	2.25E-13	1.00E-14	6.00E-13	1.50E-13	7.00E-18	4.00E-15	1.00E-15
12/28/2015	2.20E-16	9.00E-14	2.25E-14	5.00E-17	2.00E-14	5.00E-15	2.00E-16	9.00E-13	2.25E-13	1.20E-14	6.00E-13	1.50E-13	1.00E-18	4.00E-15	1.00E-15


BHV-1 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15
Thorium-230
Uranium Natural
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-1 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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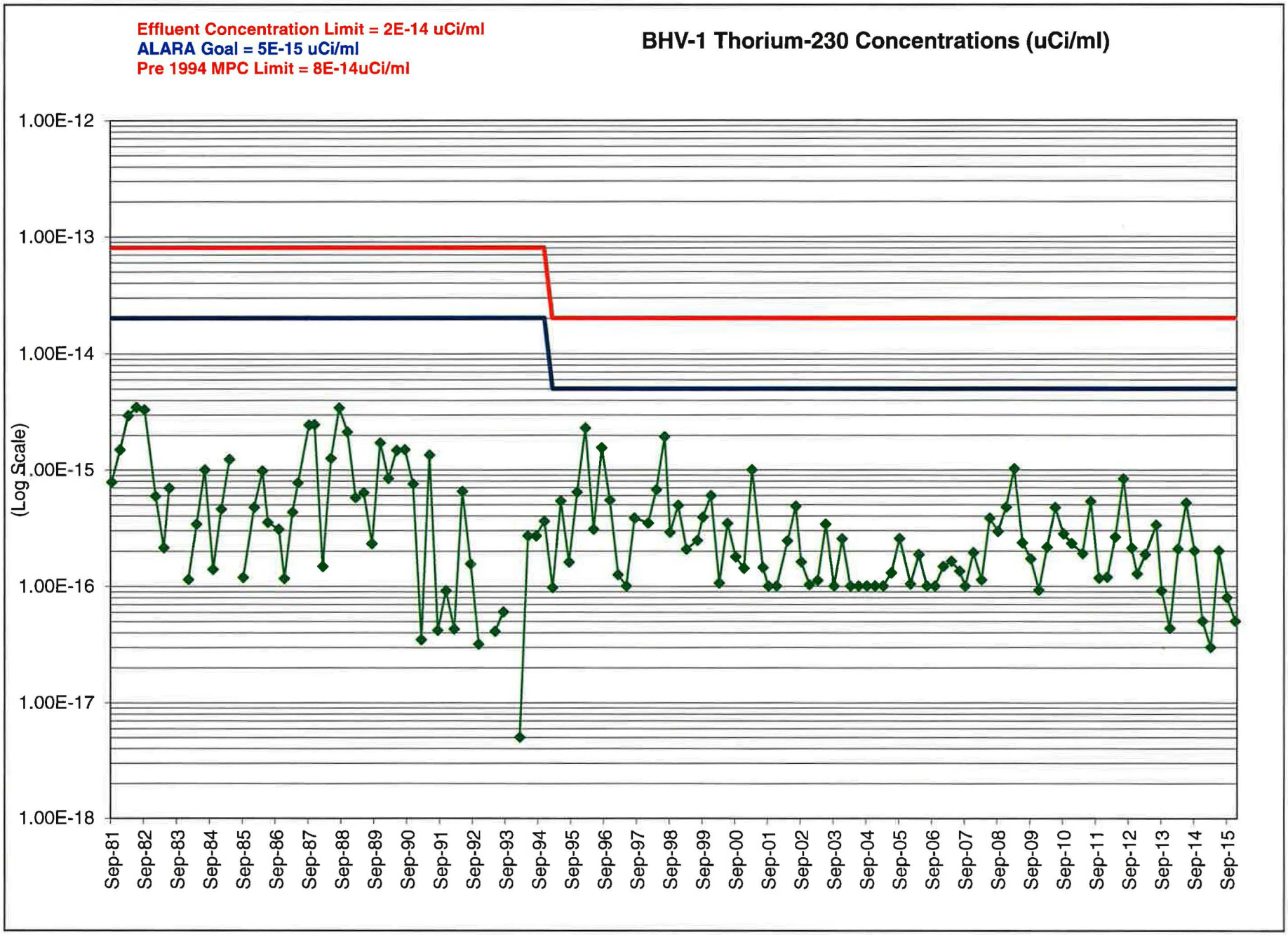
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-1 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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Sep-12
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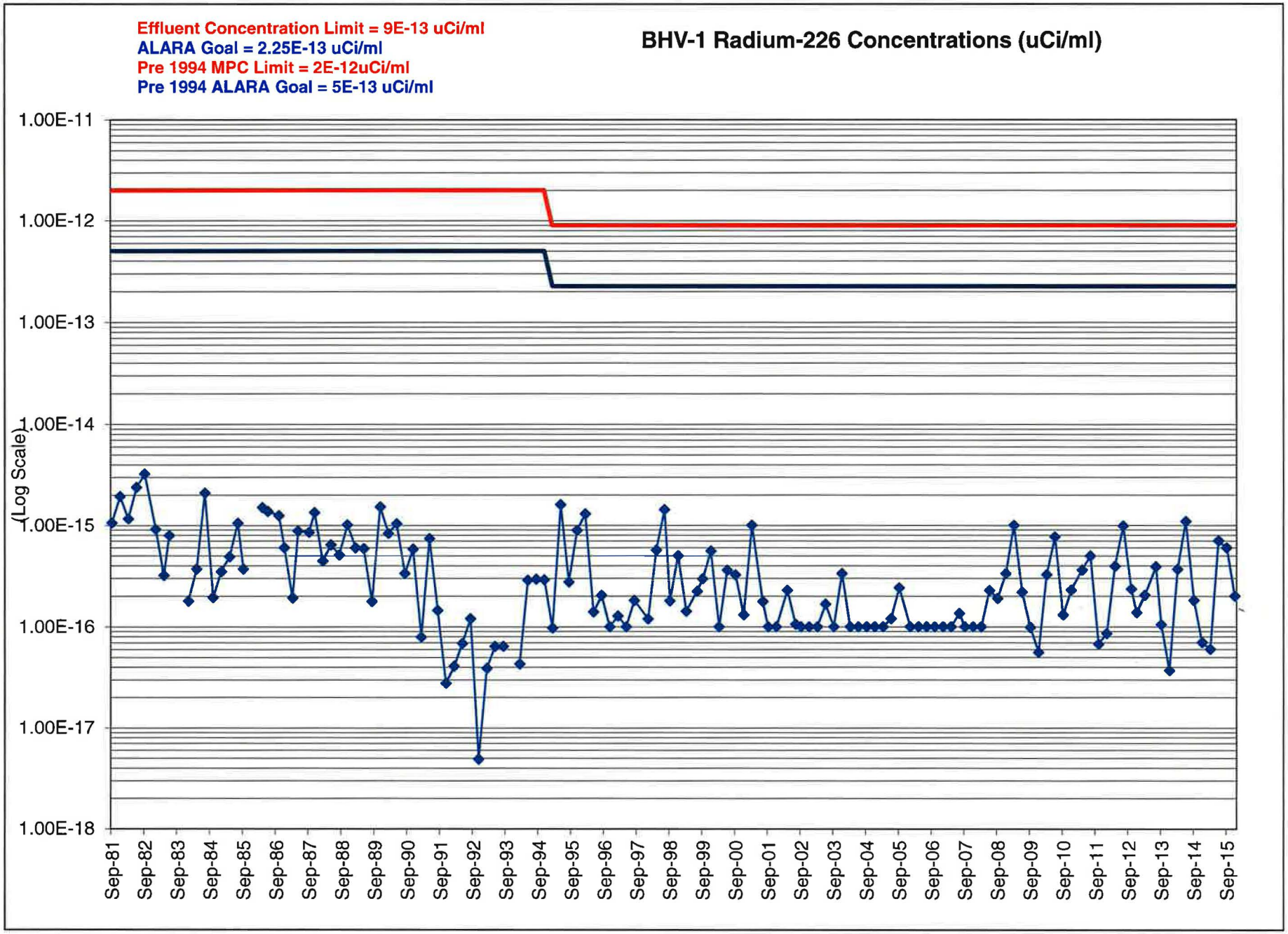
Sep-14
Sep-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-1 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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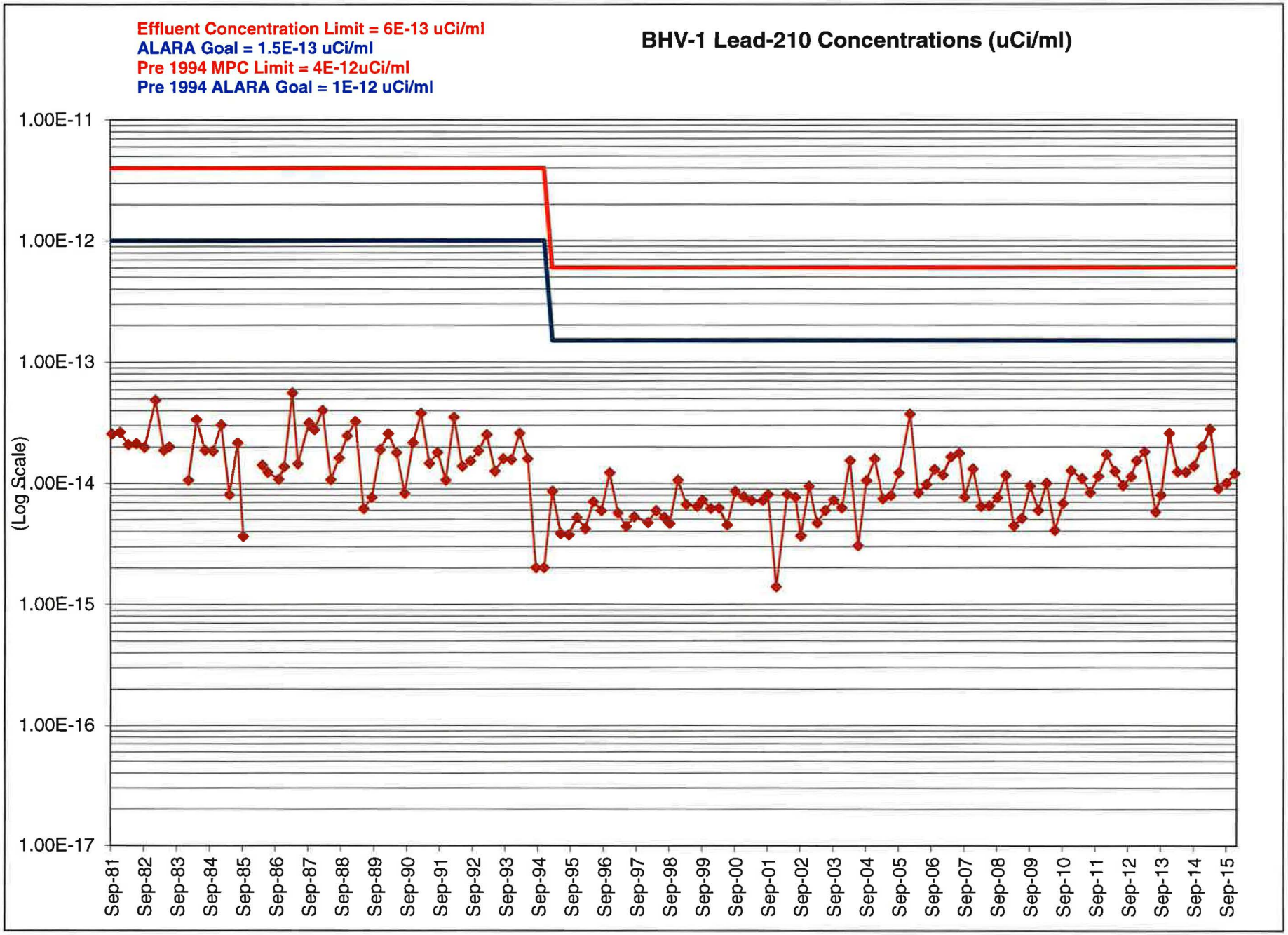
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-1 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
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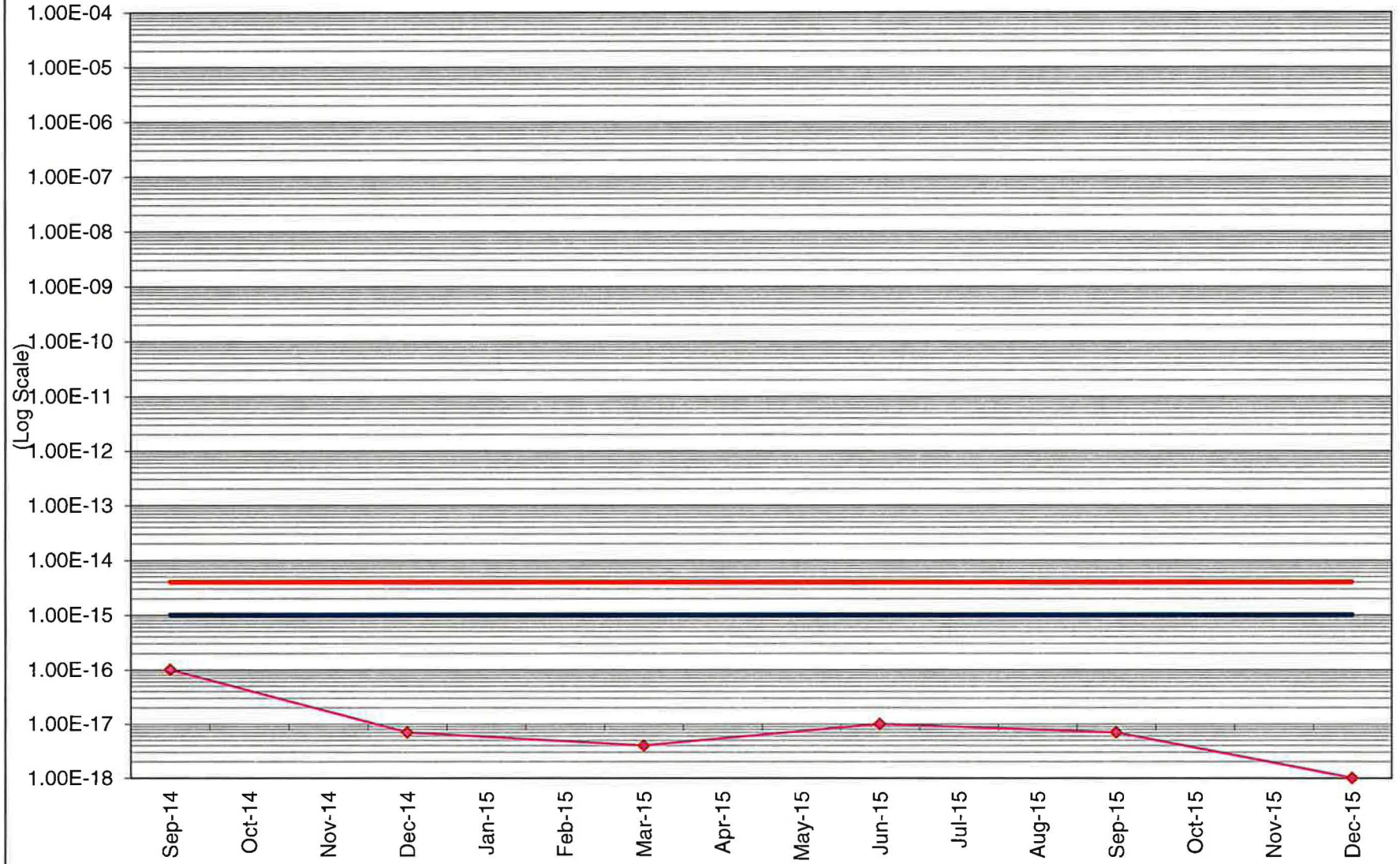
Sep-13
Sep-14
Sep-15

Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml

BHV-1 Thorium-232 Concentrations (uCi/ml)



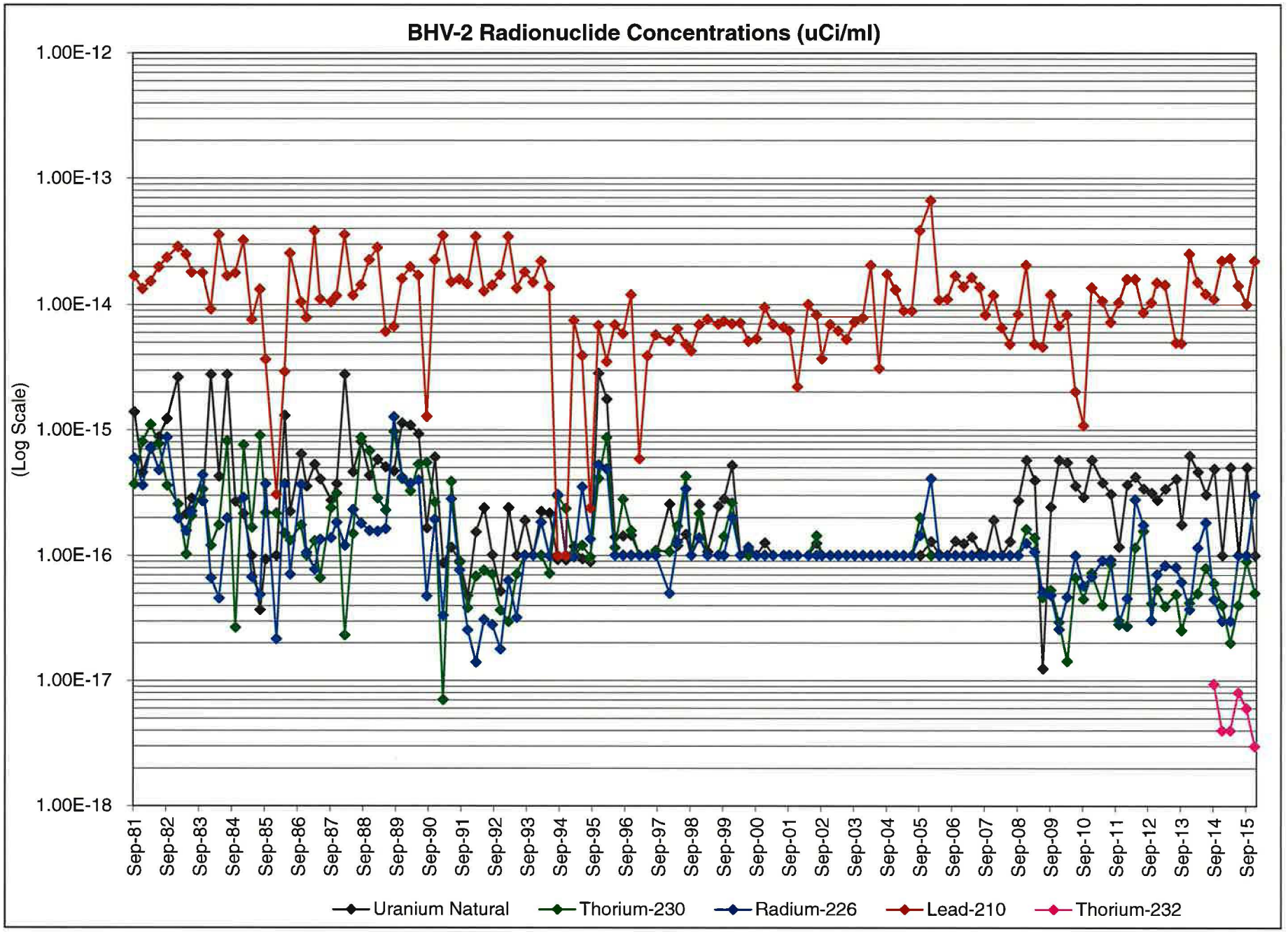
TAB 2

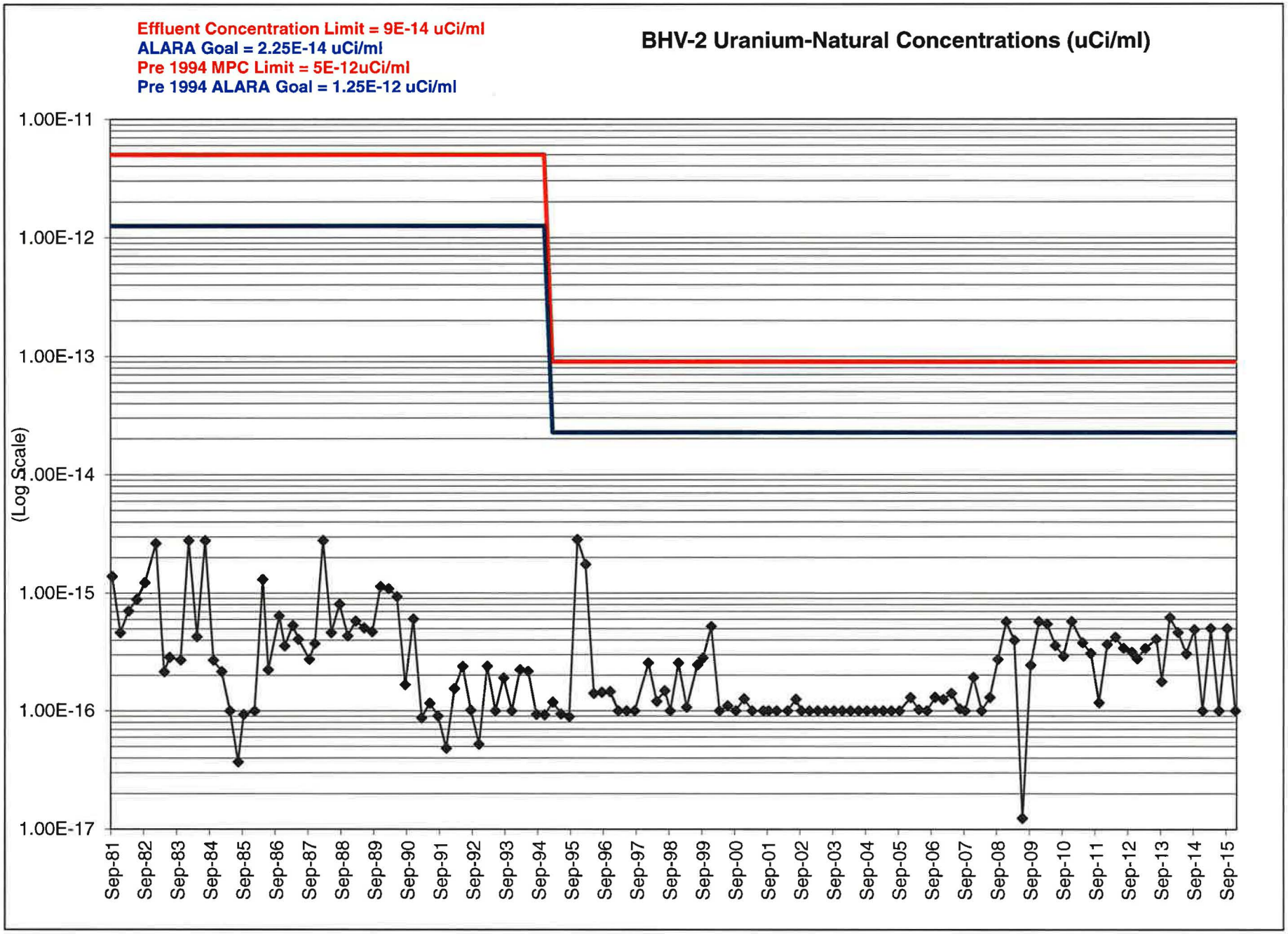
BHV-2 AIR SAMPLING GRAPHS AND DATA TABLE

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-2U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-2T230	Effluent Concentration Limit =	9E-15 uCi/ml	BHV-2R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-2PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-2T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981	1.39E-15	5.00E-12	1.25E-12	3.69E-16	8.00E-14	2.00E-14	5.92E-16	2.00E-12	5.00E-13	1.67E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/14/1981	4.62E-16	5.00E-12	1.25E-12	8.03E-16	8.00E-14	2.00E-14	3.62E-16	2.00E-12	5.00E-13	1.33E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/29/1982	7.07E-16	5.00E-12	1.25E-12	1.10E-15	8.00E-14	2.00E-14	7.27E-16	2.00E-12	5.00E-13	1.52E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1982	8.84E-16	5.00E-12	1.25E-12	7.73E-16	8.00E-14	2.00E-14	4.78E-16	2.00E-12	5.00E-13	1.98E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/27/1982	1.23E-15	5.00E-12	1.25E-12	3.60E-16	8.00E-14	2.00E-14	8.73E-16	2.00E-12	5.00E-13	2.35E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1983	2.64E-15	5.00E-12	1.25E-12	2.55E-16	8.00E-14	2.00E-14	1.98E-16	2.00E-12	5.00E-13	2.85E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/4/1983	2.14E-16	5.00E-12	1.25E-12	1.02E-16	8.00E-14	2.00E-14	1.57E-16	2.00E-12	5.00E-13	2.48E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1983	2.85E-16	5.00E-12	1.25E-12	2.06E-16	8.00E-14	2.00E-14	2.24E-16	2.00E-12	5.00E-13	1.79E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/3/1983	2.70E-16	5.00E-12	1.25E-12	3.36E-16	8.00E-14	2.00E-14	4.37E-16	2.00E-12	5.00E-13	1.78E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1984	2.78E-15	5.00E-12	1.25E-12	1.20E-16	8.00E-14	2.00E-14	6.64E-17	2.00E-12	5.00E-13	9.14E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/2/1984	4.28E-16	5.00E-12	1.25E-12	1.75E-16	8.00E-14	2.00E-14	4.57E-17	2.00E-12	5.00E-13	3.55E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/2/1984	2.78E-15	5.00E-12	1.25E-12	8.12E-16	8.00E-14	2.00E-14	1.98E-16	2.00E-12	5.00E-13	1.68E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/1/1984	2.69E-16	5.00E-12	1.25E-12	2.66E-17	8.00E-14	2.00E-14	0.00E+00	2.00E-12	5.00E-13	1.77E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1985	2.15E-16	5.00E-12	1.25E-12	7.55E-16	8.00E-14	2.00E-14	2.87E-16	2.00E-12	5.00E-13	3.19E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1985	1.00E-16	5.00E-12	1.25E-12	1.67E-16	8.00E-14	2.00E-14	6.75E-17	2.00E-12	5.00E-13	7.56E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/1/1985	3.70E-17	5.00E-12	1.25E-12	9.00E-16	8.00E-14	2.00E-14	4.90E-17	2.00E-12	5.00E-13	1.31E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/30/1985	9.32E-17	5.00E-12	1.25E-12	2.18E-16	8.00E-14	2.00E-14	3.71E-16	2.00E-12	5.00E-13	3.64E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1986	1.00E-16	5.00E-12	1.25E-12	2.16E-16	8.00E-14	2.00E-14	2.15E-17	2.00E-12	5.00E-13	3.04E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1986	1.31E-15	5.00E-12	1.25E-12	1.50E-16	8.00E-14	2.00E-14	3.71E-16	2.00E-12	5.00E-13	2.90E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1986	2.23E-16	5.00E-12	1.25E-12	1.32E-16	8.00E-14	2.00E-14	7.09E-17	2.00E-12	5.00E-13	2.53E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/27/1986	6.41E-16	5.00E-12	1.25E-12	1.74E-16	8.00E-14	2.00E-14	3.67E-16	2.00E-12	5.00E-13	1.04E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/15/1986	3.56E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.05E-16	2.00E-12	5.00E-13	7.81E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/16/1987	5.31E-16	5.00E-12	1.25E-12	1.30E-16	8.00E-14	2.00E-14	7.74E-17	2.00E-12	5.00E-13	3.80E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1987	4.06E-16	5.00E-12	1.25E-12	6.63E-17	8.00E-14	2.00E-14	1.34E-16	2.00E-12	5.00E-13	1.10E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/9/1987	2.74E-16	5.00E-12	1.25E-12	2.38E-16	8.00E-14	2.00E-14	1.38E-16	2.00E-12	5.00E-13	1.04E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/2/1987	3.73E-16	5.00E-12	1.25E-12	3.11E-16	8.00E-14	2.00E-14	1.83E-16	2.00E-12	5.00E-13	1.17E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/16/1988	2.78E-15	5.00E-12	1.25E-12	2.31E-17	8.00E-14	2.00E-14	1.20E-16	2.00E-12	5.00E-13	3.55E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/18/1988	4.63E-16	5.00E-12	1.25E-12	1.49E-16	8.00E-14	2.00E-14	2.30E-16	2.00E-12	5.00E-13	1.18E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/15/1988	8.06E-16	5.00E-12	1.25E-12	8.69E-16	8.00E-14	2.00E-14	1.80E-16	2.00E-12	5.00E-13	1.42E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/14/1988	4.34E-16	5.00E-12	1.25E-12	6.76E-16	8.00E-14	2.00E-14	1.57E-16	2.00E-12	5.00E-13	2.25E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/13/1989	5.80E-16	5.00E-12	1.25E-12	2.85E-16	8.00E-14	2.00E-14	1.55E-16	2.00E-12	5.00E-13	2.80E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/15/1989	5.06E-16	5.00E-12	1.25E-12	2.28E-16	8.00E-14	2.00E-14	1.63E-16	2.00E-12	5.00E-13	6.05E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/14/1989	4.71E-16	5.00E-12	1.25E-12	9.60E-16	8.00E-14	2.00E-14	1.26E-15	2.00E-12	5.00E-13	6.65E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/13/1989	1.14E-15	5.00E-12	1.25E-12	4.08E-16	8.00E-14	2.00E-14	4.18E-16	2.00E-12	5.00E-13	1.59E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/12/1990	1.09E-15	5.00E-12	1.25E-12	3.25E-16	8.00E-14	2.00E-14	3.74E-16	2.00E-12	5.00E-13	1.98E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/14/1990	9.32E-16	5.00E-12	1.25E-12	5.27E-16	8.00E-14	2.00E-14	3.97E-16	2.00E-12	5.00E-13	1.69E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/13/1990	1.66E-16	5.00E-12	1.25E-12	5.49E-16	8.00E-14	2.00E-14	4.75E-17	2.00E-12	5.00E-13	1.27E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/12/1990	6.05E-16	5.00E-12	1.25E-12	2.64E-16	8.00E-14	2.00E-14	1.93E-16	2.00E-12	5.00E-13	2.25E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/11/1991	8.72E-17	5.00E-12	1.25E-12	7.00E-18	8.00E-14	2.00E-14	3.33E-17	2.00E-12	5.00E-13	3.49E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/13/1991	1.16E-16	5.00E-12	1.25E-12	3.86E-16	8.00E-14	2.00E-14	2.80E-16	2.00E-12	5.00E-13	1.50E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/12/1991	9.02E-17	5.00E-12	1.25E-12	8.82E-17	8.00E-14	2.00E-14	7.65E-17	2.00E-12	5.00E-13	1.58E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/11/1991	4.81E-17	5.00E-12	1.25E-12	3.82E-17	8.00E-14	2.00E-14	2.54E-17	2.00E-12	5.00E-13	1.45E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/10/1992	1.54E-16	5.00E-12	1.25E-12	6.82E-17	8.00E-14	2.00E-14	1.40E-17	2.00E-12	5.00E-13	3.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1992	2.38E-16	5.00E-12	1.25E-12	7.63E-17	8.00E-14	2.00E-14	3.07E-17	2.00E-12	5.00E-13	1.27E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1992	1.01E-16	5.00E-12	1.25E-12	7.07E-17	8.00E-14	2.00E-14	2.80E-17	2.00E-12	5.00E-13	1.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/9/1992	5.20E-17	5.00E-12	1.25E-12	3.65E-17	8.00E-14	2.00E-14	1.78E-17	2.00E-12	5.00E-13	1.71E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/9/1993	2.39E-16	5.00E-12	1.25E-12	2.97E-17	8.00E-14	2.00E-14	6.31E-17	2.00E-12	5.00E-13	3.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/10/1993	1.00E-16	5.00E-12	1.25E-12	7.11E-17	8.00E-14	2.00E-14	3.19E-17	2.00E-12	5.00E-13	1.34E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1993	1.90E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.80E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-2U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-2T230	Effluent Concentration Limit =	9E-15 uCi/ml	BHV-2R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-2PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-2T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
11/8/1993	1.00E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.49E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1994	2.23E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.84E-16	2.00E-12	5.00E-13	2.19E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/9/1994	2.16E-16	5.00E-12	1.25E-12	7.20E-17	8.00E-14	2.00E-14	9.89E-17	2.00E-12	5.00E-13	1.37E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/9/1994	9.29E-17	5.00E-12	1.25E-12	2.96E-16	8.00E-14	2.00E-14	3.04E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/7/1994	9.21E-17	5.00E-12	1.25E-12	2.35E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1995	1.18E-16	9.00E-14	2.25E-14	9.70E-17	2.00E-14	5.00E-15	9.70E-17	9.00E-13	2.25E-13	7.42E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/9/1995	9.40E-17	9.00E-14	2.25E-14	1.20E-16	2.00E-14	5.00E-15	3.50E-16	9.00E-13	2.25E-13	3.90E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/9/1995	8.90E-17	9.00E-14	2.25E-14	9.67E-17	2.00E-14	5.00E-15	1.35E-16	9.00E-13	2.25E-13	2.38E-16	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/11/1995	2.83E-15	9.00E-14	2.25E-14	4.09E-16	2.00E-14	5.00E-15	5.23E-16	9.00E-13	2.25E-13	6.77E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/5/1996	1.75E-15	9.00E-14	2.25E-14	8.66E-16	2.00E-14	5.00E-15	4.86E-16	9.00E-13	2.25E-13	3.50E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/6/1996	1.40E-16	9.00E-14	2.25E-14	1.15E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.85E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/5/1996	1.43E-16	9.00E-14	2.25E-14	2.78E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.83E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/6/1996	1.45E-16	9.00E-14	2.25E-14	1.57E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.19E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/6/1997	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.84E-16	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/5/1997	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.89E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/11/1997	1.00E-16	9.00E-14	2.25E-14	1.09E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.69E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/5/1998	2.55E-16	9.00E-14	2.25E-14	1.07E-16	2.00E-14	5.00E-15	5.00E-17	9.00E-13	2.25E-13	5.11E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/28/1998	1.20E-16	9.00E-14	2.25E-14	1.71E-16	2.00E-14	5.00E-15	1.28E-16	9.00E-13	2.25E-13	6.40E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/31/1998	1.47E-16	9.00E-14	2.25E-14	4.24E-16	2.00E-14	5.00E-15	3.39E-16	9.00E-13	2.25E-13	4.80E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/28/1998	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.26E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1998	2.54E-16	9.00E-14	2.25E-14	2.15E-16	2.00E-14	5.00E-15	1.38E-16	9.00E-13	2.25E-13	6.88E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/1999	1.07E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.61E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/1999	2.46E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/1999	2.81E-16	9.00E-14	2.25E-14	1.41E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.35E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1999	5.20E-16	9.00E-14	2.25E-14	2.60E-16	2.00E-14	5.00E-15	2.01E-16	9.00E-13	2.25E-13	7.00E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/27/2000	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.12E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/26/2000	1.10E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.16E-16	9.00E-13	2.25E-13	5.07E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2000	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.31E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/26/2000	1.26E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.45E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/26/2001	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2001	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.56E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/24/2001	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.16E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2001	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/1/2002	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/1/2002	1.25E-16	9.00E-14	2.25E-14	1.43E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.25E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2002	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.69E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2002	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.91E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.16E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.27E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/29/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.23E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/29/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.80E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.04E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.09E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.73E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.30E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/28/2005	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.88E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/29/2005	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.85E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2005	1.00E-16	9.00E-14	2.25E-14	1.99E-16	2.00E-14	5.00E-15	1.44E-16	9.00E-13	2.25E-13	3.81E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2006	1.29E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	4.08E-16	9.00E-13	2.25E-13	6.58E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-2U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-2T230	Effluent Concentration Limit =	9E-15 uCi/ml	BHV-2R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-2PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-2T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
4/3/2006	1.02E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.08E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/2006	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/2/2006	1.30E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.68E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/1/2007	1.24E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.38E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/2/2007	1.40E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.63E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2007	1.04E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.36E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2007	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.24E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2007	1.91E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.18E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/30/2008	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.49E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2008	1.29E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.82E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2008	2.73E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.30E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2008	5.71E-16	9.00E-14	2.25E-14	1.61E-16	2.00E-14	5.00E-15	1.25E-16	9.00E-13	2.25E-13	2.04E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/15/2009	3.96E-16	9.00E-14	2.25E-14	1.38E-16	2.00E-14	5.00E-15	1.07E-16	9.00E-13	2.25E-13	4.81E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/15/2009	1.24E-17	9.00E-14	2.25E-14	4.64E-17	2.00E-14	5.00E-15	5.11E-17	9.00E-13	2.25E-13	4.58E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/15/2009	2.43E-16	9.00E-14	2.25E-14	5.28E-17	2.00E-14	5.00E-15	4.84E-17	9.00E-13	2.25E-13	1.19E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/15/2009	5.72E-16	9.00E-14	2.25E-14	2.94E-17	2.00E-14	5.00E-15	2.57E-17	9.00E-13	2.25E-13	6.70E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2010	5.47E-16	9.00E-14	2.25E-14	1.42E-17	2.00E-14	5.00E-15	4.66E-17	9.00E-13	2.25E-13	8.24E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2010	3.58E-16	9.00E-14	2.25E-14	6.64E-17	2.00E-14	5.00E-15	9.90E-17	9.00E-13	2.25E-13	2.01E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2010	2.91E-16	9.00E-14	2.25E-14	4.48E-17	2.00E-14	5.00E-15	5.72E-17	9.00E-13	2.25E-13	1.08E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2010	5.73E-16	9.00E-14	2.25E-14	7.24E-17	2.00E-14	5.00E-15	6.76E-17	9.00E-13	2.25E-13	1.35E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/4/2011	3.79E-16	9.00E-14	2.25E-14	4.01E-17	2.00E-14	5.00E-15	9.11E-17	9.00E-13	2.25E-13	1.06E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/4/2011	3.07E-16	9.00E-14	2.25E-14	8.54E-17	2.00E-14	5.00E-15	9.21E-17	9.00E-13	2.25E-13	7.21E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/3/2011	1.17E-16	9.00E-14	2.25E-14	3.04E-17	2.00E-14	5.00E-15	2.81E-17	9.00E-13	2.25E-13	1.03E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2012	3.65E-16	9.00E-14	2.25E-14	2.72E-17	2.00E-14	5.00E-15	4.54E-17	9.00E-13	2.25E-13	1.58E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2012	4.22E-16	9.00E-14	2.25E-14	1.15E-16	2.00E-14	5.00E-15	2.77E-16	9.00E-13	2.25E-13	1.58E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2012	3.39E-16	9.00E-14	2.25E-14	1.56E-16	2.00E-14	5.00E-15	1.74E-16	9.00E-13	2.25E-13	8.60E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/1/2012	3.13E-16	9.00E-14	2.25E-14	4.13E-17	2.00E-14	5.00E-15	3.04E-17	9.00E-13	2.25E-13	1.03E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2012	2.76E-16	9.00E-14	2.25E-14	5.41E-17	2.00E-14	5.00E-15	7.05E-17	9.00E-13	2.25E-13	1.48E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/25/2013	3.38E-16	9.00E-14	2.25E-14	3.94E-17	2.00E-14	5.00E-15	8.32E-17	9.00E-13	2.25E-13	1.42E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2013	4.06E-16	9.00E-14	2.25E-14	4.89E-17	2.00E-14	5.00E-15	8.06E-17	9.00E-13	2.25E-13	4.93E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2013	1.76E-16	9.00E-14	2.25E-14	2.52E-17	2.00E-14	5.00E-15	6.13E-17	9.00E-13	2.25E-13	4.90E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2013	6.20E-16	9.00E-14	2.25E-14	4.19E-17	2.00E-14	5.00E-15	3.72E-17	9.00E-13	2.25E-13	2.50E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2014	4.63E-16	9.00E-14	2.25E-14	4.97E-17	2.00E-14	5.00E-15	1.15E-16	9.00E-13	2.25E-13	1.49E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2014	3.04E-16	9.00E-14	2.25E-14	7.92E-17	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.21E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2014	4.89E-16	9.00E-14	2.25E-14	6.01E-17	2.00E-14	5.00E-15	4.47E-17	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	9.35E-18	4.00E-15	1.00E-15
12/29/2014	1.00E-16	9.00E-14	2.25E-14	4.00E-17	2.00E-14	5.00E-15	3.00E-17	9.00E-13	2.25E-13	2.20E-14	6.00E-13	1.50E-13	4.00E-18	4.00E-15	1.00E-15
3/30/2015	5.00E-16	9.00E-14	2.25E-14	2.00E-17	2.00E-14	5.00E-15	3.00E-17	9.00E-13	2.25E-13	2.30E-14	6.00E-13	1.50E-13	4.00E-18	4.00E-15	1.00E-15
6/29/2015	1.00E-16	9.00E-14	2.25E-14	4.00E-17	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.40E-14	6.00E-13	1.50E-13	8.00E-18	4.00E-15	1.00E-15
9/28/2015	5.00E-16	9.00E-14	2.25E-14	9.00E-17	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.00E-14	6.00E-13	1.50E-13	6.00E-18	4.00E-15	1.00E-15
12/28/2015	1.00E-16	9.00E-14	2.25E-14	5.00E-17	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	2.20E-14	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15


BHV-2 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-2 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
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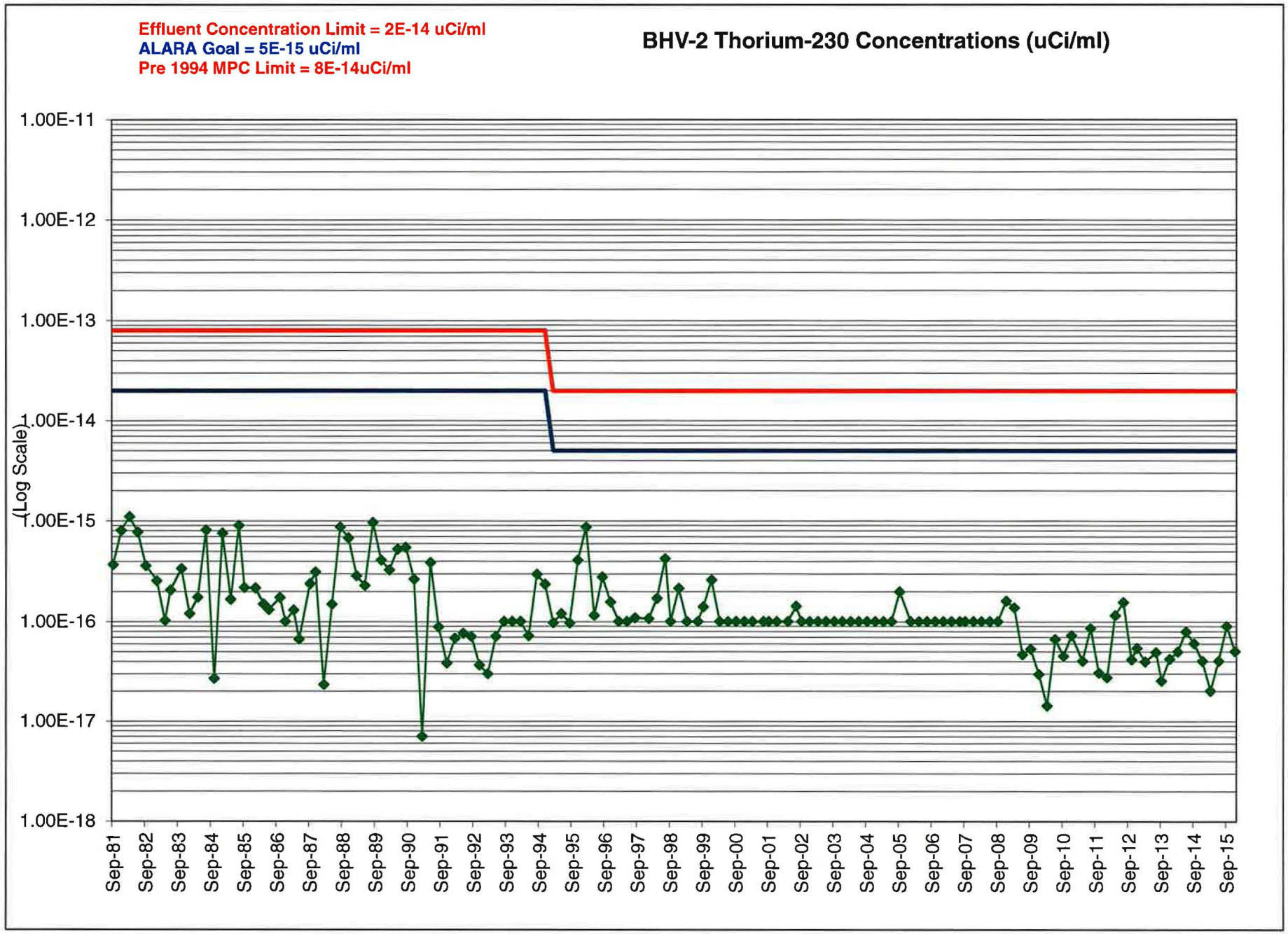
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-2 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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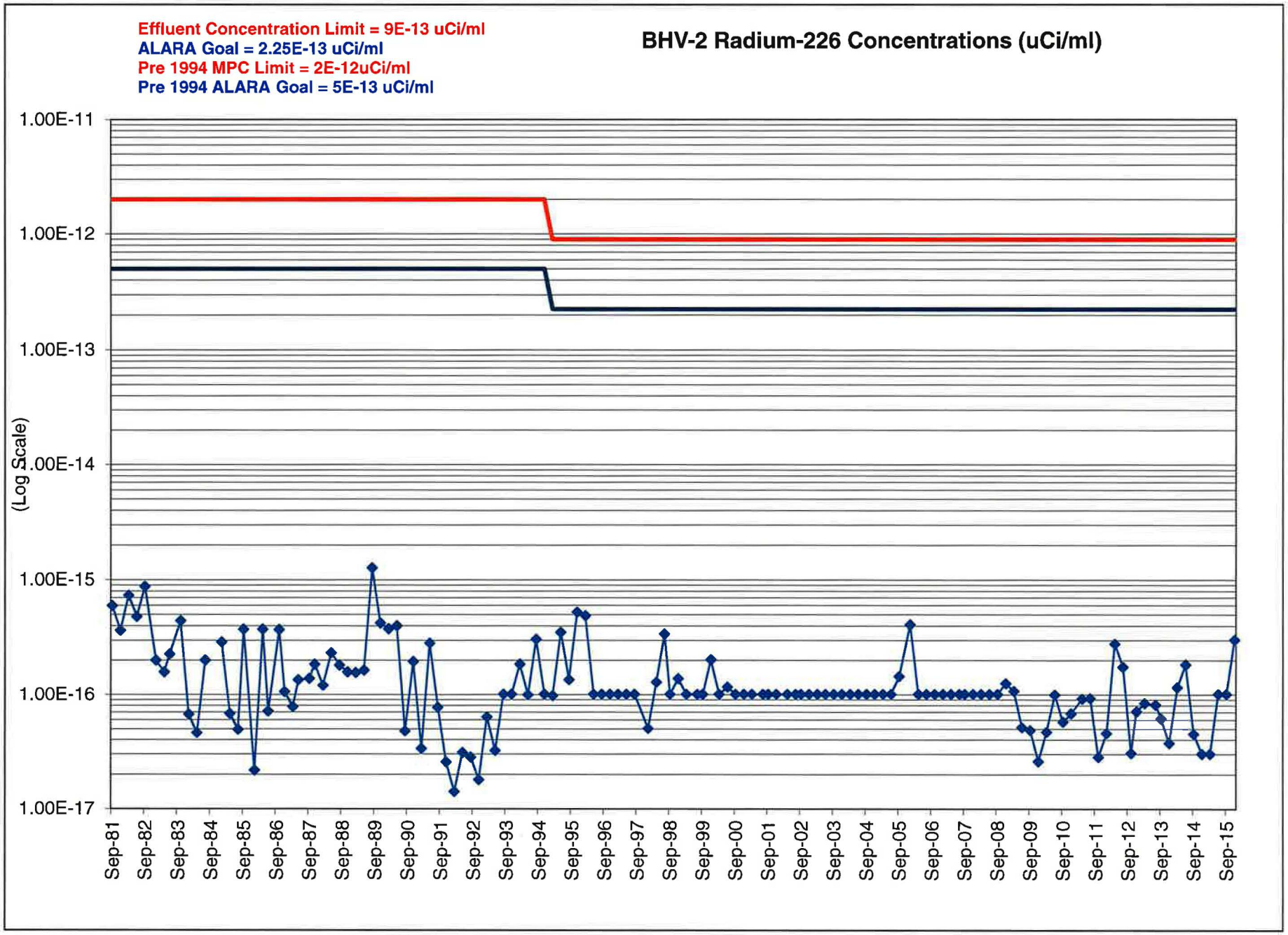
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-2 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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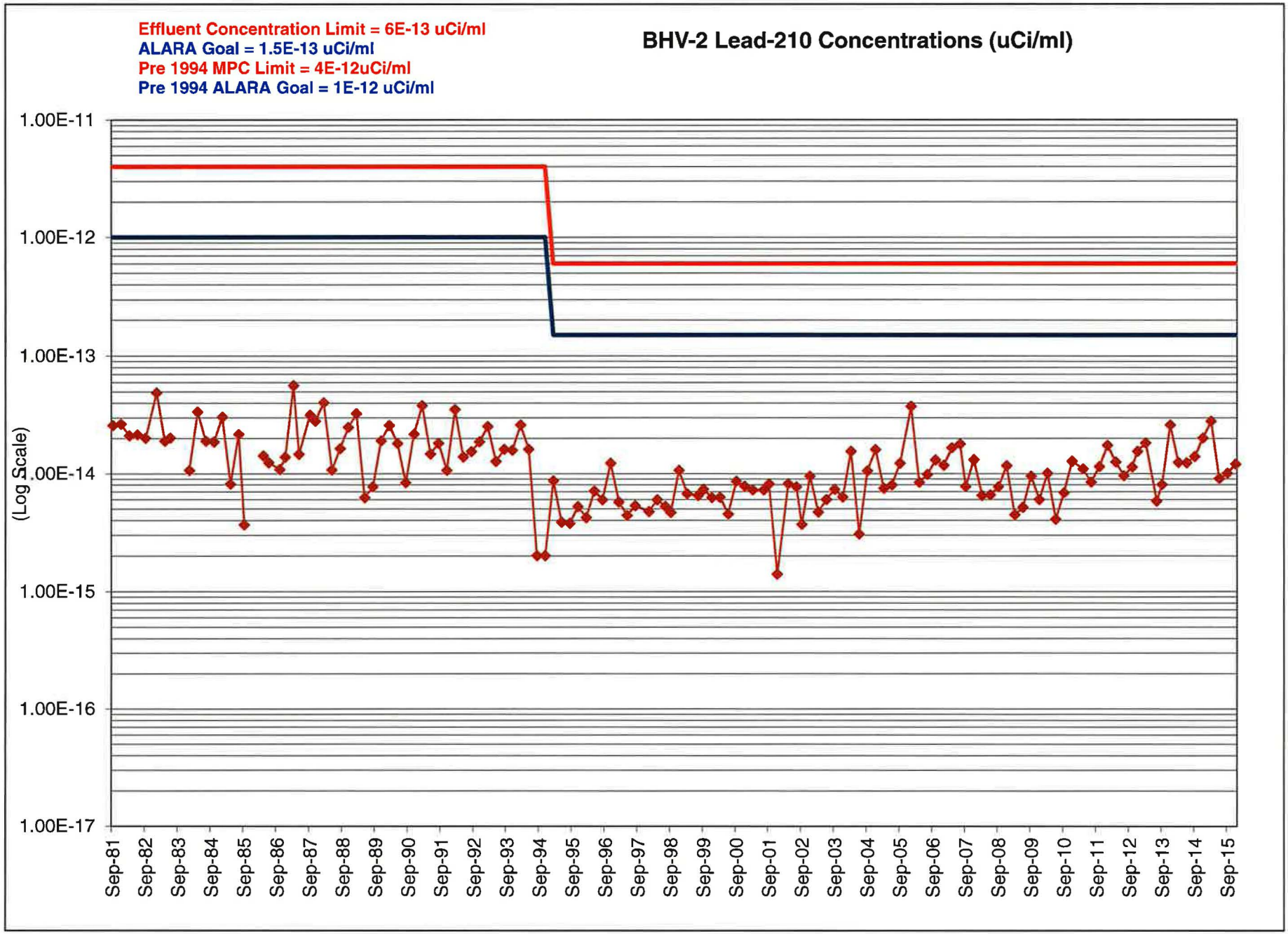
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-2 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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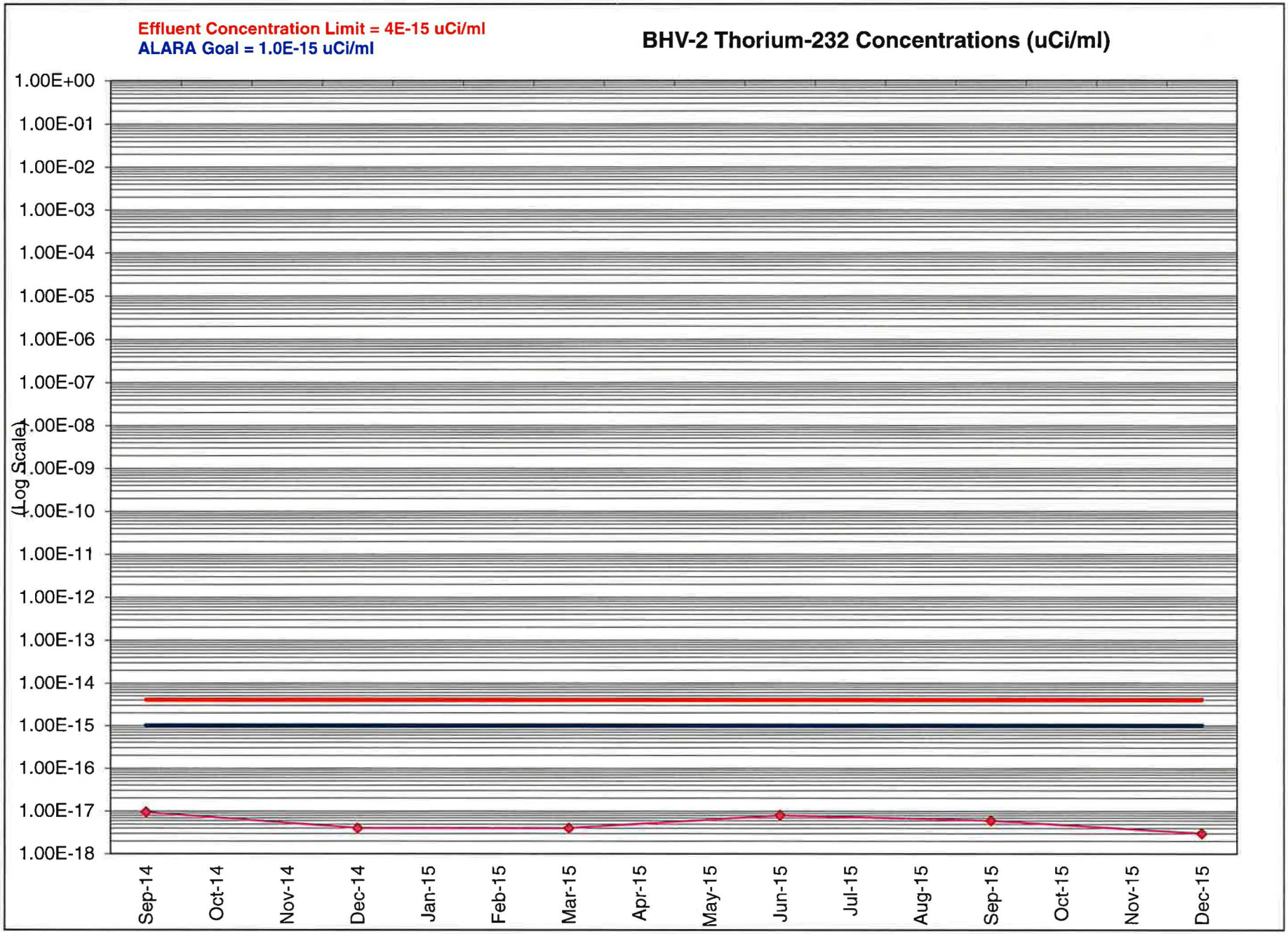
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-2 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
1.00E+00
1.00E-01
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
1.00E-09
1.00E-10
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15

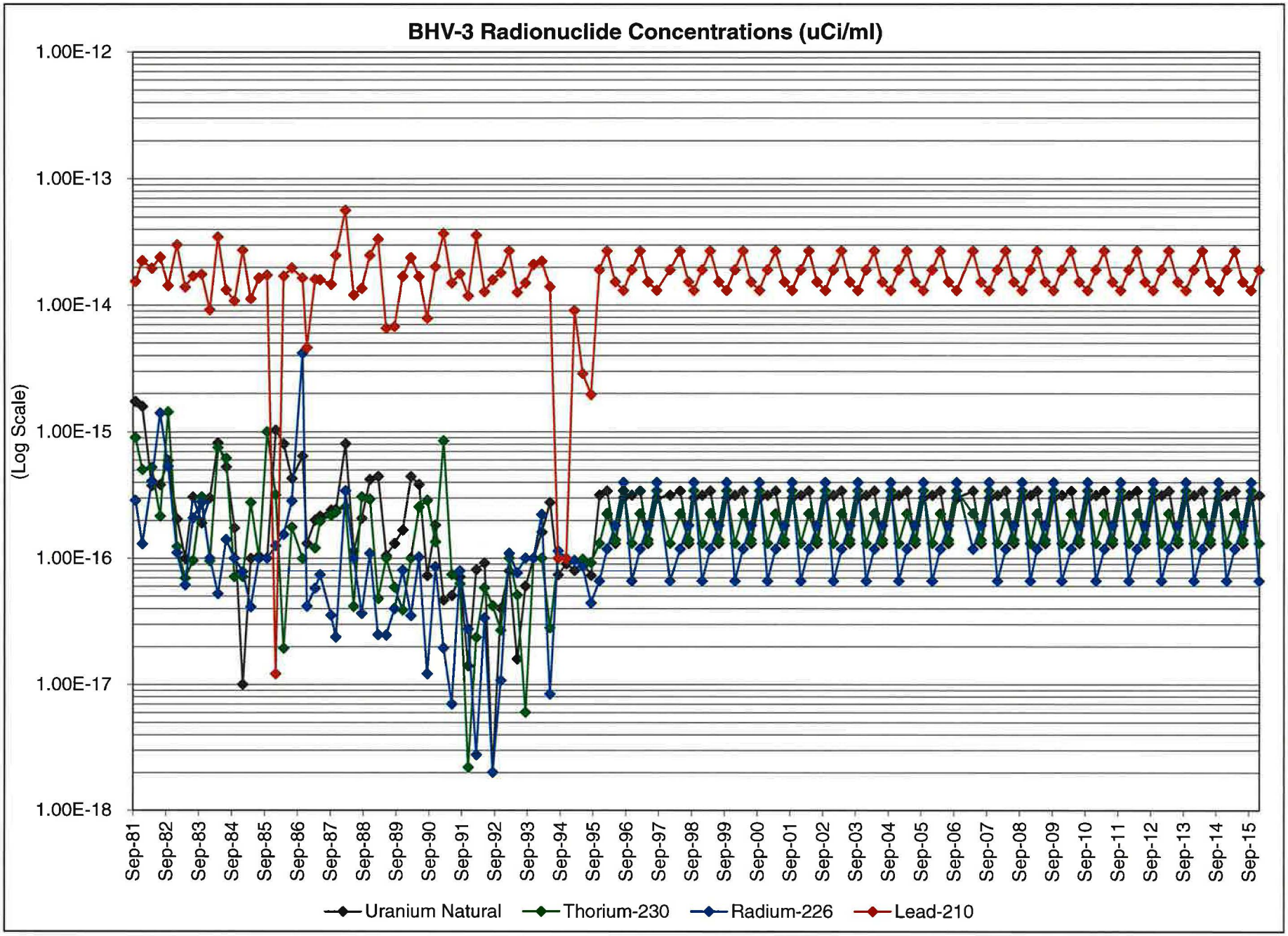
TAB 3

BHV-3 AIR SAMPLING GRAPHS AND DATA TABLE

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-3U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-3T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-3R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-3PB
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981	1.74E-15	5.00E-12	1.25E-12	9.02E-16	8.00E-14	2.00E-14	2.87E-16	2.00E-12	5.00E-13	1.54E-14	4.00E-12	1.00E-12
12/14/1981	1.59E-15	5.00E-12	1.25E-12	5.03E-16	8.00E-14	2.00E-14	1.30E-16	2.00E-12	5.00E-13	2.25E-14	4.00E-12	1.00E-12
3/29/1982	3.76E-16	5.00E-12	1.25E-12	5.25E-16	8.00E-14	2.00E-14	4.08E-16	2.00E-12	5.00E-13	1.96E-14	4.00E-12	1.00E-12
6/30/1982	3.83E-16	5.00E-12	1.25E-12	2.16E-16	8.00E-14	2.00E-14	1.41E-15	2.00E-12	5.00E-13	2.40E-14	4.00E-12	1.00E-12
9/27/1982	5.95E-16	5.00E-12	1.25E-12	1.44E-15	8.00E-14	2.00E-14	5.36E-16	2.00E-12	5.00E-13	1.43E-14	4.00E-12	1.00E-12
1/3/1983	2.05E-16	5.00E-12	1.25E-12	1.23E-16	8.00E-14	2.00E-14	1.10E-16	2.00E-12	5.00E-13	3.01E-14	4.00E-12	1.00E-12
4/4/1983	1.00E-16	5.00E-12	1.25E-12	6.94E-17	8.00E-14	2.00E-14	6.11E-17	2.00E-12	5.00E-13	1.39E-14	4.00E-12	1.00E-12
6/30/1983	3.06E-16	5.00E-12	1.25E-12	9.59E-17	8.00E-14	2.00E-14	2.08E-16	2.00E-12	5.00E-13	1.70E-14	4.00E-12	1.00E-12
10/3/1983	1.91E-16	5.00E-12	1.25E-12	3.05E-16	8.00E-14	2.00E-14	2.79E-16	2.00E-12	5.00E-13	1.76E-14	4.00E-12	1.00E-12
1/3/1984	3.01E-16	5.00E-12	1.25E-12	9.51E-17	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	9.17E-15	4.00E-12	1.00E-12
4/2/1984	8.22E-16	5.00E-12	1.25E-12	7.52E-16	8.00E-14	2.00E-14	5.20E-17	2.00E-12	5.00E-13	3.47E-14	4.00E-12	1.00E-12
7/2/1984	5.29E-16	5.00E-12	1.25E-12	6.18E-16	8.00E-14	2.00E-14	1.40E-16	2.00E-12	5.00E-13	1.32E-14	4.00E-12	1.00E-12
10/1/1984	1.74E-16	5.00E-12	1.25E-12	7.10E-17	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.08E-14	4.00E-12	1.00E-12
1/2/1985	1.00E-17	5.00E-12	1.25E-12	7.10E-17	8.00E-14	2.00E-14	7.80E-17	2.00E-12	5.00E-13	2.73E-14	4.00E-12	1.00E-12
4/1/1985	1.00E-16	5.00E-12	1.25E-12	2.76E-16	8.00E-14	2.00E-14	4.10E-17	2.00E-12	5.00E-13	1.12E-14	4.00E-12	1.00E-12
7/1/1985	1.04E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.64E-14	4.00E-12	1.00E-12
9/30/1985	1.00E-16	5.00E-12	1.25E-12	1.00E-15	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.73E-14	4.00E-12	1.00E-12
1/2/1986	1.03E-15	5.00E-12	1.25E-12	3.17E-16	8.00E-14	2.00E-14	1.25E-16	2.00E-12	5.00E-13	1.21E-17	4.00E-12	1.00E-12
4/1/1986	8.04E-16	5.00E-12	1.25E-12	1.93E-17	8.00E-14	2.00E-14	1.54E-16	2.00E-12	5.00E-13	1.69E-14	4.00E-12	1.00E-12
6/30/1986	4.29E-16	5.00E-12	1.25E-12	1.77E-16	8.00E-14	2.00E-14	2.83E-16	2.00E-12	5.00E-13	1.97E-14	4.00E-12	1.00E-12
10/27/1986	6.45E-16	5.00E-12	1.25E-12	9.89E-17	8.00E-14	2.00E-14	4.16E-15	2.00E-12	5.00E-13	1.64E-14	4.00E-12	1.00E-12
12/15/1986	1.31E-16	5.00E-12	1.25E-12	0.00E+00	8.00E-14	2.00E-14	4.16E-17	2.00E-12	5.00E-13	4.60E-15	4.00E-12	1.00E-12
3/16/1987	2.01E-16	5.00E-12	1.25E-12	1.20E-16	8.00E-14	2.00E-14	5.73E-17	2.00E-12	5.00E-13	1.60E-14	4.00E-12	1.00E-12
5/11/1987	2.16E-16	5.00E-12	1.25E-12	1.96E-16	8.00E-14	2.00E-14	7.38E-17	2.00E-12	5.00E-13	1.59E-14	4.00E-12	1.00E-12
9/9/1987	2.41E-16	5.00E-12	1.25E-12	2.18E-16	8.00E-14	2.00E-14	3.52E-17	2.00E-12	5.00E-13	1.46E-14	4.00E-12	1.00E-12
11/2/1987	2.44E-16	5.00E-12	1.25E-12	2.32E-16	8.00E-14	2.00E-14	2.37E-17	2.00E-12	5.00E-13	2.48E-14	4.00E-12	1.00E-12
2/16/1988	8.08E-16	5.00E-12	1.25E-12	2.55E-16	8.00E-14	2.00E-14	3.42E-16	2.00E-12	5.00E-13	5.61E-14	4.00E-12	1.00E-12
5/18/1988	1.14E-16	5.00E-12	1.25E-12	4.14E-17	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.20E-14	4.00E-12	1.00E-12
8/15/1988	2.08E-16	5.00E-12	1.25E-12	3.06E-16	8.00E-14	2.00E-14	3.65E-17	2.00E-12	5.00E-13	1.36E-14	4.00E-12	1.00E-12
11/14/1988	4.21E-16	5.00E-12	1.25E-12	2.93E-16	8.00E-14	2.00E-14	1.09E-16	2.00E-12	5.00E-13	2.48E-14	4.00E-12	1.00E-12
2/13/1989	4.45E-16	5.00E-12	1.25E-12	4.78E-17	8.00E-14	2.00E-14	2.47E-17	2.00E-12	5.00E-13	3.34E-14	4.00E-12	1.00E-12
5/15/1989	1.05E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	2.45E-17	2.00E-12	5.00E-13	6.56E-15	4.00E-12	1.00E-12
8/14/1989	1.31E-16	5.00E-12	1.25E-12	5.85E-17	8.00E-14	2.00E-14	3.97E-17	2.00E-12	5.00E-13	6.75E-15	4.00E-12	1.00E-12
11/13/1989	1.67E-16	5.00E-12	1.25E-12	3.87E-17	8.00E-14	2.00E-14	8.03E-17	2.00E-12	5.00E-13	1.69E-14	4.00E-12	1.00E-12
2/12/1990	4.43E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	3.50E-17	2.00E-12	5.00E-13	2.37E-14	4.00E-12	1.00E-12
5/14/1990	3.84E-16	5.00E-12	1.25E-12	2.54E-16	8.00E-14	2.00E-14	1.02E-16	2.00E-12	5.00E-13	1.68E-14	4.00E-12	1.00E-12
8/13/1990	7.27E-17	5.00E-12	1.25E-12	2.87E-16	8.00E-14	2.00E-14	1.21E-17	2.00E-12	5.00E-13	7.86E-15	4.00E-12	1.00E-12
11/12/1990	1.84E-16	5.00E-12	1.25E-12	1.34E-16	8.00E-14	2.00E-14	8.53E-17	2.00E-12	5.00E-13	2.01E-14	4.00E-12	1.00E-12
2/11/1991	4.66E-17	5.00E-12	1.25E-12	8.48E-16	8.00E-14	2.00E-14	1.94E-17	2.00E-12	5.00E-13	3.69E-14	4.00E-12	1.00E-12
5/13/1991	5.05E-17	5.00E-12	1.25E-12	7.40E-17	8.00E-14	2.00E-14	7.00E-18	2.00E-12	5.00E-13	1.50E-14	4.00E-12	1.00E-12
8/12/1991	7.14E-17	5.00E-12	1.25E-12	6.22E-17	8.00E-14	2.00E-14	7.95E-17	2.00E-12	5.00E-13	1.77E-14	4.00E-12	1.00E-12
11/11/1991	1.41E-17	5.00E-12	1.25E-12	2.19E-18	8.00E-14	2.00E-14	2.75E-17	2.00E-12	5.00E-13	1.18E-14	4.00E-12	1.00E-12
2/10/1992	8.12E-17	5.00E-12	1.25E-12	2.35E-17	8.00E-14	2.00E-14	2.76E-18	2.00E-12	5.00E-13	3.57E-14	4.00E-12	1.00E-12
5/11/1992	9.18E-17	5.00E-12	1.25E-12	5.80E-17	8.00E-14	2.00E-14	3.36E-17	2.00E-12	5.00E-13	1.28E-14	4.00E-12	1.00E-12
8/10/1992	2.00E-18	5.00E-12	1.25E-12	4.19E-17	8.00E-14	2.00E-14	2.00E-18	2.00E-12	5.00E-13	1.59E-14	4.00E-12	1.00E-12
11/9/1992	4.00E-17	5.00E-12	1.25E-12	2.68E-17	8.00E-14	2.00E-14	1.07E-17	2.00E-12	5.00E-13	1.81E-14	4.00E-12	1.00E-12
2/9/1993	7.94E-17	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.09E-16	2.00E-12	5.00E-13	2.69E-14	4.00E-12	1.00E-12
5/10/1993	1.60E-17	5.00E-12	1.25E-12	5.07E-17	8.00E-14	2.00E-14	7.64E-17	2.00E-12	5.00E-13	1.26E-14	4.00E-12	1.00E-12
8/10/1993	6.00E-17	5.00E-12	1.25E-12	6.00E-18	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.50E-14	4.00E-12	1.00E-12

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-3U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-3T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-3R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-3PB
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
11/8/1993	1.00E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	2.10E-14	4.00E-12	1.00E-12
2/7/1994	1.61E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	2.22E-16	2.00E-12	5.00E-13	2.23E-14	4.00E-12	1.00E-12
5/9/1994	2.77E-16	5.00E-12	1.25E-12	2.80E-17	8.00E-14	2.00E-14	8.37E-18	2.00E-12	5.00E-13	1.40E-14	4.00E-12	1.00E-12
8/9/1994	7.39E-17	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.14E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12
11/7/1994	9.05E-17	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12
2/7/1995	7.99E-17	9.00E-14	2.25E-14	9.60E-17	2.00E-14	5.00E-15	9.60E-17	9.00E-13	2.25E-13	9.05E-15	6.00E-13	1.50E-13
5/9/1995	9.40E-17	9.00E-14	2.25E-14	9.80E-17	2.00E-14	5.00E-15	8.60E-17	9.00E-13	2.25E-13	2.88E-15	6.00E-13	1.50E-13
8/9/1995	7.30E-17	9.00E-14	2.25E-14	9.20E-17	2.00E-14	5.00E-15	4.40E-17	9.00E-13	2.25E-13	1.96E-15	6.00E-13	1.50E-13
11/11/1995	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
2/5/1996	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
5/6/1996	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
8/5/1996	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
11/6/1996	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
2/6/1997	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
5/5/1997	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
8/11/1997	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
1/5/1998	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
4/28/1998	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/31/1998	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/28/1998	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/28/1998	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/29/1999	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/3/1999	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/27/1999	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/28/1999	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/28/2000	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/26/2000	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/26/2000	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/26/2000	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/26/2001	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/2/2001	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/24/2001	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/31/2001	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
4/1/2002	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/1/2002	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2002	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/30/2002	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/31/2003	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/30/2003	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/29/2003	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/29/2003	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/29/2004	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/27/2004	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/27/2004	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/27/2004	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/28/2005	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/29/2005	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/26/2005	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
1/3/2006	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-3U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-3T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-3R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-3PB
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
4/3/2006	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/3/2006	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
10/2/2006	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
1/1/2006	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
4/2/2007	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/2/2007	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2007	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/31/2007	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/31/2008	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/30/2008	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2008	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/31/2008	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/15/2009	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/15/2009	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/15/2009	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/15/2009	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/31/2010	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/30/2010	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2010	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/31/2010	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
4/4/2011	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/4/2011	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
10/3/2011	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
1/3/2012	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
4/3/2012	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/2/2012	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
10/1/2012	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/31/2012	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/25/2013	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
7/2/2013	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2013	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/30/2013	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/31/2014	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/30/2014	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/30/2014	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/29/2014	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13
3/30/2015	3.41E-16	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	2.69E-14	6.00E-13	1.50E-13
6/29/2015	1.31E-16	9.00E-14	2.25E-14	1.39E-16	2.00E-14	5.00E-15	1.82E-16	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13
9/28/2015	3.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	3.99E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13
12/28/2015	3.16E-16	9.00E-14	2.25E-14	1.31E-16	2.00E-14	5.00E-15	6.58E-17	9.00E-13	2.25E-13	1.91E-14	6.00E-13	1.50E-13


BHV-3 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
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Sep-06
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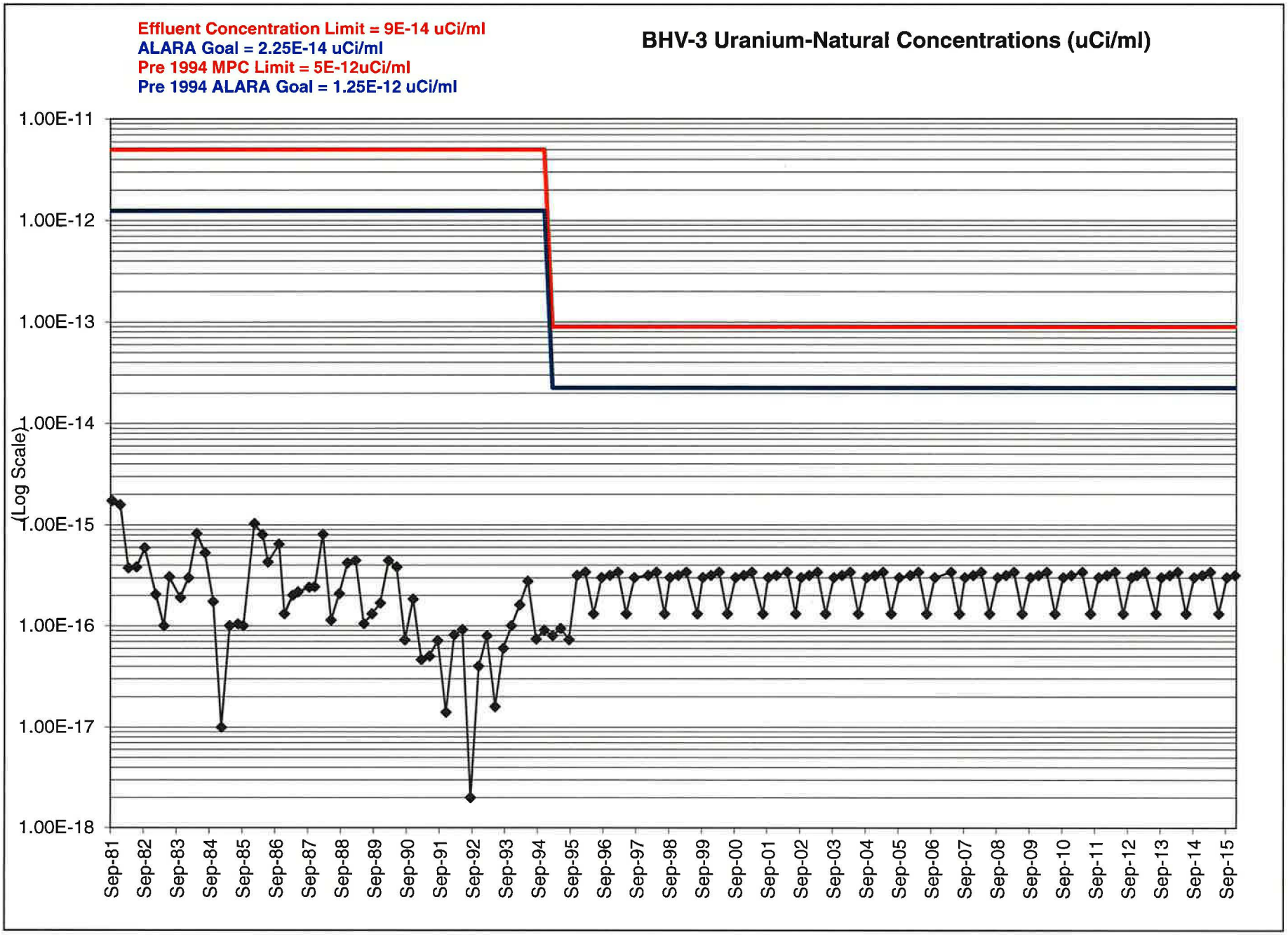
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15
Uranium Natural
Thorium-230
Radium-226
Lead-210


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-3 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
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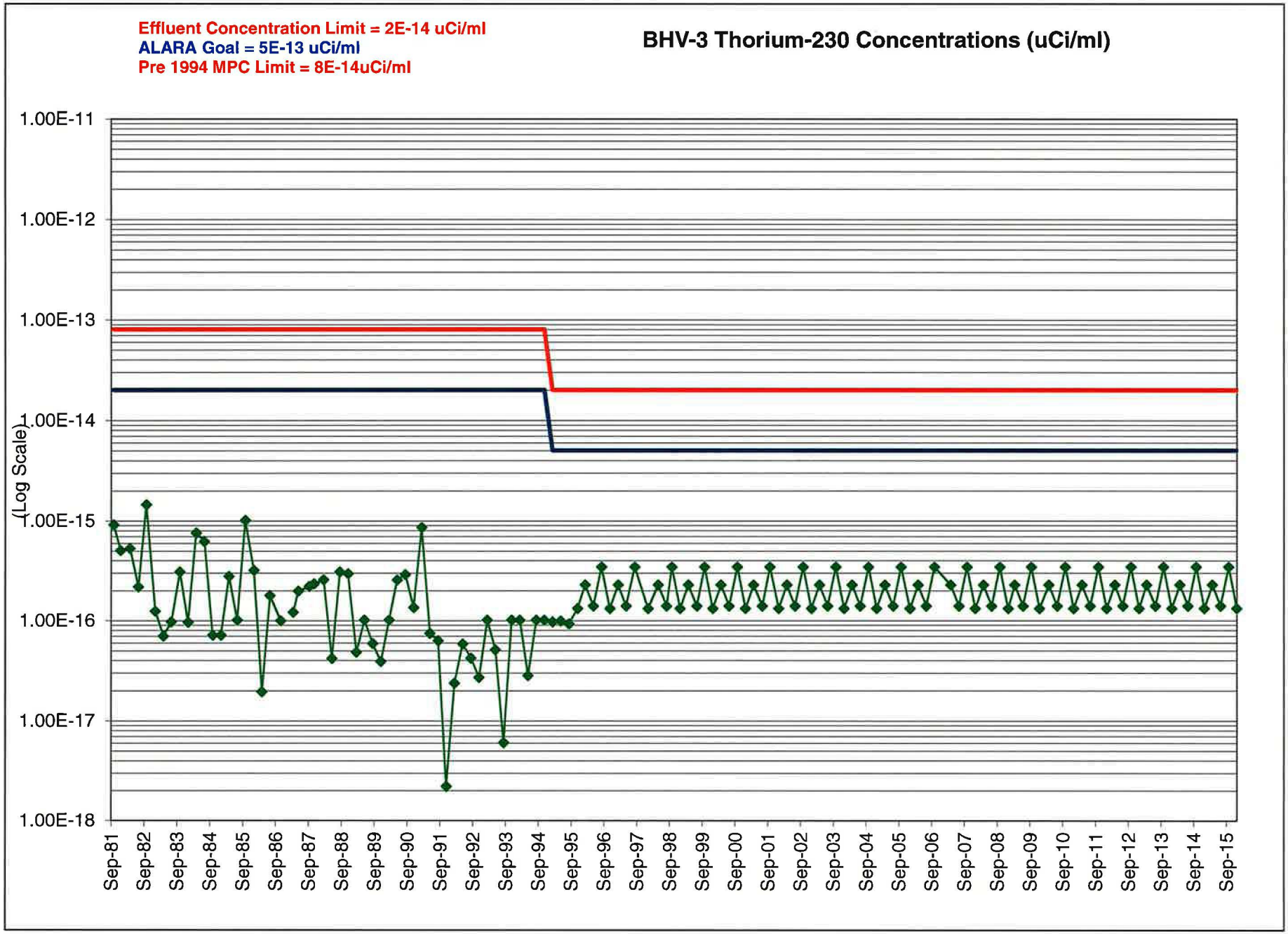
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-13 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-3 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
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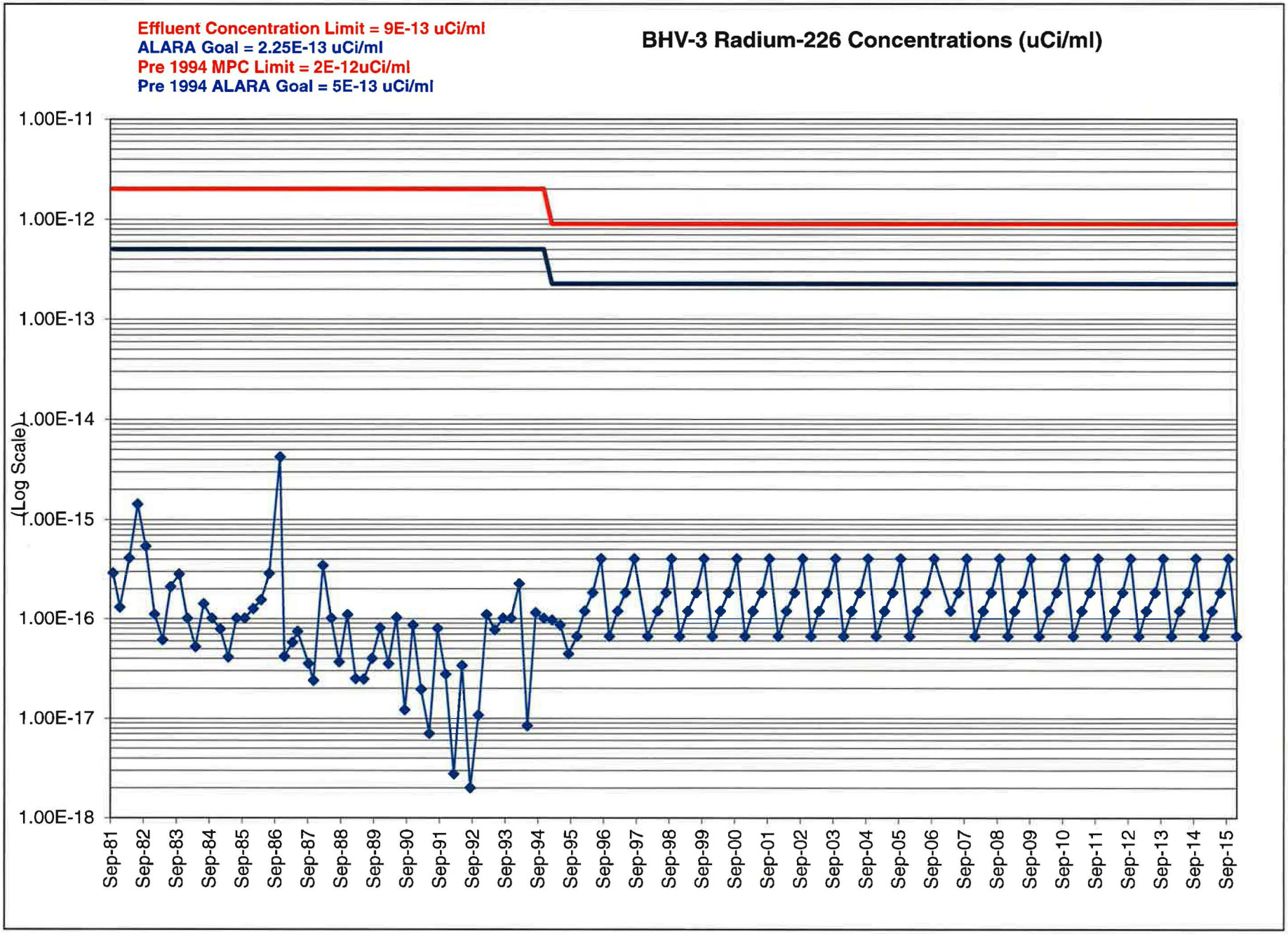
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-3 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
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Sep-91
Sep-92
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Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
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Sep-12
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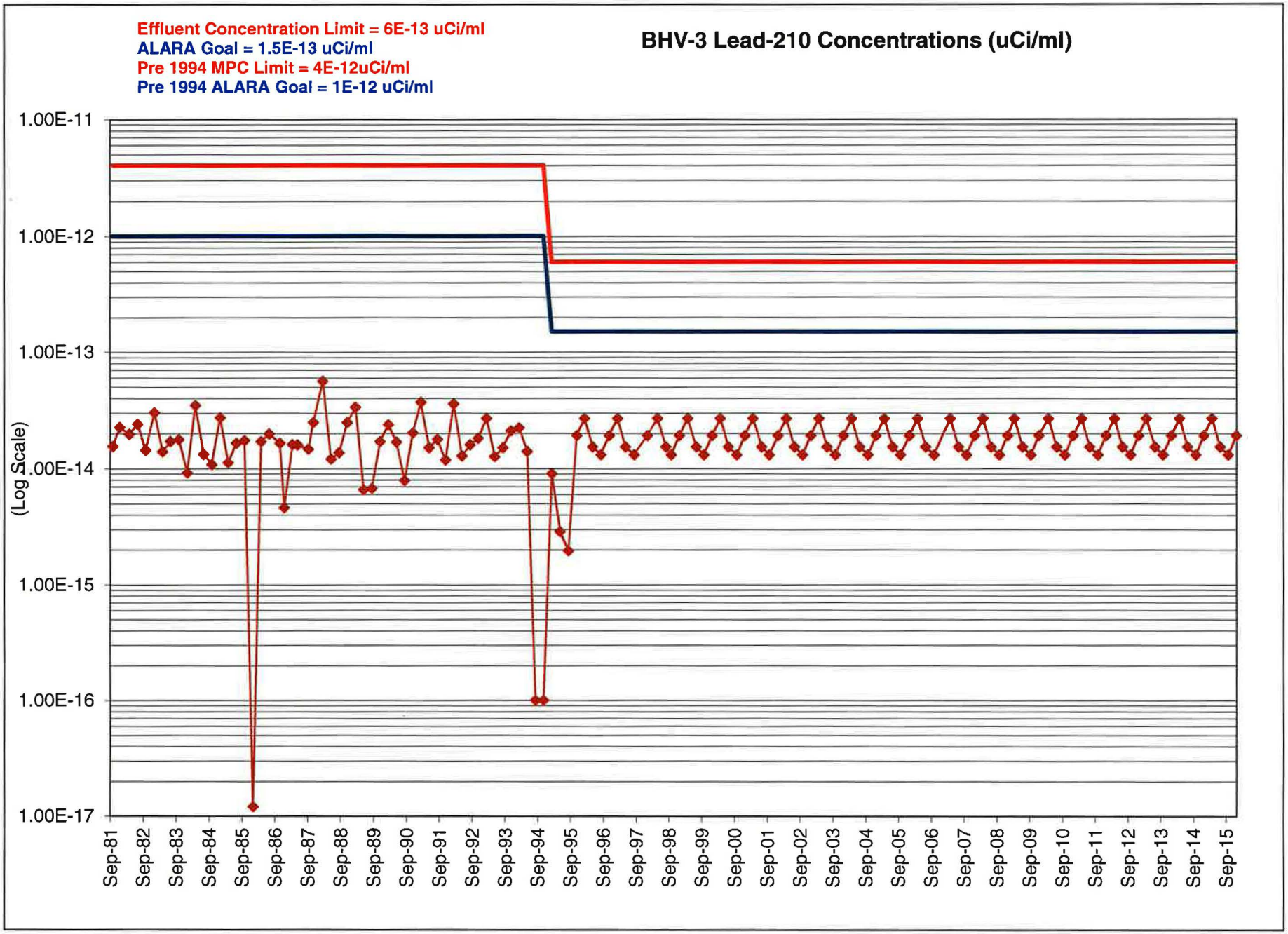
Sep-14
Sep-15


Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-3 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
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Sep-91
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Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
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Sep-15

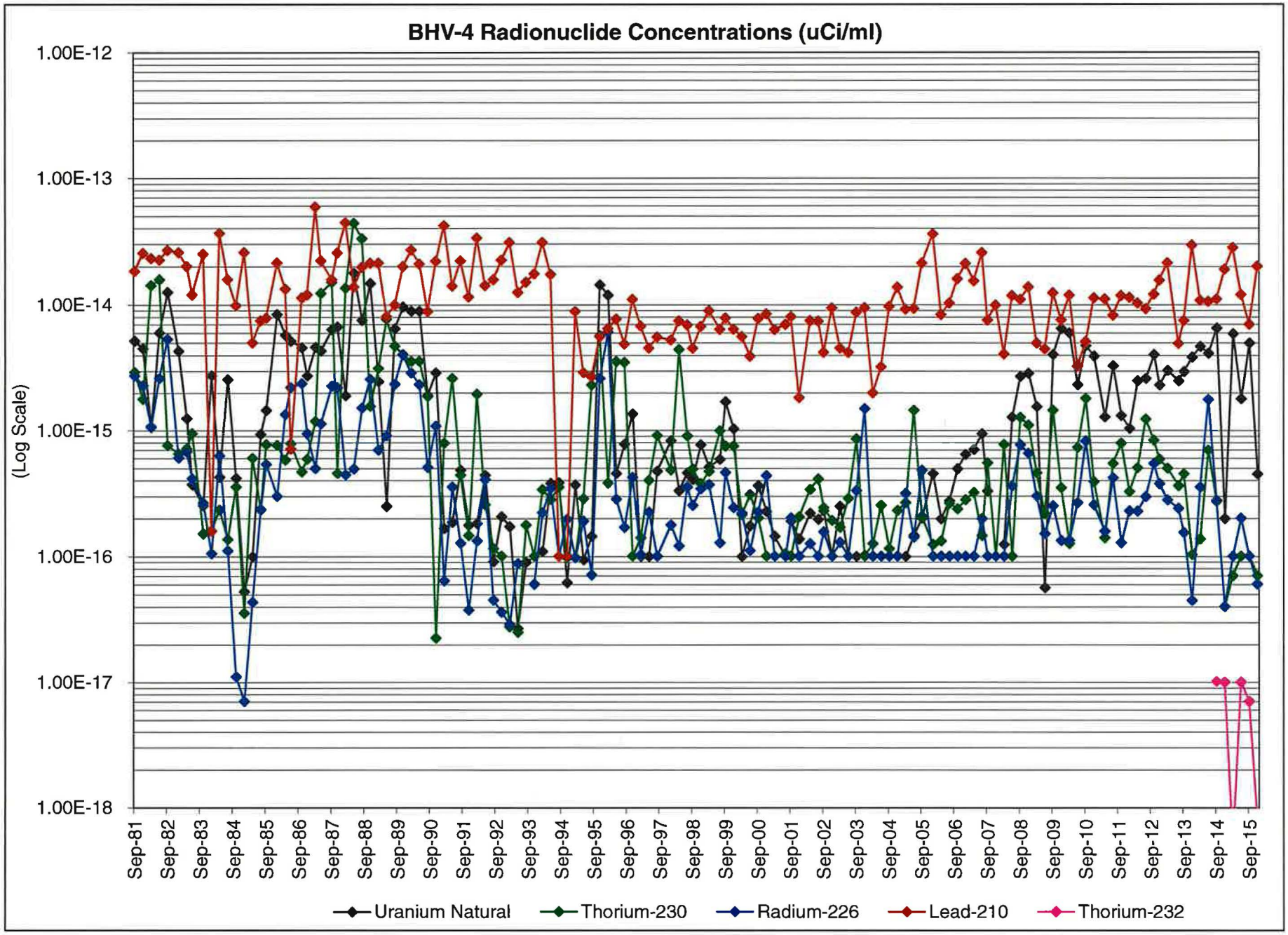
TAB 4

BHV-4 AIR SAMPLING GRAPHS AND DATA TABLE

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-4U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-4T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-4R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-4PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-4T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981	5.20E-15	5.00E-12	1.25E-12	2.93E-15	8.00E-14	2.00E-14	2.74E-15	2.00E-12	5.00E-13	1.84E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/14/1981	4.53E-15	5.00E-12	1.25E-12	1.78E-15	8.00E-14	2.00E-14	2.29E-15	2.00E-12	5.00E-13	2.54E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/29/1982	1.06E-15	5.00E-12	1.25E-12	1.42E-14	8.00E-14	2.00E-14	1.07E-15	2.00E-12	5.00E-13	2.31E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1982	6.03E-15	5.00E-12	1.25E-12	1.57E-14	8.00E-14	2.00E-14	2.62E-15	2.00E-12	5.00E-13	2.25E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/27/1982	1.26E-14	5.00E-12	1.25E-12	7.58E-16	8.00E-14	2.00E-14	5.35E-15	2.00E-12	5.00E-13	2.68E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1983	4.33E-15	5.00E-12	1.25E-12	6.52E-16	8.00E-14	2.00E-14	6.04E-16	2.00E-12	5.00E-13	2.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/4/1983	1.25E-15	5.00E-12	1.25E-12	7.17E-16	8.00E-14	2.00E-14	6.76E-16	2.00E-12	5.00E-13	2.00E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1983	3.73E-16	5.00E-12	1.25E-12	9.43E-16	8.00E-14	2.00E-14	4.13E-16	2.00E-12	5.00E-13	1.20E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/3/1983	2.54E-16	5.00E-12	1.25E-12	1.51E-16	8.00E-14	2.00E-14	2.65E-16	2.00E-12	5.00E-13	2.50E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1984	2.76E-15	5.00E-12	1.25E-12	1.60E-16	8.00E-14	2.00E-14	1.05E-16	2.00E-12	5.00E-13	1.59E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/2/1984	4.27E-16	5.00E-12	1.25E-12	2.33E-16	8.00E-14	2.00E-14	6.28E-16	2.00E-12	5.00E-13	3.67E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/2/1984	2.57E-15	5.00E-12	1.25E-12	1.36E-16	8.00E-14	2.00E-14	1.11E-16	2.00E-12	5.00E-13	1.58E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/1/1984	4.18E-16	5.00E-12	1.25E-12	3.54E-16	8.00E-14	2.00E-14	1.10E-17	2.00E-12	5.00E-13	9.83E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1985	5.30E-17	5.00E-12	1.25E-12	3.55E-17	8.00E-14	2.00E-14	7.00E-18	2.00E-12	5.00E-13	2.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1985	1.00E-16	5.00E-12	1.25E-12	6.00E-16	8.00E-14	2.00E-14	4.35E-17	2.00E-12	5.00E-13	5.02E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/1/1985	9.36E-16	5.00E-12	1.25E-12	2.33E-16	8.00E-14	2.00E-14	2.36E-16	2.00E-12	5.00E-13	7.48E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/30/1985	1.46E-15	5.00E-12	1.25E-12	7.69E-16	8.00E-14	2.00E-14	5.38E-16	2.00E-12	5.00E-13	7.86E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1986	8.40E-15	5.00E-12	1.25E-12	7.60E-16	8.00E-14	2.00E-14	2.99E-16	2.00E-12	5.00E-13	2.12E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1986	5.79E-15	5.00E-12	1.25E-12	5.80E-16	8.00E-14	2.00E-14	1.34E-15	2.00E-12	5.00E-13	1.33E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1986	5.19E-15	5.00E-12	1.25E-12	7.83E-16	8.00E-14	2.00E-14	2.20E-15	2.00E-12	5.00E-13	7.14E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/27/1986	4.60E-15	5.00E-12	1.25E-12	4.67E-16	8.00E-14	2.00E-14	2.37E-15	2.00E-12	5.00E-13	1.13E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/15/1986	2.75E-15	5.00E-12	1.25E-12	5.90E-16	8.00E-14	2.00E-14	9.39E-16	2.00E-12	5.00E-13	1.20E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/16/1987	4.64E-15	5.00E-12	1.25E-12	1.18E-15	8.00E-14	2.00E-14	4.97E-16	2.00E-12	5.00E-13	5.89E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1987	4.35E-15	5.00E-12	1.25E-12	1.23E-14	8.00E-14	2.00E-14	1.13E-15	2.00E-12	5.00E-13	2.21E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/9/1987	6.39E-15	5.00E-12	1.25E-12	1.50E-14	8.00E-14	2.00E-14	2.26E-15	2.00E-12	5.00E-13	1.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/2/1987	6.72E-15	5.00E-12	1.25E-12	4.53E-16	8.00E-14	2.00E-14	2.20E-15	2.00E-12	5.00E-13	2.55E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/16/1988	1.91E-15	5.00E-12	1.25E-12	1.35E-14	8.00E-14	2.00E-14	4.42E-16	2.00E-12	5.00E-13	4.44E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/18/1988	1.78E-14	5.00E-12	1.25E-12	4.39E-14	8.00E-14	2.00E-14	4.92E-16	2.00E-12	5.00E-13	1.38E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/15/1988	7.56E-15	5.00E-12	1.25E-12	3.31E-14	8.00E-14	2.00E-14	1.51E-15	2.00E-12	5.00E-13	1.97E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/14/1988	1.47E-14	5.00E-12	1.25E-12	1.56E-15	8.00E-14	2.00E-14	2.57E-15	2.00E-12	5.00E-13	2.12E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/13/1989	2.47E-15	5.00E-12	1.25E-12	3.14E-15	8.00E-14	2.00E-14	6.94E-16	2.00E-12	5.00E-13	2.12E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/15/1989	2.50E-16	5.00E-12	1.25E-12	7.68E-15	8.00E-14	2.00E-14	9.03E-16	2.00E-12	5.00E-13	8.05E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/14/1989	6.50E-15	5.00E-12	1.25E-12	4.72E-15	8.00E-14	2.00E-14	2.35E-15	2.00E-12	5.00E-13	9.95E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/13/1989	9.63E-15	5.00E-12	1.25E-12	4.05E-15	8.00E-14	2.00E-14	4.03E-15	2.00E-12	5.00E-13	1.99E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/12/1990	8.92E-15	5.00E-12	1.25E-12	3.56E-15	8.00E-14	2.00E-14	2.89E-15	2.00E-12	5.00E-13	2.69E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/14/1990	8.90E-15	5.00E-12	1.25E-12	3.58E-15	8.00E-14	2.00E-14	2.33E-15	2.00E-12	5.00E-13	2.09E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/13/1990	1.92E-15	5.00E-12	1.25E-12	1.87E-15	8.00E-14	2.00E-14	5.06E-16	2.00E-12	5.00E-13	8.86E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/12/1990	2.91E-15	5.00E-12	1.25E-12	2.25E-17	8.00E-14	2.00E-14	1.08E-15	2.00E-12	5.00E-13	2.19E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/11/1991	1.67E-16	5.00E-12	1.25E-12	7.89E-16	8.00E-14	2.00E-14	6.38E-17	2.00E-12	5.00E-13	4.19E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/13/1991	1.87E-16	5.00E-12	1.25E-12	2.61E-15	8.00E-14	2.00E-14	3.54E-16	2.00E-12	5.00E-13	1.40E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/12/1991	4.85E-16	5.00E-12	1.25E-12	4.38E-16	8.00E-14	2.00E-14	1.27E-16	2.00E-12	5.00E-13	2.20E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/11/1991	1.77E-16	5.00E-12	1.25E-12	1.46E-16	8.00E-14	2.00E-14	3.76E-17	2.00E-12	5.00E-13	1.15E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/10/1992	1.83E-16	5.00E-12	1.25E-12	1.95E-15	8.00E-14	2.00E-14	1.33E-16	2.00E-12	5.00E-13	3.35E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1992	4.40E-16	5.00E-12	1.25E-12	2.56E-16	8.00E-14	2.00E-14	4.04E-16	2.00E-12	5.00E-13	1.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1992	9.09E-17	5.00E-12	1.25E-12	1.15E-16	8.00E-14	2.00E-14	4.50E-17	2.00E-12	5.00E-13	1.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/9/1992	2.07E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	3.62E-17	2.00E-12	5.00E-13	2.24E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/9/1993	1.73E-16	5.00E-12	1.25E-12	2.76E-17	8.00E-14	2.00E-14	2.89E-17	2.00E-12	5.00E-13	3.08E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/10/1993	2.70E-17	5.00E-12	1.25E-12	2.50E-17	8.00E-14	2.00E-14	8.74E-17	2.00E-12	5.00E-13	1.25E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1993	9.00E-17	5.00E-12	1.25E-12	1.76E-16	8.00E-14	2.00E-14	0.00E+00	2.00E-12	5.00E-13	1.50E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/8/1993	1.00E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	6.00E-17	2.00E-12	5.00E-13	1.75E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-4U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-4T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-4R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-4PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-4T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
2/7/1994	1.10E-16	5.00E-12	1.25E-12	3.38E-16	8.00E-14	2.00E-14	2.21E-16	2.00E-12	5.00E-13	3.08E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/9/1994	3.80E-16	5.00E-12	1.25E-12	2.82E-16	8.00E-14	2.00E-14	3.46E-16	2.00E-12	5.00E-13	1.73E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/9/1994	3.85E-16	5.00E-12	1.25E-12	3.53E-16	8.00E-14	2.00E-14	1.00E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/7/1994	6.21E-17	5.00E-12	1.25E-12	9.70E-17	8.00E-14	2.00E-14	1.96E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1995	3.70E-16	9.00E-14	2.25E-14	9.80E-17	2.00E-14	5.00E-15	9.70E-17	9.00E-13	2.25E-13	8.84E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/9/1995	9.40E-17	9.00E-14	2.25E-14	2.86E-16	2.00E-14	5.00E-15	1.90E-16	9.00E-13	2.25E-13	2.90E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/9/1995	1.45E-16	9.00E-14	2.25E-14	2.31E-15	2.00E-14	5.00E-15	7.10E-17	9.00E-13	2.25E-13	2.70E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/11/1995	1.43E-14	9.00E-14	2.25E-14	5.70E-15	2.00E-14	5.00E-15	2.61E-15	9.00E-13	2.25E-13	5.60E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/5/1996	1.19E-14	9.00E-14	2.25E-14	3.80E-16	2.00E-14	5.00E-15	6.10E-15	9.00E-13	2.25E-13	6.48E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/6/1996	4.55E-16	9.00E-14	2.25E-14	3.57E-15	2.00E-14	5.00E-15	2.84E-16	9.00E-13	2.25E-13	7.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/5/1996	7.78E-16	9.00E-14	2.25E-14	3.51E-15	2.00E-14	5.00E-15	1.69E-16	9.00E-13	2.25E-13	4.90E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/6/1996	1.36E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	4.21E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/6/1997	1.00E-16	9.00E-14	2.25E-14	1.40E-16	2.00E-14	5.00E-15	1.03E-16	9.00E-13	2.25E-13	6.76E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/5/1997	1.00E-16	9.00E-14	2.25E-14	4.00E-16	2.00E-14	5.00E-15	2.24E-16	9.00E-13	2.25E-13	4.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/11/1997	4.74E-16	9.00E-14	2.25E-14	9.07E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/5/1998	8.31E-16	9.00E-14	2.25E-14	4.82E-16	2.00E-14	5.00E-15	1.77E-16	9.00E-13	2.25E-13	5.28E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/28/1998	3.32E-16	9.00E-14	2.25E-14	4.43E-15	2.00E-14	5.00E-15	1.21E-16	9.00E-13	2.25E-13	7.43E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/31/1998	4.60E-16	9.00E-14	2.25E-14	9.02E-16	2.00E-14	5.00E-15	3.54E-16	9.00E-13	2.25E-13	6.91E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/28/1998	4.08E-16	9.00E-14	2.25E-14	4.93E-16	2.00E-14	5.00E-15	2.53E-16	9.00E-13	2.25E-13	4.52E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1998	7.72E-16	9.00E-14	2.25E-14	3.75E-16	2.00E-14	5.00E-15	3.43E-16	9.00E-13	2.25E-13	6.73E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/1999	5.11E-16	9.00E-14	2.25E-14	4.70E-16	2.00E-14	5.00E-15	3.70E-16	9.00E-13	2.25E-13	8.96E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/1999	5.90E-16	9.00E-14	2.25E-14	9.89E-16	2.00E-14	5.00E-15	1.28E-16	9.00E-13	2.25E-13	6.40E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/1999	1.70E-15	9.00E-14	2.25E-14	7.50E-16	2.00E-14	5.00E-15	4.61E-16	9.00E-13	2.25E-13	7.86E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1999	1.03E-15	9.00E-14	2.25E-14	7.50E-16	2.00E-14	5.00E-15	2.43E-16	9.00E-13	2.25E-13	6.42E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/27/2000	1.00E-16	9.00E-14	2.25E-14	2.13E-16	2.00E-14	5.00E-15	2.20E-16	9.00E-13	2.25E-13	5.61E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/26/2000	1.75E-16	9.00E-14	2.25E-14	3.08E-16	2.00E-14	5.00E-15	1.11E-16	9.00E-13	2.25E-13	3.92E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2000	3.65E-16	9.00E-14	2.25E-14	2.01E-16	2.00E-14	5.00E-15	2.24E-16	9.00E-13	2.25E-13	7.79E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/26/2000	2.27E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	4.35E-16	9.00E-13	2.25E-13	8.45E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/26/2001	1.45E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.37E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2001	1.00E-16	9.00E-14	2.25E-14	1.05E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.99E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/24/2001	1.91E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	2.01E-16	9.00E-13	2.25E-13	8.04E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2001	1.38E-16	9.00E-14	2.25E-14	2.05E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.83E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/1/2002	2.20E-16	9.00E-14	2.25E-14	3.38E-16	2.00E-14	5.00E-15	1.26E-16	9.00E-13	2.25E-13	7.48E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/1/2002	1.97E-16	9.00E-14	2.25E-14	4.10E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.40E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2002	2.30E-16	9.00E-14	2.25E-14	2.42E-16	2.00E-14	5.00E-15	1.56E-16	9.00E-13	2.25E-13	4.21E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2002	1.00E-16	9.00E-14	2.25E-14	1.92E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.42E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2003	2.50E-16	9.00E-14	2.25E-14	1.69E-16	2.00E-14	5.00E-15	1.29E-16	9.00E-13	2.25E-13	4.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2003	1.00E-16	9.00E-14	2.25E-14	2.87E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/29/2003	1.00E-16	9.00E-14	2.25E-14	8.53E-16	2.00E-14	5.00E-15	3.32E-16	9.00E-13	2.25E-13	8.69E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/29/2003	1.02E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.49E-15	9.00E-13	2.25E-13	9.45E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/2004	1.00E-16	9.00E-14	2.25E-14	1.26E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.00E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/27/2004	1.00E-16	9.00E-14	2.25E-14	2.53E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.23E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/2004	1.00E-16	9.00E-14	2.25E-14	1.15E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/27/2004	1.00E-16	9.00E-14	2.25E-14	2.30E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.37E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/28/2005	1.00E-16	9.00E-14	2.25E-14	2.66E-16	2.00E-14	5.00E-15	3.15E-16	9.00E-13	2.25E-13	9.22E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/29/2005	1.47E-16	9.00E-14	2.25E-14	1.45E-15	2.00E-14	5.00E-15	1.42E-16	9.00E-13	2.25E-13	9.34E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2005	2.01E-16	9.00E-14	2.25E-14	2.06E-16	2.00E-14	5.00E-15	4.80E-16	9.00E-13	2.25E-13	2.12E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2006	4.54E-16	9.00E-14	2.25E-14	1.24E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.60E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2006	1.99E-16	9.00E-14	2.25E-14	1.32E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.36E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/2006	2.76E-16	9.00E-14	2.25E-14	2.63E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.03E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-4U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-4T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-4R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-4PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-4T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
10/2/2006	4.97E-16	9.00E-14	2.25E-14	2.37E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.60E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/1/2007	6.46E-16	9.00E-14	2.25E-14	2.81E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/2/2007	7.08E-16	9.00E-14	2.25E-14	3.20E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.54E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2007	9.41E-16	9.00E-14	2.25E-14	1.46E-16	2.00E-14	5.00E-15	1.99E-16	9.00E-13	2.25E-13	2.56E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2007	3.30E-16	9.00E-14	2.25E-14	5.50E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.57E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2007	1.42 E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.93E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2008	1.25E-16	9.00E-14	2.25E-14	7.72E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	4.09E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2008	1.28E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	3.61E-16	9.00E-13	2.25E-13	1.18E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2008	2.72E-15	9.00E-14	2.25E-14	1.27E-15	2.00E-14	5.00E-15	7.66E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2008	2.88E-15	9.00E-14	2.25E-14	1.10E-15	2.00E-14	5.00E-15	6.56E-16	9.00E-13	2.25E-13	1.38E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/15/2009	1.56E-15	9.00E-14	2.25E-14	4.57E-16	2.00E-14	5.00E-15	2.99E-16	9.00E-13	2.25E-13	4.97E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/15/2009	5.67E-17	9.00E-14	2.25E-14	2.17E-16	2.00E-14	5.00E-15	1.51E-16	9.00E-13	2.25E-13	4.47E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/15/2009	4.05E-15	9.00E-14	2.25E-14	1.45E-15	2.00E-14	5.00E-15	2.52E-16	9.00E-13	2.25E-13	1.24E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/15/2009	6.50E-15	9.00E-14	2.25E-14	3.48E-16	2.00E-14	5.00E-15	1.33E-16	9.00E-13	2.25E-13	7.60E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2010	6.01E-15	9.00E-14	2.25E-14	1.26E-16	2.00E-14	5.00E-15	1.34E-16	9.00E-13	2.25E-13	1.19E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2010	2.33E-15	9.00E-14	2.25E-14	7.29E-16	2.00E-14	5.00E-15	2.66E-16	9.00E-13	2.25E-13	3.27E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2010	4.77E-15	9.00E-14	2.25E-14	1.80E-15	2.00E-14	5.00E-15	8.23E-16	9.00E-13	2.25E-13	5.11E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2010	3.93E-15	9.00E-14	2.25E-14	3.90E-16	2.00E-14	5.00E-15	2.56E-16	9.00E-13	2.25E-13	1.13E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/4/2011	1.29E-15	9.00E-14	2.25E-14	1.40E-16	2.00E-14	5.00E-15	1.58E-16	9.00E-13	2.25E-13	1.11E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/4/2011	3.30E-15	9.00E-14	2.25E-14	5.44E-16	2.00E-14	5.00E-15	4.18E-16	9.00E-13	2.25E-13	8.26E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/3/2011	1.32E-15	9.00E-14	2.25E-14	7.89E-16	2.00E-14	5.00E-15	1.28E-16	9.00E-13	2.25E-13	1.18E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2012	1.04E-15	9.00E-14	2.25E-14	3.25E-16	2.00E-14	5.00E-15	2.28E-16	9.00E-13	2.25E-13	1.14E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2012	2.51E-15	9.00E-14	2.25E-14	5.02E-16	2.00E-14	5.00E-15	2.27E-16	9.00E-13	2.25E-13	1.03E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2012	2.62E-15	9.00E-14	2.25E-14	1.23E-15	2.00E-14	5.00E-15	2.97E-16	9.00E-13	2.25E-13	9.27E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/1/2012	4.05E-15	9.00E-14	2.25E-14	8.33E-16	2.00E-14	5.00E-15	5.43E-16	9.00E-13	2.25E-13	1.21E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2012	2.32E-15	9.00E-14	2.25E-14	5.89E-16	2.00E-14	5.00E-15	3.75E-16	9.00E-13	2.25E-13	1.56E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/25/2013	3.04E-15	9.00E-14	2.25E-14	4.99E-16	2.00E-14	5.00E-15	2.79E-16	9.00E-13	2.25E-13	2.13E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2013	2.50E-15	9.00E-14	2.25E-14	3.62E-16	2.00E-14	5.00E-15	2.40E-16	9.00E-13	2.25E-13	4.93E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2013	2.98E-15	9.00E-14	2.25E-14	4.49E-16	2.00E-14	5.00E-15	1.54E-16	9.00E-13	2.25E-13	7.49E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2013	3.88E-15	9.00E-14	2.25E-14	1.03E-16	2.00E-14	5.00E-15	4.47E-17	9.00E-13	2.25E-13	2.93E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2014	4.69E-15	9.00E-14	2.25E-14	1.37E-16	2.00E-14	5.00E-15	3.53E-16	9.00E-13	2.25E-13	1.08E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2014	4.16E-15	9.00E-14	2.25E-14	6.96E-16	2.00E-14	5.00E-15	1.77E-15	9.00E-13	2.25E-13	1.06E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2014	6.56E-15	9.00E-14	2.25E-14	2.73E-16	2.00E-14	5.00E-15	2.77E-16	9.00E-13	2.25E-13	1.11E-14	6.00E-13	1.50E-13	1.01E-17	4.00E-15	1.00E-15
12/29/2014	2.00E-16	9.00E-14	2.25E-14	4.00E-17	2.00E-14	5.00E-15	4.00E-17	9.00E-13	2.25E-13	1.90E-14	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
3/30/2015	5.90E-15	9.00E-14	2.25E-14	7.00E-17	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.80E-14	6.00E-13	1.50E-13	5.00E-19	4.00E-15	1.00E-15
6/29/2015	1.80E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	2.00E-16	9.00E-13	2.25E-13	1.20E-14	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
9/28/2015	5.00E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.00E-15	6.00E-13	1.50E-13	7.00E-18	4.00E-15	1.00E-15
12/28/2015	4.50E-16	9.00E-14	2.25E-14	7.00E-17	2.00E-14	5.00E-15	6.00E-17	9.00E-13	2.25E-13	2.00E-14	6.00E-13	1.50E-13	8.00E-19	4.00E-15	1.00E-15


BHV-4 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
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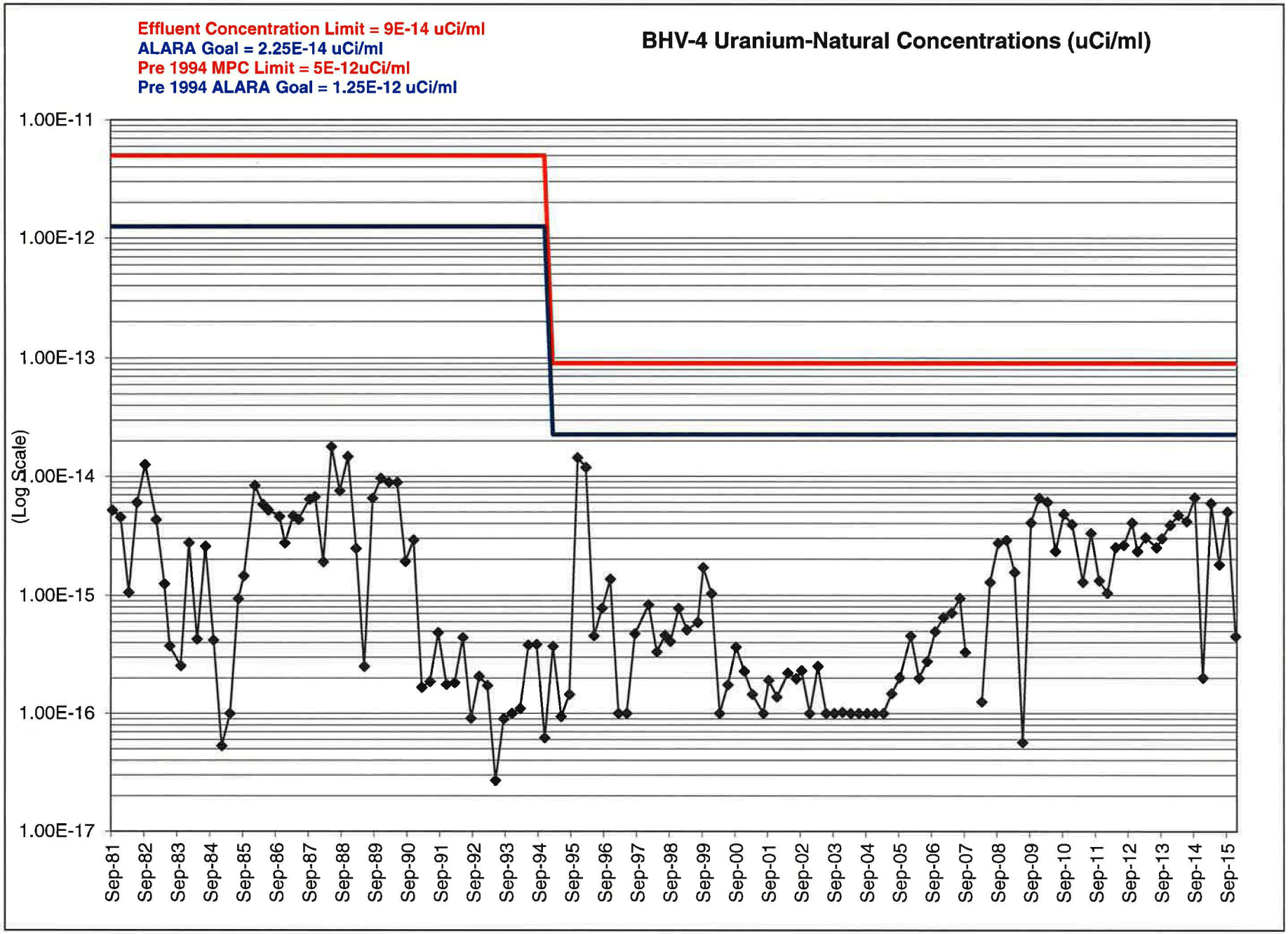
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-4 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
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Sep-97
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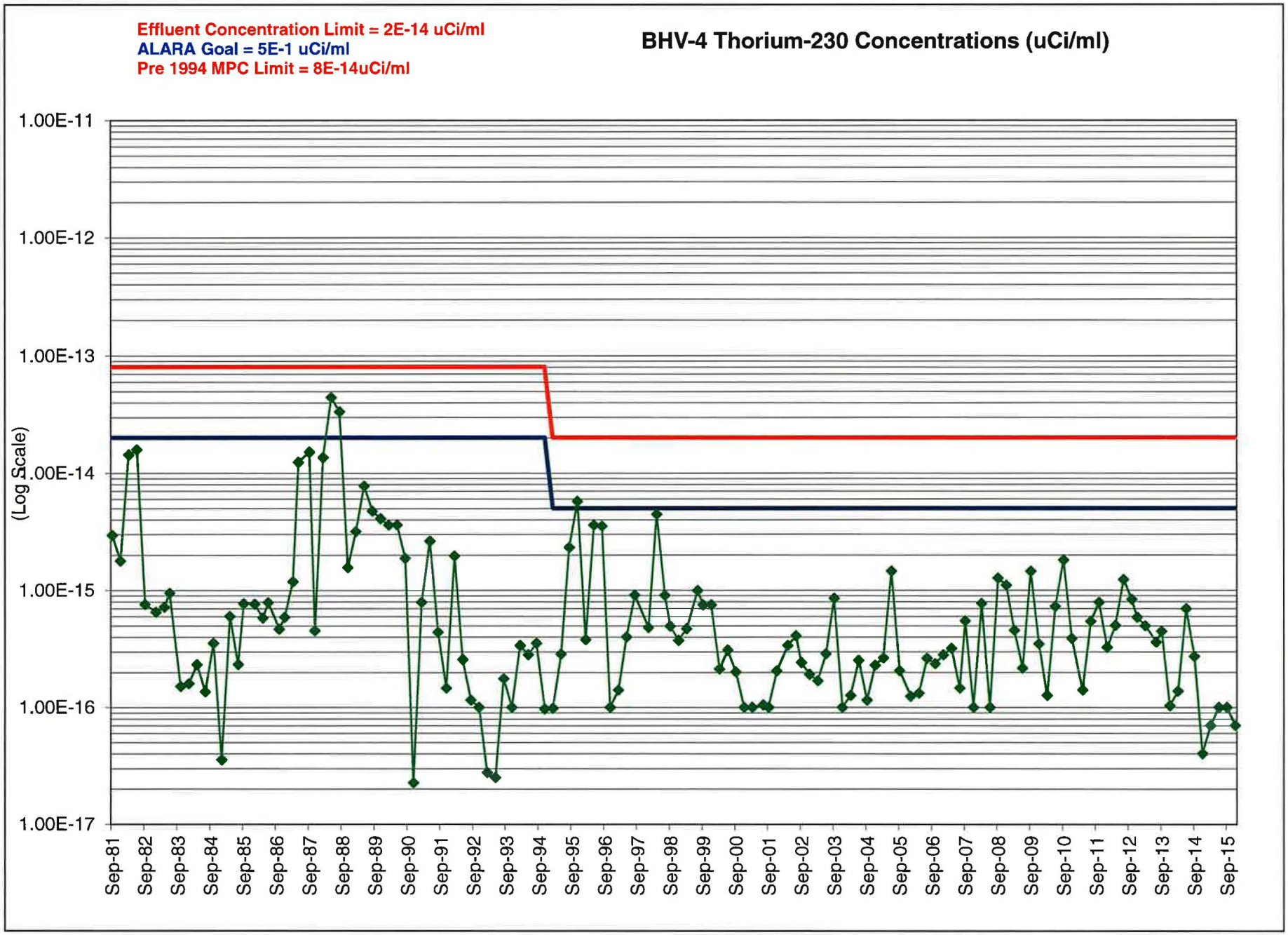
Sep-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-1 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-4 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
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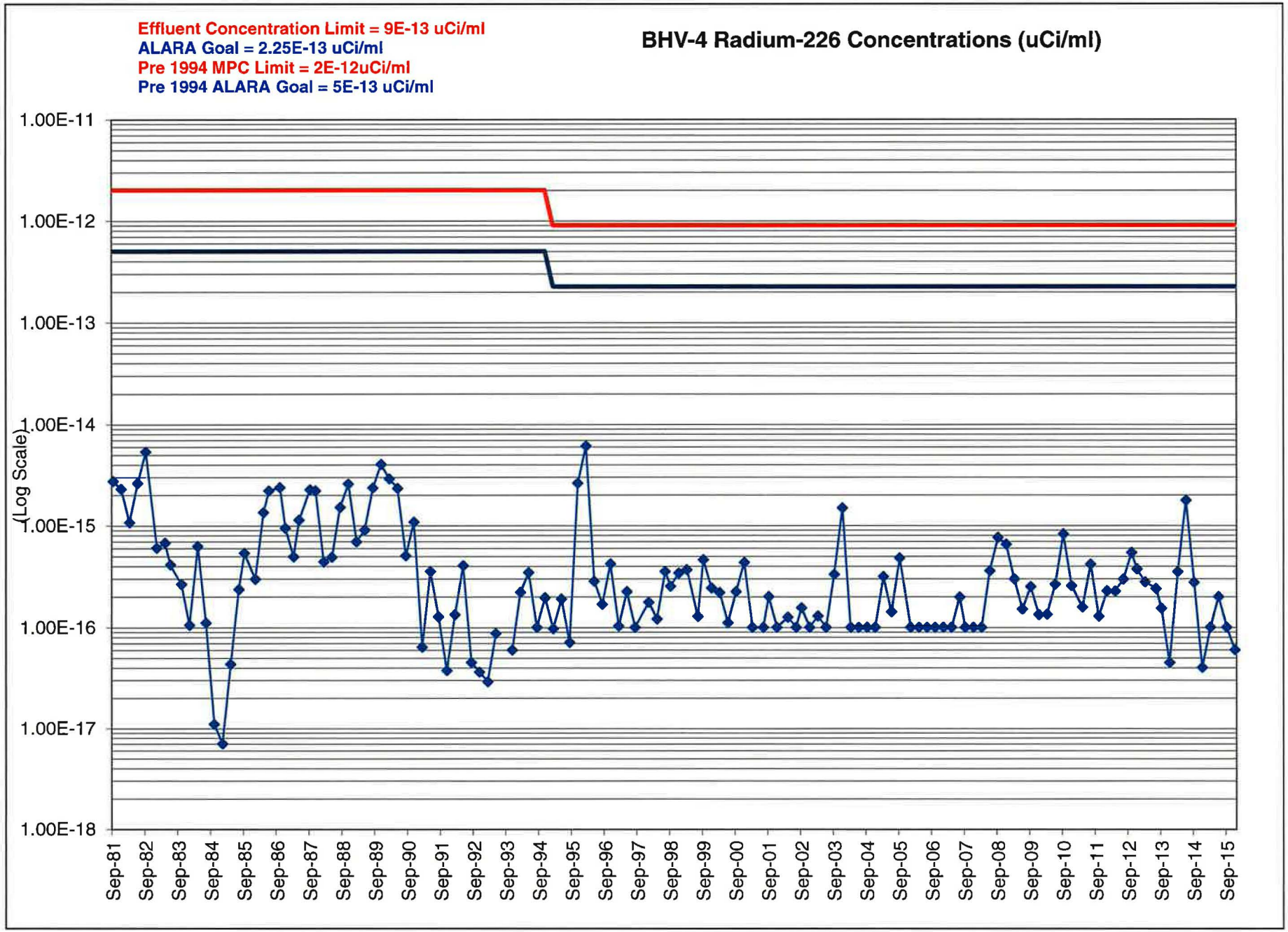
Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-4 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
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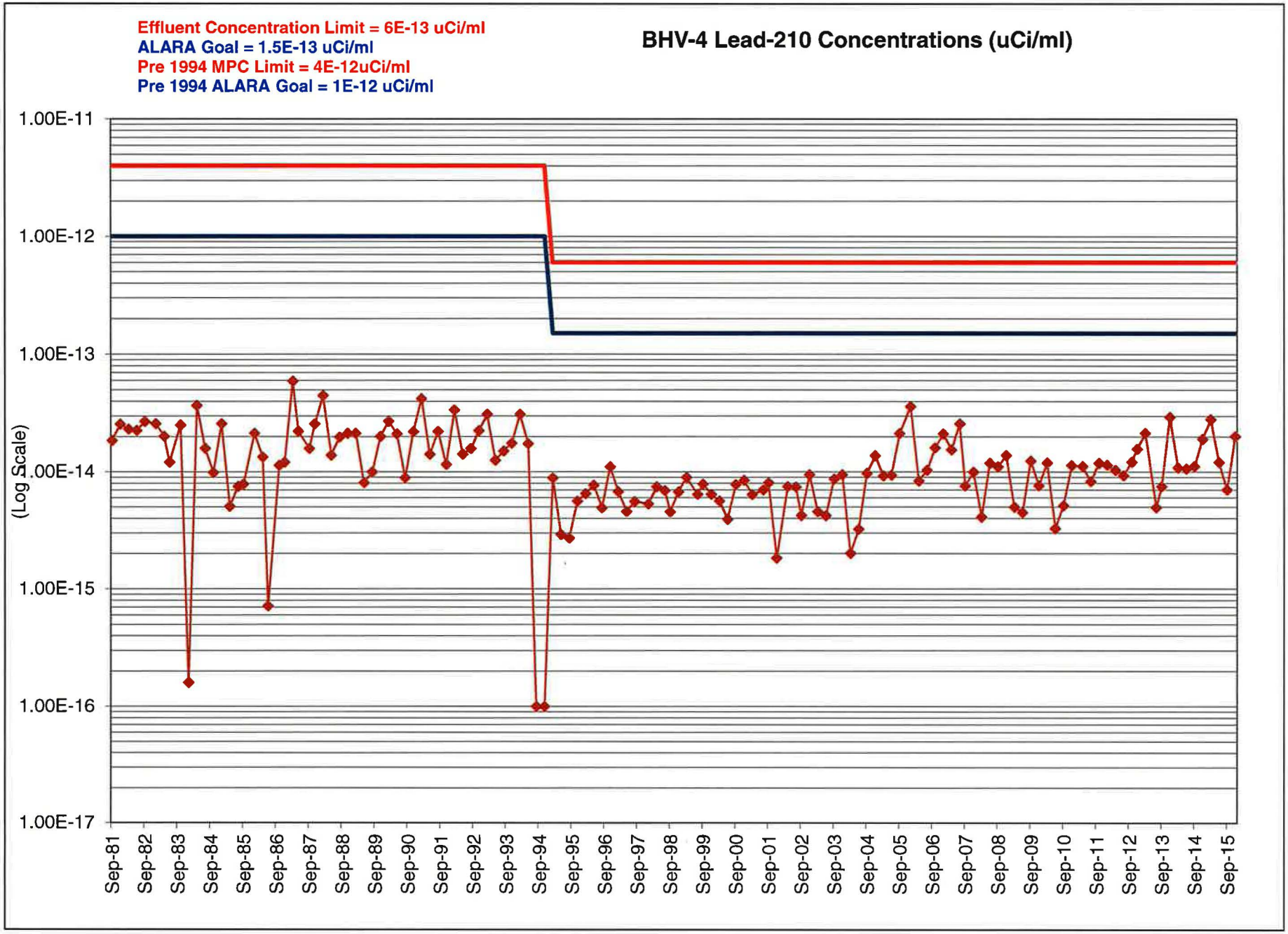
Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-4 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
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Sep-91
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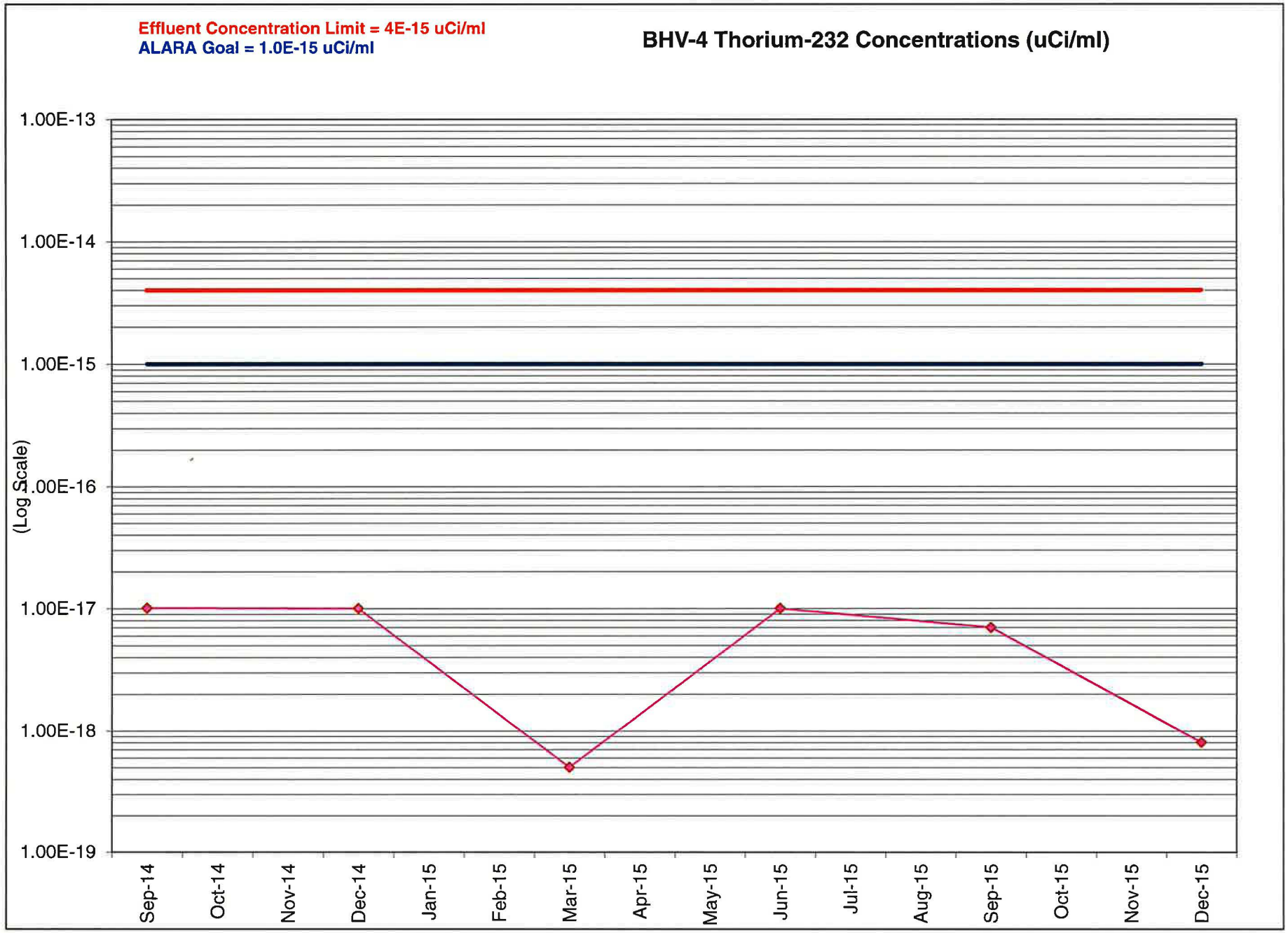
Sep-14
Sep-15


Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-4 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
1.00E-19
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15

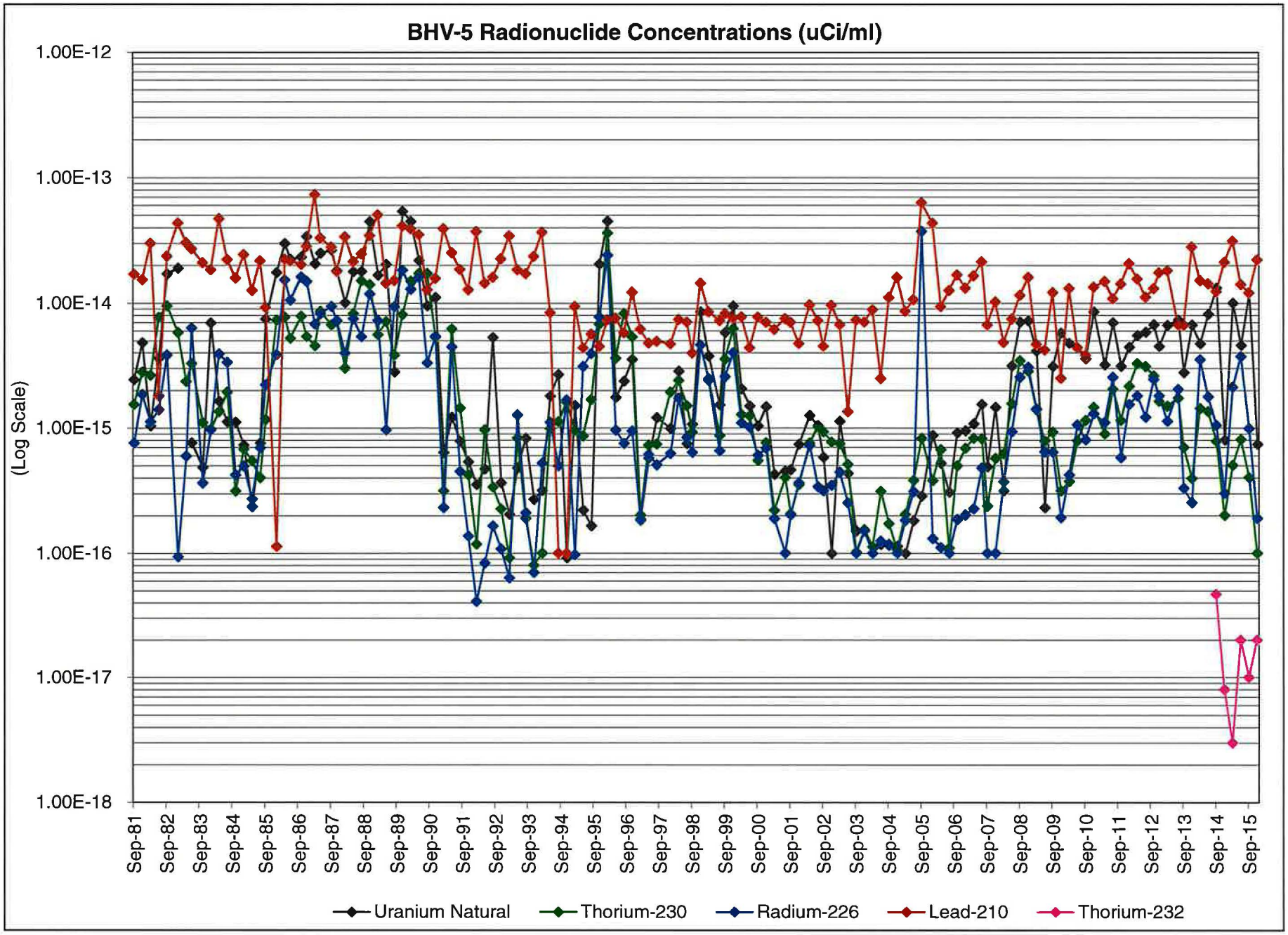
TAB 5

BHV-5 AIR SAMPLING GRAPHS AND DATA TABLE

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-5U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-5T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-5R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-5PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-5T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981	2.44E-15	5.00E-12	1.25E-12	1.53E-15	8.00E-14	2.00E-14	7.54E-16	2.00E-12	5.00E-13	1.69E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/14/1981	4.84E-15	5.00E-12	1.25E-12	2.78E-15	8.00E-14	2.00E-14	1.84E-15	2.00E-12	5.00E-13	1.53E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/29/1982	1.04E-15	5.00E-12	1.25E-12	2.62E-15	8.00E-14	2.00E-14	1.11E-15	2.00E-12	5.00E-13	2.98E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1982	3.61E-15	5.00E-12	1.25E-12	7.61E-15	8.00E-14	2.00E-14	1.39E-15	2.00E-12	5.00E-13	1.80E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/27/1982	1.71E-14	5.00E-12	1.25E-12	9.46E-15	8.00E-14	2.00E-14	3.80E-15	2.00E-12	5.00E-13	2.35E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1983	1.90E-14	5.00E-12	1.25E-12	5.77E-15	8.00E-14	2.00E-14	9.34E-17	2.00E-12	5.00E-13	4.32E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/4/1983		5.00E-12	1.25E-12	2.33E-15	8.00E-14	2.00E-14	5.93E-16	2.00E-12	5.00E-13	3.01E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1983	7.62E-16	5.00E-12	1.25E-12	3.25E-15	8.00E-14	2.00E-14	6.28E-15	2.00E-12	5.00E-13	2.69E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/3/1983	4.86E-16	5.00E-12	1.25E-12	1.10E-15	8.00E-14	2.00E-14	3.63E-16	2.00E-12	5.00E-13	2.08E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1984	6.96E-15	5.00E-12	1.25E-12	9.69E-16	8.00E-14	2.00E-14	9.60E-16	2.00E-12	5.00E-13	1.83E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/2/1984	1.64E-15	5.00E-12	1.25E-12	1.34E-15	8.00E-14	2.00E-14	3.88E-15	2.00E-12	5.00E-13	4.67E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/2/1984	1.12E-15	5.00E-12	1.25E-12	1.92E-15	8.00E-14	2.00E-14	3.31E-15	2.00E-12	5.00E-13	2.21E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/1/1984	1.11E-15	5.00E-12	1.25E-12	3.13E-16	8.00E-14	2.00E-14	4.21E-16	2.00E-12	5.00E-13	1.57E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1985	7.32E-16	5.00E-12	1.25E-12	6.71E-16	8.00E-14	2.00E-14	4.94E-16	2.00E-12	5.00E-13	2.42E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1985	2.36E-16	5.00E-12	1.25E-12	5.43E-16	8.00E-14	2.00E-14	2.71E-16	2.00E-12	5.00E-13	1.25E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/1/1985	7.58E-16	5.00E-12	1.25E-12	4.00E-16	8.00E-14	2.00E-14	6.90E-16	2.00E-12	5.00E-13	2.15E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/30/1985	7.47E-15	5.00E-12	1.25E-12	1.16E-15	8.00E-14	2.00E-14	2.19E-15	2.00E-12	5.00E-13	9.20E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1986	1.75E-14	5.00E-12	1.25E-12	7.24E-15	8.00E-14	2.00E-14	3.83E-15	2.00E-12	5.00E-13	1.13E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1986	2.99E-14	5.00E-12	1.25E-12	7.64E-15	8.00E-14	2.00E-14	1.51E-14	2.00E-12	5.00E-13	2.22E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1986	2.23E-14	5.00E-12	1.25E-12	5.19E-15	8.00E-14	2.00E-14	1.05E-14	2.00E-12	5.00E-13	2.16E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/27/1986	2.33E-14	5.00E-12	1.25E-12	7.78E-15	8.00E-14	2.00E-14	1.60E-14	2.00E-12	5.00E-13	2.02E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/15/1986	3.40E-14	5.00E-12	1.25E-12	5.35E-15	8.00E-14	2.00E-14	1.47E-14	2.00E-12	5.00E-13	2.82E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/16/1987	2.06E-14	5.00E-12	1.25E-12	4.50E-15	8.00E-14	2.00E-14	6.74E-15	2.00E-12	5.00E-13	7.29E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1987	2.50E-14	5.00E-12	1.25E-12	8.54E-15	8.00E-14	2.00E-14	8.15E-15	2.00E-12	5.00E-13	3.28E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/9/1987	2.65E-14	5.00E-12	1.25E-12	6.62E-15	8.00E-14	2.00E-14	9.34E-15	2.00E-12	5.00E-13	2.77E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/2/1987	1.80E-14	5.00E-12	1.25E-12	7.09E-15	8.00E-14	2.00E-14	7.20E-15	2.00E-12	5.00E-13	1.77E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/16/1988	1.01E-14	5.00E-12	1.25E-12	2.98E-15	8.00E-14	2.00E-14	3.93E-15	2.00E-12	5.00E-13	3.36E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/18/1988	1.78E-14	5.00E-12	1.25E-12	8.14E-15	8.00E-14	2.00E-14	7.43E-15	2.00E-12	5.00E-13	2.12E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/15/1988	1.79E-14	5.00E-12	1.25E-12	1.49E-14	8.00E-14	2.00E-14	5.34E-15	2.00E-12	5.00E-13	2.45E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/14/1988	4.46E-14	5.00E-12	1.25E-12	1.39E-14	8.00E-14	2.00E-14	1.17E-14	2.00E-12	5.00E-13	3.43E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/13/1989	1.67E-14	5.00E-12	1.25E-12	5.54E-15	8.00E-14	2.00E-14	7.20E-15	2.00E-12	5.00E-13	5.02E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/15/1989	2.03E-14	5.00E-12	1.25E-12	7.05E-15	8.00E-14	2.00E-14	9.56E-16	2.00E-12	5.00E-13	1.43E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/14/1989	2.81E-15	5.00E-12	1.25E-12	3.78E-15	8.00E-14	2.00E-14	9.26E-15	2.00E-12	5.00E-13	1.50E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/13/1989	5.38E-14	5.00E-12	1.25E-12	8.01E-15	8.00E-14	2.00E-14	1.81E-14	2.00E-12	5.00E-13	4.09E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/12/1990	4.48E-14	5.00E-12	1.25E-12	1.48E-14	8.00E-14	2.00E-14	1.28E-14	2.00E-12	5.00E-13	3.88E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/14/1990	2.18E-14	5.00E-12	1.25E-12	1.70E-14	8.00E-14	2.00E-14	1.59E-14	2.00E-12	5.00E-13	3.49E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/13/1990	9.53E-15	5.00E-12	1.25E-12	1.70E-14	8.00E-14	2.00E-14	3.27E-15	2.00E-12	5.00E-13	1.27E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/12/1990	1.11E-14	5.00E-12	1.25E-12	5.27E-15	8.00E-14	2.00E-14	5.38E-15	2.00E-12	5.00E-13	1.56E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/11/1991	6.35E-16	5.00E-12	1.25E-12	3.13E-16	8.00E-14	2.00E-14	2.31E-16	2.00E-12	5.00E-13	3.89E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/13/1991	1.22E-15	5.00E-12	1.25E-12	6.14E-15	8.00E-14	2.00E-14	4.41E-15	2.00E-12	5.00E-13	2.50E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/12/1991	7.84E-16	5.00E-12	1.25E-12	1.43E-15	8.00E-14	2.00E-14	4.47E-16	2.00E-12	5.00E-13	1.84E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/11/1991	5.37E-16	5.00E-12	1.25E-12	4.20E-16	8.00E-14	2.00E-14	1.37E-16	2.00E-12	5.00E-13	1.27E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/10/1992	3.54E-16	5.00E-12	1.25E-12	1.18E-16	8.00E-14	2.00E-14	4.08E-17	2.00E-12	5.00E-13	3.69E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1992	4.71E-16	5.00E-12	1.25E-12	9.58E-16	8.00E-14	2.00E-14	8.31E-17	2.00E-12	5.00E-13	1.43E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1992	5.32E-15	5.00E-12	1.25E-12	3.36E-16	8.00E-14	2.00E-14	1.65E-16	2.00E-12	5.00E-13	1.59E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/9/1992	3.66E-16	5.00E-12	1.25E-12	2.25E-16	8.00E-14	2.00E-14	1.08E-16	2.00E-12	5.00E-13	2.24E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/9/1993	2.05E-16	5.00E-12	1.25E-12	9.14E-17	8.00E-14	2.00E-14	6.31E-17	2.00E-12	5.00E-13	3.41E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/10/1993	4.80E-16	5.00E-12	1.25E-12	8.25E-16	8.00E-14	2.00E-14	1.26E-15	2.00E-12	5.00E-13	1.83E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1993	8.30E-16	5.00E-12	1.25E-12	1.90E-16	8.00E-14	2.00E-14	2.10E-16	2.00E-12	5.00E-13	1.70E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-5U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-5T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-5R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-5PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-5T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
11/8/1993	2.70E-16	5.00E-12	1.25E-12	8.00E-17	8.00E-14	2.00E-14	7.00E-17	2.00E-12	5.00E-13	2.34E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1994	3.18E-16	5.00E-12	1.25E-12	1.00E-16	8.00E-14	2.00E-14	5.18E-16	2.00E-12	5.00E-13	3.64E-14	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/9/1994	1.80E-15	5.00E-12	1.25E-12	9.78E-16	8.00E-14	2.00E-14	1.10E-15	2.00E-12	5.00E-13	8.30E-15	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/9/1994	2.67E-15	5.00E-12	1.25E-12	1.11E-15	8.00E-14	2.00E-14	4.95E-16	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/7/1994	9.21E-17	5.00E-12	1.25E-12	1.59E-15	8.00E-14	2.00E-14	1.66E-15	2.00E-12	5.00E-13	1.00E-16	4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1995	1.51E-15	9.00E-14	2.25E-14	9.50E-16	2.00E-14	5.00E-15	9.70E-17	9.00E-13	2.25E-13	9.35E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/9/1995	2.21E-16	9.00E-14	2.25E-14	8.56E-16	2.00E-14	5.00E-15	3.06E-15	9.00E-13	2.25E-13	4.34E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/9/1995	1.66E-16	9.00E-14	2.25E-14	1.67E-15	2.00E-14	5.00E-15	3.90E-15	9.00E-13	2.25E-13	5.60E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/11/1995	2.04E-14	9.00E-14	2.25E-14	6.70E-15	2.00E-14	5.00E-15	7.65E-15	9.00E-13	2.25E-13	4.47E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/5/1996	4.50E-14	9.00E-14	2.25E-14	3.58E-14	2.00E-14	5.00E-15	2.39E-14	9.00E-13	2.25E-13	7.30E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/6/1996	1.76E-15	9.00E-14	2.25E-14	3.57E-15	2.00E-14	5.00E-15	9.55E-16	9.00E-13	2.25E-13	7.54E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/5/1996	2.37E-15	9.00E-14	2.25E-14	8.18E-15	2.00E-14	5.00E-15	7.46E-16	9.00E-13	2.25E-13	5.75E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/6/1996	3.53E-15	9.00E-14	2.25E-14	5.31E-15	2.00E-14	5.00E-15	9.39E-16	9.00E-13	2.25E-13	1.21E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/6/1997	1.84E-16	9.00E-14	2.25E-14	2.01E-16	2.00E-14	5.00E-15	1.87E-16	9.00E-13	2.25E-13	6.14E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/5/1997	5.75E-16	9.00E-14	2.25E-14	7.24E-16	2.00E-14	5.00E-15	6.07E-16	9.00E-13	2.25E-13	4.75E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/11/1997	1.21E-15	9.00E-14	2.25E-14	7.39E-16	2.00E-14	5.00E-15	5.05E-16	9.00E-13	2.25E-13	4.92E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/5/1998	9.89E-16	9.00E-14	2.25E-14	1.92E-15	2.00E-14	5.00E-15	6.21E-16	9.00E-13	2.25E-13	4.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/28/1998	2.84E-15	9.00E-14	2.25E-14	2.38E-15	2.00E-14	5.00E-15	1.72E-15	9.00E-13	2.25E-13	7.35E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/31/1998	7.49E-16	9.00E-14	2.25E-14	1.49E-15	2.00E-14	5.00E-15	8.34E-16	9.00E-13	2.25E-13	7.01E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/28/1998	1.07E-15	9.00E-14	2.25E-14	9.20E-16	2.00E-14	5.00E-15	6.32E-16	9.00E-13	2.25E-13	3.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1998	8.51E-15	9.00E-14	2.25E-14	4.58E-15	2.00E-14	5.00E-15	4.58E-15	9.00E-13	2.25E-13	1.43E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/1999	3.75E-15	9.00E-14	2.25E-14	2.45E-15	2.00E-14	5.00E-15	2.39E-15	9.00E-13	2.25E-13	8.46E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/1999	1.53E-15	9.00E-14	2.25E-14	8.65E-16	2.00E-14	5.00E-15	6.52E-16	9.00E-13	2.25E-13	7.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/1999	5.83E-15	9.00E-14	2.25E-14	3.52E-15	2.00E-14	5.00E-15	2.55E-15	9.00E-13	2.25E-13	8.22E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1999	9.48E-15	9.00E-14	2.25E-14	6.20E-15	2.00E-14	5.00E-15	3.96E-15	9.00E-13	2.25E-13	7.56E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/27/2000	2.06E-15	9.00E-14	2.25E-14	1.27E-15	2.00E-14	5.00E-15	1.09E-15	9.00E-13	2.25E-13	7.72E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/26/2000	1.50E-15	9.00E-14	2.25E-14	1.24E-15	2.00E-14	5.00E-15	1.01E-15	9.00E-13	2.25E-13	4.36E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2000	1.04E-15	9.00E-14	2.25E-14	5.45E-16	2.00E-14	5.00E-15	6.01E-16	9.00E-13	2.25E-13	7.67E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/26/2000	1.48E-15	9.00E-14	2.25E-14	7.56E-16	2.00E-14	5.00E-15	6.84E-16	9.00E-13	2.25E-13	7.00E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/26/2001	4.27E-16	9.00E-14	2.25E-14	2.19E-16	2.00E-14	5.00E-15	1.89E-16	9.00E-13	2.25E-13	6.13E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2001	4.52E-16	9.00E-14	2.25E-14	4.02E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.48E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/24/2001	4.65E-16	9.00E-14	2.25E-14	2.06E-16	2.00E-14	5.00E-15	2.02E-16	9.00E-13	2.25E-13	6.98E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2001	7.40E-16	9.00E-14	2.25E-14	3.51E-16	2.00E-14	5.00E-15	3.64E-16	9.00E-13	2.25E-13	4.72E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/1/2002	1.26E-15	9.00E-14	2.25E-14	7.53E-16	2.00E-14	5.00E-15	7.19E-16	9.00E-13	2.25E-13	9.65E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/1/2002	1.02E-15	9.00E-14	2.25E-14	1.03E-15	2.00E-14	5.00E-15	3.39E-16	9.00E-13	2.25E-13	7.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2002	5.82E-16	9.00E-14	2.25E-14	9.28E-16	2.00E-14	5.00E-15	3.14E-16	9.00E-13	2.25E-13	4.48E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2002	1.00E-16	9.00E-14	2.25E-14	7.67E-16	2.00E-14	5.00E-15	3.48E-16	9.00E-13	2.25E-13	9.56E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2003	1.13E-15	9.00E-14	2.25E-14	7.41E-16	2.00E-14	5.00E-15	4.41E-16	9.00E-13	2.25E-13	6.68E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2003	4.35E-16	9.00E-14	2.25E-14	5.08E-16	2.00E-14	5.00E-15	2.51E-16	9.00E-13	2.25E-13	1.34E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/29/2003	1.51E-16	9.00E-14	2.25E-14	1.02E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.28E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/29/2003	1.52E-16	9.00E-14	2.25E-14	1.54E-16	2.00E-14	5.00E-15	1.51E-16	9.00E-13	2.25E-13	7.02E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/2004	1.00E-16	9.00E-14	2.25E-14	1.12E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.82E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/27/2004	1.18E-16	9.00E-14	2.25E-14	3.11E-16	2.00E-14	5.00E-15	1.25E-16	9.00E-13	2.25E-13	2.47E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/2004	1.16E-16	9.00E-14	2.25E-14	1.72E-16	2.00E-14	5.00E-15	1.18E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/27/2004	1.14E-16	9.00E-14	2.25E-14	1.06E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.59E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/28/2005	1.00E-16	9.00E-14	2.25E-14	2.04E-16	2.00E-14	5.00E-15	1.83E-16	9.00E-13	2.25E-13	8.57E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/29/2005	1.83E-16	9.00E-14	2.25E-14	3.81E-16	2.00E-14	5.00E-15	3.09E-16	9.00E-13	2.25E-13	1.06E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2005	2.87E-16	9.00E-14	2.25E-14	8.21E-16	2.00E-14	5.00E-15	3.71E-14	9.00E-13	2.25E-13	6.28E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2006	8.74E-16	9.00E-14	2.25E-14	3.79E-16	2.00E-14	5.00E-15	1.31E-16	9.00E-13	2.25E-13	4.32E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable

Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-5U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-5T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-5R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-5PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-5T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-15 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
4/3/2006	5.22E-16	9.00E-14	2.25E-14	6.66E-16	2.00E-14	5.00E-15	1.11E-16	9.00E-13	2.25E-13	9.34E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/2006	3.08E-16	9.00E-14	2.25E-14	1.10E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.25E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/2/2006	9.14E-16	9.00E-14	2.25E-14	4.95E-16	2.00E-14	5.00E-15	1.86E-16	9.00E-13	2.25E-13	1.67E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/1/2007	9.49E-16	9.00E-14	2.25E-14	6.81E-16	2.00E-14	5.00E-15	2.02E-16	9.00E-13	2.25E-13	1.31E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/2/2007	1.08E-15	9.00E-14	2.25E-14	8.22E-16	2.00E-14	5.00E-15	2.26E-16	9.00E-13	2.25E-13	1.64E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2007	1.54E-15	9.00E-14	2.25E-14	8.16E-16	2.00E-14	5.00E-15	4.76E-16	9.00E-13	2.25E-13	2.12E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2007	4.90E-16	9.00E-14	2.25E-14	2.37E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.65E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2007	1.46E-15	9.00E-14	2.25E-14	5.67E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.02E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2008	3.16E-16	9.00E-14	2.25E-14	6.17E-16	2.00E-14	5.00E-15	3.71E-16	9.00E-13	2.25E-13	4.82E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2008	3.13E-15	9.00E-14	2.25E-14	1.55E-15	2.00E-14	5.00E-15	9.27E-16	9.00E-13	2.25E-13	7.40E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2008	7.08E-15	9.00E-14	2.25E-14	3.41E-15	2.00E-14	5.00E-15	2.52E-15	9.00E-13	2.25E-13	1.15E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2008	7.22E-15	9.00E-14	2.25E-14	2.82E-15	2.00E-14	5.00E-15	3.03E-15	9.00E-13	2.25E-13	1.59E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/15/2009	4.13E-15	9.00E-14	2.25E-14	1.39E-15	2.00E-14	5.00E-15	1.41E-15	9.00E-13	2.25E-13	4.66E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/15/2009	2.31E-16	9.00E-14	2.25E-14	7.79E-16	2.00E-14	5.00E-15	6.37E-16	9.00E-13	2.25E-13	4.18E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/15/2009	3.10E-15	9.00E-14	2.25E-14	9.20E-16	2.00E-14	5.00E-15	6.36E-16	9.00E-13	2.25E-13	1.21E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/15/2009	5.77E-15	9.00E-14	2.25E-14	3.13E-16	2.00E-14	5.00E-15	1.92E-16	9.00E-13	2.25E-13	2.48E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2010	4.78E-15	9.00E-14	2.25E-14	3.73E-16	2.00E-14	5.00E-15	4.19E-16	9.00E-13	2.25E-13	1.30E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2010	4.35E-15	9.00E-14	2.25E-14	7.84E-16	2.00E-14	5.00E-15	1.05E-15	9.00E-13	2.25E-13	4.40E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2010	3.57E-15	9.00E-14	2.25E-14	1.14E-15	2.00E-14	5.00E-15	7.97E-16	9.00E-13	2.25E-13	3.78E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2010	8.52E-15	9.00E-14	2.25E-14	1.45E-15	2.00E-14	5.00E-15	1.29E-15	9.00E-13	2.25E-13	1.33E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/4/2011	3.20E-15	9.00E-14	2.25E-14	8.89E-16	2.00E-14	5.00E-15	1.10E-15	9.00E-13	2.25E-13	1.48E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/4/2011	6.98E-15	9.00E-14	2.25E-14	2.03E-15	2.00E-14	5.00E-15	2.52E-15	9.00E-13	2.25E-13	1.08E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/3/2011	3.11E-15	9.00E-14	2.25E-14	1.14E-15	2.00E-14	5.00E-15	5.75E-16	9.00E-13	2.25E-13	1.41E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2012	4.44E-15	9.00E-14	2.25E-14	2.14E-15	2.00E-14	5.00E-15	1.53E-15	9.00E-13	2.25E-13	2.05E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2012	5.52E-15	9.00E-14	2.25E-14	3.24E-15	2.00E-14	5.00E-15	1.79E-15	9.00E-13	2.25E-13	1.55E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2012	5.87E-15	9.00E-14	2.25E-14	3.06E-15	2.00E-14	5.00E-15	1.21E-15	9.00E-13	2.25E-13	1.11E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/1/2012	6.73E-15	9.00E-14	2.25E-14	2.59E-15	2.00E-14	5.00E-15	2.43E-15	9.00E-13	2.25E-13	1.30E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2012	4.50E-15	9.00E-14	2.25E-14	1.62E-15	2.00E-14	5.00E-15	1.79E-15	9.00E-13	2.25E-13	1.74E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/25/2013	6.66E-15	9.00E-14	2.25E-14	1.48E-15	2.00E-14	5.00E-15	1.12E-15	9.00E-13	2.25E-13	1.80E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2013	7.35E-15	9.00E-14	2.25E-14	1.72E-15	2.00E-14	5.00E-15	2.02E-15	9.00E-13	2.25E-13	6.67E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2013	2.78E-15	9.00E-14	2.25E-14	6.92E-16	2.00E-14	5.00E-15	3.29E-16	9.00E-13	2.25E-13	6.62E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2013	6.70E-15	9.00E-14	2.25E-14	3.93E-16	2.00E-14	5.00E-15	2.53E-16	9.00E-13	2.25E-13	2.78E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2014	4.74E-15	9.00E-14	2.25E-14	1.42E-15	2.00E-14	5.00E-15	3.48E-15	9.00E-13	2.25E-13	1.50E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2014	8.18E-15	9.00E-14	2.25E-14	1.34E-15	2.00E-14	5.00E-15	1.76E-15	9.00E-13	2.25E-13	1.42E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2014	1.32E-14	9.00E-14	2.25E-14	7.76E-16	2.00E-14	5.00E-15	1.04E-15	9.00E-13	2.25E-13	1.23E-14	6.00E-13	1.50E-13	4.66E-17	4.00E-15	1.00E-15
12/29/2014	8.00E-16	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	2.10E-14	6.00E-13	1.50E-13	8.00E-18	4.00E-15	1.00E-15
3/30/2015	1.00E-14	9.00E-14	2.25E-14	5.00E-16	2.00E-14	5.00E-15	2.10E-15	9.00E-13	2.25E-13	3.10E-14	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15
6/29/2015	4.60E-15	9.00E-14	2.25E-14	8.00E-16	2.00E-14	5.00E-15	3.70E-15	9.00E-13	2.25E-13	1.40E-14	6.00E-13	1.50E-13	2.00E-17	4.00E-15	1.00E-15
9/28/2015	1.20E-14	9.00E-14	2.25E-14	4.00E-16	2.00E-14	5.00E-15	9.80E-16	9.00E-13	2.25E-13	1.20E-14	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
12/28/2015	7.40E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.90E-16	9.00E-13	2.25E-13	2.20E-14	6.00E-13	1.50E-13	2.00E-17	4.00E-15	1.00E-15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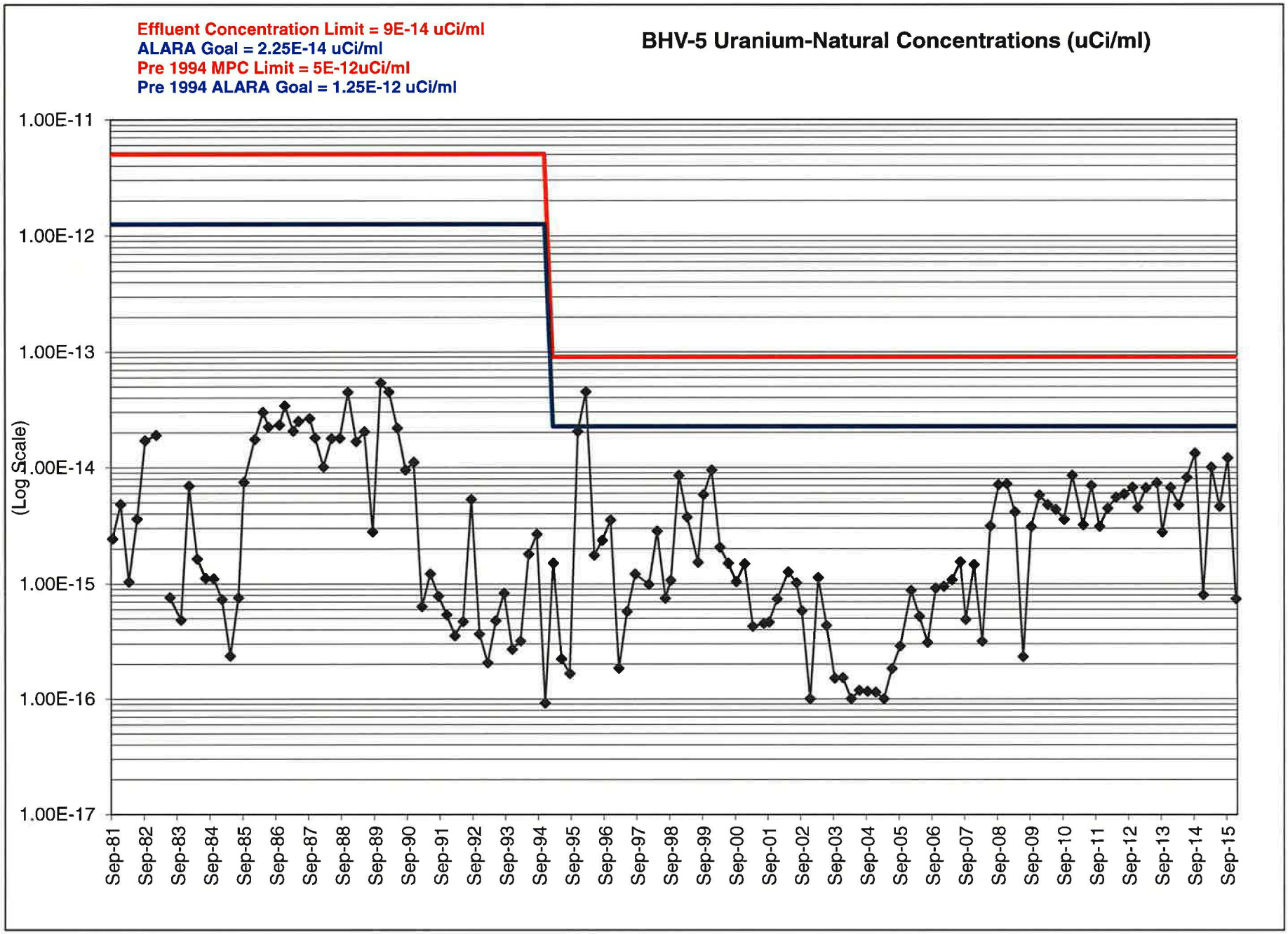
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-5 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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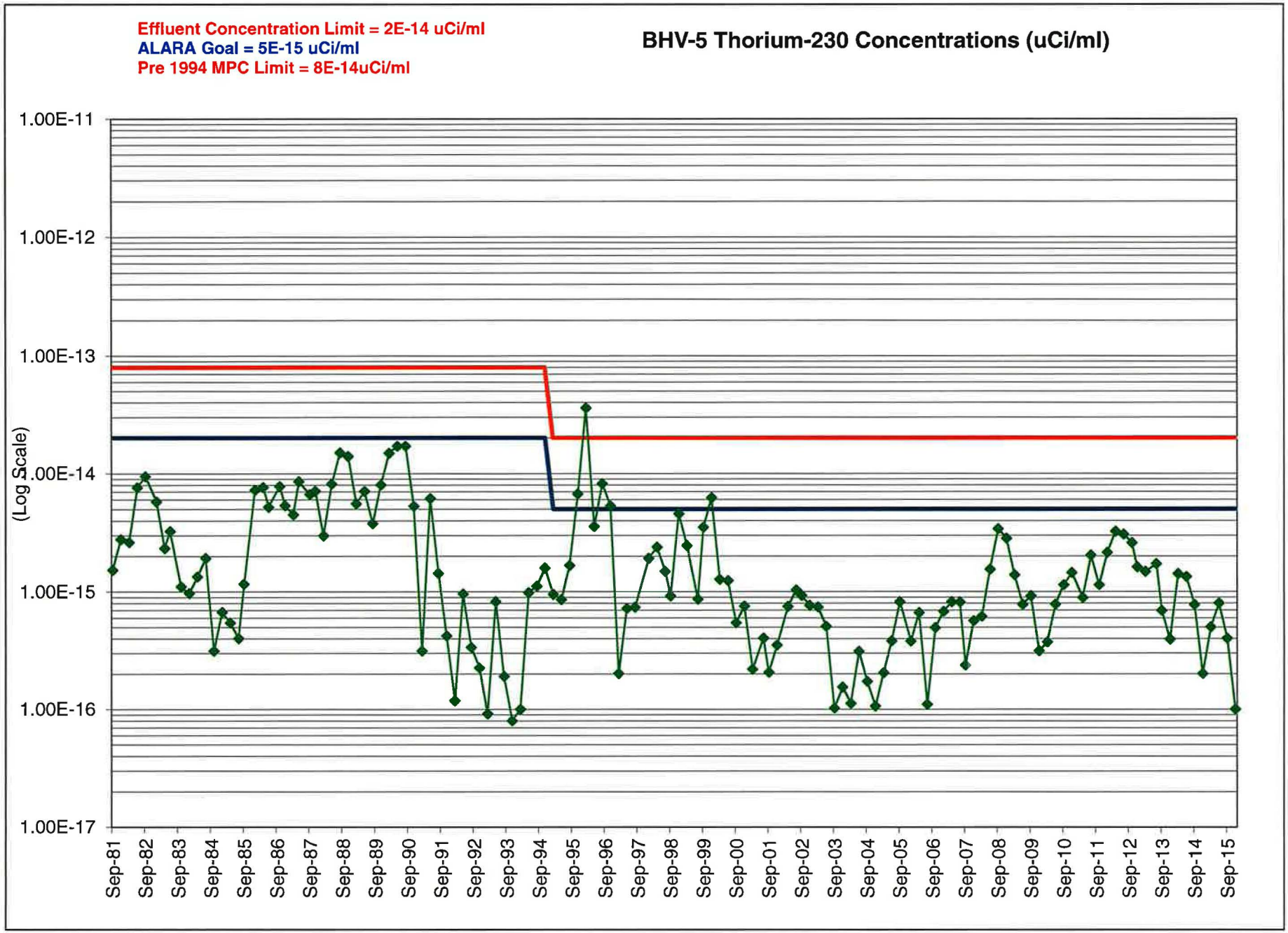
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-5 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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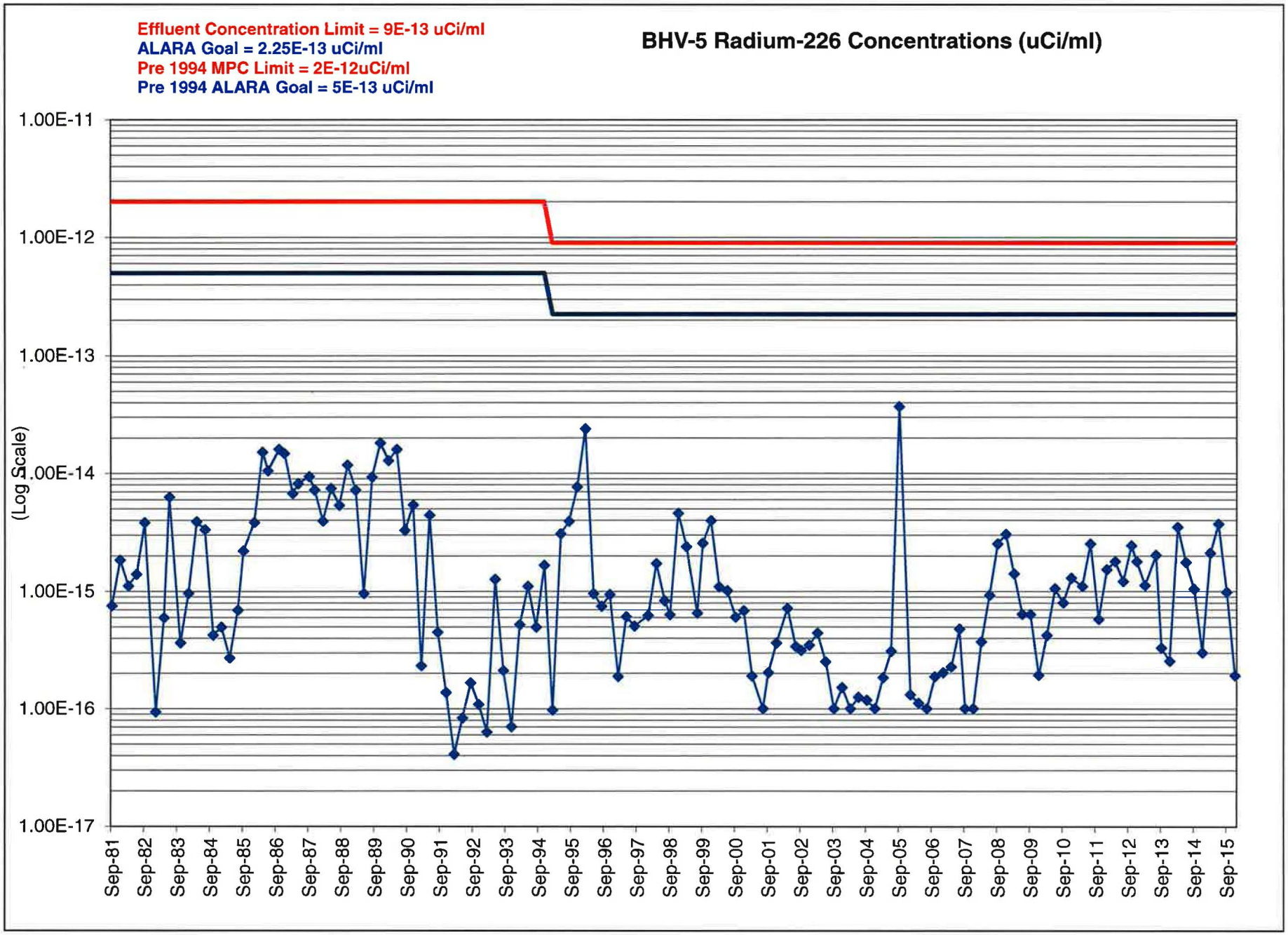
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-5 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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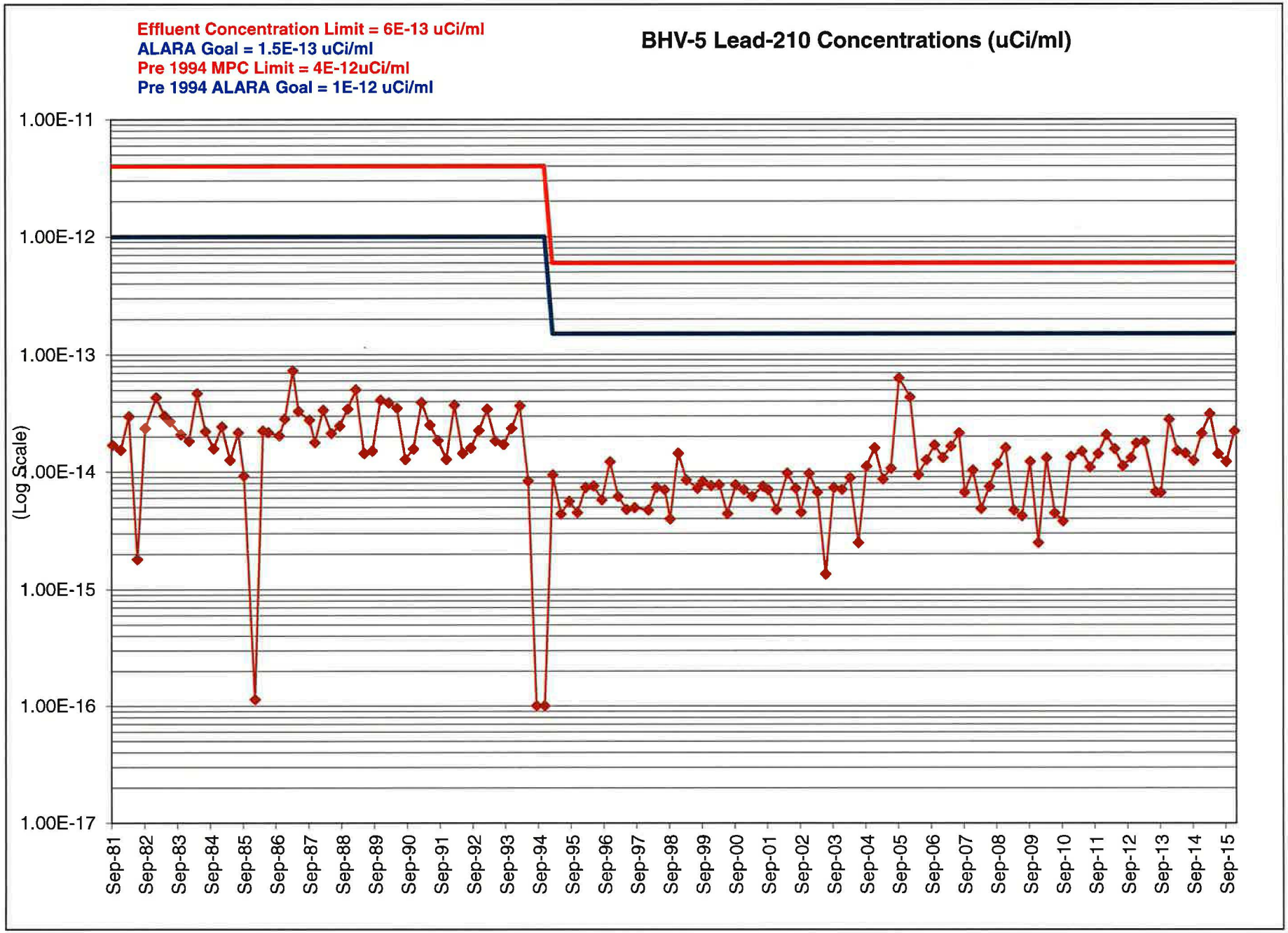
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-5 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
Sep-90
Sep-91
Sep-92
Sep-93
Sep-94
Sep-95
Sep-96
Sep-97
Sep-98
Sep-99
Sep-00
Sep-01
Sep-02
Sep-03
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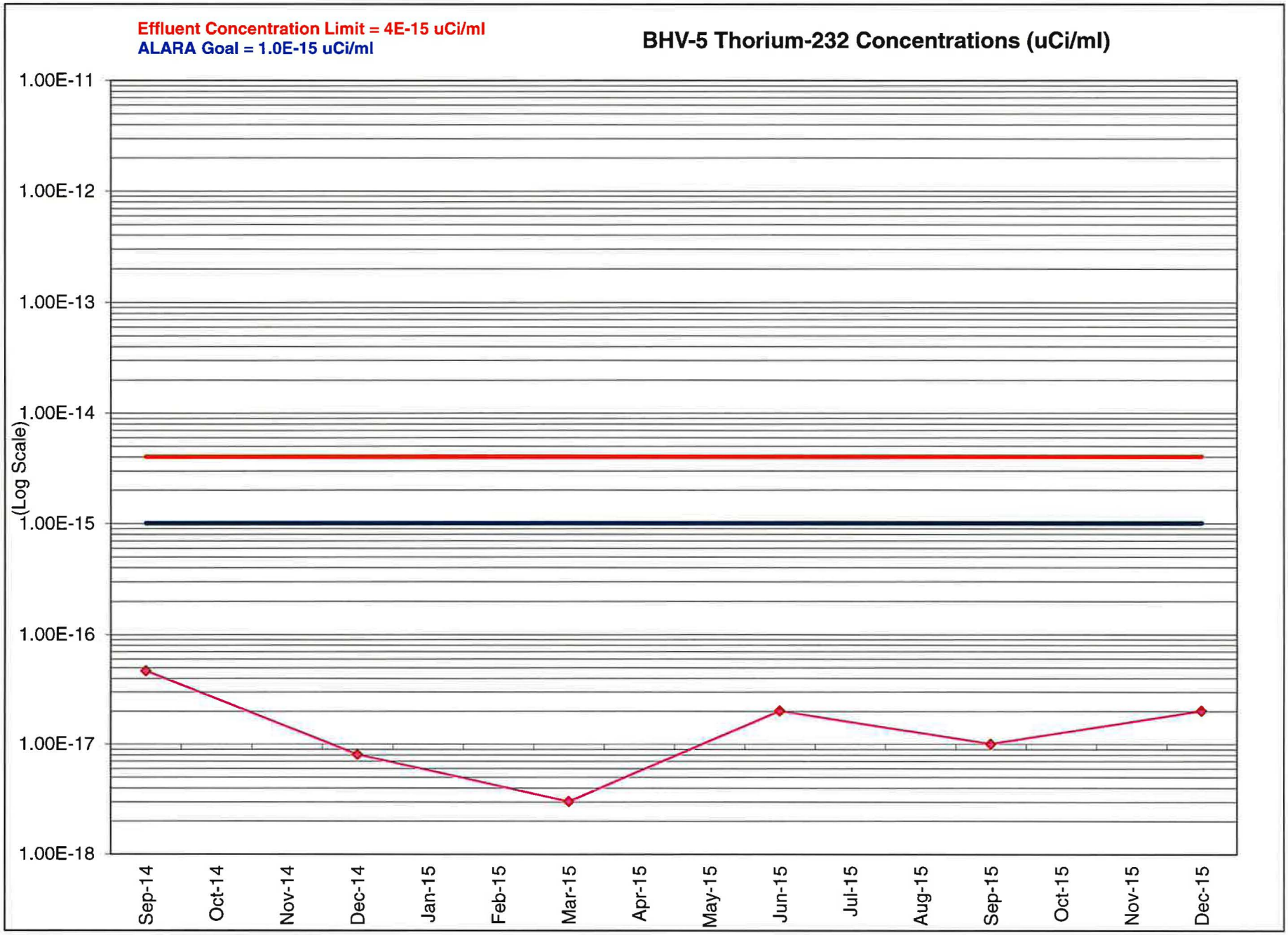
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-5 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15

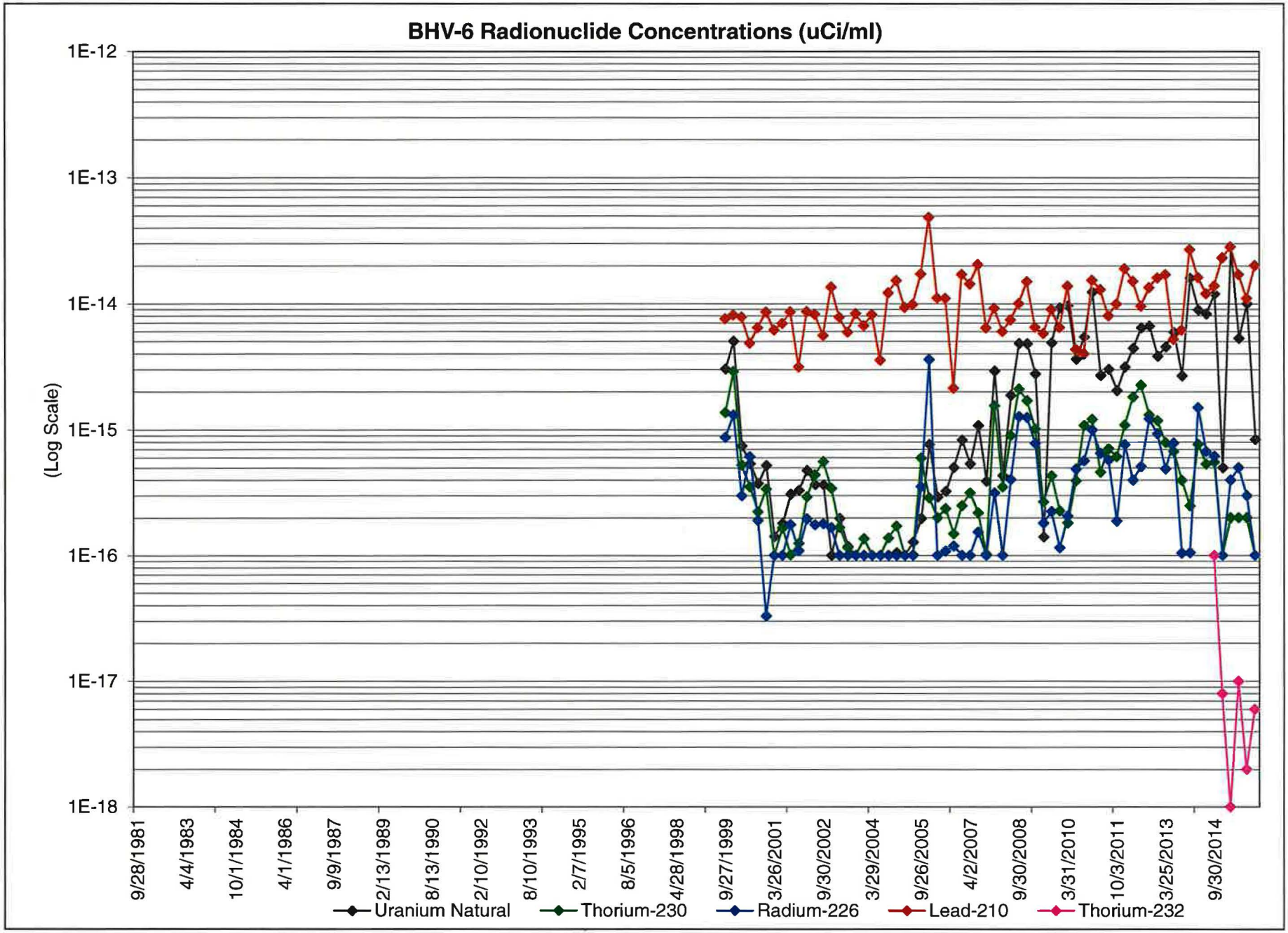
TAB 6

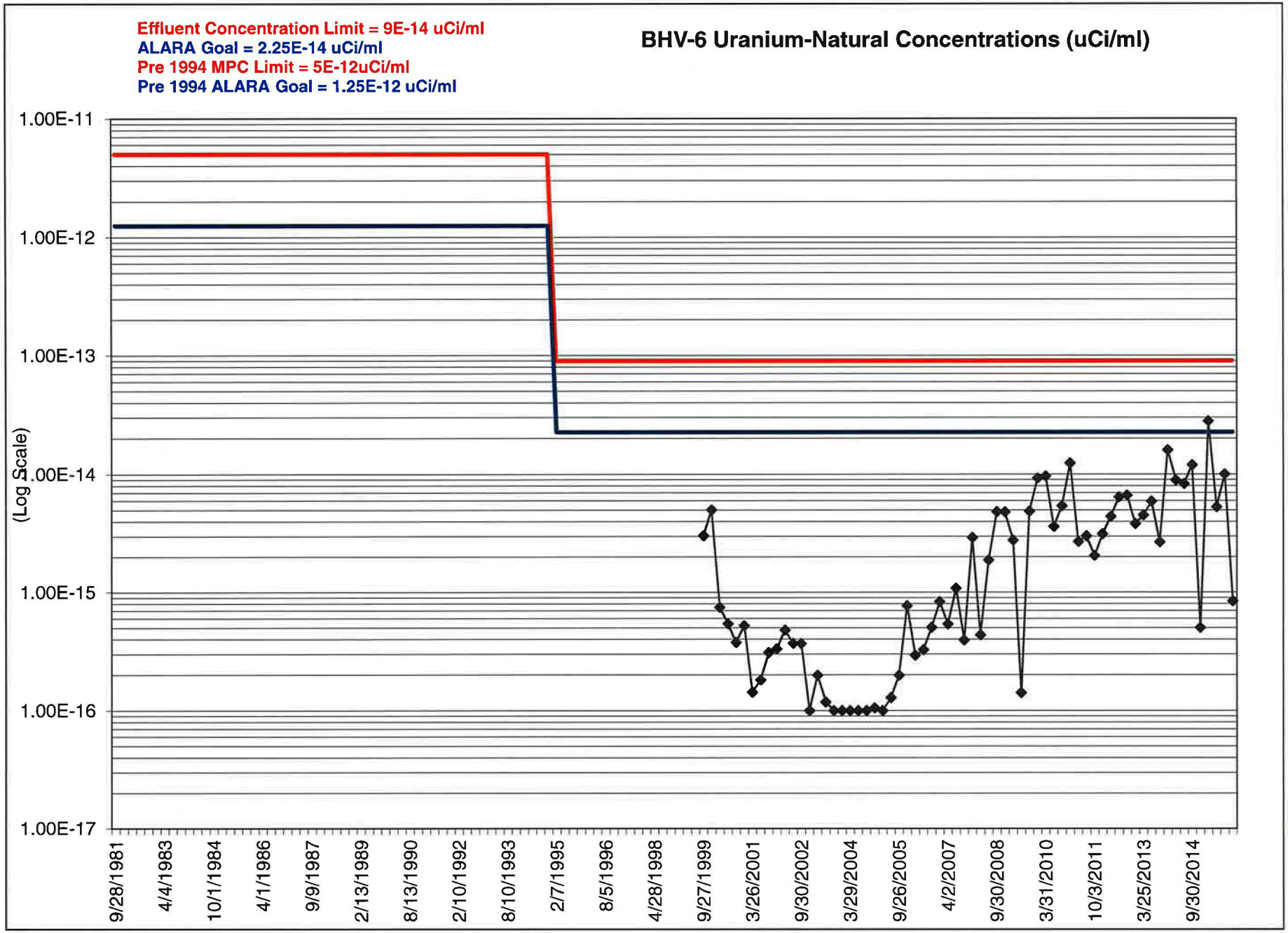
BHV-6 AIR SAMPLING GRAPHS AND DATA TABLE

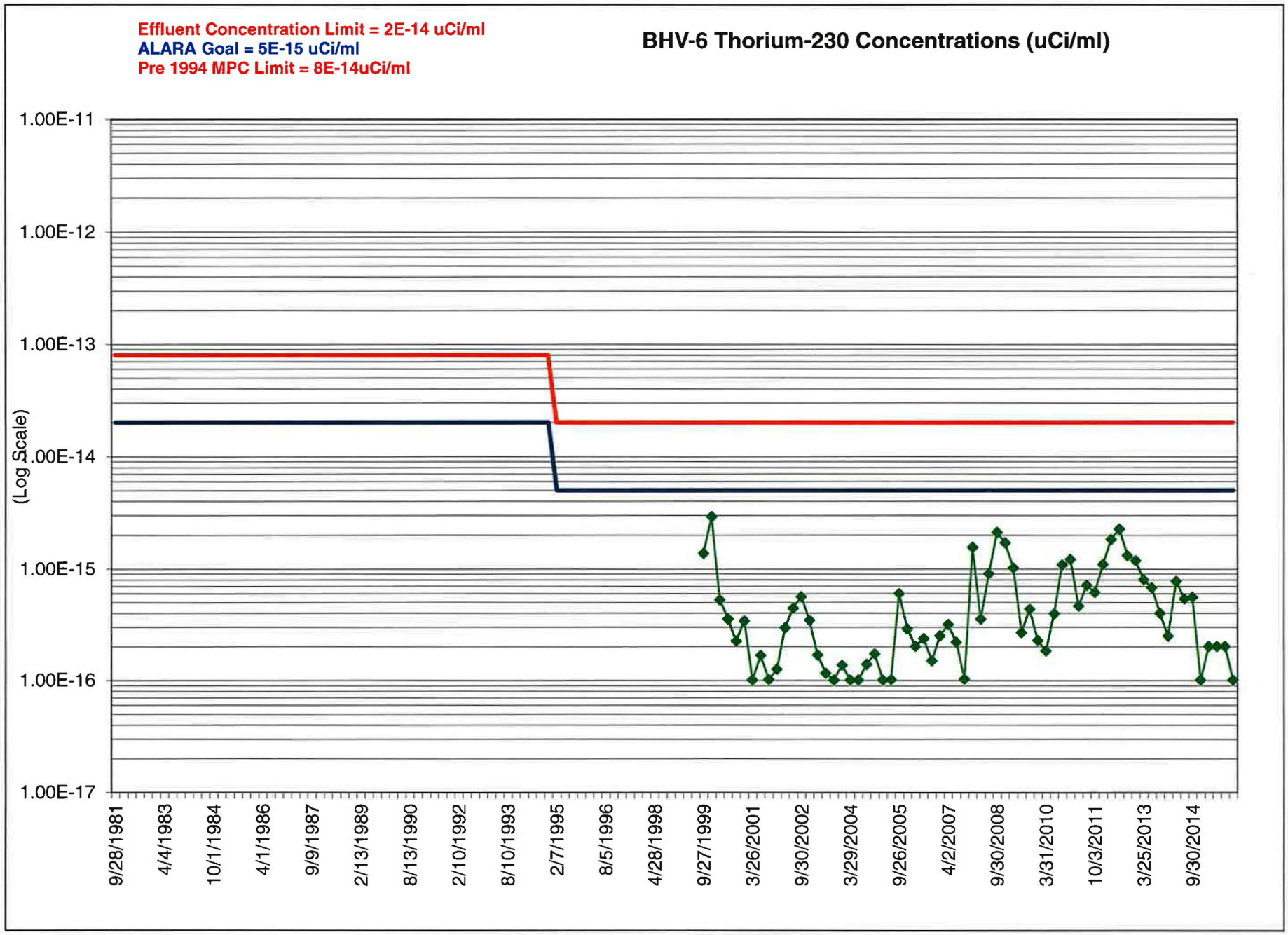
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-6U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-6T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-6R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-6PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-6T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
9/28/1981		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/14/1981		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/29/1982		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1982		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/27/1982		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1983		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/4/1983		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1983		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/3/1983		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/3/1984		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/2/1984		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/2/1984		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/1/1984		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1985		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1985		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
7/1/1985		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/30/1985		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
1/2/1986		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
4/1/1986		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
6/30/1986		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
10/27/1986		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
12/15/1986		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
3/16/1987		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1987		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
9/9/1987		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/2/1987		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/16/1988		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/18/1988		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/15/1988		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/14/1988		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/13/1989		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/15/1989		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/14/1989		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/13/1989		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/12/1990		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/14/1990		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/13/1990		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/12/1990		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/11/1991		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/13/1991		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/12/1991		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/11/1991		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/10/1992		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/11/1992		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1992		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/9/1992		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/9/1993		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/10/1993		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/10/1993		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable

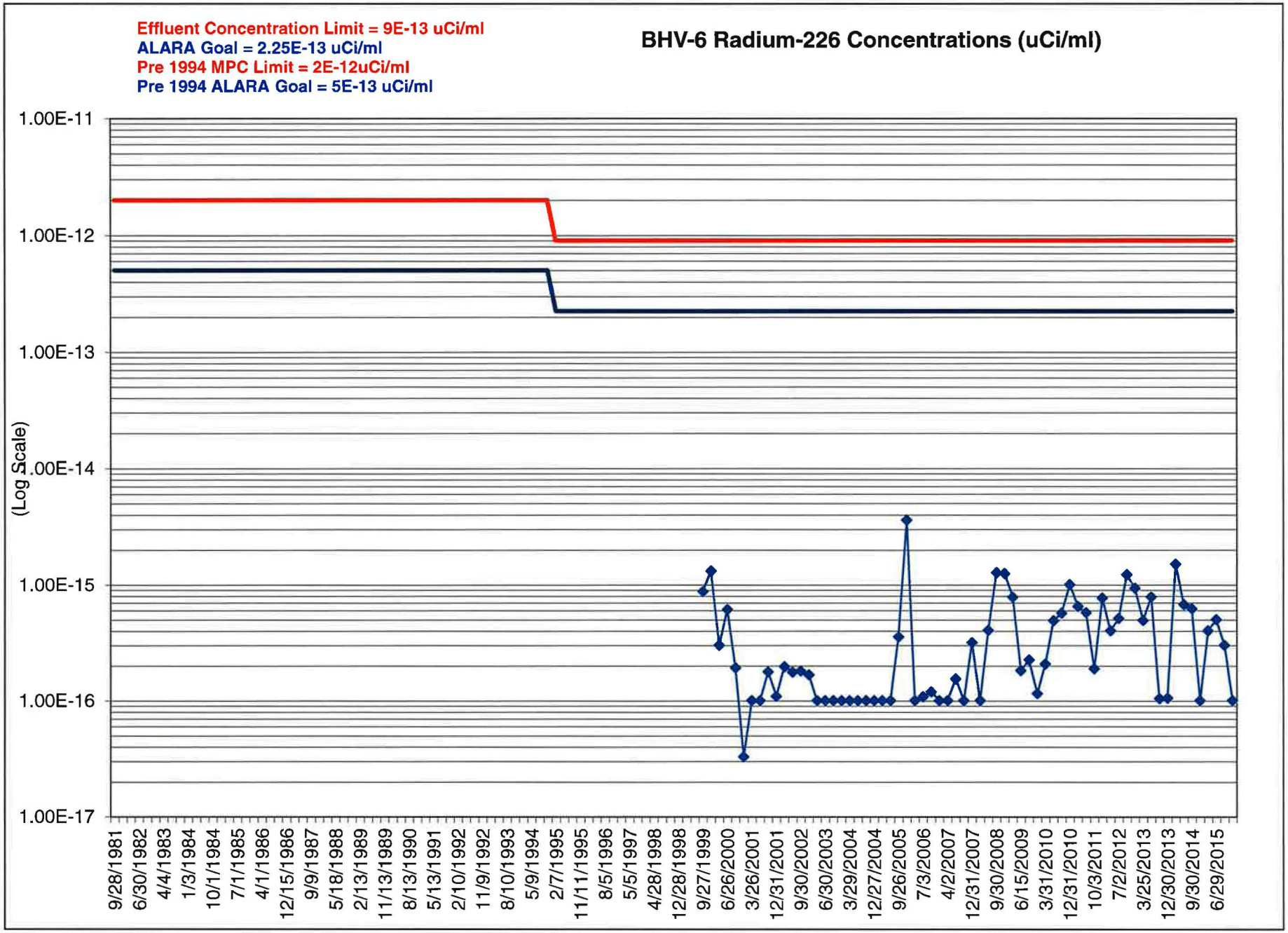
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-6U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-6T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-6R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-6PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-6T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
11/8/1993		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1994		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
5/9/1994		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
8/9/1994		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
11/7/1994		5.00E-12	1.25E-12		8.00E-14	2.00E-14		2.00E-12	5.00E-13		4.00E-12	1.00E-12	Not Analyzed	Not Applicable	Not Applicable
2/7/1995		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/9/1995		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/9/1995		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/11/1995		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/5/1996		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/6/1996		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/5/1996		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
11/6/1996		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
2/6/1997		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
5/5/1997		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
8/11/1997		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/5/1998		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/28/1998		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/31/1998		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/28/1998		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1998		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/1999		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/1999		9.00E-14	2.25E-14		2.00E-14	5.00E-15		9.00E-13	2.25E-13		6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/1999	3.03E-15	9.00E-14	2.25E-14	1.37E-15	2.00E-14	5.00E-15	8.72E-16	9.00E-13	2.25E-13	7.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/28/1999	5.01E-15	9.00E-14	2.25E-14	2.89E-15	2.00E-14	5.00E-15	1.31E-15	9.00E-13	2.25E-13	8.10E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/30/2000	7.46E-16	9.00E-14	2.25E-14	5.25E-16	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	7.83E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/26/2000	5.40E-16	9.00E-14	2.25E-14	3.53E-16	2.00E-14	5.00E-15	6.11E-16	9.00E-13	2.25E-13	4.83E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/25/2000	3.75E-16	9.00E-14	2.25E-14	2.23E-16	2.00E-14	5.00E-15	1.91E-16	9.00E-13	2.25E-13	6.41E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/26/2000	5.21E-16	9.00E-14	2.25E-14	3.39E-16	2.00E-14	5.00E-15	3.28E-17	9.00E-13	2.25E-13	8.57E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/26/2001	1.42E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.15E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2001	1.81E-16	9.00E-14	2.25E-14	1.66E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.95E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/24/2001	3.08E-16	9.00E-14	2.25E-14	1.01E-16	2.00E-14	5.00E-15	1.77E-16	9.00E-13	2.25E-13	8.59E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2001	3.31E-16	9.00E-14	2.25E-14	1.25E-16	2.00E-14	5.00E-15	1.09E-16	9.00E-13	2.25E-13	3.14E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/1/2002	4.77E-16	9.00E-14	2.25E-14	2.94E-16	2.00E-14	5.00E-15	1.96E-16	9.00E-13	2.25E-13	8.61E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/1/2002	3.68E-16	9.00E-14	2.25E-14	4.41E-16	2.00E-14	5.00E-15	1.76E-16	9.00E-13	2.25E-13	8.20E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2002	3.67E-16	9.00E-14	2.25E-14	5.60E-16	2.00E-14	5.00E-15	1.80E-16	9.00E-13	2.25E-13	5.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2002	1.00E-16	9.00E-14	2.25E-14	3.43E-16	2.00E-14	5.00E-15	1.67E-16	9.00E-13	2.25E-13	1.35E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2003	1.98E-16	9.00E-14	2.25E-14	1.68E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	7.77E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2003	1.18E-16	9.00E-14	2.25E-14	1.15E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.92E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/29/2003	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.30E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/29/2003	1.00E-16	9.00E-14	2.25E-14	1.36E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.66E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/29/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	8.17E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/27/2004	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	3.55E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/27/2004	1.00E-16	9.00E-14	2.25E-14	1.38E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.22E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/27/2004	1.05E-16	9.00E-14	2.25E-14	1.72E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.52E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/28/2005	1.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.34E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/29/2005	1.28E-16	9.00E-14	2.25E-14	1.01E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	9.85E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/26/2005	1.98E-16	9.00E-14	2.25E-14	5.98E-16	2.00E-14	5.00E-15	3.55E-16	9.00E-13	2.25E-13	1.71E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2006	7.67E-16	9.00E-14	2.25E-14	2.88E-16	2.00E-14	5.00E-15	3.60E-15	9.00E-13	2.25E-13	4.85E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable

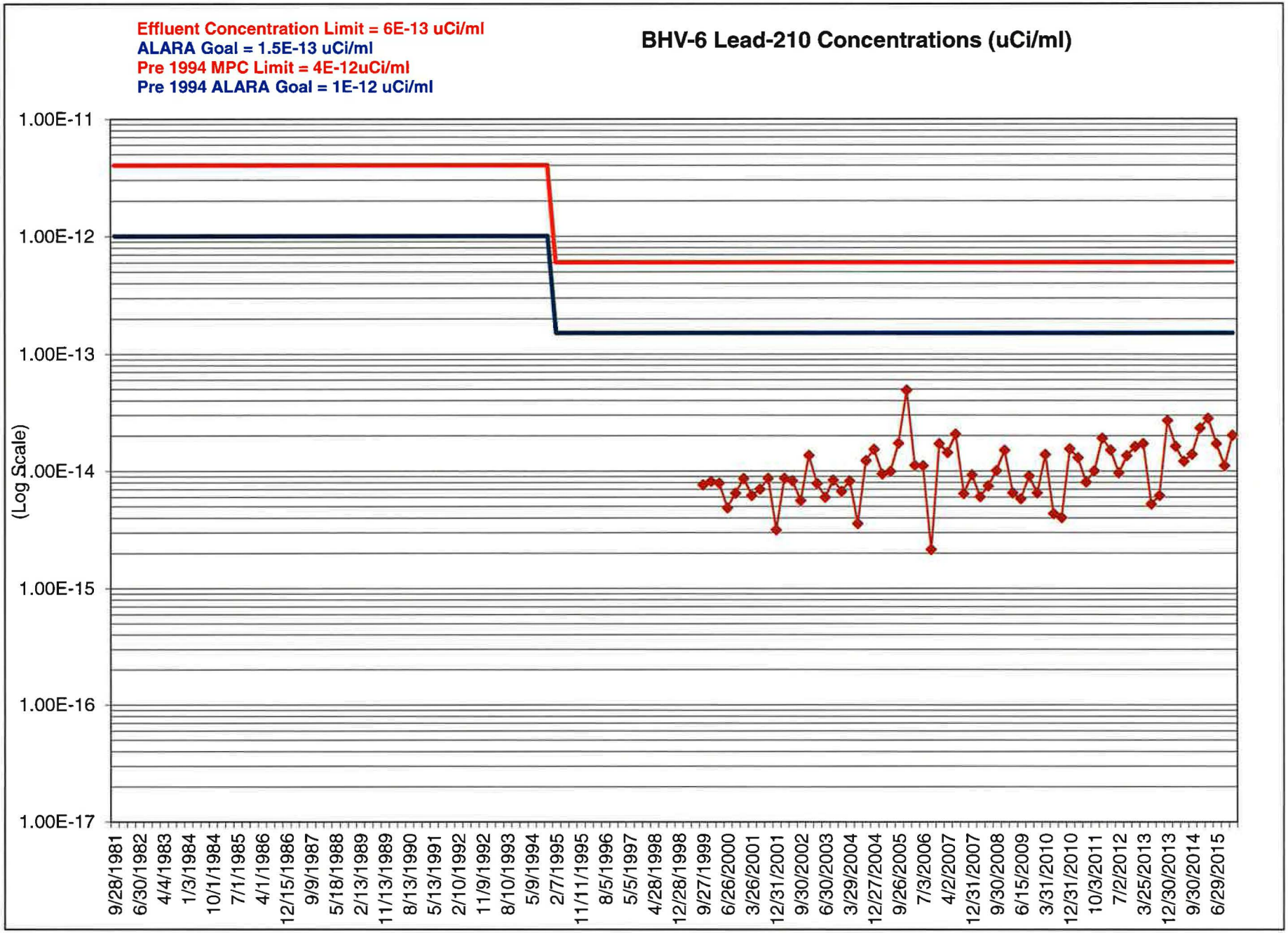
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-6U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-6T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-6R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-6PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-6T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
4/3/2006	2.92E-16	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.11E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/3/2006	3.25E-16	9.00E-14	2.25E-14	2.36E-16	2.00E-14	5.00E-15	1.08E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/2/2006	5.03E-16	9.00E-14	2.25E-14	1.49E-16	2.00E-14	5.00E-15	1.19E-16	9.00E-13	2.25E-13	2.13E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/1/2007	8.31E-16	9.00E-14	2.25E-14	2.49E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/2/2007	5.36E-16	9.00E-14	2.25E-14	3.15E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	1.43E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2007	1.08E-15	9.00E-14	2.25E-14	2.18E-16	2.00E-14	5.00E-15	1.54E-16	9.00E-13	2.25E-13	2.04E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2007	3.92E-16	9.00E-14	2.25E-14	1.02E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	6.38E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2007	2.92E-15	9.00E-14	2.25E-14	1.55E-15	2.00E-14	5.00E-15	3.16E-16	9.00E-13	2.25E-13	9.19E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2008	4.34E-16	9.00E-14	2.25E-14	3.51E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	5.99E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/3102008	1.88E-15	9.00E-14	2.25E-14	9.00E-16	2.00E-14	5.00E-15	4.04E-16	9.00E-13	2.25E-13	7.41E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2008	4.82E-15	9.00E-14	2.25E-14	2.10E-15	2.00E-14	5.00E-15	1.27E-15	9.00E-13	2.25E-13	1.00E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2008	4.80E-15	9.00E-14	2.25E-14	1.70E-15	2.00E-14	5.00E-15	1.25E-15	9.00E-13	2.25E-13	1.49E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/15/2009	2.77E-15	9.00E-14	2.25E-14	1.01E-15	2.00E-14	5.00E-15	7.82E-16	9.00E-13	2.25E-13	6.46E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/15/2009	1.41E-16	9.00E-14	2.25E-14	2.67E-16	2.00E-14	5.00E-15	1.81E-16	9.00E-13	2.25E-13	5.76E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/15/2009	4.87E-15	9.00E-14	2.25E-14	4.32E-16	2.00E-14	5.00E-15	2.23E-16	9.00E-13	2.25E-13	8.98E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/15/2009	9.24E-15	9.00E-14	2.25E-14	2.26E-16	2.00E-14	5.00E-15	1.15E-16	9.00E-13	2.25E-13	6.44E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2010	9.63E-15	9.00E-14	2.25E-14	1.82E-16	2.00E-14	5.00E-15	2.06E-16	9.00E-13	2.25E-13	1.37E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2010	3.62E-15	9.00E-14	2.25E-14	3.94E-16	2.00E-14	5.00E-15	4.89E-16	9.00E-13	2.25E-13	4.30E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2010	5.42E-15	9.00E-14	2.25E-14	1.08E-15	2.00E-14	5.00E-15	5.68E-16	9.00E-13	2.25E-13	3.98E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2010	1.24E-14	9.00E-14	2.25E-14	1.21E-15	2.00E-14	5.00E-15	1.00E-15	9.00E-13	2.25E-13	1.53E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/4/2011	2.70E-15	9.00E-14	2.25E-14	4.62E-16	2.00E-14	5.00E-15	6.51E-16	9.00E-13	2.25E-13	1.29E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/4/2011	3.01E-15	9.00E-14	2.25E-14	7.07E-16	2.00E-14	5.00E-15	5.75E-16	9.00E-13	2.25E-13	7.97E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/3/2011	2.05E-15	9.00E-14	2.25E-14	6.12E-16	2.00E-14	5.00E-15	1.88E-16	9.00E-13	2.25E-13	9.93E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
1/3/2012	3.14E-15	9.00E-14	2.25E-14	1.09E-15	2.00E-14	5.00E-15	7.65E-16	9.00E-13	2.25E-13	1.89E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
4/3/2012	4.41E-15	9.00E-14	2.25E-14	1.82E-15	2.00E-14	5.00E-15	4.00E-16	9.00E-13	2.25E-13	1.50E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2012	6.42E-15	9.00E-14	2.25E-14	2.25E-15	2.00E-14	5.00E-15	5.11E-16	9.00E-13	2.25E-13	9.54E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
10/1/2012	6.63E-15	9.00E-14	2.25E-14	1.31E-15	2.00E-14	5.00E-15	1.22E-15	9.00E-13	2.25E-13	1.34E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/31/2012	3.83E-15	9.00E-14	2.25E-14	1.18E-15	2.00E-14	5.00E-15	9.30E-16	9.00E-13	2.25E-13	1.60E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/25/2013	4.52E-15	9.00E-14	2.25E-14	7.93E-16	2.00E-14	5.00E-15	4.91E-16	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
7/2/2013	5.91E-15	9.00E-14	2.25E-14	6.74E-16	2.00E-14	5.00E-15	7.85E-16	9.00E-13	2.25E-13	5.18E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2013	2.68E-15	9.00E-14	2.25E-14	3.97E-16	2.00E-14	5.00E-15	1.04E-16	9.00E-13	2.25E-13	6.13E-15	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
12/30/2013	1.60E-14	9.00E-14	2.25E-14	2.48E-16	2.00E-14	5.00E-15	1.05E-16	9.00E-13	2.25E-13	2.67E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
3/31/2014	8.92E-15	9.00E-14	2.25E-14	7.68E-16	2.00E-14	5.00E-15	1.50E-15	9.00E-13	2.25E-13	1.61E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
6/30/2014	8.29E-15	9.00E-14	2.25E-14	5.35E-16	2.00E-14	5.00E-15	6.72E-16	9.00E-13	2.25E-13	1.20E-14	6.00E-13	1.50E-13	Not Analyzed	Not Applicable	Not Applicable
9/30/2014	1.20E-14	9.00E-14	2.25E-14	5.54E-16	2.00E-14	5.00E-15	6.18E-16	9.00E-13	2.25E-13	1.38E-14	6.00E-13	1.50E-13	1.00E-16	4.00E-15	1.00E-15
12/29/2014	5.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.30E-14	6.00E-13	1.50E-13	8.00E-18	4.00E-15	1.00E-15
3/30/2015	2.80E-14	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	4.00E-16	9.00E-13	2.25E-13	2.80E-14	6.00E-13	1.50E-13	1.00E-18	4.00E-15	1.00E-15
6/29/2015	5.30E-15	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	5.00E-16	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
9/28/2015	1.00E-14	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	2.00E-18	4.00E-15	1.00E-15
12/28/2015	8.40E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.00E-14	6.00E-13	1.50E-13	6.00E-18	4.00E-15	1.00E-15

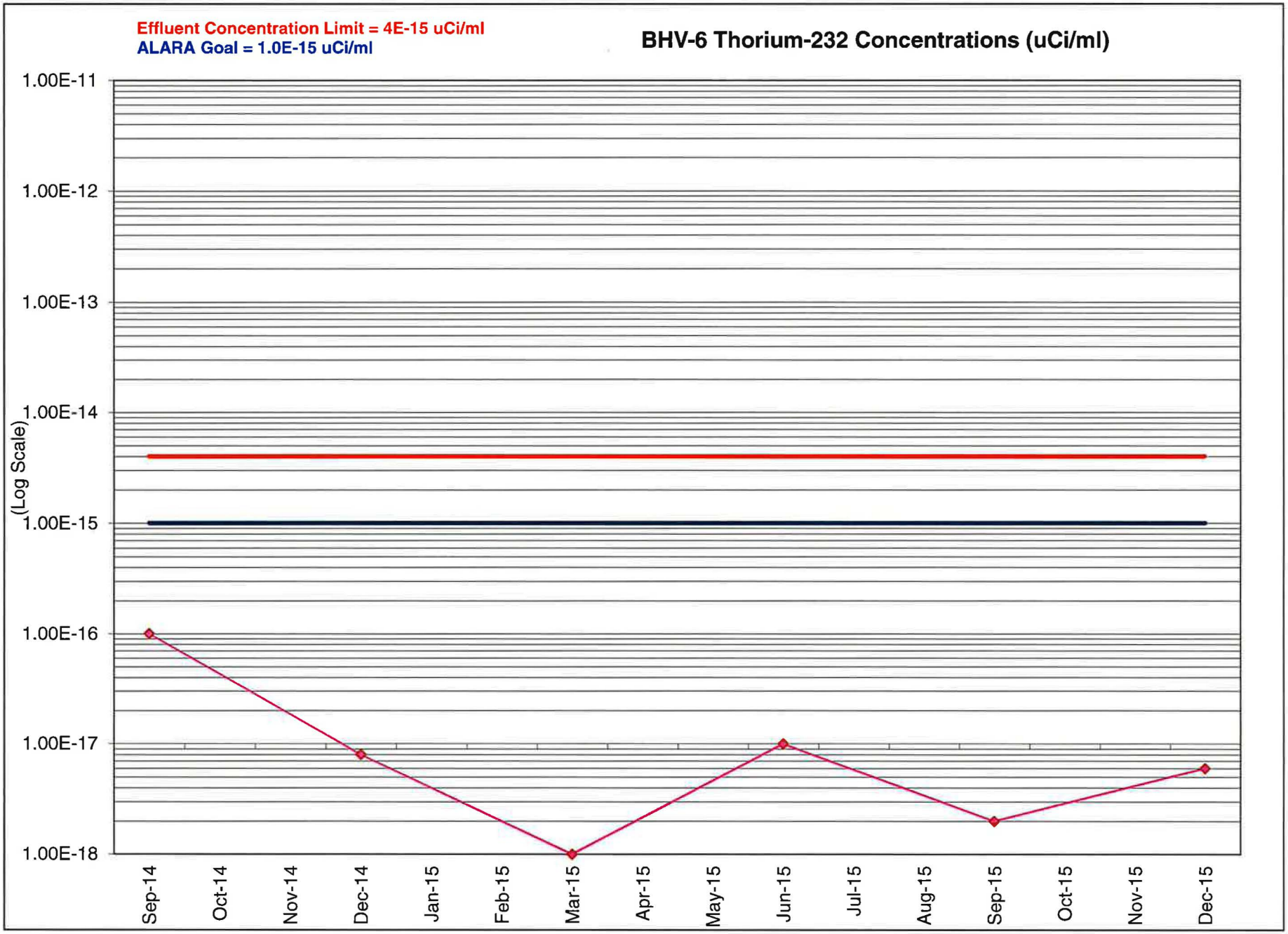

BHV-6 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1E-12
1E-13
1E-14
1E-15
1E-16
1E-17
1E-18
9/28/1981
4/4/1983
10/1/1984
4/1/1986
9/9/1987
2/13/1989
8/13/1990
2/10/1992
8/10/1993
2/7/1995
8/5/1996
4/28/1998
9/27/1999
3/26/2001
9/30/2002
3/29/2004
9/26/2005
4/2/2007
9/30/2008
3/31/2010
10/3/2011
3/25/2013
9/30/2014
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-6 Uranium-Natural Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
9/28/1981
4/4/1983
10/1/1984
4/1/1986
9/9/1987
2/13/1989
8/13/1990
2/10/1992
8/10/1993
2/7/1995
8/5/1996
4/28/1998
9/27/1999
3/26/2001
9/30/2002
3/29/2004
9/26/2005
4/2/2007
9/30/2008
3/31/2010
10/3/2011
3/25/2013
9/30/2014


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-6 Thorium-230 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
9/28/1981
4/4/1983
10/1/1984
4/1/1986
9/9/1987
2/13/1989
8/13/1990
2/10/1992
8/10/1993
2/7/1995
8/5/1996
4/28/1998
9/27/1999
3/26/2001
9/30/2002
3/29/2004
9/26/2005
4/2/2007
9/30/2008
3/31/2010
10/3/2011
3/25/2013
9/30/2014


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-6 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
9/28/1981
6/30/1982
4/4/1983
1/3/1984
10/1/1984
7/1/1985
4/1/1986
12/15/1986
9/9/1987
5/18/1988
2/13/1989
11/13/1989
8/13/1990
5/13/1991
2/10/1992
11/9/1992
8/10/1993
5/9/1994
2/7/1995
11/11/1995
8/5/1996
5/5/1997
4/28/1998
12/28/1998
9/27/1999
6/26/2000
3/26/2001
12/31/2001
9/30/2002
6/30/2003
3/29/2004
12/27/2004
9/26/2005
7/3/2006
4/2/2007
12/31/2007
9/30/2008
6/15/2009
3/31/2010
12/31/2010
10/3/2011
7/2/2012
3/25/2013
12/30/2013
9/30/2014
6/29/2015

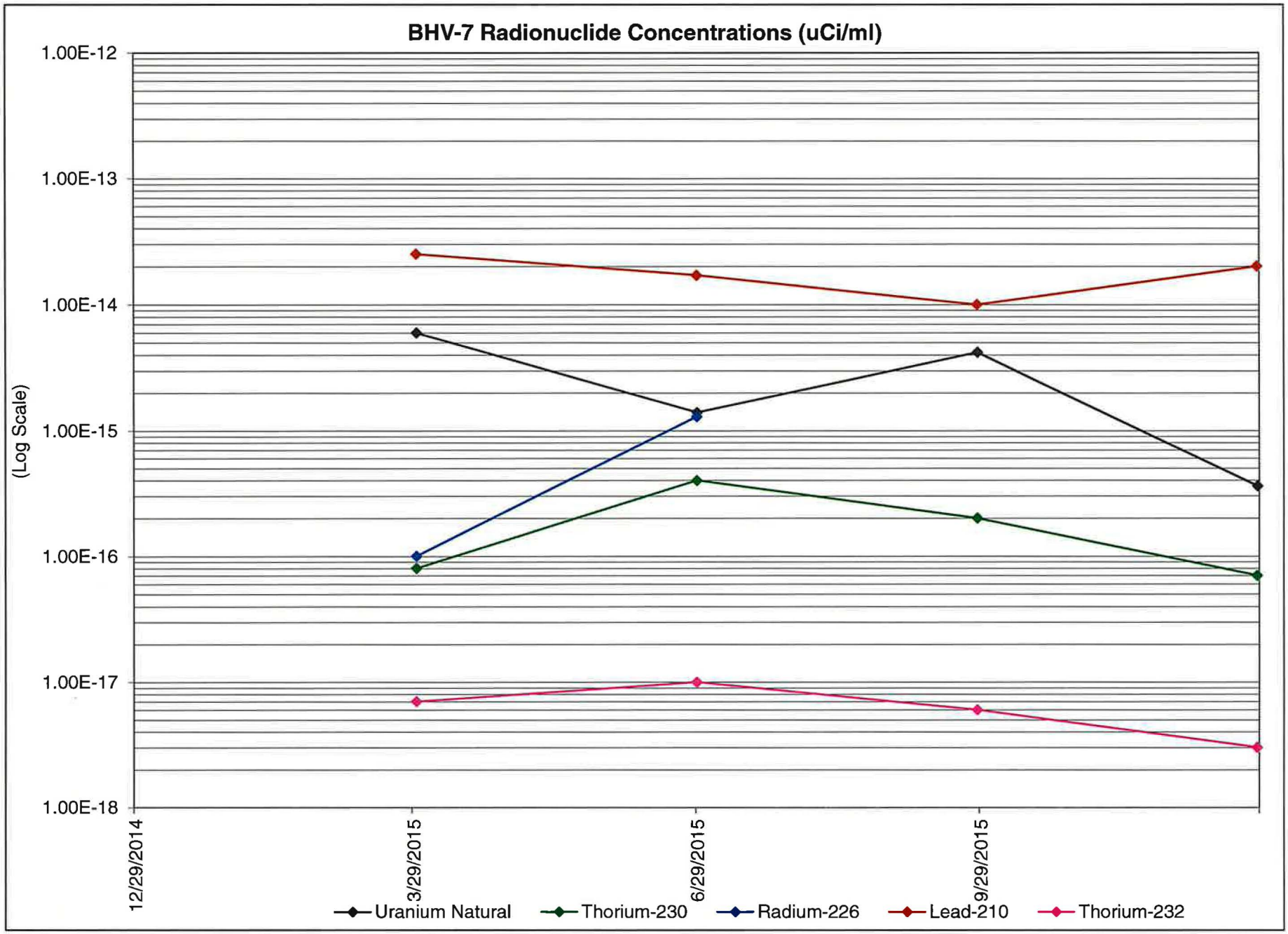

Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-6 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
9/28/1981
6/30/1982
4/4/1983
1/3/1984
10/1/1984
7/1/1985
4/1/1986
12/15/1986
9/9/1987
5/18/1988
2/13/1989
11/13/1989
8/13/1990
5/13/1991
2/10/1992
11/9/1992
8/10/1993
5/9/1994
2/7/1995
11/11/1995
8/5/1996
5/5/1997
4/28/1998
12/28/1998
9/27/1999
6/26/2000
3/26/2001
12/31/2001
9/30/2002
6/30/2003
3/29/2004
12/27/2004
9/26/2005
7/3/2006
4/2/2007
12/31/2007
9/30/2008
6/15/2009
3/31/2010
12/31/2010
10/3/2011
7/2/2012
3/25/2013
12/30/2013
9/30/2014
6/29/2015

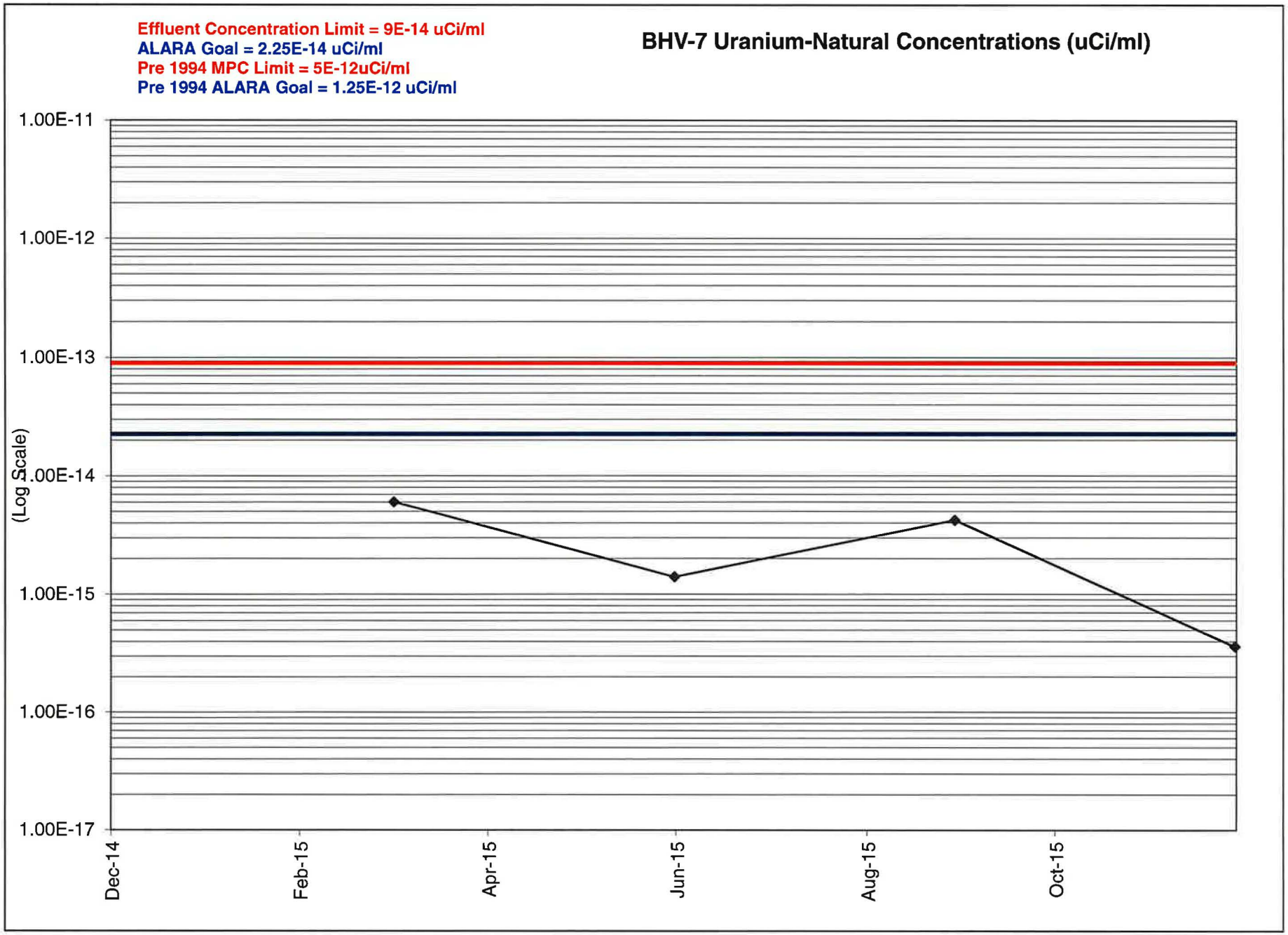

Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-6 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15

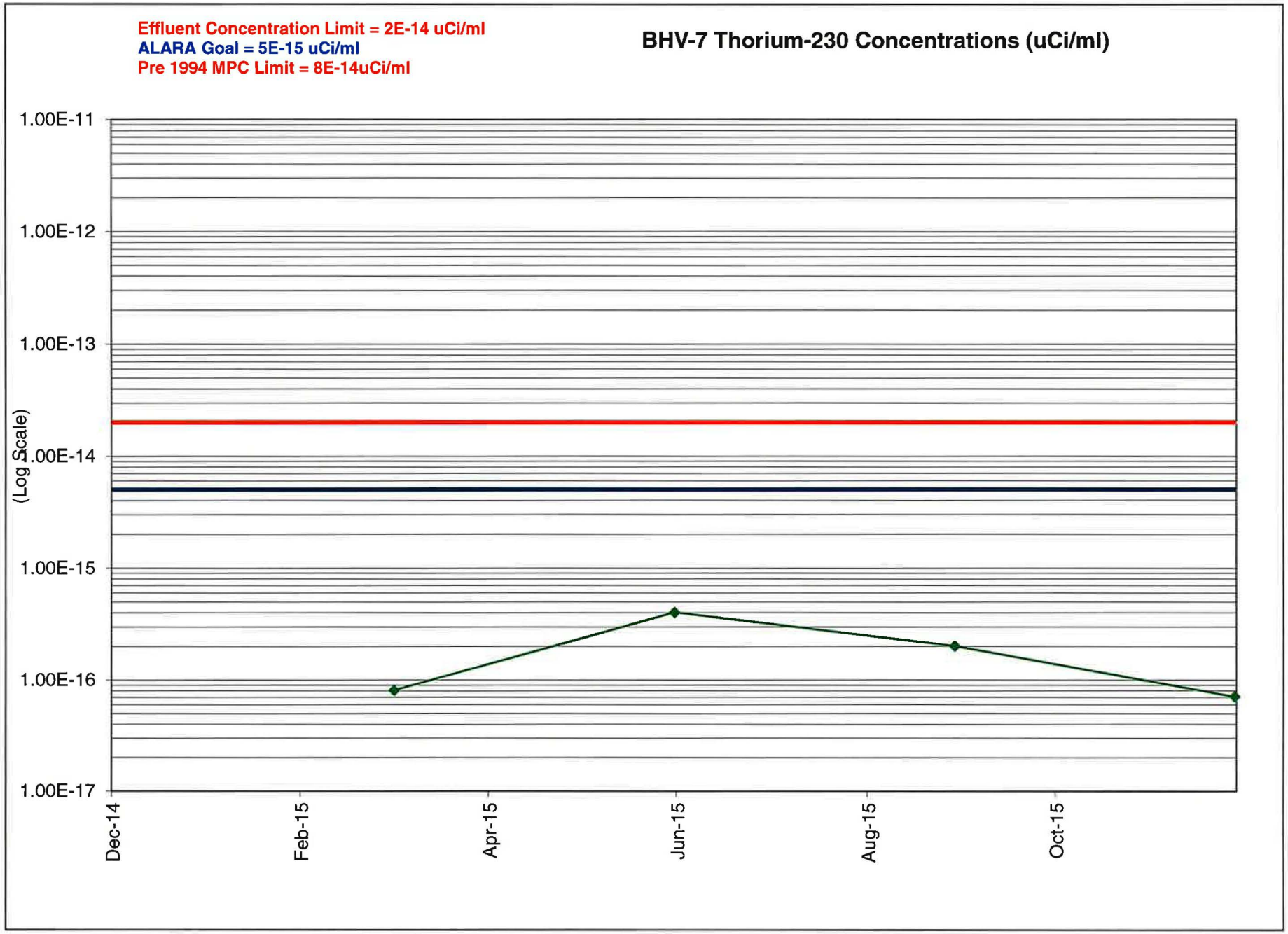
TAB 7

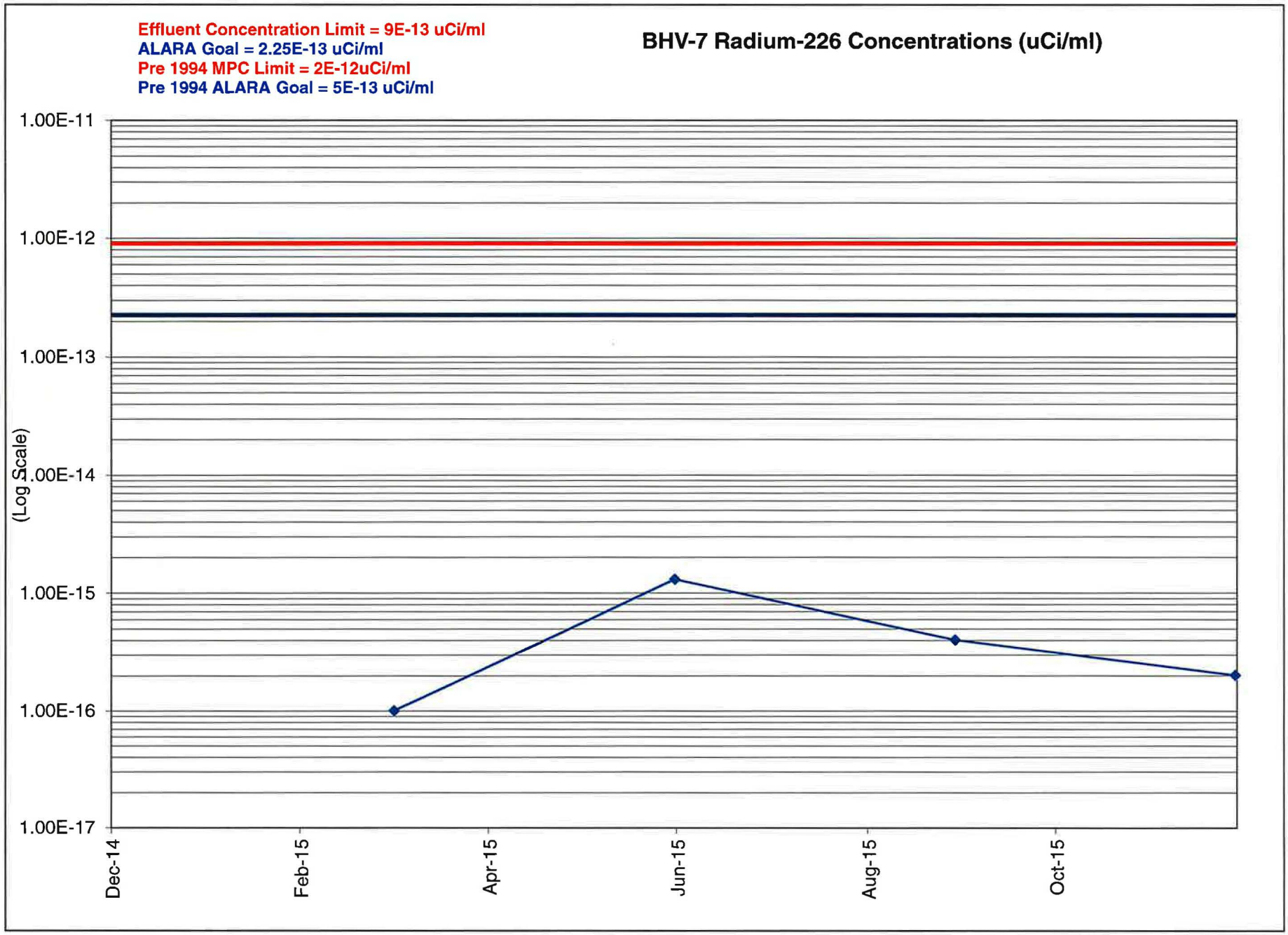
BHV-7 AIR SAMPLING GRAPHS AND DATA TABLE

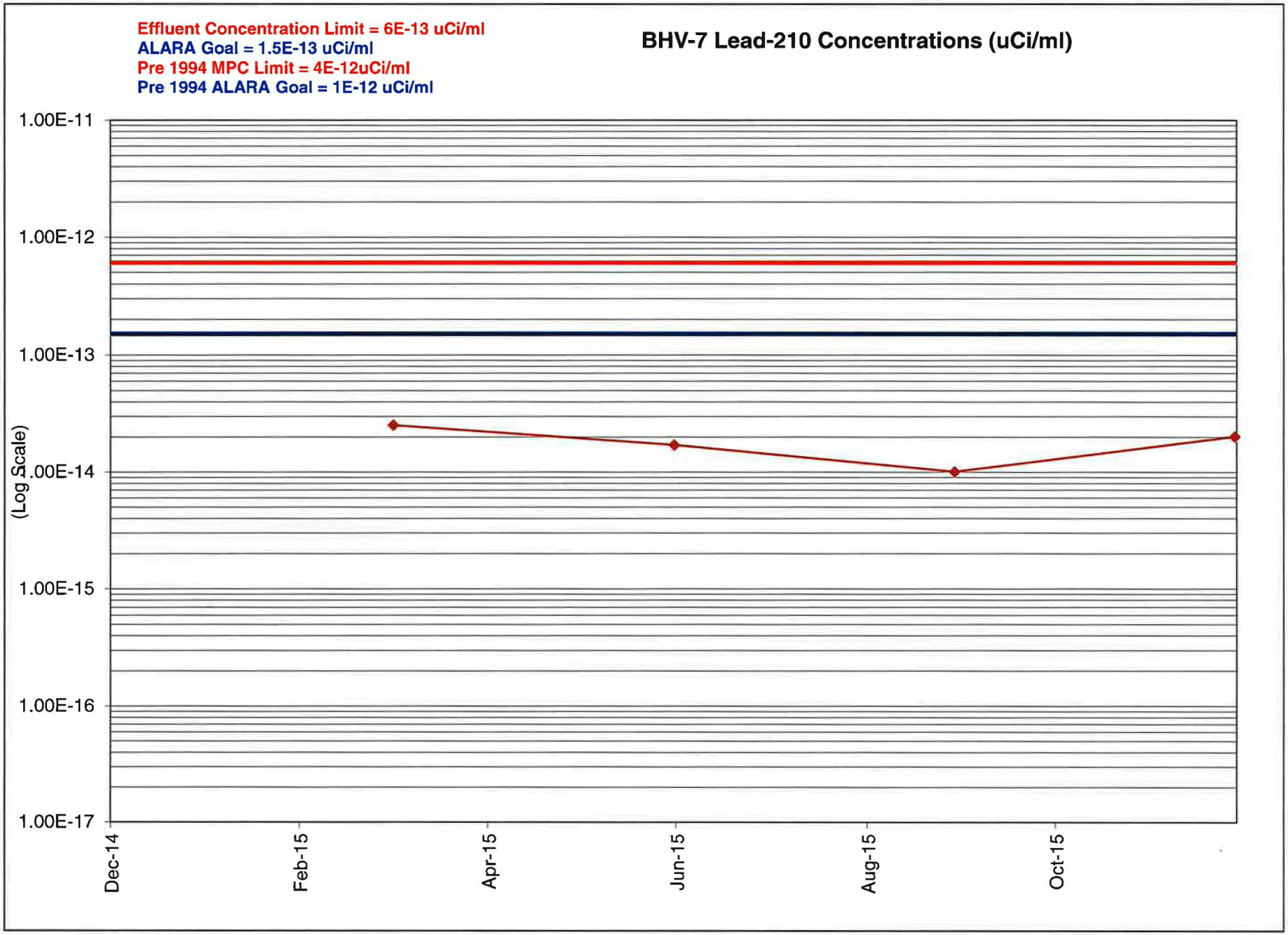
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-7U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-7T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-7R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-7PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-7T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
12/29/2014	NS	9.00E-14	2.25E-14	NS	2.00E-14	5.00E-15	NS	9.00E-13	2.25E-13	NS	6.00E-13	1.50E-13	NS	4.00E-15	1.00E-15
3/30/2015	6.00E-15	9.00E-14	2.25E-14	8.00E-17	2.00E-14	5.00E-15	1.00E-16	9.00E-13	2.25E-13	2.50E-14	6.00E-13	1.50E-13	7.00E-18	4.00E-15	1.00E-15
6/29/2015	1.40E-15	9.00E-14	2.25E-14	4.00E-16	2.00E-14	5.00E-15	1.30E-15	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	1.00E-17	4.00E-15	1.00E-15
9/28/2015	4.20E-15	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	4.00E-16	9.00E-13	2.25E-13	1.00E-14	6.00E-13	1.50E-13	6.00E-18	4.00E-15	1.00E-15
12/28/2015	3.60E-16	9.00E-14	2.25E-14	7.00E-17	2.00E-14	5.00E-15	2.00E-16	9.00E-13	2.25E-13	2.00E-14	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15

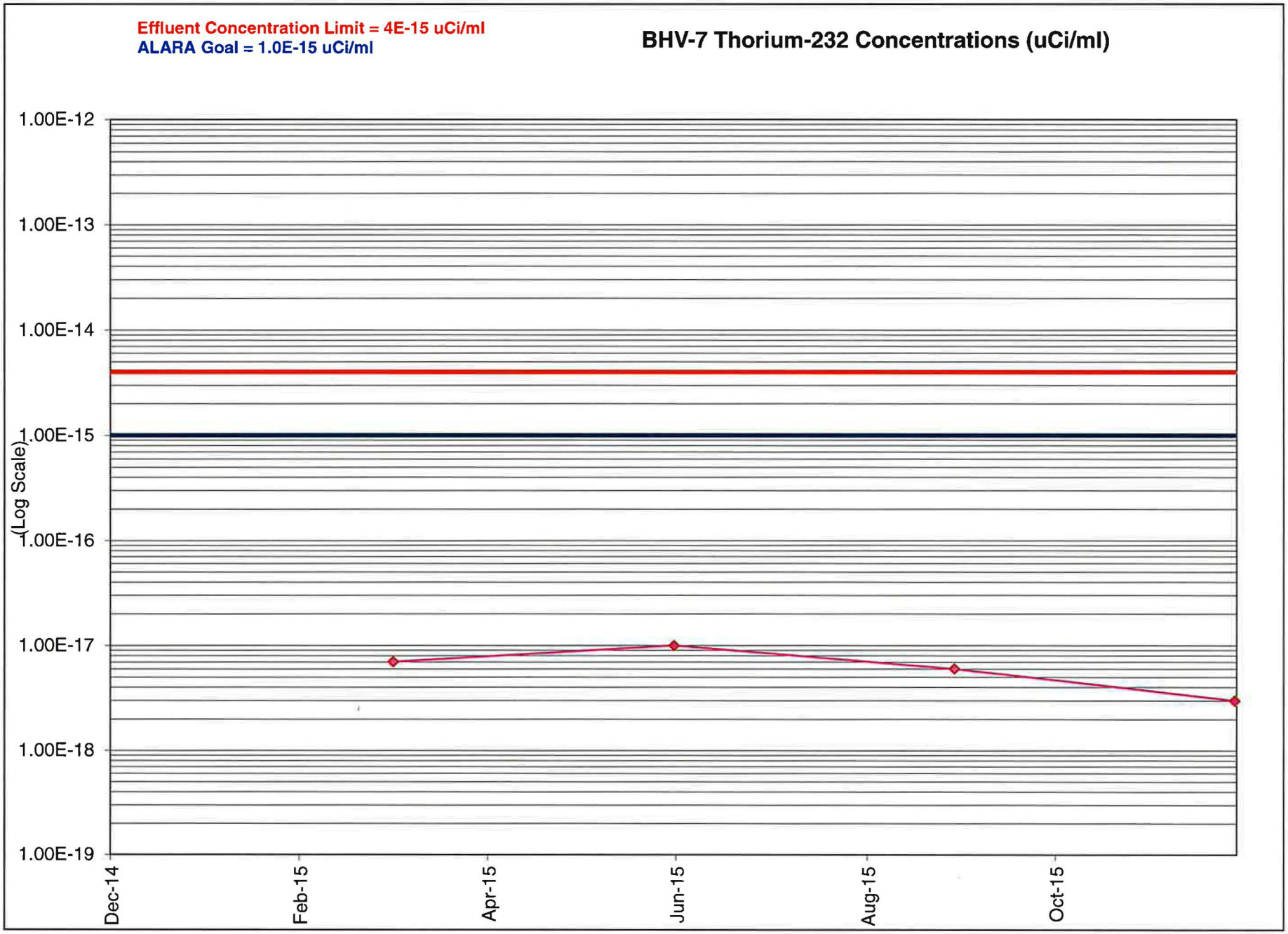

BHV-7 Radionuclide Concentrations (uCi/ml)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
(Log Scale)
12/29/2014
3/29/2015
6/29/2015
9/29/2015
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-7 Uranium-Natural Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-7 Thorium-230 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-7 Radium-226 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15

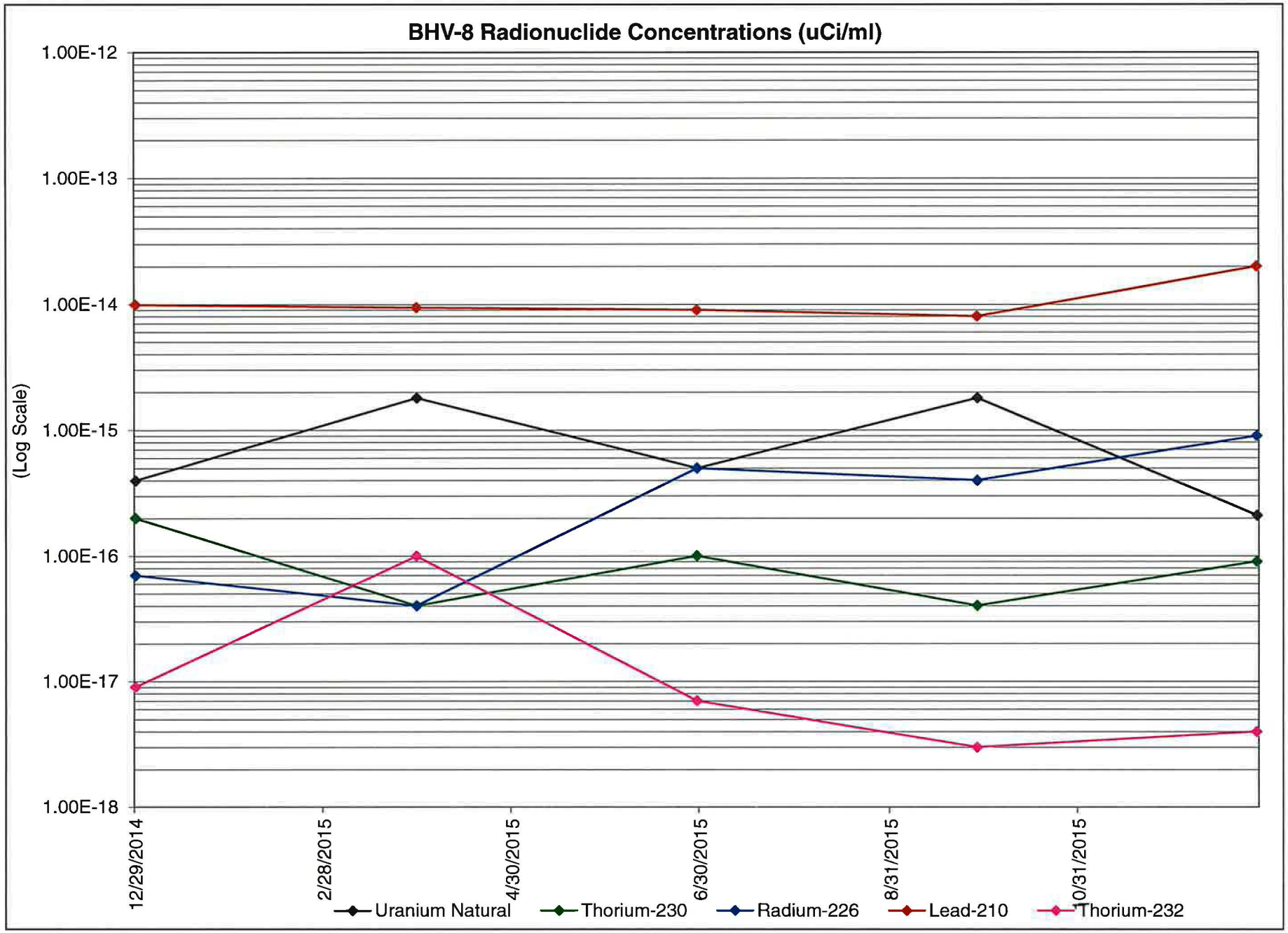

Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-7 Lead-210 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15

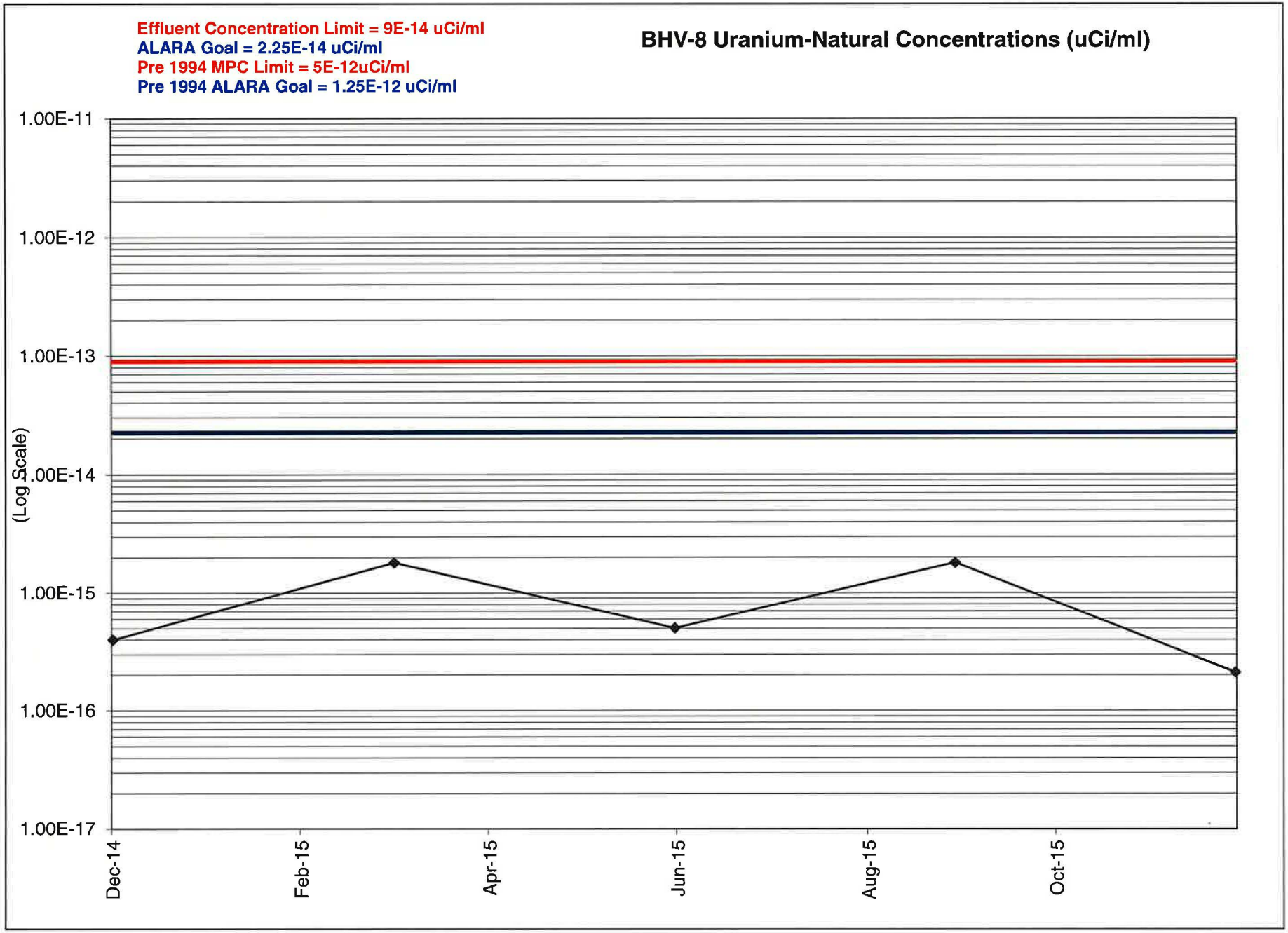

Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-7 Thorium-232 Concentrations (uCi/ml)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
1.00E-19
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15

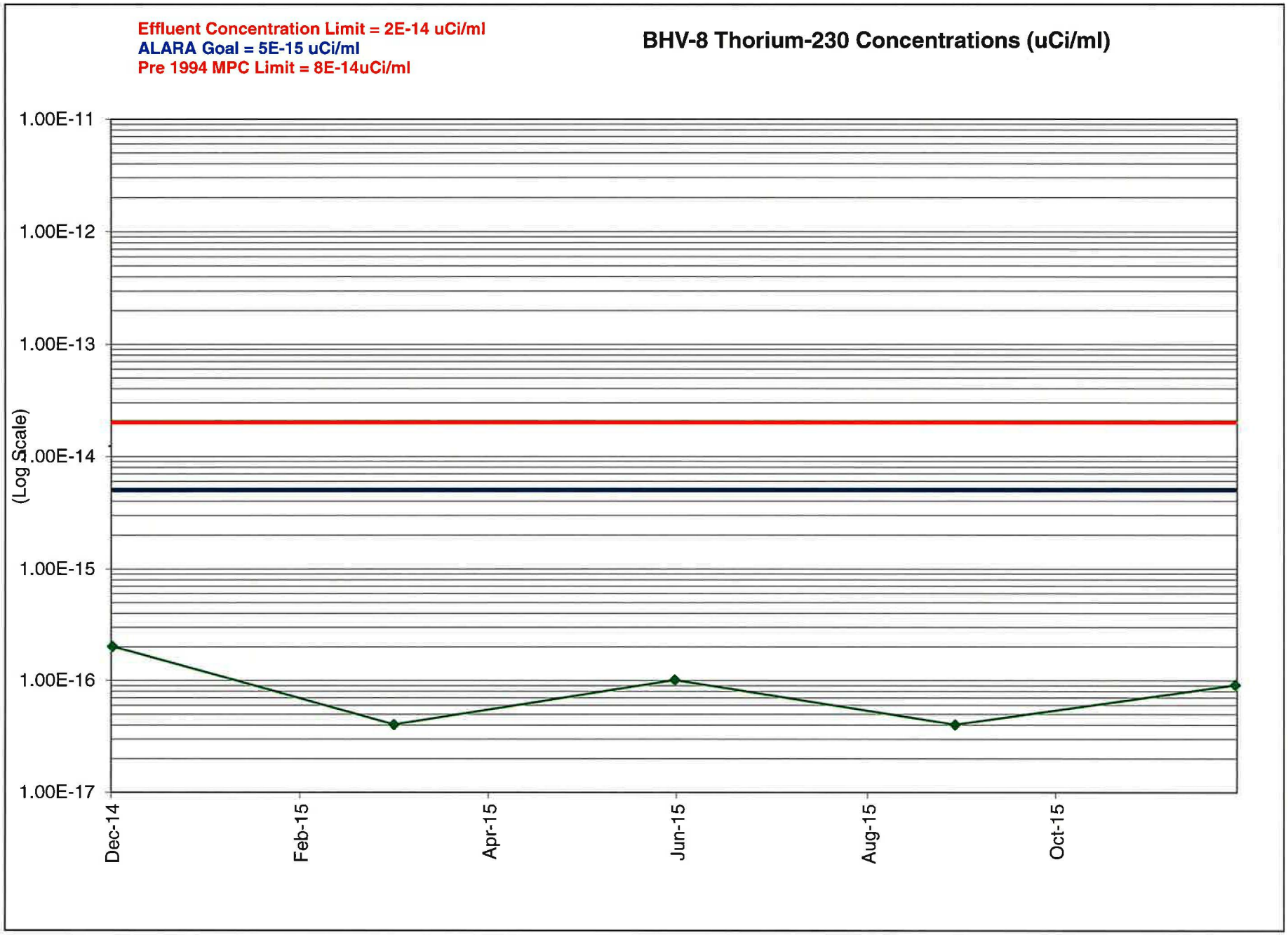
TAB 8

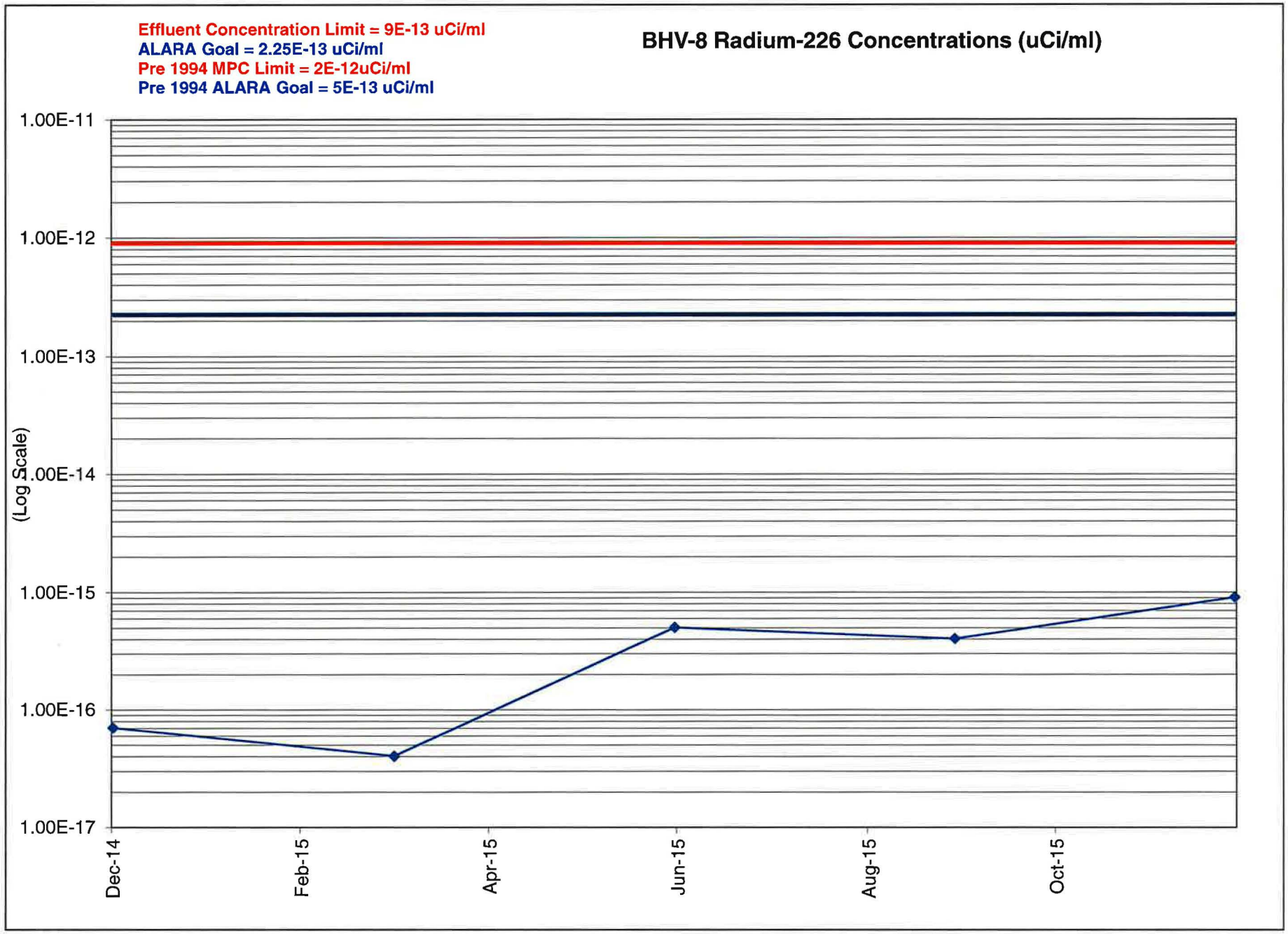
BHV-8 AIR SAMPLING GRAPHS AND DATA TABLE

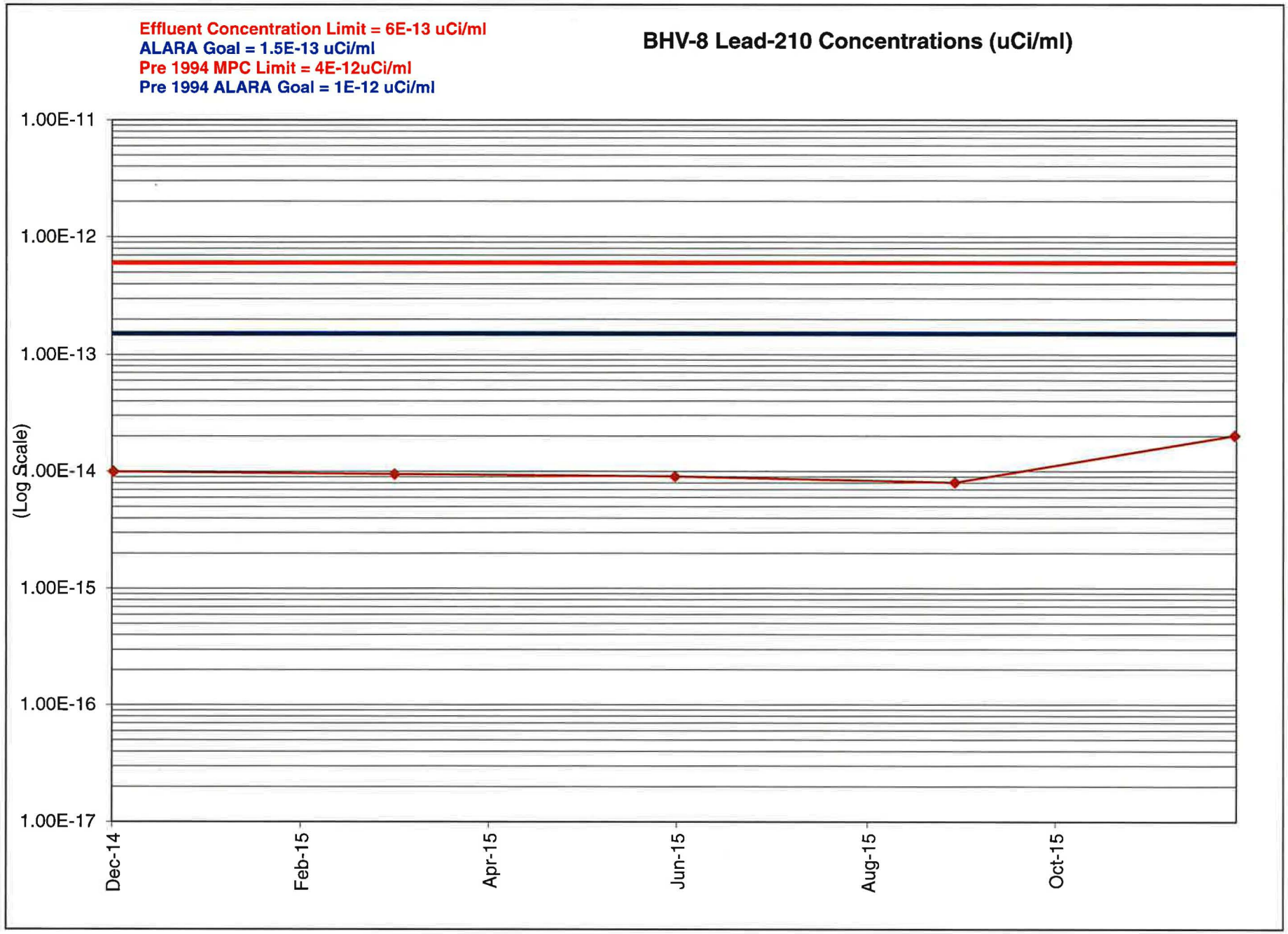
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-8U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-8T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-8R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-8PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-8T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA Goal =	5E-13 uCi/ml		ALARA Goal =	2.25E-13 uCi/ml		ALARA Goal =	1.5E-13 uCi/ml		ALARA Goal =	1E-15 uCi/ml	
	Pre 1994 MPC Limit =	5E-12 uCi/ml		Pre 1994 MPC Limit =	8E-14 uCi/ml		Pre 1994 MPC Limit =	2E-12 uCi/ml		Pre 1994 MPC Limit =	4E-12 uCi/ml		Pre 1994 MPC Limit =	Not Applicable	
	Pre 1994 ALARA GOAL =	1.25E-12 uCi/ml					Pre 1994 ALARA GOAL =	5E-13 uCi/ml		Pre 1994 ALARA GOAL =	1E-12 uCi/ml		Pre 1994 ALARA GOAL =	Not Applicable	
	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A	Conc	EFC	EFC A
12/29/2014	4.00E-16	9.00E-14	2.25E-14	2.00E-16	2.00E-14	5.00E-15	7.00E-17	9.00E-13	2.25E-13	9.90E-15	6.00E-13	1.50E-13	9.00E-18	4.00E-15	1.00E-15
3/30/2015	1.80E-15	9.00E-14	2.25E-14	4.00E-17	2.00E-14	5.00E-15	4.00E-17	9.00E-13	2.25E-13	9.40E-15	6.00E-13	1.50E-13	1.00E-16	4.00E-15	1.00E-15
6/29/2015	5.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	5.00E-16	9.00E-13	2.25E-13	9.00E-15	6.00E-13	1.50E-13	7.00E-18	4.00E-15	1.00E-15
9/28/2015	1.80E-15	9.00E-14	2.25E-14	4.00E-17	2.00E-14	5.00E-15	4.00E-16	9.00E-13	2.25E-13	8.00E-15	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15
12/28/2015	2.10E-16	9.00E-14	2.25E-14	9.00E-17	2.00E-14	5.00E-15	9.00E-16	9.00E-13	2.25E-13	2.00E-14	6.00E-13	1.50E-13	4.00E-18	4.00E-15	1.00E-15

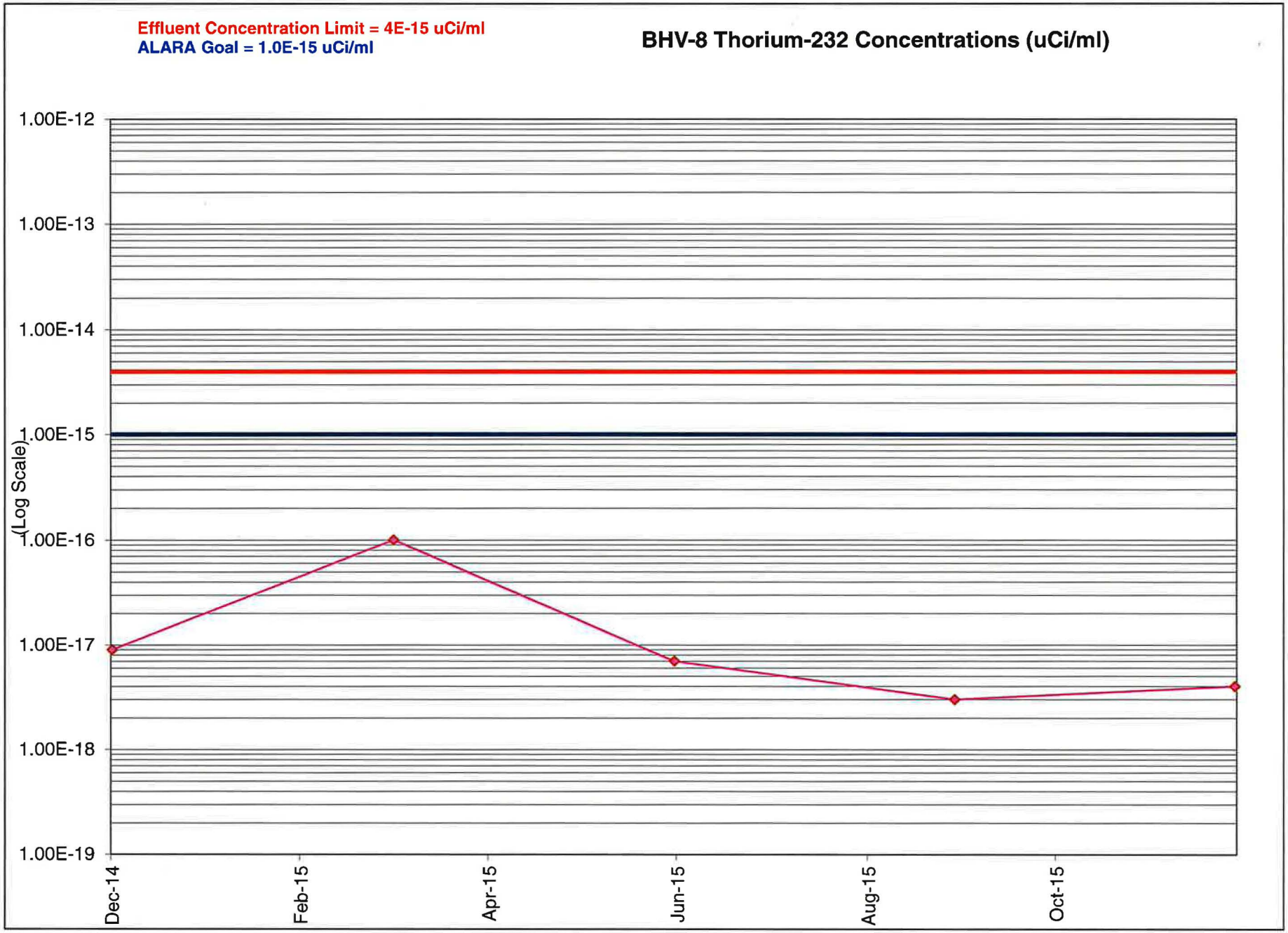

BHV-8 Radionuclide Concentrations (uCi/ml)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
(Log Scale)
12/29/2014
2/28/2015
4/30/2015
6/30/2015
8/31/2015
10/31/2015
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


Effluent Concentration Limit = 9E-14 uCi/ml
ALARA Goal = 2.25E-14 uCi/ml
Pre 1994 MPC Limit = 5E-12uCi/ml
Pre 1994 ALARA Goal = 1.25E-12 uCi/ml
BHV-8 Uranium-Natural Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-15 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-8 Thorium-230 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-8 Radium-226 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-8 Lead-210 Concentrations (uCi/ml)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15


Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-8 Thorium-232 Concentrations (uCi/ml)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
1.00E-19
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15

ATTACHMENT C

BHV AIR SAMPLING LABORATORY RESULTS AND QA/QC

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-001
Client Sample ID: BHV-1

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	2.3E-09	mg/L		1.5E-10		SW6020	10/20/15 04:35 / smm
Uranium, Activity	1.6E-15	uCi/mL		1.0E-16		SW6020	10/20/15 04:35 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.0E-14	uCi/mL				E909.0	10/16/15 13:46 / eli-cs
Lead 210 precision (±)	1.6E-15	uCi/mL				E909.0	10/16/15 13:46 / eli-cs
Lead 210 MDC	2.1E-16	uCi/mL				E909.0	10/16/15 13:46 / eli-cs
Radium 226	6.3E-16	uCi/mL				E903.0	10/19/15 07:54 / dmf
Radium 226 precision (±)	1.3E-16	uCi/mL				E903.0	10/19/15 07:54 / dmf
Radium 226 MDC	1.3E-17	uCi/mL				E903.0	10/19/15 07:54 / dmf
Thorium 230	7.6E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	1.5E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	1.3E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	7.2E-18	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	6.8E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	1.1E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1210	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	197	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	25.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	75.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	15.1	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	9.2	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	1.8	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.87	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.82	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	1.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	191	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130713.6	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-1

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-001	^{nat}U	1.9E-15	N/A	N/A	1E-16	9E-14	2.1E+00
First Quarter 2015	^{230}Th	3E-17	5E-18	9E-18	1E-16	3E-14	9E-02
Air Volume in mLs	^{226}Ra	6E-17	2E-17	1E-17	1E-16	9E-13	6E-03
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	4E-18	5E-18	9E-18	N/A	6E-15	6E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-001	^{nat}U	6E-16	N/A	N/A	1E-16	9E-14	7E-01
Second Quarter 2015	^{230}Th	2E-16	4E-17	3E-18	1E-16	3E-14	6E-01
Air Volume in mLs	^{226}Ra	7E-16	1E-16	1E-17	1E-16	9E-13	8E-02
1.14E+11	^{210}Pb	9E-15	2E-15	2E-16	2E-15	6E-13	2E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-001	^{nat}U	1.6E-15	N/A	N/A	1E-16	9E-14	1.8E+00
Third Quarter 2015	^{230}Th	8E-17	1E-17	1E-17	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	6E-16	1E-16	1E-17	1E-16	9E-13	7E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	7E-18	7E-18	1E-17	N/A	6E-15	1E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-1

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-001	^{nat}U	1.9E-15	N/A	N/A	1E-16	9E-14	2.1E+00
First Quarter 2015	^{230}Th	3E-17	5E-18	9E-18	1E-16	3E-14	9E-02
Air Volume in mLs	^{226}Ra	6E-17	2E-17	1E-17	1E-16	9E-13	6E-03
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	4E-18	5E-18	9E-18	N/A	6E-15	6E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-001	^{nat}U	6E-16	N/A	N/A	1E-16	9E-14	7E-01
Second Quarter 2015	^{230}Th	2E-16	4E-17	3E-18	1E-16	3E-14	6E-01
Air Volume in mLs	^{226}Ra	7E-16	1E-16	1E-17	1E-16	9E-13	8E-02
1.14E+11	^{210}Pb	9E-15	2E-15	2E-16	2E-15	6E-13	2E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-001	^{nat}U	1.6E-15	N/A	N/A	1E-16	9E-14	1.8E+00
Third Quarter 2015	^{230}Th	8E-17	1E-17	1E-17	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	6E-16	1E-16	1E-17	1E-16	9E-13	7E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	7E-18	7E-18	1E-17	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-001	^{nat}U	2.2E-16	N/A	N/A	1E-16	9E-14	2.4E-01
Fourth Quarter 2015	^{230}Th	5E-17	1E-17	8E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	2E-16	4E-17	4E-18	1E-16	9E-13	2E-02
1.24E+11	^{210}Pb	1.2E-14	2E-15	2E-16	2E-15	6E-13	2.0E+00
	^{232}Th	1E-18	5E-18	1E-17	N/A	6E-15	2E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-001
Client Sample ID: BHV-1

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	3.2E-10	mg/L		1.5E-10		SW6020	01/15/16 12:28 / smm
Uranium, Activity	2.2E-16	uCi/mL		1.0E-16		SW6020	01/15/16 12:28 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.2E-14	uCi/mL				E909.0	01/20/16 23:09 / eli-cs
Lead 210 precision (±)	2.0E-15	uCi/mL				E909.0	01/20/16 23:09 / eli-cs
Lead 210 MDC	2.2E-16	uCi/mL				E909.0	01/20/16 23:09 / eli-cs
Radium 226	1.8E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	3.6E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.4E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	5.2E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 precision (±)	9.9E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 MDC	8.1E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232	1.1E-18	uCi/mL	U			E908.0	01/19/16 16:43 / cng
Thorium 232 precision (±)	4.6E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232 MDC	9.6E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1530	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	250	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	27.7	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	22.3	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	4.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.54	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	6.4	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	1.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	1.0	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.14	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.57	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	1.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	26.8	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.1E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	2.0E-02	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	1.7E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	2.0E-02	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-001
Client Sample ID: BHV-1

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	2.4E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124158400	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-2

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-002	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	6E-01
First Quarter 2015	^{230}Th	2E-17	4E-18	5E-18	1E-16	3E-14	8E-02
Air Volume in mLs	^{226}Ra	3E-17	2E-17	2E-17	1E-16	9E-13	4E-03
1.24E+11	^{210}Pb	2.3E-14	4E-15	4E-16	2E-15	6E-13	3.8E+00
	^{232}Th	4E-18	3E-18	6E-18	N/A	6E-15	6E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-002	^{nat}U	1E-16	N/A	N/A	1E-16	9E-14	1E-01
Second Quarter 2015	^{230}Th	4E-17	7E-18	3E-18	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	2E-17	1E-16	9E-13	1E-02
1.22E+11	^{210}Pb	1.4E-14	2E-15	3E-16	2E-15	6E-13	2.3E+00
	^{232}Th	8E-18	3E-18	2E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-002	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	5E-01
Third Quarter 2015	^{230}Th	9E-17	2E-17	5E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	1E-17	1E-16	9E-13	1E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	6E-18	4E-18	5E-18	N/A	6E-15	9E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-002
Client Sample ID: BHV-2

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	6.7E-10	mg/L		1.5E-10		SW6020	10/20/15 04:48 / smm
Uranium, Activity	4.5E-16	uCi/mL		1.0E-16		SW6020	10/20/15 04:48 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.0E-14	uCi/mL				E909.0	10/16/15 13:58 / eli-cs
Lead 210 precision (±)	1.7E-15	uCi/mL				E909.0	10/16/15 13:58 / eli-cs
Lead 210 MDC	2.1E-16	uCi/mL				E909.0	10/16/15 13:58 / eli-cs
Radium 226	1.2E-16	uCi/mL				E903.0	10/19/15 07:54 / dmf
Radium 226 precision (±)	3.0E-17	uCi/mL				E903.0	10/19/15 07:54 / dmf
Radium 226 MDC	1.3E-17	uCi/mL				E903.0	10/19/15 07:54 / dmf
Thorium 230	9.3E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	1.8E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	5.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	5.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	3.8E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	5.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1230	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	200	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	25.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	14.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	3.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	11.2	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	2.1	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	0.66	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.67	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.46	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	0.66	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	54.6	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130776	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-2

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-002	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	6E-01
First Quarter 2015	^{230}Th	2E-17	4E-18	5E-18	1E-16	3E-14	8E-02
Air Volume in mLs	^{226}Ra	3E-17	2E-17	2E-17	1E-16	9E-13	4E-03
1.24E+11	^{210}Pb	2.3E-14	4E-15	4E-16	2E-15	6E-13	3.8E+00
	^{232}Th	4E-18	3E-18	6E-18	N/A	6E-15	6E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-002	^{nat}U	1E-16	N/A	N/A	1E-16	9E-14	1E-01
Second Quarter 2015	^{230}Th	4E-17	7E-18	3E-18	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	2E-17	1E-16	9E-13	1E-02
1.22E+11	^{210}Pb	1.4E-14	2E-15	3E-16	2E-15	6E-13	2.3E+00
	^{232}Th	8E-18	3E-18	2E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-002	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	5E-01
Third Quarter 2015	^{230}Th	9E-17	2E-17	5E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	1E-17	1E-16	9E-13	1E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	6E-18	4E-18	5E-18	N/A	6E-15	9E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-002	^{nat}U	1E-16	N/A	N/A	1E-16	9E-14	1E-01
Fourth Quarter 2015	^{230}Th	5E-17	9E-18	4E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	3E-16	6E-17	4E-18	1E-16	9E-13	3E-02
1.25E+11	^{210}Pb	2.2E-14	4E-15	3E-16	2E-15	6E-13	3.7E+00
	^{232}Th	3E-18	3E-18	4E-18	N/A	6E-15	5E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-002
Client Sample ID: BHV-2

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	ND	mg/L		1.5E-10		SW6020	01/15/16 12:33 / smm
Uranium, Activity	ND	uCi/mL		1.0E-16		SW6020	01/15/16 12:33 / smm
RADIONUCLIDES - IN AIR							
Lead 210	2.2E-14	uCi/mL				E909.0	01/20/16 23:18 / eli-cs
Lead 210 precision (±)	3.5E-15	uCi/mL				E909.0	01/20/16 23:18 / eli-cs
Lead 210 MDC	3.0E-16	uCi/mL				E909.0	01/20/16 23:18 / eli-cs
Radium 226	2.9E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	5.6E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.3E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	4.5E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 precision (±)	8.5E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 MDC	3.7E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232	2.7E-18	uCi/mL	U			E908.0	01/19/16 16:43 / cng
Thorium 232 precision (±)	2.5E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232 MDC	4.1E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2700	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	439	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	37.3	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	35.7	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	7.0	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.54	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	5.6	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	1.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	0.47	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.34	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.31	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	0.51	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	9.0	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.6E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	3.0E-02	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	1.5E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	5.0E-02	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-002
Client Sample ID: BHV-2

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	8.0E-02	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124660400	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-4

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-003	^{nat}U	5.9E-15	N/A	N/A	1E-16	9E-14	6.6E+00
First Quarter 2015	^{230}Th	7E-17	1E-17	3E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	2E-17	1E-16	9E-13	1E-02
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	5E-19	1E-18	3E-18	N/A	6E-15	8E-03

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-003	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
Second Quarter 2015	^{230}Th	1E-16	3E-17	3E-18	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	2E-16	4E-17	2E-17	1E-16	9E-13	2E-02
1.21E+11	^{210}Pb	1.2E-14	2E-15	2E-16	2E-15	6E-13	2.1E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-003	^{nat}U	5.0E-15	N/A	N/A	1E-16	9E-14	5.5E+00
Third Quarter 2015	^{230}Th	1E-16	3E-17	1E-17	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	1E-17	1E-16	9E-13	1E-02
1.20E+11	^{210}Pb	7E-15	1E-15	2E-16	2E-15	6E-13	1E+00
	^{232}Th	7E-18	6E-18	9E-18	N/A	6E-15	1E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-003
Client Sample ID: BHV-4

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	7.4E-09	mg/L		1.5E-10		SW6020	10/20/15 04:50 / smm
Uranium, Activity	5.0E-15	uCi/mL		1.0E-16		SW6020	10/20/15 04:50 / smm
RADIONUCLIDES - IN AIR							
Lead 210	6.5E-15	uCi/mL				E909.0	10/16/15 14:10 / eli-cs
Lead 210 precision (±)	1.1E-15	uCi/mL				E909.0	10/16/15 14:10 / eli-cs
Lead 210 MDC	1.7E-16	uCi/mL				E909.0	10/16/15 14:10 / eli-cs
Radium 226	1.2E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	3.1E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.4E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	1.4E-16	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	2.7E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	1.3E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	7.4E-18	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	5.8E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	8.7E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	783	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	128	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	20.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	14.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	3.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	17.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	3.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.90	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.70	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	1.0	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	599	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130605.6	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-4

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-003	^{nat}U	5.9E-15	N/A	N/A	1E-16	9E-14	6.6E+00
First Quarter 2015	^{230}Th	7E-17	1E-17	3E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	2E-17	1E-16	9E-13	1E-02
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	5E-19	1E-18	3E-18	N/A	6E-15	8E-03

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-003	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
Second Quarter 2015	^{230}Th	1E-16	3E-17	3E-18	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	2E-16	4E-17	2E-17	1E-16	9E-13	2E-02
1.21E+11	^{210}Pb	1.2E-14	2E-15	2E-16	2E-15	6E-13	2.1E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-003	^{nat}U	5.0E-15	N/A	N/A	1E-16	9E-14	5.5E+00
Third Quarter 2015	^{230}Th	1E-16	3E-17	1E-17	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	1E-17	1E-16	9E-13	1E-02
1.20E+11	^{210}Pb	7E-15	1E-15	2E-16	2E-15	6E-13	1E+00
	^{232}Th	7E-18	6E-18	9E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-003	^{nat}U	4.5E-16	N/A	N/A	1E-16	9E-14	5.0E-01
Fourth Quarter 2015	^{230}Th	7E-17	1E-17	7E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	6E-17	2E-17	4E-18	1E-16	9E-13	7E-03
1.24E+11	^{210}Pb	2E-14	3E-15	3E-16	2E-15	6E-13	3E+00
	^{232}Th	8E-19	4E-18	9E-18	N/A	6E-15	1E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-003
Client Sample ID: BHV-4

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	6.7E-10	mg/L		1.5E-10		SW6020	01/15/16 12:39 / smm
Uranium, Activity	4.5E-16	uCi/mL		1.0E-16		SW6020	01/15/16 12:39 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.6E-14	uCi/mL				E909.0	01/20/16 23:24 / eli-cs
Lead 210 precision (±)	2.7E-15	uCi/mL				E909.0	01/20/16 23:24 / eli-cs
Lead 210 MDC	2.6E-16	uCi/mL				E909.0	01/20/16 23:24 / eli-cs
Radium 226	6.3E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	1.5E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.2E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	6.7E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 precision (±)	1.3E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 MDC	6.6E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232	7.9E-19	uCi/mL	U			E908.0	01/19/16 16:43 / cng
Thorium 232 precision (±)	4.1E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232 MDC	9.2E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2040	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	332	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	32.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	7.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	1.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.52	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	8.3	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	1.6	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	0.82	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.098	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.51	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	1.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	56.5	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.7E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	7.0E-03	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	2.2E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	1.0E-02	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-003
Client Sample ID: BHV-4

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	5.0E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124337600	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-5

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-004	^{nat}U	1.0E-14	N/A	N/A	1E-16	9E-14	1.2E+01
First Quarter 2015	^{230}Th	5E-16	9E-17	1E-17	1E-16	3E-14	2E+00
Air Volume in mLs	^{226}Ra	2.1E-15	4E-16	2E-17	1E-16	9E-13	2.3E-01
1.23E+11	^{210}Pb	3.1E-14	5E-15	4E-16	2E-15	6E-13	5.2E+00
	^{232}Th	3E-18	4E-18	8E-18	N/A	6E-15	4E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-004	^{nat}U	4.6E-15	N/A	N/A	1E-16	9E-14	5.1E+00
Second Quarter 2015	^{230}Th	8E-16	1E-16	2E-18	1E-16	3E-14	3E+00
Air Volume in mLs	^{226}Ra	3.7E-15	7E-16	1E-17	1E-16	9E-13	4.1E-01
1.21E+11	^{210}Pb	1.4E-14	2E-15	3E-16	2E-15	6E-13	2.3E+00
	^{232}Th	2E-17	3E-18	2E-18	N/A	6E-15	3E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-004	^{nat}U	1.2E-14	N/A	N/A	1E-16	9E-14	1.3E+01
Third Quarter 2015	^{230}Th	4E-16	7E-17	2E-17	1E-16	3E-14	1E+00
Air Volume in mLs	^{226}Ra	9.8E-16	2E-16	1E-17	1E-16	9E-13	1.1E-01
1.20E+11	^{210}Pb	1.2E-14	2E-15	2E-16	2E-15	6E-13	2.0E+00
	^{232}Th	1E-17	2E-18	2E-17	N/A	6E-15	2E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-004
Client Sample ID: BHV-5

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	1.8E-08	mg/L		1.5E-10		SW6020	10/20/15 04:53 / smm
Uranium, Activity	1.2E-14	uCi/mL		1.0E-16		SW6020	10/20/15 04:53 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.2E-14	uCi/mL				E909.0	10/16/15 14:27 / eli-cs
Lead 210 precision (±)	1.9E-15	uCi/mL				E909.0	10/16/15 14:27 / eli-cs
Lead 210 MDC	2.3E-16	uCi/mL				E909.0	10/16/15 14:27 / eli-cs
Radium 226	9.8E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	1.9E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.4E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	3.5E-16	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	6.7E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	2.2E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	1.2E-17	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	2.4E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	2.0E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1420	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	231	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	27.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	118	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	23.0	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	42.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	8.0	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	2.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	1.5	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.28	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	2.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	1440	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130556.6	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-5

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-004	^{nat}U	1.0E-14	N/A	N/A	1E-16	9E-14	1.2E+01
First Quarter 2015	^{230}Th	5E-16	9E-17	1E-17	1E-16	3E-14	2E+00
Air Volume in mLs	^{226}Ra	2.1E-15	4E-16	2E-17	1E-16	9E-13	2.3E-01
1.23E+11	^{210}Pb	3.1E-14	5E-15	4E-16	2E-15	6E-13	5.2E+00
	^{232}Th	3E-18	4E-18	8E-18	N/A	6E-15	4E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-004	^{nat}U	4.6E-15	N/A	N/A	1E-16	9E-14	5.1E+00
Second Quarter 2015	^{230}Th	8E-16	1E-16	2E-18	1E-16	3E-14	3E+00
Air Volume in mLs	^{226}Ra	3.7E-15	7E-16	1E-17	1E-16	9E-13	4.1E-01
1.21E+11	^{210}Pb	1.4E-14	2E-15	3E-16	2E-15	6E-13	2.3E+00
	^{232}Th	2E-17	3E-18	2E-18	N/A	6E-15	3E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-004	^{nat}U	1.2E-14	N/A	N/A	1E-16	9E-14	1.3E+01
Third Quarter 2015	^{230}Th	4E-16	7E-17	2E-17	1E-16	3E-14	1E+00
Air Volume in mLs	^{226}Ra	9.8E-16	2E-16	1E-17	1E-16	9E-13	1.1E-01
1.20E+11	^{210}Pb	1.2E-14	2E-15	2E-16	2E-15	6E-13	2.0E+00
	^{232}Th	1E-17	2E-18	2E-17	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-004	^{nat}U	7.4E-16	N/A	N/A	1E-16	9E-14	8.2E-01
Fourth Quarter 2015	^{230}Th	1E-16	2E-17	2E-17	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	1.9E-16	4E-17	4E-18	1E-16	9E-13	2.1E-02
1.24E+11	^{210}Pb	2.2E-14	4E-15	3E-16	2E-15	6E-13	3.7E+00
	^{232}Th	2E-17	3E-18	1E-17	N/A	6E-15	3E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-004
Client Sample ID: BHV-5

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	1.1E-09	mg/L		1.5E-10		SW6020	01/15/16 12:44 / smm
Uranium, Activity	7.4E-16	uCi/mL		1.0E-16		SW6020	01/15/16 12:44 / smm
RADIONUCLIDES - IN AIR							
Lead 210	2.2E-14	uCi/mL				E909.0	01/20/16 23:31 / eli-cs
Lead 210 precision (±)	3.6E-15	uCi/mL				E909.0	01/20/16 23:31 / eli-cs
Lead 210 MDC	3.0E-16	uCi/mL				E909.0	01/20/16 23:31 / eli-cs
Radium 226	1.9E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	3.8E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.3E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	1.2E-16	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 precision (±)	2.3E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 230 MDC	2.0E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232	1.7E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232 precision (±)	3.2E-18	uCi/mL				E908.0	01/19/16 16:43 / cng
Thorium 232 MDC	1.4E-17	uCi/mL				E908.0	01/19/16 16:43 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2760	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	449	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	37.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	22.9	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	4.7	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.53	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	15.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	2.9	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	2.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	2.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.40	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	1.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	91.8	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.7E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	2.0E-02	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	4.1E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	2.8E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-004
Client Sample ID: BHV-5

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	8.2E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	123973900	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-6

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-005	^{nat}U	2.8E-14	N/A	N/A	1E-16	9E-14	3.1E+01
First Quarter 2015	^{230}Th	2E-16	3E-17	2E-17	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	4E-16	9E-17	2E-17	1E-16	9E-13	5E-02
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	1E-18	9E-18	2E-17	N/A	6E-15	2E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-005	^{nat}U	5.3E-15	N/A	N/A	1E-16	9E-14	5.9E+00
Second Quarter 2015	^{230}Th	2E-16	4E-17	2E-18	1E-16	3E-14	7E-01
Air Volume in mLs	^{226}Ra	5E-16	1E-16	2E-17	1E-16	9E-13	5E-02
1.20E+11	^{210}Pb	1.7E-14	3E-15	3E-16	2E-15	6E-13	2.8E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-005	^{nat}U	1.0E-14	N/A	N/A	1E-16	9E-14	1.1E+01
Third Quarter 2015	^{230}Th	2E-16	4E-17	2E-17	1E-16	3E-14	8E-01
Air Volume in mLs	^{226}Ra	3E-16	6E-17	1E-17	1E-16	9E-13	3E-02
1.21E+11	^{210}Pb	1.1E-14	2E-15	2E-16	2E-15	6E-13	1.8E+00
	^{232}Th	2E-18	8E-18	2E-17	N/A	6E-15	4E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-005
Client Sample ID: BHV-6

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	1.5E-08	mg/L	B	1.5E-10		SW6020	10/14/15 23:07 / smm
Uranium, Activity	1.0E-14	uCi/mL		1.0E-16		SW6020	10/14/15 23:07 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.1E-14	uCi/mL				E909.0	10/16/15 14:38 / eli-cs
Lead 210 precision (±)	1.7E-15	uCi/mL				E909.0	10/16/15 14:38 / eli-cs
Lead 210 MDC	2.2E-16	uCi/mL				E909.0	10/16/15 14:38 / eli-cs
Radium 226	2.8E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	5.9E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.3E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	2.3E-16	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	4.4E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	2.3E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	2.3E-18	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	7.6E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	1.9E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1290	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	211	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	26.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	33.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	7.2	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	27.9	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	5.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	2.8	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.28	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.92	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	2.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	1200	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130477.8	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-6

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-005	^{nat}U	2.8E-14	N/A	N/A	1E-16	9E-14	3.1E+01
First Quarter 2015	^{230}Th	2E-16	3E-17	2E-17	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	4E-16	9E-17	2E-17	1E-16	9E-13	5E-02
1.23E+11	^{210}Pb	2.8E-14	5E-15	4E-16	2E-15	6E-13	4.7E+00
	^{232}Th	1E-18	9E-18	2E-17	N/A	6E-15	2E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-005	^{nat}U	5.3E-15	N/A	N/A	1E-16	9E-14	5.9E+00
Second Quarter 2015	^{230}Th	2E-16	4E-17	2E-18	1E-16	3E-14	7E-01
Air Volume in mLs	^{226}Ra	5E-16	1E-16	2E-17	1E-16	9E-13	5E-02
1.20E+11	^{210}Pb	1.7E-14	3E-15	3E-16	2E-15	6E-13	2.8E+00
	^{232}Th	1E-17	3E-18	3E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-005	^{nat}U	1.0E-14	N/A	N/A	1E-16	9E-14	1.1E+01
Third Quarter 2015	^{230}Th	2E-16	4E-17	2E-17	1E-16	3E-14	8E-01
Air Volume in mLs	^{226}Ra	3E-16	6E-17	1E-17	1E-16	9E-13	3E-02
1.21E+11	^{210}Pb	1.1E-14	2E-15	2E-16	2E-15	6E-13	1.8E+00
	^{232}Th	2E-18	8E-18	2E-17	N/A	6E-15	4E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-005	^{nat}U	8.4E-16	N/A	N/A	1E-16	9E-14	9.3E-01
Fourth Quarter 2015	^{230}Th	1E-16	2E-17	2E-17	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	1E-16	3E-17	4E-18	1E-16	9E-13	1E-02
1.25E+11	^{210}Pb	2.0E-14	3E-15	3E-16	2E-15	6E-13	3.3E+00
	^{232}Th	6E-18	8E-18	2E-17	N/A	6E-15	1E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-005
Client Sample ID: BHV-6

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	1.2E-09	mg/L		1.5E-10		SW6020	01/15/16 13:10 / smm
Uranium, Activity	8.4E-16	uCi/mL		1.0E-16		SW6020	01/15/16 13:10 / smm
RADIONUCLIDES - IN AIR							
Lead 210	2.0E-14	uCi/mL				E909.0	01/20/16 23:36 / eli-cs
Lead 210 precision (±)	3.3E-15	uCi/mL				E909.0	01/20/16 23:36 / eli-cs
Lead 210 MDC	2.9E-16	uCi/mL				E909.0	01/20/16 23:36 / eli-cs
Radium 226	1.3E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	2.8E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.3E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	1.2E-16	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 precision (±)	2.3E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 MDC	1.9E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232	6.2E-18	uCi/mL	U			E908.0	01/20/16 09:26 / cng
Thorium 232 precision (±)	7.8E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 MDC	1.5E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2550	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	416	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	36.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	16.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	3.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.54	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	15.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	2.9	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	2.3	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.77	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.98	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	1.9	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	105	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.4E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	1.0E-02	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	4.0E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	1.0E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-005
Client Sample ID: BHV-6

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	9.3E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124611200	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-7

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-008	^{nat}U	6.0E-15	N/A	N/A	1E-16	9E-14	6.6E+00
First Quarter 2015	^{230}Th	8E-17	2E-17	7E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	1E-16	4E-17	3E-17	1E-16	9E-13	2E-02
5.66E+10	^{210}Pb	2.5E-14	4E-15	5E-16	2E-15	6E-13	4.1E+00
	^{232}Th	7E-18	4E-18	5E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-006	^{nat}U	1.4E-15	N/A	N/A	1E-16	9E-14	1.5E+00
Second Quarter 2015	^{230}Th	4E-16	7E-17	3E-18	1E-16	3E-14	1E+00
Air Volume in mLs	^{226}Ra	1.3E-15	3E-16	2E-17	1E-16	9E-13	1.5E-01
1.22E+11	^{210}Pb	1.7E-14	3E-15	3E-16	2E-15	6E-13	2.9E+00
	^{232}Th	1E-17	2E-18	2E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-006	^{nat}U	4.2E-15	N/A	N/A	1E-16	9E-14	4.7E+00
Third Quarter 2015	^{230}Th	2E-16	3E-17	3E-18	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	4E-16	8E-17	1E-17	1E-16	9E-13	4E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	6E-18	3E-18	3E-18	N/A	6E-15	1E-01

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-006
Client Sample ID: BHV-7

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	6.3E-09	mg/L	B	1.5E-10		SW6020	10/14/15 23:10 / smm
Uranium, Activity	4.2E-15	uCi/mL		1.0E-16		SW6020	10/14/15 23:10 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.0E-14	uCi/mL				E909.0	10/16/15 14:49 / eli-cs
Lead 210 precision (±)	1.7E-15	uCi/mL				E909.0	10/16/15 14:49 / eli-cs
Lead 210 MDC	2.1E-16	uCi/mL				E909.0	10/16/15 14:49 / eli-cs
Radium 226	4.0E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	8.3E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.4E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	1.5E-16	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	2.9E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	2.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	6.0E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	2.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	2.7E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1250	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	205	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	25.9	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	48.3	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	10	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	18.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	3.5	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	0.30	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.72	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.31	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	0.33	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	512	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	130957.8	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-7

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-008	^{nat}U	6.0E-15	N/A	N/A	1E-16	9E-14	6.6E+00
First Quarter 2015	^{230}Th	8E-17	2E-17	7E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	1E-16	4E-17	3E-17	1E-16	9E-13	2E-02
5.66E+10	^{210}Pb	2.5E-14	4E-15	5E-16	2E-15	6E-13	4.1E+00
	^{232}Th	7E-18	4E-18	5E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-006	^{nat}U	1.4E-15	N/A	N/A	1E-16	9E-14	1.5E+00
Second Quarter 2015	^{230}Th	4E-16	7E-17	3E-18	1E-16	3E-14	1E+00
Air Volume in mLs	^{226}Ra	1.3E-15	3E-16	2E-17	1E-16	9E-13	1.5E-01
1.22E+11	^{210}Pb	1.7E-14	3E-15	3E-16	2E-15	6E-13	2.9E+00
	^{232}Th	1E-17	2E-18	2E-18	N/A	6E-15	2E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-006	^{nat}U	4.2E-15	N/A	N/A	1E-16	9E-14	4.7E+00
Third Quarter 2015	^{230}Th	2E-16	3E-17	3E-18	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	4E-16	8E-17	1E-17	1E-16	9E-13	4E-02
1.21E+11	^{210}Pb	1.0E-14	2E-15	2E-16	2E-15	6E-13	1.7E+00
	^{232}Th	6E-18	3E-18	3E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-006	^{nat}U	3.6E-16	N/A	N/A	1E-16	9E-14	4.0E-01
Fourth Quarter 2015	^{230}Th	7E-17	1E-17	2E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	2E-16	3E-17	4E-18	1E-16	9E-13	2E-02
1.24E+11	^{210}Pb	2.0E-14	3E-15	3E-16	2E-15	6E-13	3.3E+00
	^{232}Th	3E-18	2E-18	2E-18	N/A	6E-15	5E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-006
Client Sample ID: BHV-7

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	5.4E-10	mg/L		1.5E-10		SW6020	01/15/16 13:15 / smm
Uranium, Activity	3.6E-16	uCi/mL		1.0E-16		SW6020	01/15/16 13:15 / smm
RADIONUCLIDES - IN AIR							
Lead 210	2.0E-14	uCi/mL				E909.0	01/20/16 23:42 / eli-cs
Lead 210 precision (±)	3.3E-15	uCi/mL				E909.0	01/20/16 23:42 / eli-cs
Lead 210 MDC	2.9E-16	uCi/mL				E909.0	01/20/16 23:42 / eli-cs
Radium 226	1.6E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	3.3E-17	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.3E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	7.0E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 precision (±)	1.3E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 MDC	2.4E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232	3.2E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 precision (±)	1.7E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 MDC	1.9E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2520	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	410	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	35.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	20.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	4.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.54	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	8.7	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	1.7	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	0.30	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.39	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.20	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	0.24	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	45.1	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.4E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	2.0E-02	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	2.3E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	5.0E-02	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-006
Client Sample ID: BHV-7

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	4.0E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	123987100	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: BHV-8

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-006	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
First Quarter 2015	^{230}Th	4E-17	8E-18	2E-17	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	4E-17	1E-17	2E-17	1E-16	9E-13	4E-03
7.72E+10	^{210}Pb	9.4E-15	2E-15	2E-16	2E-15	6E-13	1.6E+00
	^{232}Th	-6E-19	1E-17	3E-17	N/A	6E-15	-1E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-007	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	5E-01
Second Quarter 2015	^{230}Th	1E-16	2E-17	3E-18	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	5E-16	9E-17	2E-17	1E-16	9E-13	5E-02
1.20E+11	^{210}Pb	9E-15	2E-15	2E-16	2E-15	6E-13	2E+00
	^{232}Th	7E-18	3E-18	3E-18	N/A	6E-15	1E-01

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-007	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
Third Quarter 2015	^{230}Th	4E-17	9E-18	3E-18	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	4E-16	8E-17	1E-17	1E-16	9E-13	4E-02
1.11E+11	^{210}Pb	8E-15	1E-15	2E-16	2E-15	6E-13	1E+00
	^{232}Th	3E-18	2E-18	3E-18	N/A	6E-15	4E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-007
Client Sample ID: BHV-8

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	2.6E-09	mg/L	B	1.5E-10		SW6020	10/14/15 23:12 / smm
Uranium, Activity	1.8E-15	uCi/mL		1.0E-16		SW6020	10/14/15 23:12 / smm
RADIONUCLIDES - IN AIR							
Lead 210	7.8E-15	uCi/mL				E909.0	10/16/15 15:01 / eli-cs
Lead 210 precision (±)	1.3E-15	uCi/mL				E909.0	10/16/15 15:01 / eli-cs
Lead 210 MDC	1.9E-16	uCi/mL				E909.0	10/16/15 15:01 / eli-cs
Radium 226	3.8E-16	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	7.7E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.2E-17	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	4.5E-17	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	8.5E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	3.0E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	2.6E-18	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	1.9E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	2.8E-18	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	862	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	141	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	20.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	41.9	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	8.6	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	5.0	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	0.95	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	0.33	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.29	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.21	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	0.31	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	195	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	120626	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: BHV-8

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-006	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
First Quarter 2015	^{230}Th	4E-17	8E-18	2E-17	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	4E-17	1E-17	2E-17	1E-16	9E-13	4E-03
7.72E+10	^{210}Pb	9.4E-15	2E-15	2E-16	2E-15	6E-13	1.6E+00
	^{232}Th	-6E-19	1E-17	3E-17	N/A	6E-15	-1E-02

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-007	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	5E-01
Second Quarter 2015	^{230}Th	1E-16	2E-17	3E-18	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	5E-16	9E-17	2E-17	1E-16	9E-13	5E-02
1.20E+11	^{210}Pb	9E-15	2E-15	2E-16	2E-15	6E-13	2E+00
	^{232}Th	7E-18	3E-18	3E-18	N/A	6E-15	1E-01

C15100167-007	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-007	^{nat}U	1.8E-15	N/A	N/A	1E-16	9E-14	2.0E+00
Third Quarter 2015	^{230}Th	4E-17	9E-18	3E-18	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	4E-16	8E-17	1E-17	1E-16	9E-13	4E-02
1.11E+11	^{210}Pb	8E-15	1E-15	2E-16	2E-15	6E-13	1E+00
	^{232}Th	3E-18	2E-18	3E-18	N/A	6E-15	4E-02

C15100167-007	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-007	^{nat}U	2.1E-16	N/A	N/A	1E-16	9E-14	2.3E-01
Fourth Quarter 2015	^{230}Th	9E-17	2E-17	2E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	9E-16	2E-16	4E-18	1E-16	9E-13	1E-01
1.24E+11	^{210}Pb	2E-14	3E-15	3E-16	2E-15	6E-13	3E+00
	^{232}Th	4E-18	2E-18	2E-18	N/A	6E-15	6E-02

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-007
Client Sample ID: BHV-8

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	3.1E-10	mg/L		1.5E-10		SW6020	01/15/16 13:21 / smm
Uranium, Activity	2.1E-16	uCi/mL		1.0E-16		SW6020	01/15/16 13:21 / smm
RADIONUCLIDES - IN AIR							
Lead 210	1.8E-14	uCi/mL				E909.0	01/20/16 23:48 / eli-cs
Lead 210 precision (±)	2.9E-15	uCi/mL				E909.0	01/20/16 23:48 / eli-cs
Lead 210 MDC	2.7E-16	uCi/mL				E909.0	01/20/16 23:48 / eli-cs
Radium 226	8.7E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	1.7E-16	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	4.3E-18	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	9.3E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 precision (±)	1.8E-17	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 MDC	2.4E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232	3.7E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 precision (±)	1.8E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 MDC	2.2E-18	uCi/mL				E908.0	01/20/16 09:26 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2170	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	354	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	33.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	107	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	20.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.53	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	11.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	2.2	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	0.30	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	0.45	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.22	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	0.27	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	25.6	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.9E+00	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	1.0E-01	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	3.1E-01	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	6.0E-02	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-007
Client Sample ID: BHV-8

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	2.3E-01	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	123596000	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: November 2, 2015
PROJECT: 3rd Quarter Air 2015

SAMPLE ID: Blanks

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-007	^{nat}U	6E-17	N/A	N/A	1E-16	9E-14	7E-02
First Quarter 2015	^{230}Th	5E-18	2E-18	2E-18	1E-16	3E-14	2E-02
Air Volume in mLs	^{226}Ra	1E-17	8E-18	1E-17	1E-16	9E-13	1E-03
1.36E+11	^{210}Pb	-7E-18	3E-17	6E-17	2E-15	6E-13	-1E-03
	^{232}Th	2E-20	8E-19	2E-18	N/A	6E-15	3E-04

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-008	^{nat}U	8E-18	N/A	N/A	1E-16	9E-14	8E-03
Second Quarter 2015	^{230}Th	2E-18	1E-18	2E-18	1E-16	3E-14	5E-03
Air Volume in mLs	^{226}Ra	2E-17	1E-17	1E-17	1E-16	9E-13	2E-03
1.36E+11	^{210}Pb	2E-17	3E-17	5E-17	2E-15	6E-13	3E-03
	^{232}Th	-5E-19	7E-19	2E-18	N/A	6E-15	-9E-03

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-008	^{nat}U	9E-18	N/A	N/A	1E-16	9E-14	1E-02
Third Quarter 2015	^{230}Th	3E-18	2E-18	2E-18	1E-16	3E-14	9E-03
Air Volume in mLs	^{226}Ra	1E-17	7E-18	1E-17	1E-16	9E-13	1E-03
1.36E+11	^{210}Pb	-9E-19	2E-17	4E-17	2E-15	6E-13	-2E-04
	^{232}Th	6E-19	1E-18	2E-18	N/A	6E-15	1E-02

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Lab ID: C15100167-008
Client Sample ID: Blanks

Report Date: 11/02/15
Collection Date: 09/28/15
DateReceived: 10/02/15
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	0.0019	mg/L	DB	8.5E-06		SW6020	10/14/15 23:15 / smm
Uranium, Activity	1.3E-09	uCi/mL	D	5.8E-12		SW6020	10/14/15 23:15 / smm
RADIONUCLIDES - IN AIR							
Lead 210	-1.3E-10	uCi/mL	U			E909.0	10/16/15 15:16 / eli-cs
Lead 210 precision (±)	3.4E-09	uCi/mL				E909.0	10/16/15 15:16 / eli-cs
Lead 210 MDC	5.7E-09	uCi/mL				E909.0	10/16/15 15:16 / eli-cs
Radium 226	1.4E-09	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 precision (±)	9.5E-10	uCi/mL				E903.0	10/19/15 11:11 / dmf
Radium 226 MDC	1.4E-09	uCi/mL				E903.0	10/19/15 11:11 / dmf
Thorium 230	3.5E-10	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 precision (±)	2.2E-10	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 230 MDC	3.1E-10	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232	8.1E-11	uCi/mL	U			E908.0	10/20/15 09:40 / cng
Thorium 232 precision (±)	1.3E-10	uCi/mL				E908.0	10/20/15 09:40 / cng
Thorium 232 MDC	2.6E-10	uCi/mL				E908.0	10/20/15 09:40 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	-0.13	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Lead 210 precision (±)	3.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Lead 210 MDC	5.7	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226	1.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 precision (±)	0.95	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Radium 226 MDC	1.4	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230	0.35	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 precision (±)	0.22	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 230 MDC	0.31	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232	0.081	pCi/Filter	U			RADCALC	10/30/15 12:01 / dpb
Thorium 232 precision (±)	0.13	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Thorium 232 MDC	0.26	pCi/Filter				RADCALC	10/30/15 12:01 / dpb
Uranium, Activity	1.3	pCi/Filter		0.20		RADCALC	10/30/15 12:01 / dpb
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	1	L				FIELD	09/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: February 8, 2016
PROJECT: 4th Quarter Air 2015

SAMPLE ID: Blanks

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15040118-007	^{nat}U	6E-17	N/A	N/A	1E-16	9E-14	7E-02
First Quarter 2015	^{230}Th	5E-18	2E-18	2E-18	1E-16	3E-14	2E-02
Air Volume in mLs	^{226}Ra	1E-17	8E-18	1E-17	1E-16	9E-13	1E-03
1.36E+11	^{210}Pb	-7E-18	3E-17	6E-17	2E-15	6E-13	-1E-03
	^{232}Th	2E-20	8E-19	2E-18	N/A	6E-15	3E-04

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15070141-008	^{nat}U	1E-17	N/A	N/A	1E-16	9E-14	1E-02
Second Quarter 2015	^{230}Th	2E-18	1E-18	2E-18	1E-16	3E-14	5E-03
Air Volume in mLs	^{226}Ra	2E-17	1E-17	1E-17	1E-16	9E-13	2E-03
1.36E+11	^{210}Pb	2E-17	3E-17	5E-17	2E-15	6E-13	3E-03
	^{232}Th	-5E-19	7E-19	2E-18	N/A	6E-15	-9E-03

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C15100167-008	^{nat}U	5E-17	N/A	N/A	1E-16	9E-14	6E-02
Third Quarter 2015	^{230}Th	3E-17	0E+00	0E+00	1E-16	3E-14	1E-01
Air Volume in mLs	^{226}Ra	0E+00	2E-18	-5E-19	1E-16	9E-13	0E+00
1.36E+11	^{210}Pb	7E-19	0E+00	0E+00	2E-15	6E-13	1E-04
	^{232}Th	0E+00	0E+00	0E+00	N/A	6E-15	0E+00

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

Quarter/Date Sampled Air Volume	Radionuclide	Concentration µCi/mL	Counting Precision µCi/mL	MDC µCi/mL	L.L.D.+ µCi/mL	Effluent Conc.* µCi/mL	% Effluent Concentration
C16010198-008	^{nat}U	1E-17	N/A	N/A	1E-16	9E-14	< 1E-02
Fourth Quarter 2015	^{230}Th	4E-18	2E-18	3E-18	1E-16	3E-14	1E-02
Air Volume in mLs	^{226}Ra	8E-18	4E-18	4E-18	1E-16	9E-13	9E-04
1.36E+11	^{210}Pb	-3E-17	3E-17	6E-17	2E-15	6E-13	-5E-03
	^{232}Th	-6E-20	1E-18	3E-18	N/A	6E-15	-1E-03

Note: This sample uses 136,000,000 L of air volume for comparison purposes.

+LLD's are from NRC Reg. Guide 4.14
*Effluent Concentration from the NEW 10 CFR Part 20 - Appendix B - Table 2
Year for Natural Uranium
Year for Thorium-230, Thorium-232
Week for Radium-226
Day for Lead-210

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-008
Client Sample ID: Blanks

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	0.0026	mg/L	D	8.5E-06		SW6020	01/15/16 13:26 / smm
Uranium, Activity	1.7E-09	uCi/mL	D	5.8E-12		SW6020	01/15/16 13:26 / smm
RADIONUCLIDES - IN AIR							
Lead 210	-4.2E-09	uCi/mL	U			E909.0	01/20/16 23:55 / eli-cs
Lead 210 precision (±)	4.5E-09	uCi/mL				E909.0	01/20/16 23:55 / eli-cs
Lead 210 MDC	7.8E-09	uCi/mL				E909.0	01/20/16 23:55 / eli-cs
Radium 226	1.1E-09	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 precision (±)	5.1E-10	uCi/mL				E903.0	01/20/16 06:58 / dmf
Radium 226 MDC	5.6E-10	uCi/mL				E903.0	01/20/16 06:58 / dmf
Thorium 230	6.1E-10	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 precision (±)	2.9E-10	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 230 MDC	3.5E-10	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232	-8.5E-12	uCi/mL	U			E908.0	01/20/16 09:26 / cng
Thorium 232 precision (±)	1.7E-10	uCi/mL				E908.0	01/20/16 09:26 / cng
Thorium 232 MDC	3.8E-10	uCi/mL				E908.0	01/20/16 09:26 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	-4.2	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Lead 210 precision (±)	4.5	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Lead 210 MDC	7.8	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226	1.1	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 precision (±)	0.51	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Radium 226 MDC	0.56	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230	0.61	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 precision (±)	0.29	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 230 MDC	0.35	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232	-0.0085	pCi/Filter	U			RADCALC	01/25/16 07:35 / rdw
Thorium 232 precision (±)	0.17	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Thorium 232 MDC	0.38	pCi/Filter				RADCALC	01/25/16 07:35 / rdw
Uranium, Activity	1.7	pCi/Filter		0.20		RADCALC	01/25/16 07:35 / rdw
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	-7.0E+05	%				RADCALC	02/01/16 14:45 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, % of EFF	1.2E+05	%				RADCALC	02/01/16 14:45 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	02/01/16 14:45 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, % of EFF	2.0E+06	%				RADCALC	02/01/16 14:45 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Thorium 232, % of EFF	-1.0E+05	%				RADCALC	02/01/16 14:45 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Lab ID: C16010198-008
Client Sample ID: Blanks

Report Date: 02/08/16
Collection Date: 12/28/15
DateReceived: 01/07/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, % of EFF	1.9E+06	%				RADCALC	02/01/16 14:45 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	02/01/16 14:45 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	02/01/16 14:45 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	1	L				FIELD	12/28/15 00:00 / ***

*** Field data provided by client

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

November 02, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15100167

Project Name: 3rd Quarter Air 2015

Energy Laboratories, Inc. Casper WY received the following 8 samples for Energy Fuels Resources (USA) Inc on 10/2/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15100167-001	BHV-1	09/28/15 00:00	10/02/15	Filter	Composite of two or more samples Client Provided Field Parameters Metals, Total Digestion, Total Metals, Radiochemistry RAD-AIR, Routine Radiological Reports RAD Alternate Unit Reporting Air Filters Lead 210 Radium 226 Thorium, Isotopic
C15100167-002	BHV-2	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-003	BHV-4	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-004	BHV-5	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-005	BHV-6	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-006	BHV-7	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-007	BHV-8	09/28/15 00:00	10/02/15	Filter	Same As Above
C15100167-008	Blanks	09/28/15 00:00	10/02/15	Filter	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By: David Blaida

David Blaida, Project Manager

Digitally signed by
Dave Blaida
Date: 2016.02.16 13:44:53 -07:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Work Order: C15100167

Revised Date: 02/16/16
Report Date: 11/02/15

CASE NARRATIVE

REVISED/SUPPLEMENTAL REPORT
The attached analytical report has been revised from a previously submitted report due to the request by Kathy Weinel on 2/16/16 for the removal of "preliminary report" from the report on sample(s) 1-8. The report has been revised and replaces any previously issued report in its entirety.

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.
ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Work Order: C15100167

Revised Date: 02/16/16
Report Date: 11/02/15

CASE NARRATIVE

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

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eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

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ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.
Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Air 2015
Work Order: C15100167

Revised Date: 02/16/16
Report Date: 11/02/15

CASE NARRATIVE

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
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eli-h - Energy Laboratories, Inc. - Helena, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

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ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.REVISED/SUPPLEMENTAL REPORT
The attached analytical report has been revised from a previously submitted report due to the request by ( ) on (date) for the reanalysis/addition of ( ) on sample(s) ( ). The data presented here is from that recheck/additional analysis. The report has been revised and replaces any previously issued report in its entirety.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/02/15
Project: 3rd Quarter Air 2015
Work Order: C15100167

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 45904
Lab ID: LCS-45904		Laboratory Control Sample				Run: BERTHOLD 770-2_151009A				10/19/15 07:54
Radium 226		19.5	pCi/L		99	80	120			
Lab ID: MB-45904	3	Method Blank				Run: BERTHOLD 770-2_151009A				10/19/15 07:54
Radium 226		0.08	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: C15100167-003AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_151009A				10/19/15 11:11
Radium 226		188	pCi/L		96	70	130			
Lab ID: C15100167-003AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_151009A				10/19/15 11:11
Radium 226		179	pCi/L		94	70	130	4.7	49.2	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/02/15
Project: 3rd Quarter Air 2015
Work Order: C15100167

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 45904
Lab ID: LCS-45904		Laboratory Control Sample				Run: ALPHANALYST_151013B				10/20/15 09:42
Thorium 230		27.0	pCi/L		97	80	120			
Lab ID: C15100167-007AMS		Sample Matrix Spike				Run: ALPHANALYST_151013B				10/20/15 09:40
Thorium 230		74.9	pCi/L		129	70	130			
Lab ID: C15100167-007AMSD		Sample Matrix Spike Duplicate				Run: ALPHANALYST_151013B				10/20/15 09:40
Thorium 230		63.2	pCi/L		109	70	130	17	48	
Lab ID: MB-45904	6	Method Blank				Run: ALPHANALYST_151013B				10/20/15 09:40
Thorium 230		0.2	pCi/L							U
Thorium 230 precision (±)		0.2	pCi/L							
Thorium 230 MDC		0.3	pCi/L							
Thorium 232		0.05	pCi/L							U
Thorium 232 precision (±)		0.1	pCi/L							
Thorium 232 MDC		0.2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/02/15
Project: 3rd Quarter Air 2015
Work Order: C15100167

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_24293
Lab ID: MB-24293	3	Method Blank				Run: SUB-T65484				10/15/15 21:37
Lead 210		0.7	pCi/L							U
Lead 210 precision (±)		3	pCi/L							
Lead 210 MDC		6	pCi/L							
Lab ID: LCS-24293		Laboratory Control Sample				Run: SUB-T65484				10/15/15 23:53
Lead 210		138	pCi/L		113	80	120			
Lab ID: T15100032-001AMS		Sample Matrix Spike				Run: SUB-T65484				10/16/15 03:14
Lead 210		0.000144	pCi/L		116	70	130			
Lab ID: T15100032-001AMSD		Sample Matrix Spike Duplicate				Run: SUB-T65484				10/16/15 04:15
Lead 210		0.000154	pCi/L		125	70	130	7.0	43.4	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/02/15
Project: 3rd Quarter Air 2015
Work Order: C15100167

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Analytical Run: ICPMS2-C_151014B	
Lab ID: ICV		Initial Calibration Verification Standard							10/14/15 17:29	
Uranium		0.0479	mg/L	0.00030	96	90	110			
Lab ID: ICSA		Interference Check Sample A							10/14/15 17:32	
Uranium		2.54E-05	mg/L	0.00030						
Lab ID: ICSAB		Interference Check Sample AB							10/14/15 17:34	
Uranium		8.00E-06	mg/L	0.00030						
Method: SW6020									Analytical Run: ICPMS2-C_151019A	
Lab ID: ICV		Initial Calibration Verification Standard							10/19/15 11:02	
Uranium		0.0490	mg/L	0.00030	98	90	110			
Lab ID: ICSA		Interference Check Sample A							10/19/15 11:05	
Uranium		1.70E-05	mg/L	0.00030						
Lab ID: ICSAB		Interference Check Sample AB							10/19/15 11:08	
Uranium		4.30E-06	mg/L	0.00030						
Method: SW6020									Batch: 45904	
Lab ID: MB-45904		Method Blank				Run: ICPMS2-C_151019A			10/20/15 04:04	
Uranium		ND	mg/L	2E-05						
Lab ID: LCS2-45904		Laboratory Control Sample				Run: ICPMS2-C_151019A			10/20/15 04:16	
Uranium		0.0916	mg/L	8.5E-06	92	85	115			
Lab ID: C15100163-001ADIL		Serial Dilution				Run: ICPMS2-C_151019A			10/20/15 04:24	
Uranium		2.85E-10	mg/L	1.5E-10				29	20	R
Lab ID: C15100167-004AMS		Sample Matrix Spike				Run: ICPMS2-C_151019A			10/20/15 04:55	
Uranium		1.81E-08	mg/L	1.5E-10		75	125			A
Lab ID: C15100167-004AMSD		Sample Matrix Spike Duplicate				Run: ICPMS2-C_151019A			10/20/15 04:58	
Uranium		1.80E-08	mg/L	1.5E-10		75	125	0.9	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C15100167

Login completed by: Corinne Wagner
Date Received: 10/2/2015

Reviewed by: BL2000\swaldrop
Received by: cjm

Reviewed Date: 10/13/2015
Carrier name: NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	NA°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
3rd Quarter Air 2015	Garrin Palmer	

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
BHV-1	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-2	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-4	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-5	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-6	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-7	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-8	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
Blanks	6/29/15 - 9/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	10/1/15 1000		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
			10/2/15 9:20

CS100167

ANALYTICAL SUMMARY REPORT

February 08, 2016

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C16010198

Project Name: 4th Quarter Air 2015

Energy Laboratories, Inc. Casper WY received the following 8 samples for Energy Fuels Resources (USA) Inc on 1/7/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16010198-001	BHV-1	12/28/15 00:00	01/07/16	Filter	Composite of two or more samples Client Provided Field Parameters Metals, Total Digestion, Total Metals, Radiochemistry Radiochemistry Air Filter Compliance Calculations RAD-AIR, Routine Radiological Reports RAD Alternate Unit Reporting Air Filters Lead 210 Radium 226 Thorium, Isotopic
C16010198-002	BHV-2	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-003	BHV-4	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-004	BHV-5	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-005	BHV-6	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-006	BHV-7	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-007	BHV-8	12/28/15 00:00	01/07/16	Filter	Same As Above
C16010198-008	Blanks	12/28/15 00:00	01/07/16	Filter	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By: David Blaida

David Blaida, Project Manager

Digitally signed by
Dave Blaida
Date: 2016.02.10 09:28:27 -07:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Air 2015
Work Order: C16010198

Report Date: 02/08/16

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.
Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 02/08/16
Project: 4th Quarter Air 2015
Work Order: C16010198

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 46589
Lab ID: LCS-46589		Laboratory Control Sample				Run: TENNELEC-3_160114A				01/20/16 06:58
Radium 226		17.9	pCi/L		90	80	120			
Lab ID: MB-46589	3	Method Blank				Run: TENNELEC-3_160114A				01/20/16 06:58
Radium 226		0.3	pCi/L							
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C16010198-001AMS		Sample Matrix Spike				Run: TENNELEC-3_160114A				01/20/16 06:58
Radium 226		1.01E-06	pCi/L		101	70	130			
Lab ID: C16010198-001AMSD		Sample Matrix Spike Duplicate				Run: TENNELEC-3_160114A				01/20/16 06:58
Radium 226		9.86E-07	pCi/L		98	70	130	2.4	48.7	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 02/08/16
Project: 4th Quarter Air 2015
Work Order: C16010198

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0									Batch: RA-TH-ISO-2370	
Lab ID: LCS-46557		Laboratory Control Sample				Run: ALPHANALYST_160114B			01/19/16 16:42	
Thorium 230		27.3	pCi/L		100	80	120			
Lab ID: C16010036-002AMS		Sample Matrix Spike				Run: ALPHANALYST_160114B			01/19/16 16:42	
Thorium 230		0.000178	pCi/L		87	70	130			
Lab ID: C16010036-002AMSD		Sample Matrix Spike Duplicate				Run: ALPHANALYST_160114B			01/19/16 16:42	
Thorium 230		0.000187	pCi/L		91	70	130	4.5	48	
Lab ID: MB-46557	6	Method Blank				Run: ALPHANALYST_160114B			01/19/16 16:43	
Thorium 230		0.07	pCi/L							U
Thorium 230 precision (±)		0.1	pCi/L							
Thorium 230 MDC		0.3	pCi/L							
Thorium 232		0.10	pCi/L							U
Thorium 232 precision (±)		0.2	pCi/L							
Thorium 232 MDC		0.3	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 02/08/16
Project: 4th Quarter Air 2015
Work Order: C16010198

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E909.0**										Batch: T_24705
Lab ID: **MB-24705**	3	Method Blank				Run: SUB-T67054				01/20/16 18:52
Lead 210		2	pCi/L							U
Lead 210 precision (±)		5	pCi/L							
Lead 210 MDC		8	pCi/L							
Lab ID: **LCS-24705**		Laboratory Control Sample				Run: SUB-T67054				01/20/16 20:35
Lead 210		108	pCi/L		87	80	120			
Lab ID: **T16010054-001AMS**		Sample Matrix Spike				Run: SUB-T67054				01/20/16 22:19
Lead 210		4.48E-05	pCi/L		176	70	130			S
Lab ID: **T16010054-001AMSD**		Sample Matrix Spike Duplicate				Run: SUB-T67054				01/20/16 22:43
Lead 210		4.07E-05	pCi/L		135	70	130	9.6	42.8	S

- The sample used for the MS/MSD pair had greatly higher activity than the spike added. The MS/MSD pair is reported as a Duplicate pair instead.

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 02/08/16
Project: 4th Quarter Air 2015
Work Order: C16010198

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Analytical Run: ICPMS4-C_160114A	
Lab ID: ICV		Initial Calibration Verification Standard							01/14/16 17:20	
Uranium		0.0470	mg/L	0.00030	94	90	110			
Lab ID: ICSA		Interference Check Sample A							01/14/16 17:25	
Uranium		0.000437	mg/L	0.00030						
Lab ID: ICSAB		Interference Check Sample AB							01/14/16 17:30	
Uranium		4.09E-05	mg/L	0.00030						
Method: SW6020									Batch: 46589	
Lab ID: MB-46589		Method Blank				Run: ICPMS4-C_160114A			01/15/16 12:02	
Uranium		5E-05	mg/L	3E-05						
Lab ID: LCS2-46589		Laboratory Control Sample				Run: ICPMS4-C_160114A			01/15/16 12:07	
Uranium		0.0980	mg/L	8.5E-06	98	85	115			
Lab ID: C16010104-001ADIL		Serial Dilution				Run: ICPMS4-C_160114A			01/15/16 12:23	
Uranium		9.00E-11	mg/L	1.5E-10					20	
Lab ID: C16010213-001HMS		Sample Matrix Spike				Run: ICPMS4-C_160114A			01/15/16 13:36	
Uranium		0.0548	mg/L	9.0E-06	109	75	125			
Lab ID: C16010213-001HMSD		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160114A			01/15/16 13:41	
Uranium		0.0566	mg/L	9.0E-06	113	75	125	3.2	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C16010198

Login completed by: Tessa Parke
Date Received: 1/7/2016

Reviewed by: BL2000\dblaida
Received by: cas

Reviewed Date: 1/13/2016
Carrier name: NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy.
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 2221
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
4th Quarter Air 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
BHV-1	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-2	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-4	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-5	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-6	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-7	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-8	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
Blanks	9/28/15 - 12/28/15	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232

Comments: Please send report to Kathy Weinel at kweinel@energyfuels.com

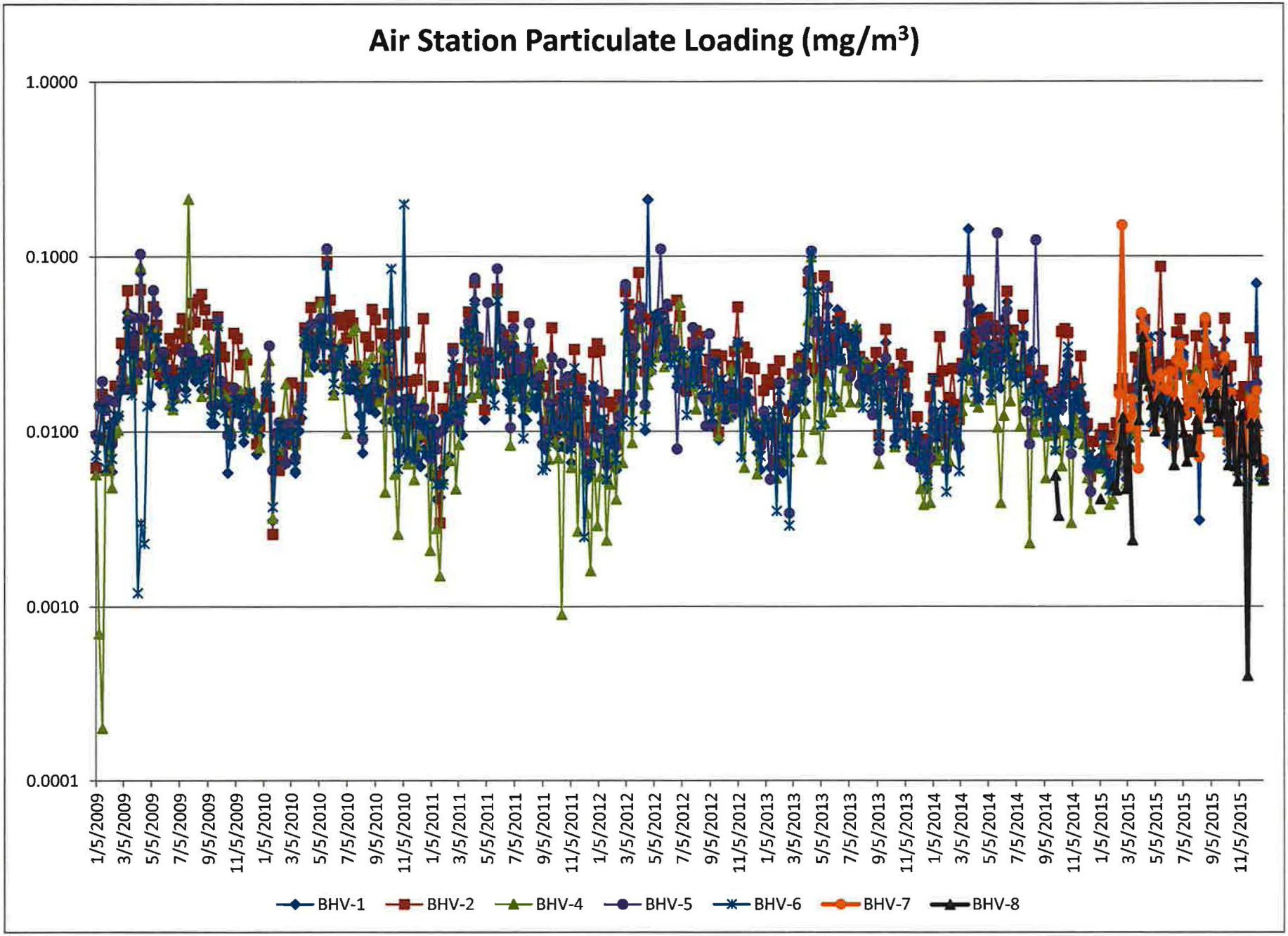
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	1/5/16 1230	[illegible]	1-7-16 10:25
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

RS-NO
Temp - N/A
450

C1501 0198

ATTACHMENT D

AIR PARTICULATE LOADING GRAPHS AND SUPPORTING DATA


Air Station Particulate Loading (mg/m3)
1.0000
0.1000
0.0100
0.0010
0.0001
1/5/2009
3/5/2009
5/5/2009
7/5/2009
9/5/2009
11/5/2009
1/5/2010
3/5/2010
5/5/2010
7/5/2010
9/5/2010
11/5/2010
1/5/2011
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11/5/2015
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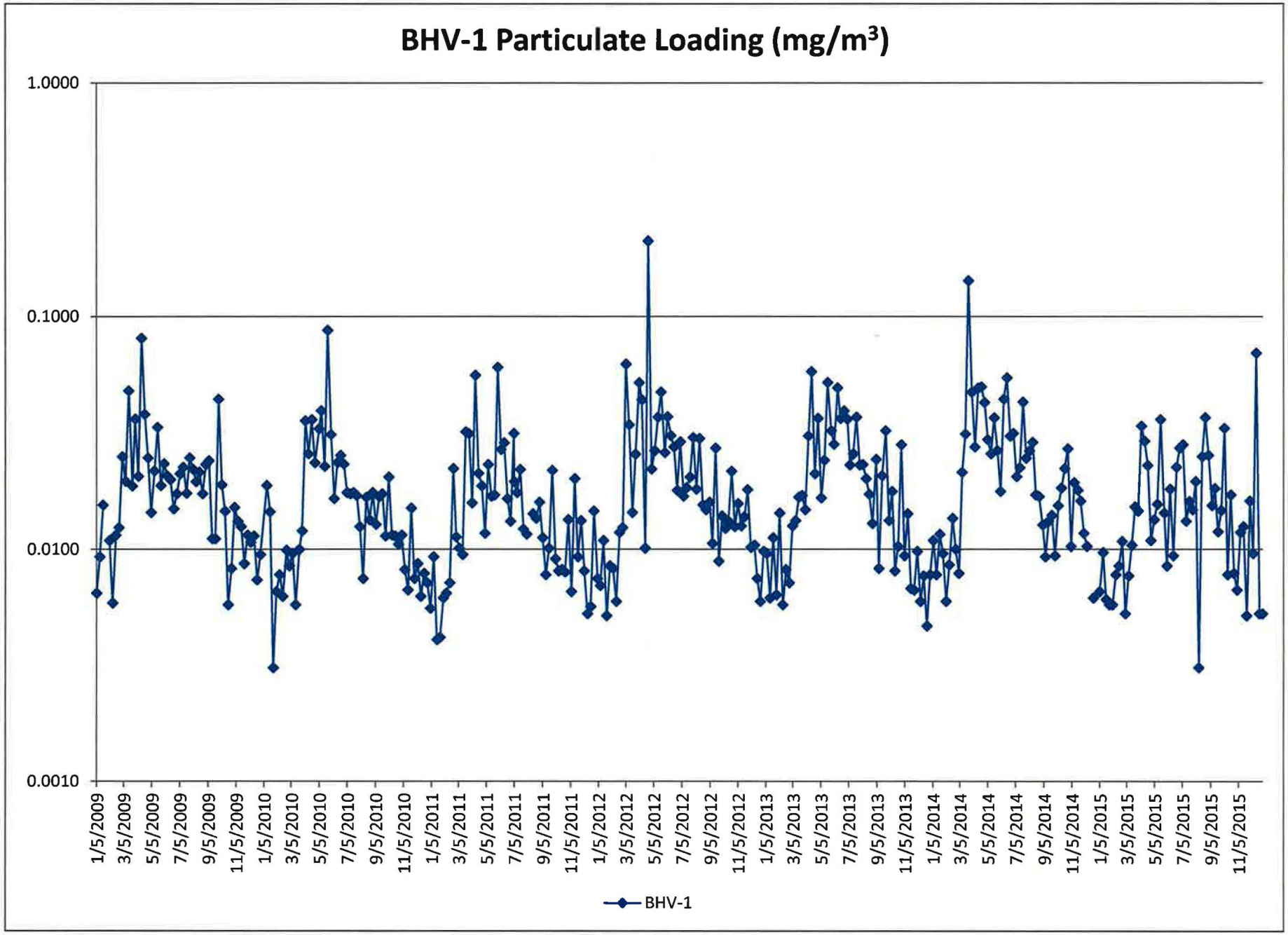
BHV-2
BHV-4
BHV-5
BHV-6
BHV-7
BHV-8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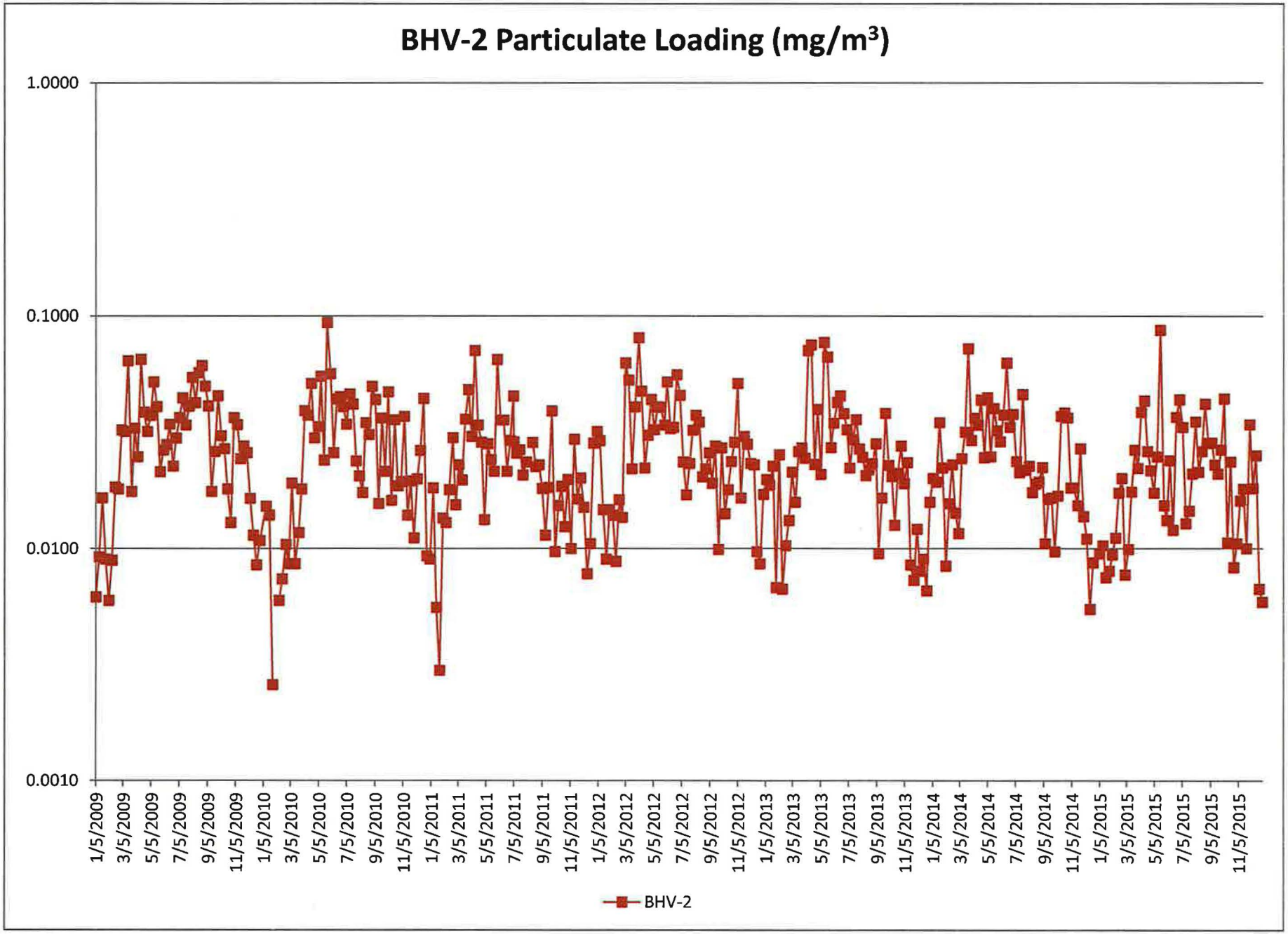
BHV-1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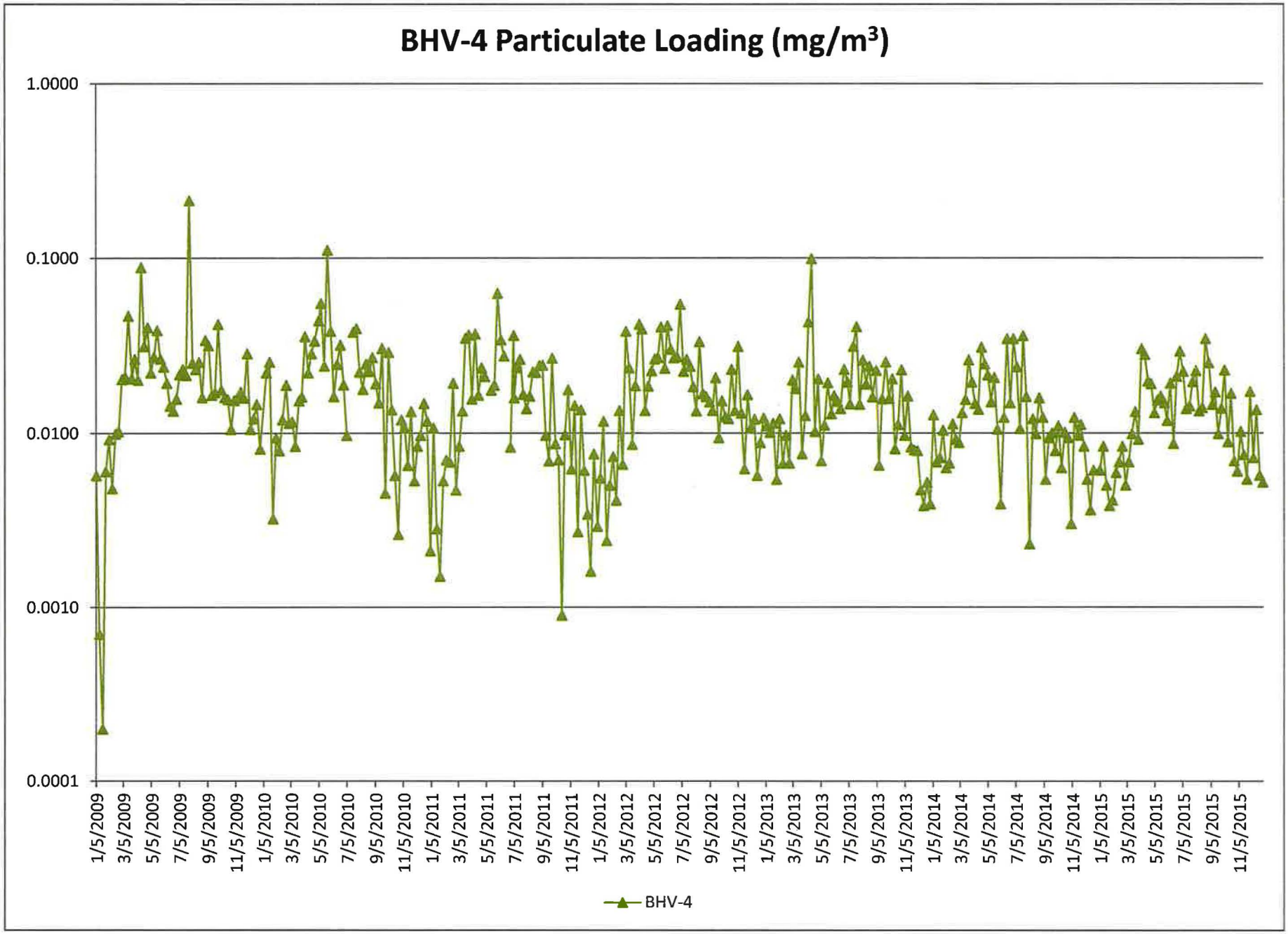
BHV-2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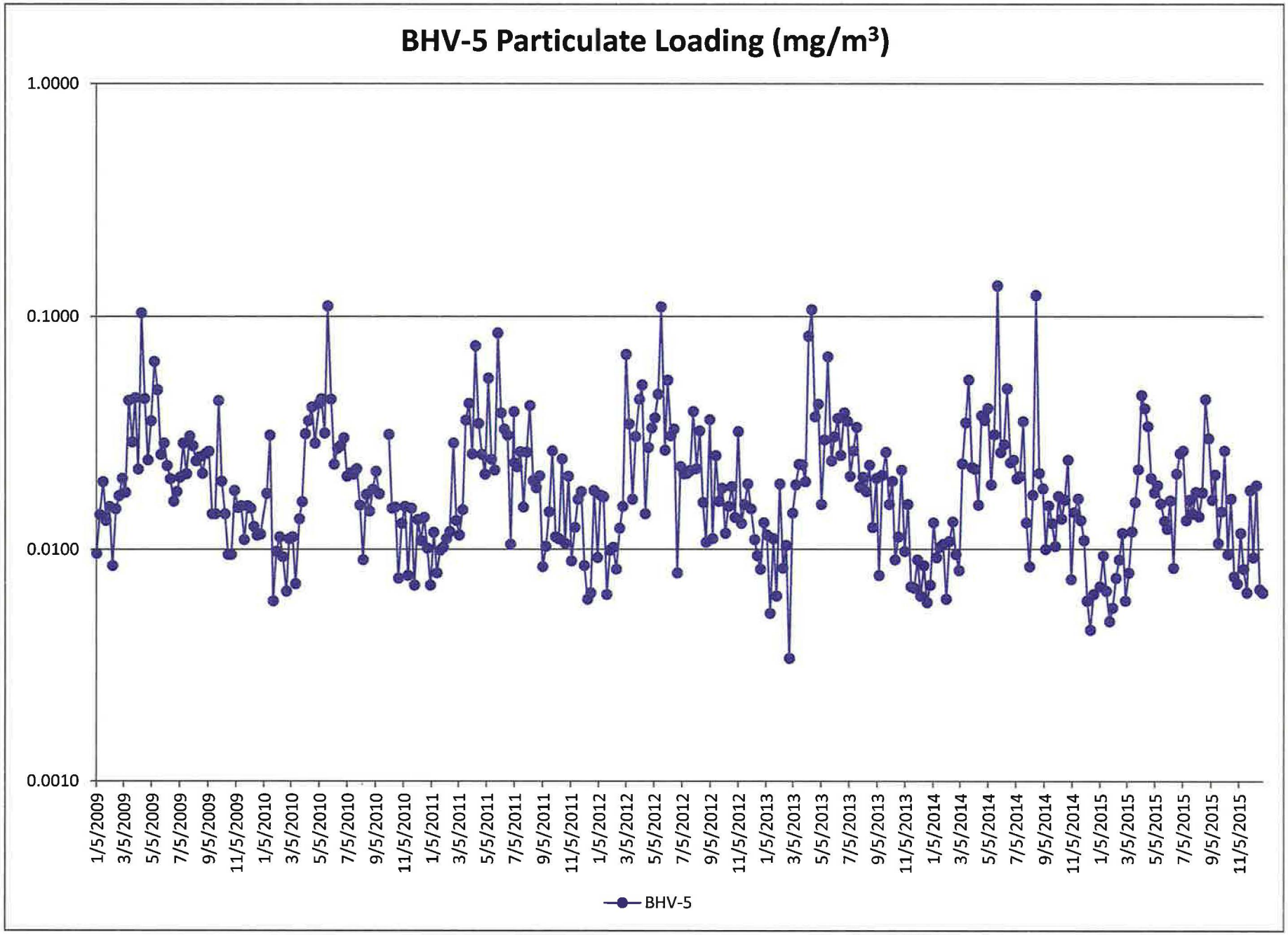
BHV-4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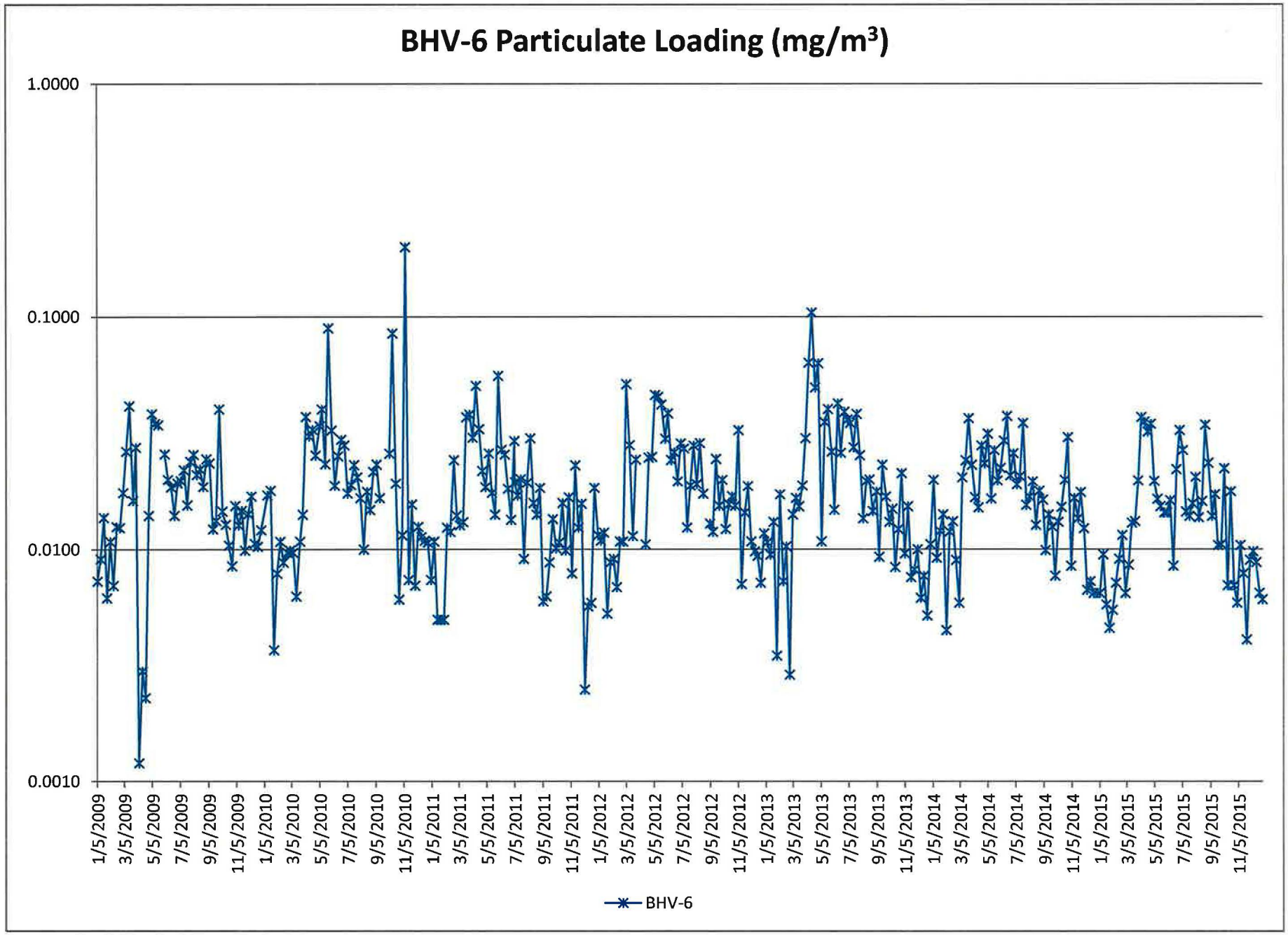
BHV-5


BHV-6 Particulate Loading (mg/m³)
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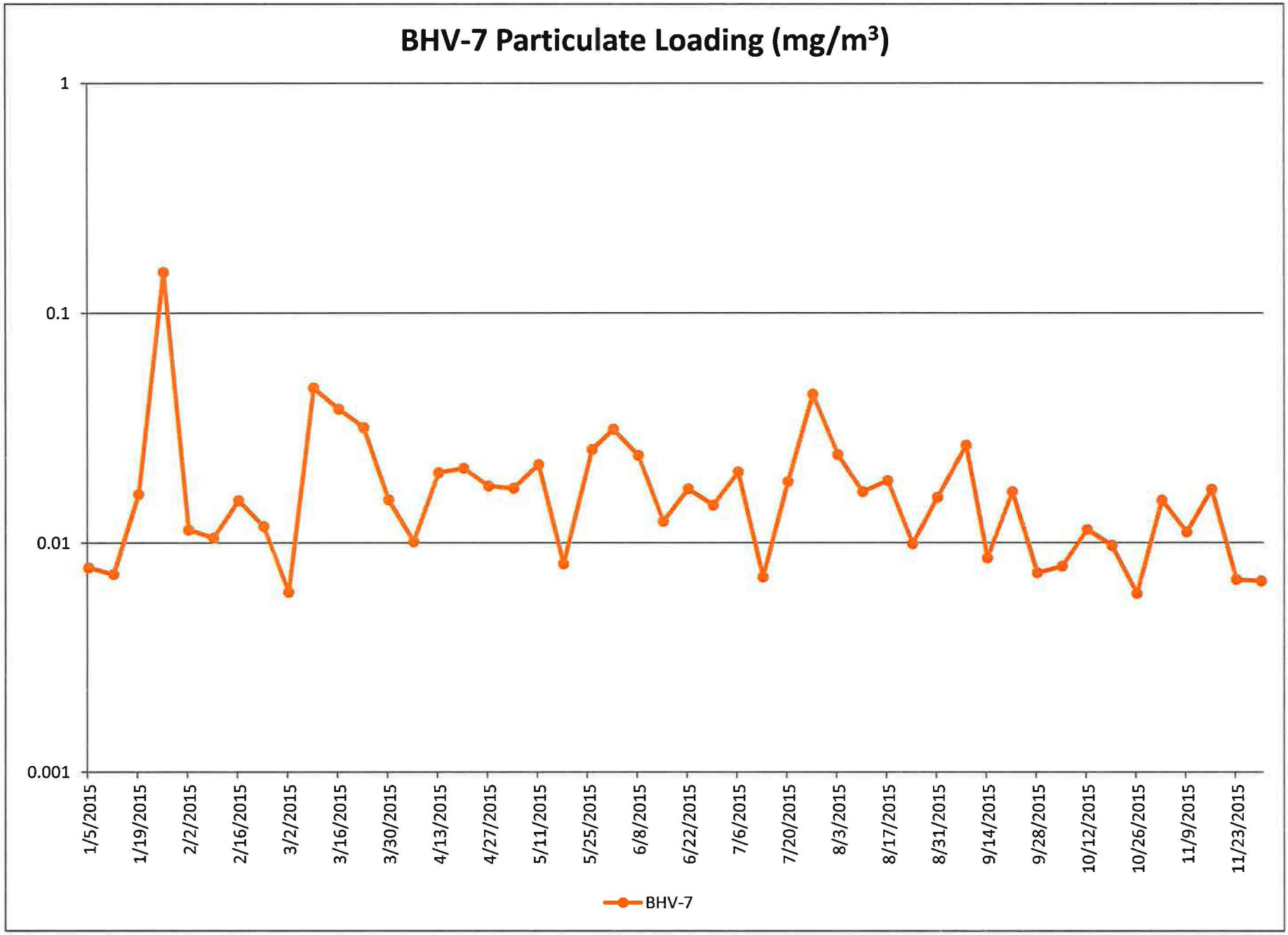
BHV-6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4/27/2015
5/11/2015
5/25/2015
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7/20/2015
8/3/2015
8/17/2015
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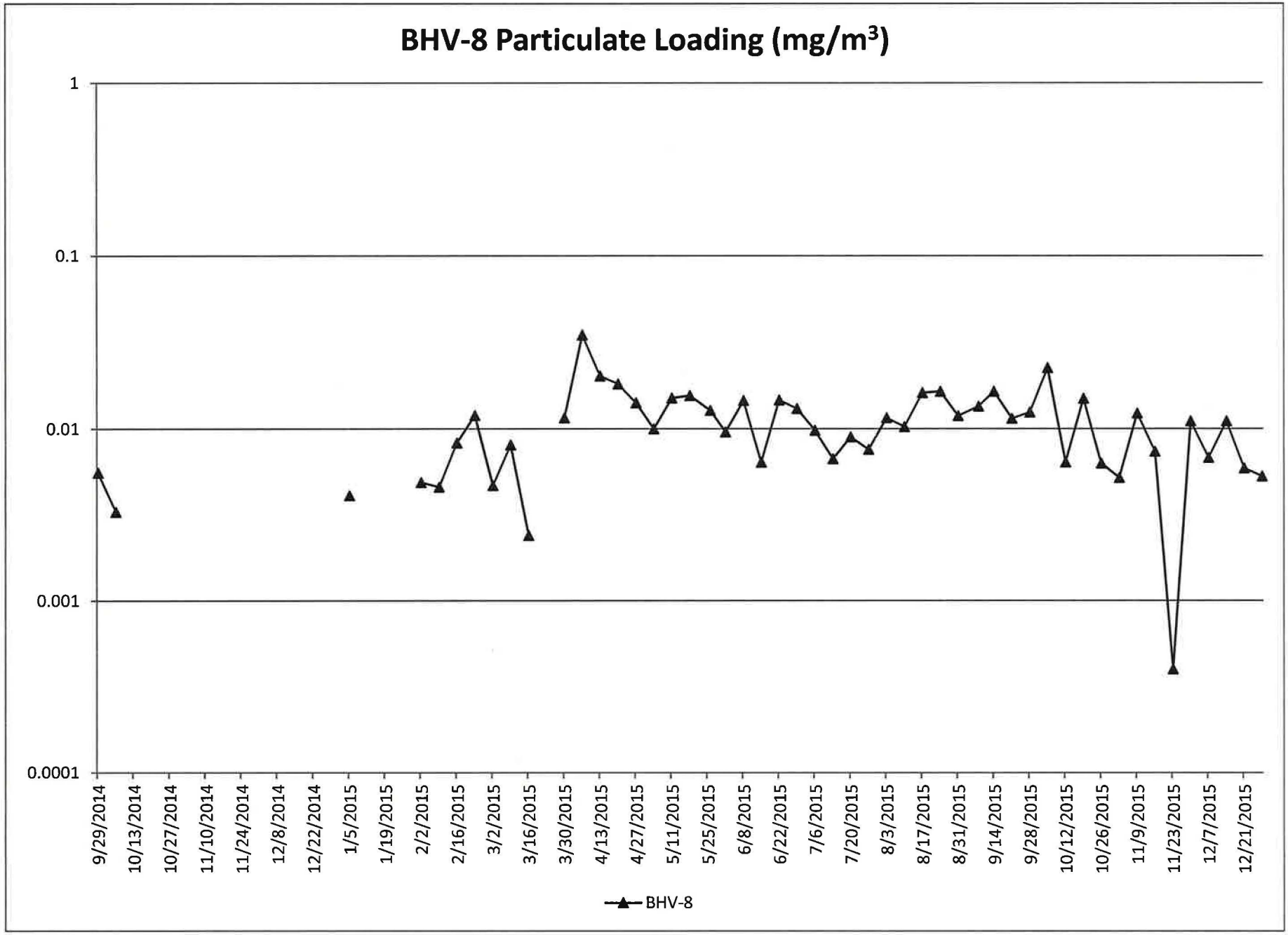
11/23/2015
BHV-7


BHV-8 Particulate Loading (mg/m³)
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12/8/2014
12/22/2014
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9/14/2015
9/28/2015
10/12/2015
10/26/2015
11/9/2015
11/23/2015
12/7/2015
12/21/2015
BHV-8

BHV-1

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2015
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953721	6/29/2015	7/6/2015	65198.65	65363.86	9912.6	4.0	4.0	4.0	24.7	297.8	620.3	1.12	0.92	32.32	9071.3	4.4407	4.6956	254.9	0.0281	98.3
2	8953708	7/6/2015	7/13/2015	65363.86	65532.83	10138.2	4.0	4.0	4.0	19.6	292.8	620.8	1.11	0.92	32.61	9362.9	4.4409	4.5649	124.0	0.0132	100.6
3	8953713	7/13/2015	7/20/2015	65532.83	65701.8	10138.2	4.0	4.0	4.0	20.9	294.1	621.0	1.11	0.92	32.55	9343.3	4.4512	4.6010	149.8	0.0160	100.6
4	8951391	7/20/2015	7/27/2015	65701.8	65869.43	10057.8	4.0	4.0	4.0	22.0	295.1	620.5	1.12	0.92	32.47	9248.9	4.4899	4.6269	137.0	0.0148	99.8
5	8951375	7/27/2015	8/3/2015	65869.43	66036.97	10052.4	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9244.6	4.4869	4.6669	180.0	0.0195	99.7
6	8951375	8/3/2015	8/10/2015	66036.97	66201	9841.8	4.5	4.0	4.3	22.5	295.6	621.03	1.15	0.95	33.44	9320.5	4.5917	4.6209	29.2	0.0031	97.6
7	8951372	8/10/2015	8/17/2015	66201	66373.27	10336.2	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9497.9	4.5033	4.7403	237.0	0.0250	102.5
8	8951364	8/17/2015	8/24/2015	66373.27	66536.25	9778.8	4.5	4.0	4.3	24.4	297.5	615.18	1.16	0.94	33.18	9186.8	4.4989	4.8380	339.1	0.0369	97.0
9	8951351	8/24/2015	8/31/2015	66536.25	66705.14	10133.4	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.51	9327.3	4.5288	4.7647	235.9	0.0253	100.5
10	8951348	8/31/2015	9/8/2015	66705.14	66896.52	11482.8	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10589.7	4.5262	4.6897	163.5	0.0154	113.9
11	8951335	9/8/2015	9/14/2015	66896.52	67039.83	8598.6	4.0	4.0	4.0	22.4	295.6	618.74	1.12	0.92	32.40	7889.6	4.5138	4.6577	143.9	0.0182	85.3
12	8951332	9/14/2015	9/21/2015	67039.83	67207.33	10050.0	3.5	4.0	3.8	18.4	291.6	619.50	1.07	0.90	31.62	8999.8	4.4856	4.5929	107.3	0.0119	99.7
13	8951319	9/21/2015	9/28/2015	67207.33	67377.21	10192.8	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9417.5	4.5144	4.6532	138.8	0.0147	101.1
					Totals	130713.6							14.53	11.98	423.23	120500.2	58.472	60.713	2240.4	0.2423	
					Averages	10054.9	4.0	4.0	4.0	21.8	295.0	620.49846	1.12	0.92	32.56	9269.2	4.498	4.670	172.3	0.0186	99.8

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-1

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2015
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951316	9/28/2015	10/5/2015	67377.21	67548.87	10299.6	4.0	4.0	4.0	18.8	292.0	620.5	1.11	0.92	32.65	9522.6	4.4906	4.8056	315.0	0.0331	102.2
2	8951303	10/5/2015	10/12/2015	67548.87	67712.85	9838.8	4.0	4.0	4.0	14.4	287.5	623.3	1.10	0.93	32.98	9189.2	4.5203	4.5919	71.6	0.0078	97.6
3	9218900	10/12/2015	10/19/2015	67712.85	67881.44	10115.4	4.0	4.0	4.0	16.0	289.1	622.6	1.10	0.93	32.87	9414.7	4.3223	4.4835	161.2	0.0171	100.4
4	9218887	10/19/2015	10/26/2015	67881.44	68047.93	9989.4	4.0	4.0	4.0	10.6	283.7	620.0	1.09	0.94	33.12	9367.4	4.3424	4.4164	74.0	0.0079	99.1
5	9218884	10/26/2015	11/2/2015	68047.93	68217.27	10160.4	4.0	4.5	4.3	8.5	281.6	618.5	1.12	0.97	34.21	9841.5	4.3535	4.4194	65.9	0.0067	100.8
6	9218877	11/2/2015	11/9/2015	68217.27	68386.38	10146.6	4.0	4.0	4.0	5.2	278.3	619.25	1.08	0.95	33.42	9601.9	4.3808	4.4945	113.7	0.0118	100.7
7	9218868	11/9/2015	11/16/2015	68386.38	68555.5	10147.2	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9631.3	4.2998	4.4199	120.1	0.0125	100.7
8	9218854	11/16/2015	11/23/2015	68555.5	68719.92	9865.2	4.0	4.0	4.0	1.9	275.1	619.76	1.08	0.95	33.63	9395.6	4.3177	4.3669	49.2	0.0052	97.9
9	9218853	11/23/2015	11/30/2015	68719.92	68889.44	10171.2	4.0	4.5	4.3	1.5	274.6	616.71	1.11	0.98	34.60	9964.4	4.3318	4.4923	160.5	0.0161	100.9
10	9218844	11/30/2015	12/7/2015	68889.44	69058.05	10116.6	4.0	3.5	3.8	-0.7	272.4	623.82	1.04	0.93	32.85	9410.6	4.3574	4.4476	90.2	0.0096	100.4
11	9218831	12/7/2015	12/14/2015	69058.05	69223.27	9913.2	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9409.3	4.2879	4.9450	657.1	0.0698	98.3
12	9218828	12/14/2015	12/21/2015	69223.27	69394.34	10264.2	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.96	33.85	9839.5	4.3828	4.4347	51.9	0.0053	101.8
13	9218820	12/21/2015	12/28/2015	69394.34	69560.33	9959.4	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9570.4	4.3860	4.4365	50.5	0.0053	98.8
					Totals	130987.2							14.14	12.32	435.15	124158.4	56.773	58.754	1980.9	0.2082	
					Averages	10075.9	4.0	4.0	4.0	5.7	278.8	619.32692	1.09	0.95	33.47	9550.6	4.367	4.520	152.4	0.0160	100.0

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-2

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953720	6/29/2015	7/6/2015	75807.62	75973.9	9976.8	4.5	4.0	4.3	24.7	297.8	620.26	1.15	0.94	33.30	9407.2	4.4293	4.7429	313.6	0.0333	99.0
2	8953707	7/6/2015	7/13/2015	75973.9	76142.87	10138.2	4.0	4.0	4.0	19.6	292.8	620.77	1.11	0.92	32.61	9362.9	4.4142	4.5344	120.2	0.0128	100.6
3	8953712	7/13/2015	7/20/2015	76142.87	76311.3	10105.8	4.0	4.0	4.0	20.9	294.1	621.03	1.11	0.92	32.55	9313.4	4.4448	4.5799	135.1	0.0145	100.3
4	8951392	7/20/2015	7/27/2015	76311.3	76478.95	10059	4.0	4.0	4.0	22.0	295.1	620.52	1.12	0.92	32.47	9250.0	4.4840	4.6769	192.9	0.0209	99.8
5	8951387	7/27/2015	8/3/2015	76478.95	76647.03	10084.8	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9274.4	4.4736	4.7997	326.1	0.0352	100.0
3.5	8951376	8/3/2015	8/10/2015	76647.03	76810.65	9817.2	4.0	4.0	4.0	22.5	295.6	621.03	1.12	0.92	32.46	9023.4	4.5068	4.6989	192.1	0.0213	97.4
7	8951371	8/10/2015	8/17/2015	76810.65	76982.89	10334.4	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9496.2	4.4900	4.7385	248.5	0.0262	102.5
8	8951363	8/17/2015	8/24/2015	76982.89	77145.67	9766.8	4.5	4.0	4.3	24.4	297.5	615.18	1.16	0.94	33.18	9175.5	4.4797	4.8648	385.1	0.0420	96.9
9	8951352	8/24/2015	8/31/2015	77145.67	77314.72	10143	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.51	9336.1	4.5432	4.8083	265.1	0.0284	100.6
10	8951347	8/31/2015	9/8/2015	77314.72	77505.89	11470.2	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10578.1	4.5179	4.8195	301.6	0.0285	113.8
11	8951336	9/8/2015	9/14/2015	77505.89	77650.55	8679.6	4.0	4.0	4.0	22.4	295.6	618.74	1.12	0.92	32.40	7963.9	4.5273	4.7094	182.1	0.0229	86.1
12	8951331	9/14/2015	9/21/2015	77650.55	77816.79	9974.4	3.5	4.0	3.8	18.4	291.6	619.50	1.07	0.90	31.62	8932.1	4.5223	4.7091	186.8	0.0209	99.0
13	8951320	9/21/2015	9/28/2015	77816.79	77987.22	10225.8	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9447.9	4.5033	4.7546	251.3	0.0266	101.4
					Totals	130776.0							14.53	11.98	423.23	120561.3	58.336	61.437	3100.5	0.3334	
					Averages	10059.7	4.0	4.0	4.0	21.8	295.0	620.49846	1.12	0.92	32.56	9273.9	4.487	4.726	238.5	0.0256	99.8

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-2

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th , 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951315	9/28/2015	10/5/2015	77989.22	78158.83	10176.6	4.0	4.0	4.0	18.8	292.0	620.52	1.11	0.92	32.65	9408.9	4.5226	4.9383	415.7	0.0442	101.0
2	8951304	10/5/2015	10/12/2015	78158.83	78322.87	9842.4	4.0	4.0	4.0	14.4	287.5	623.31	1.10	0.93	32.98	9192.6	4.5070	4.6047	97.7	0.0106	97.6
3	9218899	10/12/2015	10/19/2015	78322.87	78491.47	10116	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.87	9415.2	4.3002	4.5224	222.2	0.0236	100.4
4	9218888	10/19/2015	10/26/2015	78491.47	78658	9991.8	4.0	4.0	4.0	10.6	283.7	620.01	1.09	0.94	33.12	9369.7	4.3157	4.3932	77.5	0.0083	99.1
5	9218883	10/26/2015	11/2/2015	78658	78827.31	10158.6	4.0	5.0	4.5	8.5	281.7	618.5	1.16	1.00	35.18	10120.8	4.3814	4.4878	106.4	0.0105	100.8
3.5	9218876	11/2/2015	11/9/2015	78827.31	78996.34	10141.8	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.95	33.42	9597.0	4.3632	4.5171	153.9	0.0160	100.6
7	9218867	11/9/2015	11/16/2015	78996.34	79165.47	10147.8	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9632.3	4.3437	4.5174	173.7	0.0180	100.7
8	9218855	11/16/2015	11/23/2015	79165.47	79328.58	9786.6	4.0	4.0	4.0	1.9	275.1	619.76	1.08	0.95	33.63	9320.8	4.3542	4.4470	92.8	0.0100	97.1
9	9218852	11/23/2015	11/30/2015	79328.58	79499.39	10248.6	4.0	4.0	4.0	1.5	274.6	616.71	1.08	0.95	33.58	9744.6	4.3264	4.6595	333.1	0.0342	101.7
10	9218843	11/30/2015	12/7/2015	79499.39	79666.99	10056	4.0	4.5	4.3	-0.7	272.4	623.82	1.10	0.99	34.94	9949.3	4.3516	4.5315	179.9	0.0181	99.8
11	9218832	12/7/2015	12/14/2015	79666.99	79832.79	9948	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9442.3	4.2934	4.5305	237.1	0.0251	98.7
12	9218827	12/14/2015	12/21/2015	79832.79	80003.25	10227.6	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.96	33.85	9804.4	4.2923	4.3583	66.0	0.0067	101.5
13	9218815	12/21/2015	12/28/2015	80003.25	80170.84	10055.4	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9662.7	4.3689	4.4261	57.2	0.0059	99.8
					Totals	130897.2							14.21	12.38	437.20	124660.4	56.721	58.934	2213.2	0.2312	
					Averages	10069.0	4.0	4.1	4.1	5.7	278.8	619.32769	1.09	0.95	33.63	9589.3	4.363	4.533	170.2	0.0178	99.9

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-4

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m³/min)	Qs Std. Flow (m³/min)	Qs Std. Flow (SCFM) (ft³/min)	Total Std. Volume (m³)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m³)	Percent Onstream (%)
1	8953719	6/29/2015	7/6/2015	50996.24	51159.19	9777	4.0	4.0	4.0	24.7	297.8	620.26	1.12	0.92	32.32	8947.2	4.4379	4.6389	201.0	0.0225	97.0
2	8953706	7/6/2015	7/13/2015	51159.19	51327.12	10075.8	4.0	4.0	4.0	19.6	292.8	620.77	1.11	0.92	32.61	9305.3	4.4449	4.5735	128.6	0.0138	100.0
3	8953711	7/13/2015	7/20/2015	51327.12	51496.93	10188.6	4.0	4.0	4.0	20.9	294.1	621.03	1.11	0.92	32.55	9389.7	4.4673	4.6019	134.6	0.0143	101.1
4	8951393	7/20/2015	7/27/15/	51496.93	51664.7	10066.2	4.0	4.0	4.0	22.0	295.1	620.52	1.12	0.92	32.47	9256.6	4.4770	4.6597	182.7	0.0197	99.9
5	8951386	7/27/2015	8/3/2015	51664.7	51830.99	9977.4	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9175.7	4.4698	4.6781	208.3	0.0227	99.0
6	8951377	8/3/2015	8/10/2015	51830.99	51998.43	10046.4	4.0	4.0	4.0	22.5	295.6	621.03	1.12	0.92	32.46	9234.0	4.5175	4.6409	123.4	0.0134	99.7
7	8951370	8/10/2015	8/17/2015	51998.43	52171.08	10359	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9518.9	4.5096	4.6431	133.5	0.0140	102.8
8	8951362	8/17/2015	8/24/2015	52171.08	52333.87	9767.4	3.5	4.0	3.8	24.4	297.5	615.18	1.09	0.88	31.19	8626.9	4.4927	4.7909	298.2	0.0346	96.9
9	8951353	8/24/2015	8/31/2015	52333.87	52500.36	9989.4	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.51	9194.8	4.5161	4.7479	231.8	0.0252	99.1
10	8951346	8/31/2015	9/8/2015	52500.36	52693.72	11601.6	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10699.3	4.5260	4.6822	156.2	0.0146	115.1
11	8951337	9/8/2015	9/14/2015	52693.72	52839.06	8720.4	4.0	4.0	4.0	22.4	295.6	618.74	1.12	0.92	32.40	8001.4	4.5007	4.6383	137.6	0.0172	86.5
12	8951330	9/14/2015	9/21/2015	52839.06	53004.58	9931.2	4.5	4.0	4.3	18.4	291.6	619.50	1.14	0.95	33.64	9459.5	4.5288	4.6227	93.9	0.0099	98.5
13	8951321	9/21/2015	9/28/2015	53004.58	53173	10105.2	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9336.5	4.5096	4.6390	129.4	0.0139	100.2
					Totals	130605.6							14.49	11.96	422.28	120145.7	58.398	60.557	2159.2	0.2358	
					Averages	10046.6	4.0	4.0	4.0	21.8	295.0	620.49846	1.11	0.92	32.48	9242.0	4.492	4.658	166.1	0.0181	99.7

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-4

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951314	9/28/2015	10/5/2015	53173	53345.32	10339.2	4.0	4.0	4.0	18.8	292.0	620.52	1.11	0.92	32.65	9559.2	4.4947	4.7139	219.2	0.0229	102.6
2	8951305	10/5/2015	10/12/2015	53345.32	53509.26	9836.4	4.0	4.0	4.0	14.4	287.5	623.31	1.10	0.93	32.98	9187.0	4.4868	4.5683	81.5	0.0089	97.6
3	9218898	10/12/2015	10/19/2015	53509.26	53677.83	10114.2	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.87	9413.5	4.3092	4.4679	158.7	0.0169	100.3
4	9218889	10/19/2015	10/26/2015	53677.83	53844.2	9982.2	4.0	4.5	4.3	10.6	283.7	620.01	1.13	0.97	34.12	9644.7	4.3293	4.3960	66.7	0.0069	99.0
5	9218882	10/26/2015	11/2/2015	53844.2	54013.59	10163.4	4.0	4.0	4.0	8.5	281.7	618.5	1.09	0.94	33.20	9554.2	4.3638	4.4216	57.8	0.0060	100.8
6	9218875	11/2/2015	11/9/2015	54013.59	54182.73	10148.4	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.95	33.42	9603.2	4.2931	4.3912	98.1	0.0102	100.7
7	9218866	11/9/2015	11/16/2015	54182.73	54351.39	10119.6	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9605.5	4.3415	4.4132	71.7	0.0075	100.4
8	9218856	11/16/2015	11/23/2015	54351.39	54518.43	10022.4	4.0	4.0	4.0	1.9	275.1	619.76	1.08	0.95	33.63	9545.3	4.3351	4.3869	51.8	0.0054	99.4
9	9218851	11/23/2015	11/30/2015	54518.43	54686.35	10075.2	4.0	4.0	4.0	1.5	274.6	616.71	1.08	0.95	33.58	9579.8	4.2843	4.4503	166.0	0.0173	100.0
10	9218842	11/30/2015	12/7/2015	54686.35	54856.93	10234.8	4.0	4.0	4.0	-0.7	272.4	623.82	1.07	0.96	33.91	9828.1	4.3684	4.4393	70.9	0.0072	101.5
11	9218833	12/7/2015	12/14/2015	54856.93	55020.41	9808.8	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9310.2	4.3242	4.4512	127.0	0.0136	97.3
12	9218826	12/14/2015	12/21/2015	55020.41	55190.95	10232.4	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.96	33.85	9809.0	4.2804	4.3361	55.7	0.0057	101.5
13	9218818	12/21/2015	12/28/2015	55190.95	55359.15	10092	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9697.9	4.3542	4.4049	50.7	0.0052	100.1
					Totals	131169.0							14.14	12.32	435.19	124337.6	56.565	57.841	1275.8	0.1338	
					Averages	10089.9	4.0	4.0	4.0	5.7	278.8	619.32769	1.09	0.95	33.48	9564.4	4.351	4.449	98.1	0.0103	100.1

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-5

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25049 b= -0.0081
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953718	6/29/2015	7/6/2015	74521.91	74684.28	9742.2	3.5	4.0	3.8	24.7	297.8	620.26	1.08	0.88	31.13	8588.4	4.4277	4.6549	227.2	0.0265	96.6
2	8953705	7/6/2015	7/13/2015	74684.28	74852.07	10067.4	4.0	4.0	4.0	19.6	292.8	620.77	1.10	0.92	32.44	9247.9	4.4504	4.5738	123.4	0.0133	99.9
3	8953710	7/13/2015	7/20/2015	74852.07	75022.07	10200	4.0	4.0	4.0	20.9	294.1	621.03	1.11	0.92	32.37	9350.2	4.4538	4.6059	152.1	0.0163	101.2
4	8951394	7/20/2015	7/27/2015	75022.02	75189.79	10066.2	4.0	4.0	4.0	22.0	295.1	620.52	1.11	0.91	32.30	9207.5	4.4690	4.5999	130.9	0.0142	99.9
5	8951385	7/27/2015	8/3/2015	75189.79	75356.01	9973.2	4.0	5.0	4.5	22.7	295.8	622.0	1.18	0.97	34.25	9673.3	4.4957	4.6661	170.4	0.0176	98.9
6	8951378	8/3/2015	8/10/2015	75356.01	75523.86	10071	4.0	4.0	4.0	22.5	295.6	621.03	1.11	0.91	32.29	9207.6	4.5028	4.6296	126.8	0.0138	99.9
7	8951369	8/10/2015	8/17/2015	75523.86	75695.95	10325.4	4.0	4.0	4.0	23.6	296.8	623.06	1.11	0.91	32.28	9437.7	4.5197	4.6844	164.7	0.0175	102.4
8	8951361	8/17/2015	8/24/2015	75695.95	75858.9	9777	3.5	4.0	3.8	24.4	297.5	615.18	1.08	0.88	31.02	8587.9	4.5077	4.8871	379.4	0.0442	97.0
9	8951354	8/24/2015	8/31/2015	75858.9	76025.73	10009.8	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.33	9164.6	4.5304	4.8052	274.8	0.0300	99.3
10	8951345	8/31/2015	9/8/2015	76025.73	76219.16	11605.8	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.39	10646.1	4.5388	4.7128	174.0	0.0163	115.1
11	8951338	9/8/2015	9/14/2015	76219.16	76363.96	8688	4.0	4.0	4.0	22.4	295.6	618.74	1.11	0.91	32.23	7929.5	4.5258	4.6917	165.9	0.0209	86.2
12	8951329	9/14/2015	9/21/2015	76363.96	76529.6	9938.4	5.0	4.0	4.5	18.4	291.6	619.50	1.17	0.97	34.43	9689.5	4.5149	4.6179	103.0	0.0106	98.6
13	8951322	9/21/2015	9/28/2015	76529.6	76697.97	10102.2	4.0	4.0	4.0	19.6	292.7	621.28	1.10	0.92	32.45	9283.9	4.5173	4.6517	134.4	0.0145	100.2
					Totals	130566.6							14.48	11.95	421.93	120014.0	58.454	60.781	2327.0	0.2557	
					Averages	10043.6	4.0	4.1	4.0	21.8	295.0	620.49846	1.11	0.92	32.46	9231.8	4.496	4.675	179.0	0.0197	99.6

Comments:

Insert weekly flow check values in yellow columns.

Blue column values are calculated.

Green columns are calculated averages from the met station.

Insert filter weight values into orange columns.

BHV-5

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25049 b= -0.0081
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951313	9/28/2015	10/5/2015	76697.97	76870.34	10342.2	4.0	4.0	4.0	18.8	292.0	620.52	1.10	0.92	32.48	9510.8	4.5065	4.7588	252.3	0.0265	102.6
2	8951306	10/5/2015	10/12/2015	76870.34	77034.3	9837.6	4.0	4.0	4.0	14.4	287.5	623.31	1.09	0.93	32.80	9138.2	4.4802	4.5671	86.9	0.0095	97.6
3	9218897	10/12/2015	10/19/2015	77034.3	77202.85	10113	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.69	9361.6	4.3075	4.4617	154.2	0.0165	100.3
4	9218890	10/19/2015	10/26/2015	77202.85	77369.21	9981.6	4.0	4.0	4.0	10.6	283.7	620.01	1.09	0.93	32.94	9309.0	4.3423	4.4130	70.7	0.0076	99.0
5	9218881	10/26/2015	11/2/2015	77369.21	77538.6	10163.4	4.0	4.5	4.3	8.5	281.7	618.5	1.12	0.96	34.03	9792.5	4.3619	4.4317	69.8	0.0071	100.8
6	9218874	11/2/2015	11/9/2015	77538.6	77707.75	10149	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.94	33.23	9550.6	4.3081	4.4199	111.8	0.0117	100.7
7	9218865	11/9/2015	11/16/2015	77707.75	77877.25	10170	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.94	33.33	9599.6	4.3853	4.4637	78.4	0.0082	100.9
8	9218857	11/16/2015	11/23/2015	77877.25	78043.45	9972	4.0	4.0	4.0	1.9	275.1	619.76	1.07	0.95	33.45	9444.3	4.3852	4.4470	61.8	0.0065	98.9
9	9218850	11/23/2015	11/30/2015	78043.45	78211.39	10076.4	4.0	4.5	4.3	1.5	274.6	616.71	1.11	0.97	34.41	9819.0	4.2764	4.4523	175.9	0.0179	100.0
10	9218841	11/30/2015	12/7/2015	78211.39	78382.43	10262.4	4.0	4.0	4.0	-0.7	272.4	623.82	1.06	0.95	33.72	9798.9	4.3822	4.4724	90.2	0.0092	101.8
11	9218834	12/7/2015	12/14/2015	78382.43	78545.8	9802.2	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.94	33.33	9252.2	4.3398	4.5141	174.3	0.0188	97.2
12	9218825	12/14/2015	12/21/2015	78545.8	78716.01	10212.6	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.95	33.66	9734.8	4.2683	4.3340	65.7	0.0067	101.3
13	9218817	12/21/2015	12/28/2015	78716.01	78884.55	10112.4	4.0	4.0	4.0	-5.2	267.9	614.42	1.06	0.96	33.74	9662.5	4.3516	4.4146	63.0	0.0065	100.3
					Totals	131194.8							14.10	12.28	433.82	123973.9	56.695	58.150	1455.0	0.1529	
					Averages	10091.9	4.0	4.1	4.0	5.7	278.8	619.32769	1.08	0.94	33.37	9536.5	4.361	4.473	111.9	0.0118	100.1

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-6

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953717	6/29/2015	7/6/2015	10550.87	10713.75	9772.8	4.5	4.0	4.3	24.7	297.8	620.26	1.15	0.94	33.30	9214.8	4.4645	4.7104	245.9	0.0267	97.0
2	8953704	7/6/2015	7/13/2015	10713.75	10881.4	10059	3.5	4.0	3.8	19.6	292.8	620.77	1.08	0.89	31.59	8998.9	4.4373	4.5676	130.3	0.0145	99.8
3	8951400	7/13/2015	7/20/2015	10881.4	11051.47	10204.2	4.0	4.0	4.0	20.9	294.1	621.03	1.11	0.92	32.55	9404.1	4.4863	4.6169	130.6	0.0139	101.2
4	8951395	7/20/2015	7/27/2015	11051.47	11219.22	10065	4.0	4.0	4.0	22.0	295.1	620.52	1.12	0.92	32.47	9255.5	4.4875	4.6329	145.4	0.0157	99.9
5	8951384	7/27/2015	8/3/2015	11219.22	11385.6	9982.8	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9180.6	4.4872	4.6756	188.4	0.0205	99.0
6	8951379	8/3/2015	8/10/2015	11385.6	11552.97	10042.2	6.0	4.0	5.0	22.5	295.6	621.03	1.25	1.03	36.24	10304.5	4.4847	4.6256	140.9	0.0137	99.6
7	8951368	8/10/2015	8/17/2015	11552.97	11725.78	10368.6	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9527.7	4.5188	4.6718	153.0	0.0161	102.9
8	8951360	8/17/2015	8/24/2015	11725.78	11888.43	9759	3.5	4.0	3.8	24.4	297.5	615.18	1.09	0.88	31.19	8619.5	4.4977	4.7938	296.1	0.0344	96.8
9	8951355	8/24/2015	8/31/2015	11888.43	12054.92	9989.4	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.51	9194.8	4.5263	4.7424	216.1	0.0235	99.1
10	8951344	8/31/2015	9/8/2015	0	190.85	11451	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10560.4	4.4972	4.6438	146.6	0.0139	113.6
11	8951339	9/8/2015	9/14/2015	190.85	336.22	8722.2	4.0	4.0	4.0	22.4	295.6	618.74	1.12	0.92	32.40	8003.0	4.5399	4.6776	137.7	0.0172	86.5
12	8951328	9/14/2015	9/21/2015	336.22	505.31	10145.4	4.0	4.0	4.0	18.4	291.6	619.50	1.11	0.92	32.65	9378.9	4.4999	4.5973	97.4	0.0104	100.6
13	8951323	9/21/2015	9/28/2015	505.31	670.58	9916.2	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9161.9	4.5479	4.6445	96.6	0.0105	98.4
					Totals	130477.8							14.59	12.04	425.02	120804.6	58.475	60.600	2125.0	0.2309	
					Averages	10036.8	4.1	4.0	4.1	21.8	295.0	620.49846	1.12	0.93	32.69	9292.7	4.498	4.662	163.5	0.0178	99.6

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-6

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951312	9/28/2015	10/5/2015	670.58	842.43	10311	4.0	4.0	4.0	18.8	292.0	620.52	1.11	0.92	32.65	9533.1	4.5010	4.7132	212.2	0.0223	102.3
2	8951307	10/5/2015	10/12/2015	842.43	1006.39	9837.6	4.0	4.0	4.0	14.4	287.5	623.31	1.10	0.93	32.98	9188.1	4.4991	4.5630	63.9	0.0070	97.6
3	9218896	10/12/2015	10/19/2015	1006.39	1174.97	10114.8	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.87	9414.1	4.2608	4.4279	167.1	0.0177	100.3
4	9218891	10/19/2015	10/26/2015	1174.97	1341.36	9983.4	4.0	4.0	4.0	10.6	283.7	620.01	1.09	0.94	33.12	9361.8	4.3234	4.3888	65.4	0.0070	99.0
5	9218880	10/26/2015	11/2/2015	1341.36	1510.72	10161.6	4.0	4.0	4.0	8.5	281.7	618.5	1.09	0.94	33.20	9552.5	4.3689	4.4255	56.6	0.0059	100.8
6	9218873	11/2/2015	11/9/2015	1510.72	1679.86	10148.4	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.95	33.42	9603.2	4.3103	4.4100	99.7	0.0104	100.7
7	9218863	11/9/2015	11/16/2015	1679.86	1848.52	10119.6	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9605.5	4.3569	4.4332	76.3	0.0079	100.4
8	9218858	11/16/2015	11/23/2015	1848.52	2015.58	10023.6	4.0	4.5	4.3	1.9	275.1	619.76	1.11	0.98	34.65	9836.1	4.3792	4.4192	40.0	0.0041	99.4
9	9218849	11/23/2015	11/30/2015	2015.58	2183.53	10077	4.0	4.5	4.3	1.5	274.6	616.71	1.11	0.98	34.60	9872.1	4.2662	4.3552	89.0	0.0090	100.0
10	9218840	11/30/2015	12/7/2015	2183.53	2354.13	10236	4.0	4.0	4.0	-0.7	272.4	623.82	1.07	0.96	33.91	9829.3	4.3900	4.4862	96.2	0.0098	101.5
11	9218835	12/7/2015	12/14/2015	2354.13	2517.57	9806.4	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9307.9	4.4112	4.4932	82.0	0.0088	97.3
12	9218824	12/14/2015	12/21/2015	2517.57	2688.1	10231.8	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.96	33.85	9808.4	4.2701	4.3336	63.5	0.0065	101.5
13	9218816	12/21/2015	12/28/2015	2688.1	2856.32	10093.2	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9699.0	4.3773	4.4366	59.3	0.0061	100.1
					Totals	131144.4							14.18	12.35	436.23	124611.2	56.714	57.886	1171.2	0.1225	
					Averages	10088.0	4.0	4.1	4.0	5.7	278.8	619.32769	1.09	0.95	33.56	9585.5	4.363	4.453	90.1	0.0094	100.1

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-7

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953716	6/29/2015	7/6/2015	3182.55	3348.03	9928.8	5.0	4.0	4.5	24.7	297.8	620.26	1.19	0.97	34.25	9629.7	4.4660	4.6977	231.7	0.0241	98.5
2	8953703	7/6/2015	7/13/2015	3348.03	3516.95	10135.2	4.0	4.0	4.0	19.6	292.8	620.77	1.11	0.92	32.61	9360.2	4.4487	4.5649	116.2	0.0124	100.5
3	8951399	7/13/2015	7/20/2015	3516.95	3686.01	10143.6	4.0	4.0	4.0	20.9	294.1	621.03	1.11	0.92	32.55	9348.2	4.4788	4.6400	161.2	0.0172	100.6
4	8951396	7/20/2015	7/27/2015	3686.01	3853.66	10059	4.0	4.0	4.0	22.0	295.1	620.52	1.12	0.92	32.47	9250.0	4.4945	4.6300	135.5	0.0146	99.8
5	8951383	7/27/2015	8/3/2015	3853.66	4021.04	10042.8	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9235.8	4.4909	4.6795	188.6	0.0204	99.6
6	8951380	8/3/2015	8/10/2015	4021.04	4189.12	10084.8	4.0	4.0	4.0	22.5	295.6	621.03	1.12	0.92	32.46	9269.3	4.4900	4.5556	65.6	0.0071	100.0
7	8951367	8/10/2015	8/17/2015	4189.12	4361.43	10338.6	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9500.1	4.5083	4.6837	175.4	0.0185	102.6
8	8951359	8/17/2015	8/24/2015	4361.43	4523.91	9748.8	3.5	4.0	3.8	24.4	297.5	615.18	1.09	0.88	31.19	8610.5	4.4948	4.8778	383.0	0.0445	96.7
9	8951356	8/24/2015	8/31/2015	4523.91	4692.52	10116.6	4.0	4.0	4.0	22.4	295.5	622.55	1.11	0.92	32.51	9311.8	4.5066	4.7331	226.5	0.0243	100.4
10	8951343	8/31/2015	9/8/2015	4692.52	4884.18	11499.6	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10605.2	4.5237	4.7008	177.1	0.0167	114.1
11	8951340	9/8/2015	9/14/2015	4884.18	5027.99	8628.6	4.0	4.0	4.0	22.4	295.6	618.74	1.12	0.92	32.40	7917.1	4.4892	4.6376	148.4	0.0187	85.6
12	8951327	9/14/2015	9/21/2015	5027.99	5195.44	10047	4.0	4.0	4.0	18.4	291.6	619.74	1.11	0.92	32.65	9289.7	4.4932	4.5851	91.9	0.0099	99.7
13	8951324	9/21/2015	9/28/2015	5195.44	5365.18	10184.4	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9409.7	4.5085	4.6568	148.3	0.0158	101.0
					Totals	130957.8							14.53	11.98	423.22	120737.4	58.393	60.643	2249.4	0.2442	
					Averages	10073.7	4.0	4.0	4.0	21.8	295.0	620.51692	1.12	0.92	32.56	9287.5	4.492	4.665	173.0	0.0188	99.9

Comments:

Insert weekly flow check values in yellow columns.

Blue column values are calculated.

Green columns are calculated averages from the met station.

Insert filter weight values into orange columns.

BHV-7

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28 th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951311	9/28/2015	10/5/2015	5365.18	5536.99	10308.6	4.0	4.0	4.0	18.8	292.0	620.52	1.11	0.92	32.65	9530.9	4.5065	4.7607	254.2	0.0267	102.3
2	8951308	10/5/2015	10/12/2015	5536.99	5700.97	9838.8	4.0	4.0	4.0	14.4	287.5	623.31	1.10	0.93	32.98	9189.2	4.5123	4.5916	79.3	0.0086	97.6
3	9218895	10/12/2015	10/19/2015	5700.97	5869.54	10114.2	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.87	9413.5	4.2947	4.4519	157.2	0.0167	100.3
4	9218892	10/19/2015	10/26/2015	5869.54	6035.95	9984.6	4.0	4.0	4.0	10.6	283.7	620.01	1.09	0.94	33.12	9362.9	4.2937	4.3626	68.9	0.0074	99.1
5	9218879	10/26/2015	11/2/2015	6035.95	6205.32	10162.2	4.0	4.0	4.0	8.5	281.7	618.5	1.09	0.94	33.20	9553.1	4.3589	4.4348	75.9	0.0079	100.8
6	9218872	11/2/2015	11/9/2015	6205.32	6374.44	10147.2	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.95	33.42	9602.1	4.3189	4.4285	109.6	0.0114	100.7
7	9218864	11/9/2015	11/16/2015	6374.44	6543.08	10118.4	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9604.3	4.3672	4.4607	93.5	0.0097	100.4
8	9218859	11/16/2015	11/23/2015	6543.08	6708.4	9919.2	4.0	4.0	4.0	1.9	275.1	619.76	1.08	0.95	33.63	9447.1	4.3569	4.4140	57.1	0.0060	98.4
9	9218848	11/23/2015	11/30/2015	6708.4	6878.56	10209.6	4.0	4.5	4.3	1.5	274.6	616.71	1.11	0.98	34.60	10002.0	4.2742	4.4270	152.8	0.0153	101.3
10	9218838	11/30/2015	12/7/2015	6878.56	7046.85	10097.4	4.0	3.5	3.8	-0.7	272.4	623.82	1.04	0.93	32.85	9392.7	4.3971	4.5012	104.1	0.0111	100.2
11	9218836	12/7/2015	12/14/2015	7046.85	7212.62	9946.2	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9440.6	4.4011	4.5629	161.8	0.0171	98.7
12	9218823	12/14/2015	12/21/2015	7212.62	7383.99	10282.2	4.0	4.0	4.0	-2.7	270.4	617.22	1.07	0.96	33.85	9856.7	4.2862	4.3546	68.4	0.0069	102.0
13	9218815	12/21/2015	12/28/2015	7383.99	7550.35	9981.6	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9591.8	4.3943	4.4599	65.6	0.0068	99.0
					Totals	131110.2							14.11	12.29	434.15	123987.1	56.762	58.210	1448.4	0.1518	
					Averages	10085.4	4.0	4.0	4.0	5.7	278.8	619.32769	1.09	0.95	33.40	9537.5	4.366	4.478	111.4	0.0117	100.1

Comments:

Insert weekly flow check values in yellow columns.
Blue column values are calculated.
Green columns are calculated averages from the met station.
Insert filter weight values into orange columns.

BHV-8

Energey Fuels Resources - White Mesa Mill
Period: June 29th, 2015 - September 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8953715	6/29/2015	7/6/2015	3650.85	3816.26	9924.6	3.0	4.0	3.5	24.7	297.8	620.26	1.05	0.86	30.26	8503.8	4.4378	4.5209	83.1	0.0098	98.5
2	8953702	7/6/2015	7/13/2015	3816.26	3985.2	10136.4	4.0	4.0	4.0	19.6	292.8	620.77	1.11	0.92	32.61	9361.3	4.4462	4.5086	62.4	0.0067	100.6
3	8951398	7/13/2015	7/20/2015	3985.2	4154.23	10141.8	3.5	4.0	3.8	20.9	294.1	621.03	1.08	0.89	31.53	9053.9	4.4826	4.5643	81.7	0.0090	100.6
4	8951397	7/20/2015	7/27/2015	4154.23	4321.87	10058.4	4.0	4.0	4.0	22.0	295.1	620.52	1.12	0.92	32.47	9249.5	4.4872	4.5579	70.7	0.0076	99.8
5	8951382	7/27/2015	8/3/2015	4321.87	4489.33	10047.6	4.0	4.0	4.0	22.7	295.8	622.0	1.12	0.92	32.48	9240.2	4.4986	4.6055	106.9	0.0116	99.7
5	8951381	8/3/2015	8/10/2015	4489.33	4656.99	10059.6	5.0	4.0	4.5	22.5	295.6	621.03	1.18	0.97	34.40	9799.2	4.4875	4.5883	100.8	0.0103	99.8
7	8951366	8/10/2015	8/17/2015	4656.99	4829.38	10343.4	4.0	4.0	4.0	23.6	296.8	623.06	1.12	0.92	32.45	9504.5	4.5091	4.6627	153.6	0.0162	102.6
8	8951358	8/17/2015	8/24/2015	4829.38	4992.18	9768	5.0	4.0	4.5	24.4	297.5	615.18	1.19	0.97	34.13	9439.2	4.4980	4.6537	155.7	0.0165	96.9
9	8951357	8/24/2015	8/31/2015	4992.18	5161.06	10132.8	3.5	4.0	3.8	22.4	295.5	622.55	1.08	0.89	31.49	9034.7	4.5229	4.6304	107.5	0.0119	100.5
10	8951342	8/31/2015	9/8/2015	5161.06	5352.48	11485.2	4.0	4.0	4.0	20.3	293.5	620.52	1.11	0.92	32.57	10591.9	4.5352	4.6785	143.3	0.0135	113.9
11	8951341	9/8/2015	9/14/2015	5352.48	5498.1	8737.2	4.5	4.0	4.3	22.4	295.6	618.74	1.15	0.95	33.39	8260.1	4.5166	4.6530	136.4	0.0165	86.7
12	8951326	9/14/2015	9/21/2015	5498.1	5663.72	9937.2	4.0	4.0	4.0	18.4	291.6	619.50	1.11	0.92	32.65	9186.4	4.5011	4.6070	105.9	0.0115	98.6
13	8951325	9/21/2015	9/28/2015	5663.72	5833.52	10188	4.0	4.0	4.0	19.6	292.7	621.28	1.11	0.92	32.63	9413.0	4.5119	4.6294	117.5	0.0125	101.1
					Totals	130960.2							14.52	11.98	423.05	120637.8	58.435	59.860	1425.5	0.1536	
					Averages	10073.9	4.0	4.0	4.0	21.8	295.0	620.49846	1.12	0.92	32.54	9279.8	4.495	4.605	109.7	0.0118	99.9

Comments:

Insert weekly flow check values in yellow columns.
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Insert filter weight values into orange columns.

BHV-8

Energey Fuels Resources - White Mesa Mill
Period: September 28th, 2015 - December 28th, 2015

Calibration Date: 7/7/2015
Calibration Slope & Intercept: m= 1.25404 b= -0.0195
Orifice S/N: 8091779

First Monitoring Quarter 2014
Updated: 7/30/14

Week #	Filter Number	Start Date	Stop Date	Start Time	Stop Time	Total Time (min)	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	ΔH Average Manometer (in. H_2O)	Ta Wkly. Avg. Temp. (°C)	Ta Wkly. Avg. Temp. (K)	Pa Wkly. Avg. Pressure (mmHg)	Qa Act. Flow (m^3/min)	Qs Std. Flow (m^3/min)	Qs Std. Flow (SCFM) (ft^3/min)	Total Std. Volume (m^3)	Tare Weight (g)	Gross Weight (g)	Net Weight (mg)	Loading (mg/m^3)	Percent Onstream (%)
1	8951310	9/28/2015	10/5/2015	5833.52	6005.28	10305.6	4.0	4.0	4.0	18.8	292.0	620.52	1.11	0.92	32.65	9528.1	4.5096	4.7239	214.3	0.0225	102.2
2	8951309	10/5/2015	10/12/2015	6005.28	6169.26	9838.8	4.0	4.0	4.0	14.4	287.5	623.31	1.10	0.93	32.98	9189.2	4.5131	4.5720	58.9	0.0064	97.6
3	9218894	10/12/2015	10/19/2015	6169.26	6337.86	10116	4.0	4.0	4.0	16.0	289.1	622.55	1.10	0.93	32.87	9415.2	4.3183	4.4599	141.6	0.0150	100.4
4	9218893	10/19/2015	10/26/2015	6337.86	6504.31	9987	4.0	5.0	4.5	10.6	283.7	620.01	1.16	0.99	35.10	9925.2	4.3034	4.3658	62.4	0.0063	99.1
5	9218878	10/26/2015	11/2/2015	6504.31	6673.67	10161.6	4.0	4.5	4.3	8.5	281.7	618.5	1.12	0.97	34.21	9842.4	4.3914	4.4421	50.7	0.0052	100.8
5	9218871	11/2/2015	11/9/2015	6673.67	6842.77	10146	4.0	4.0	4.0	5.2	278.4	619.25	1.08	0.95	33.42	9601.0	4.3158	4.4337	117.9	0.0123	100.7
7	9218862	11/9/2015	11/16/2015	6842.77	7011.4	10117.8	4.0	4.0	4.0	3.4	276.6	618.99	1.08	0.95	33.52	9603.8	4.3575	4.4289	71.4	0.0074	100.4
8	9218860	11/16/2015	11/23/2015	7011.4	7176.78	9922.8	3.0	4.0	3.5	1.9	275.1	619.76	1.01	0.89	31.49	8848.9	4.3807	4.3840	3.3	0.0004	98.4
9	9218847	11/23/2015	11/30/2015	7176.78	7346.92	10208.4	4.0	3.5	3.8	1.5	274.6	616.71	1.05	0.92	32.53	9402.6	4.2742	4.3784	104.2	0.0111	101.3
10	9218838	11/30/2015	12/7/2015	7346.92	7515.24	10099.2	4.0	3.0	3.5	-0.7	272.4	623.82	1.00	0.90	31.75	9080.6	4.3927	4.4546	61.9	0.0068	100.2
11	9218837	12/7/2015	12/14/2015	7515.24	7681.1	9951.6	4.0	4.0	4.0	2.2	275.3	616.20	1.08	0.95	33.52	9445.7	4.4032	4.5077	104.5	0.0111	98.7
12	9218822	12/14/2015	12/21/2015	7681.1	7852.33	10273.8	4.0	4.5	4.3	-2.7	270.4	617.22	1.10	0.99	34.88	10147.4	4.3492	4.4087	59.5	0.0059	101.9
13	9218814	12/21/2015	12/28/2015	7852.33	8018.24	9954.6	4.0	4.0	4.0	-5.2	267.9	614.42	1.07	0.96	33.94	9565.8	4.3891	4.4401	51.0	0.0053	98.8
					Totals	131083.2							14.07	12.26	432.85	123596.0	56.898	58.000	1101.6	0.1156	
					Averages	10083.3	3.9	4.0	4.0	5.7	278.8	619.32769	1.08	0.94	33.30	9507.4	4.377	4.462	84.7	0.0089	100.0

Comments:

Insert weekly flow check values in yellow columns.

Blue column values are calculated.

Green columns are calculated averages from the met station.

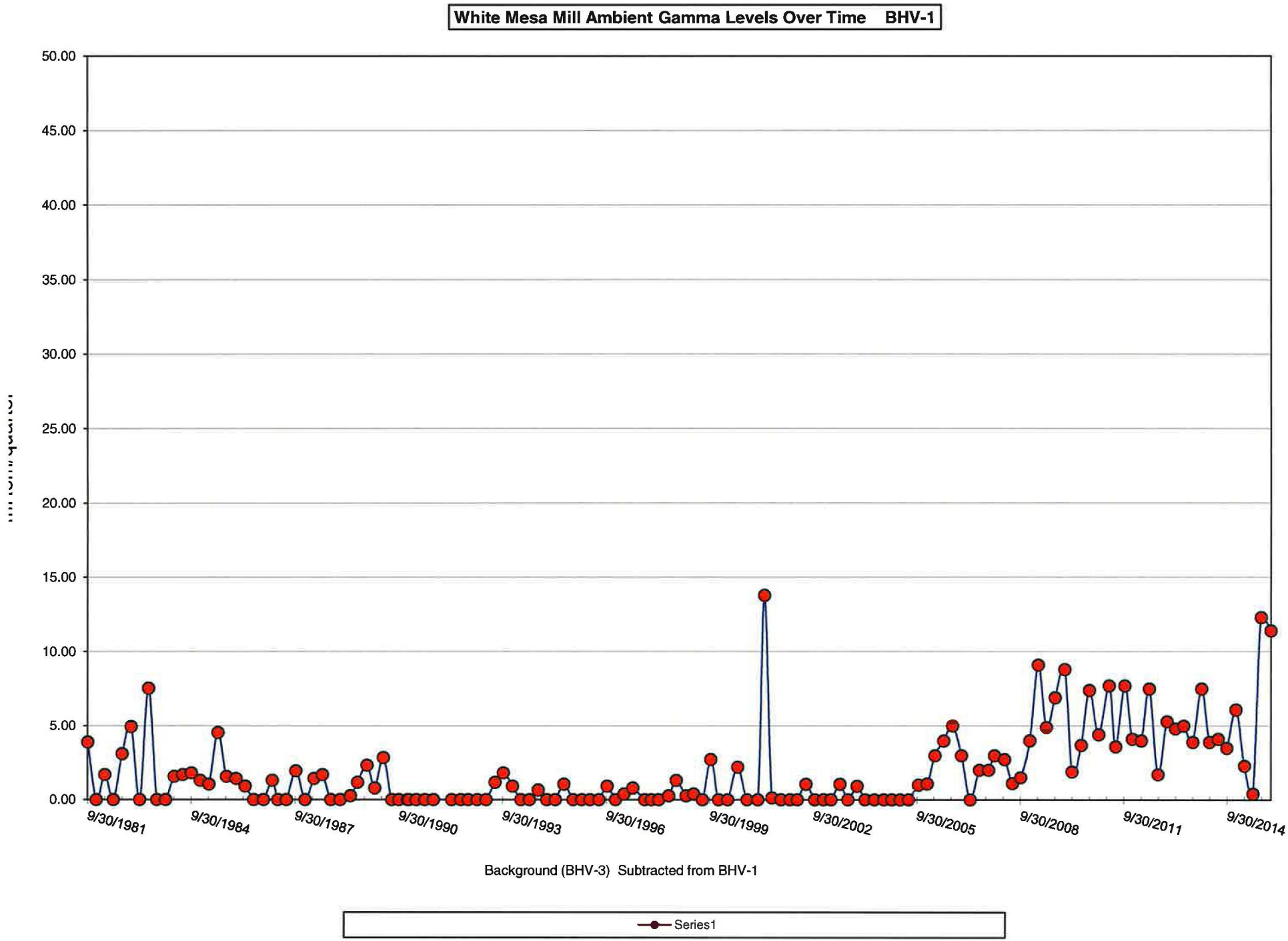
Insert filter weight values into orange columns.

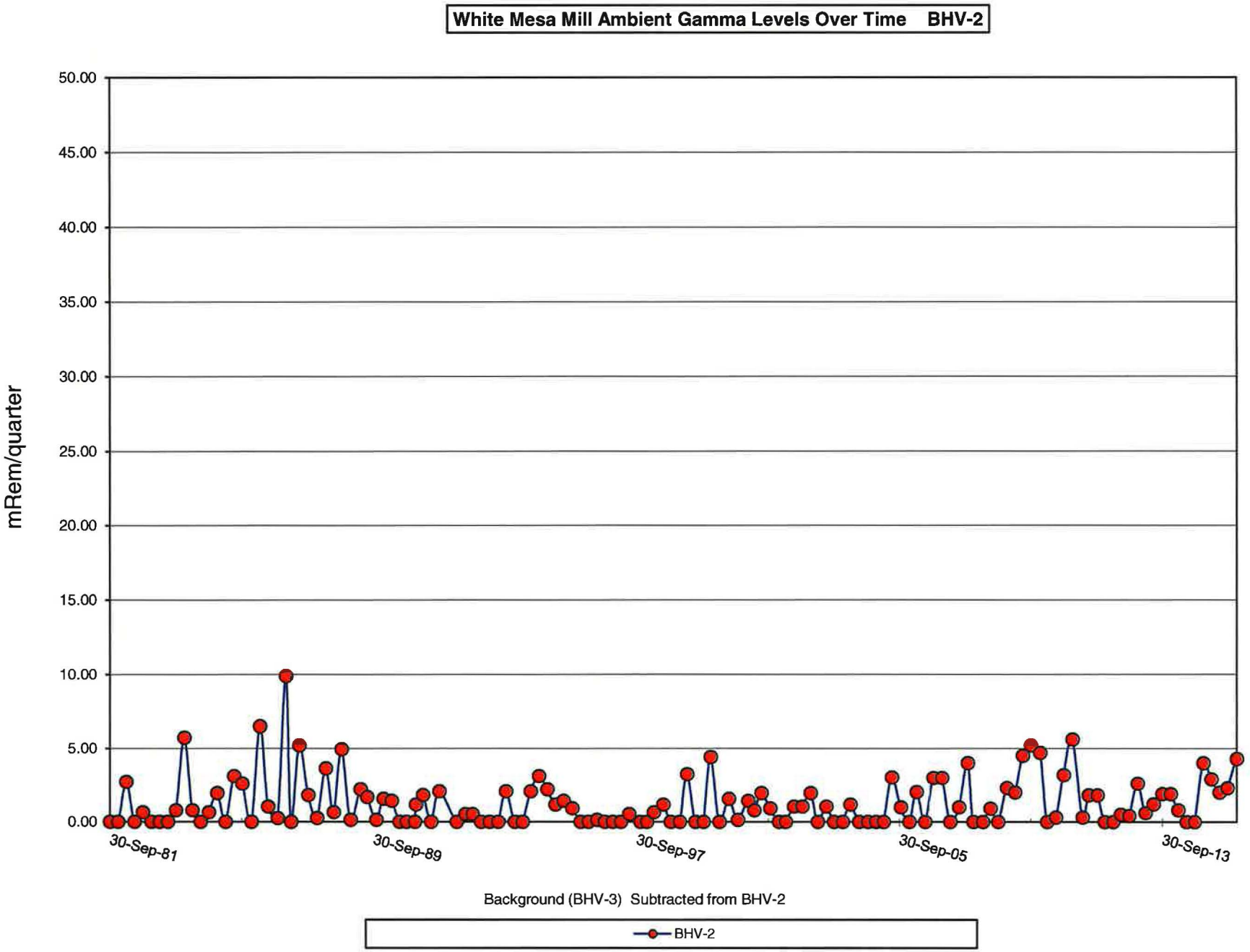
Blanks		Period: June 29th, 2015 - September 28th, 2015		
Week #	Filter Number	Start Date	Stop Date	Net
1	8953709	29-Jun-15	06-Jul-15	4.4368
2	8953714	06-Jul-15	13-Jul-15	4.4537
3	8951390	13-Jul-15	20-Jul-15	4.4814
4	8951389	20-Jul-15	27-Jul-15	4.4661
5	8951374	27-Jul-15	03-Aug-15	4.5256
6	8951373	03-Aug-15	10-Aug-15	4.5102
7	8951365	10-Aug-15	17-Aug-15	4.4923
8	8951350	17-Aug-15	24-Aug-15	4.5176
9	8951349	24-Aug-15	31-Aug-15	4.5315
10	8951334	31-Aug-15	08-Sep-15	4.5660
11	8951333	08-Sep-15	14-Sep-15	4.5066
12	8951318	14-Sep-15	21-Sep-15	4.5124
13	8951317	21-Sep-15	28-Sep-15	4.5102
	Totals			

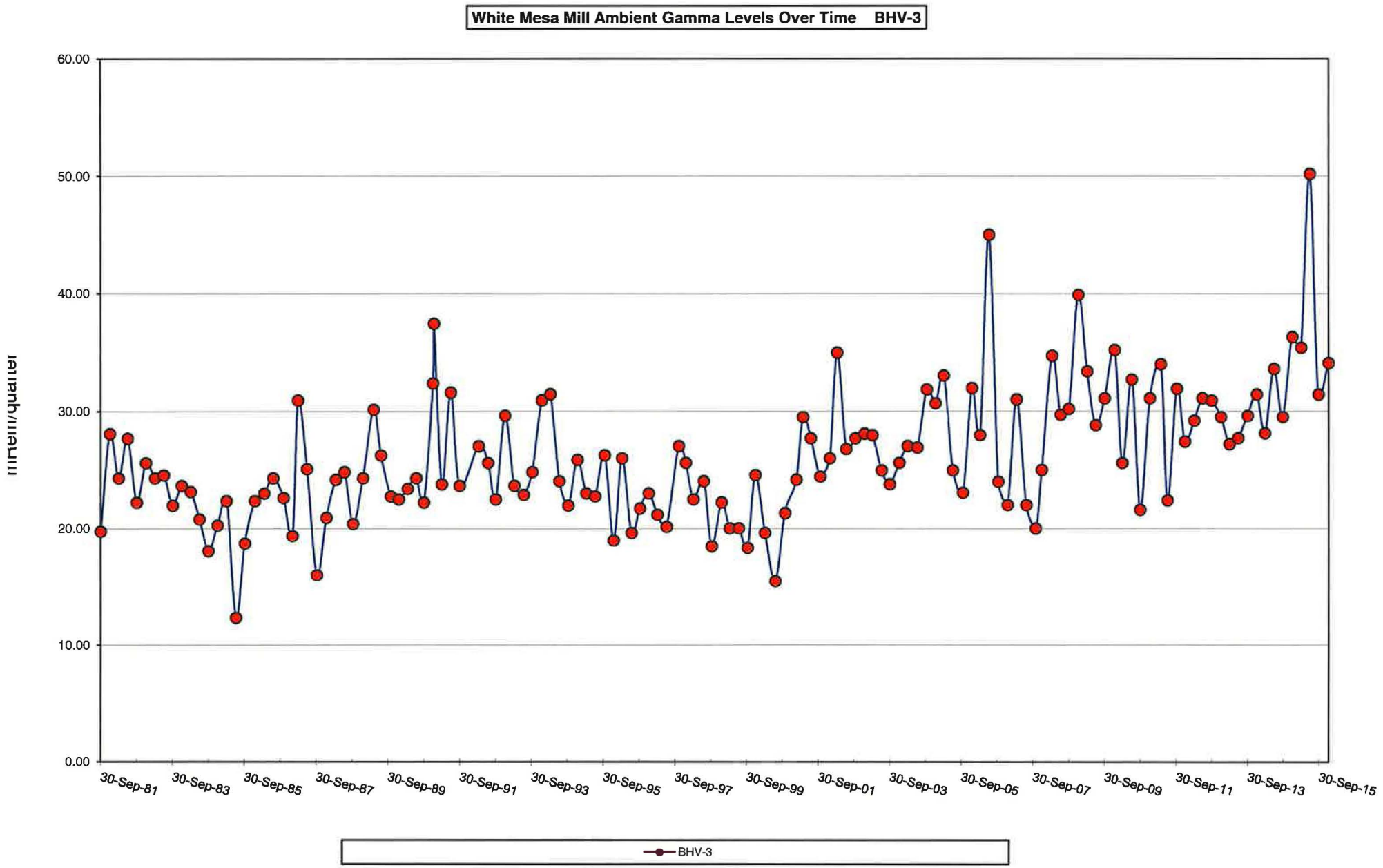
Blanks		Period: September 28th, 2015 - December 28th, 2015		
Week #	Filter Number	Start Date	Stop Date	Net
1	8951302	28-Sep-15	05-Oct-15	4.5213
2	8951301	05-Oct-15	12-Oct-15	4.5270
3	9218886	12-Oct-15	19-Oct-15	4.3615
4	9218885	19-Oct-15	26-Oct-15	4.3581
5	9218870	26-Oct-15	02-Nov-15	4.3128
6	9218869	02-Nov-15	09-Nov-15	4.3124
7	9218861	09-Nov-15	16-Nov-15	4.3471
8	9218846	16-Nov-15	23-Nov-15	4.2831
9	9218845	23-Nov-15	30-Nov-15	4.3610
10	9218830	30-Nov-15	07-Dec-15	4.2948
11	9218829	07-Dec-15	14-Dec-15	4.3813
12	9218821	14-Dec-15	21-Dec-15	4.3762
13	9218806	21-Dec-15	28-Dec-15	4.2787
	Totals			

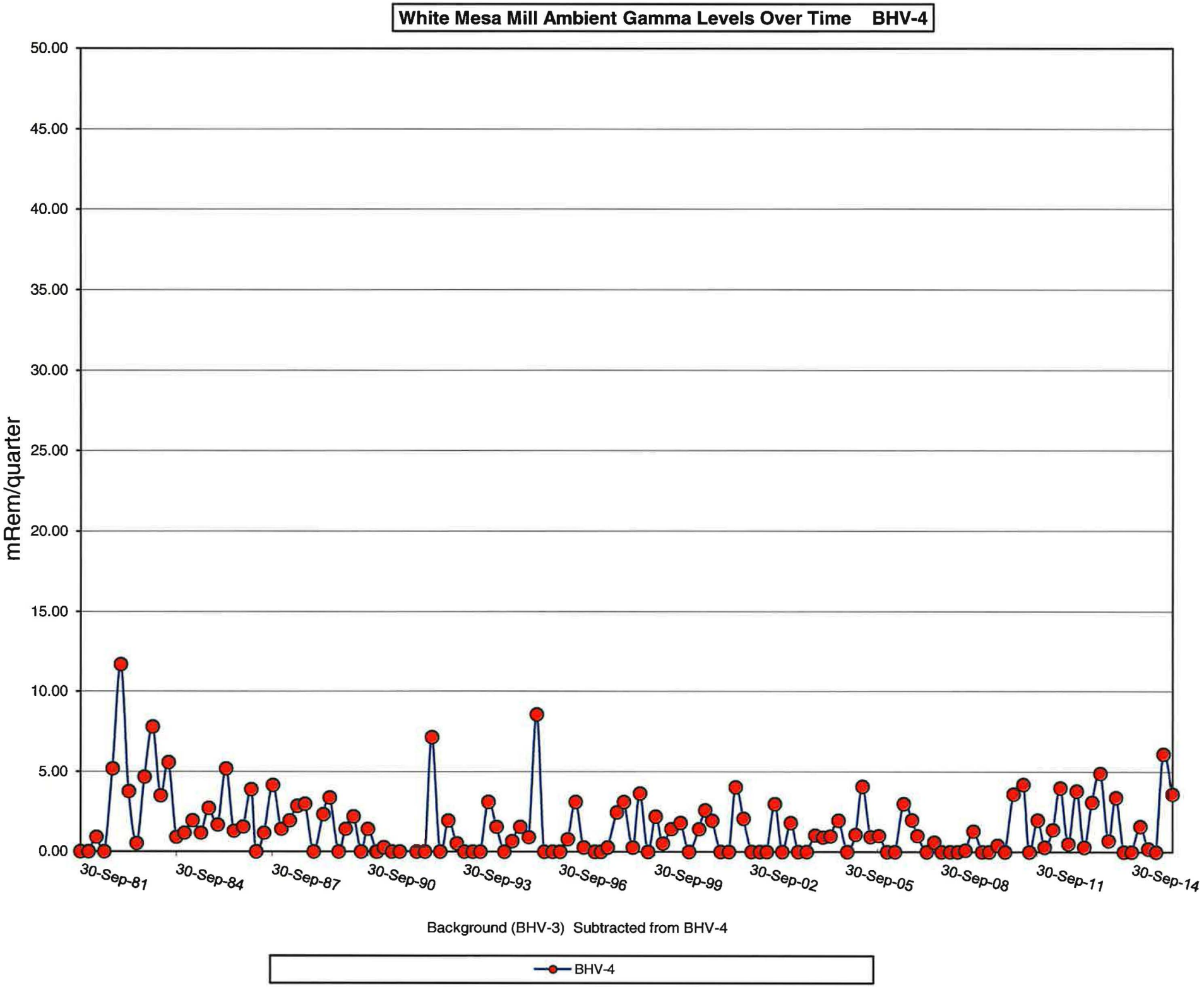
ATTACHMENT E

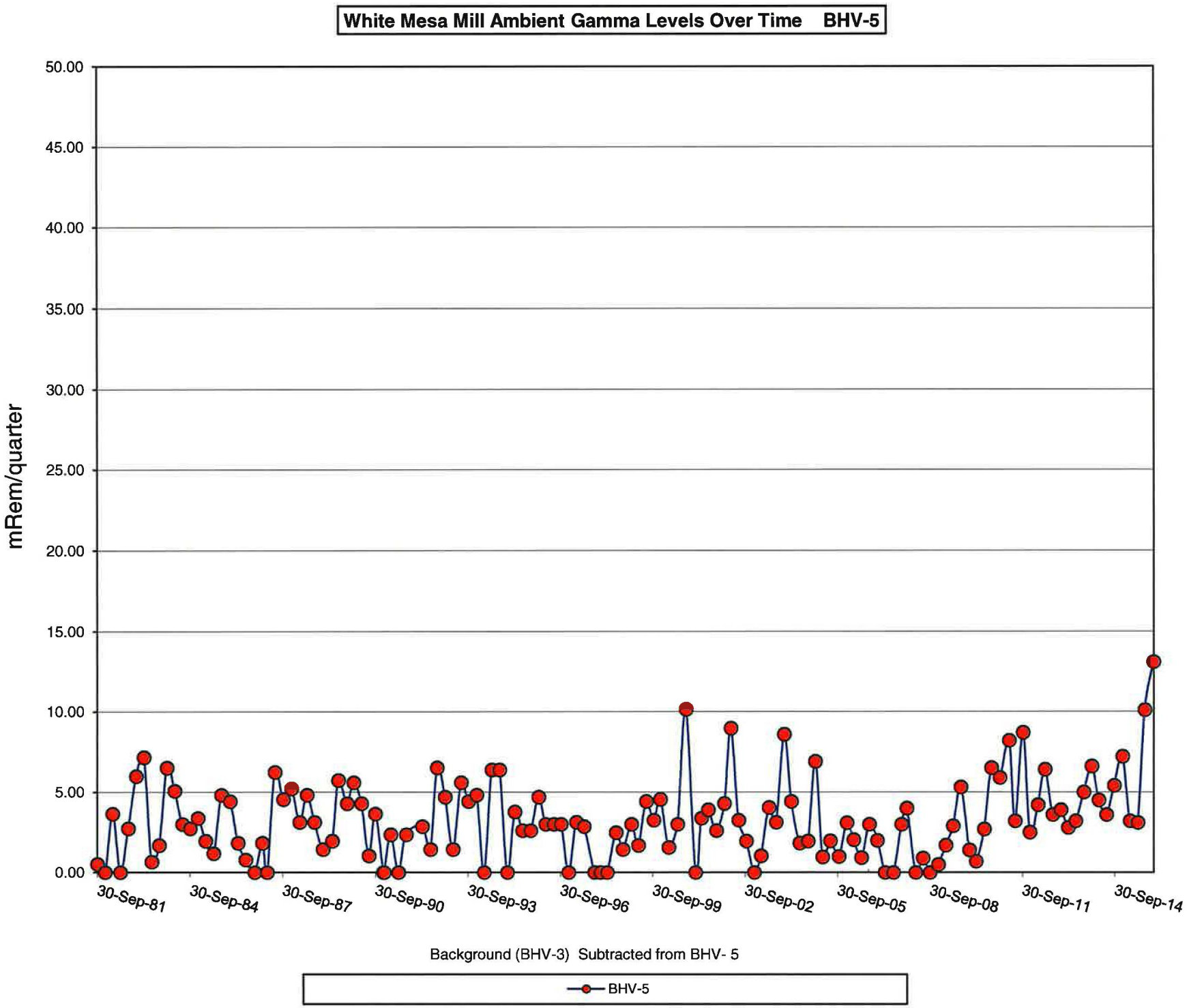
ENVIRONMENTAL GAMMA GRAPHS AND SUPPORTING DATA

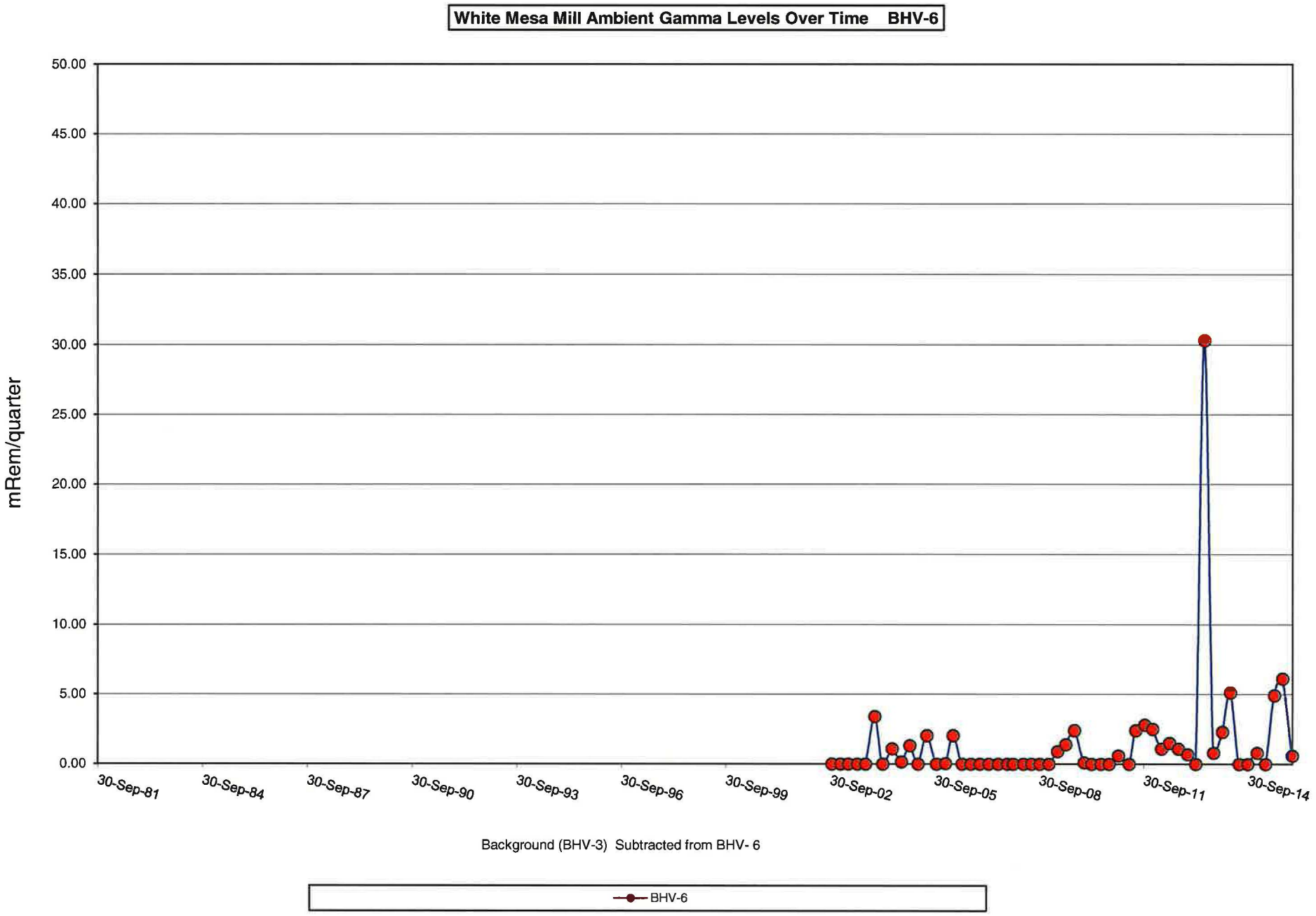

White Mesa Mill Ambient Gamma Levels Over Time BHV-1
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
9/30/1981
9/30/1984
9/30/1987
9/30/1990
9/30/1993
9/30/1996
9/30/1999
9/30/2002
9/30/2005
9/30/2008
9/30/2011
9/30/2014
Background (BHV-3) Subtracted from BHV-1
Series1

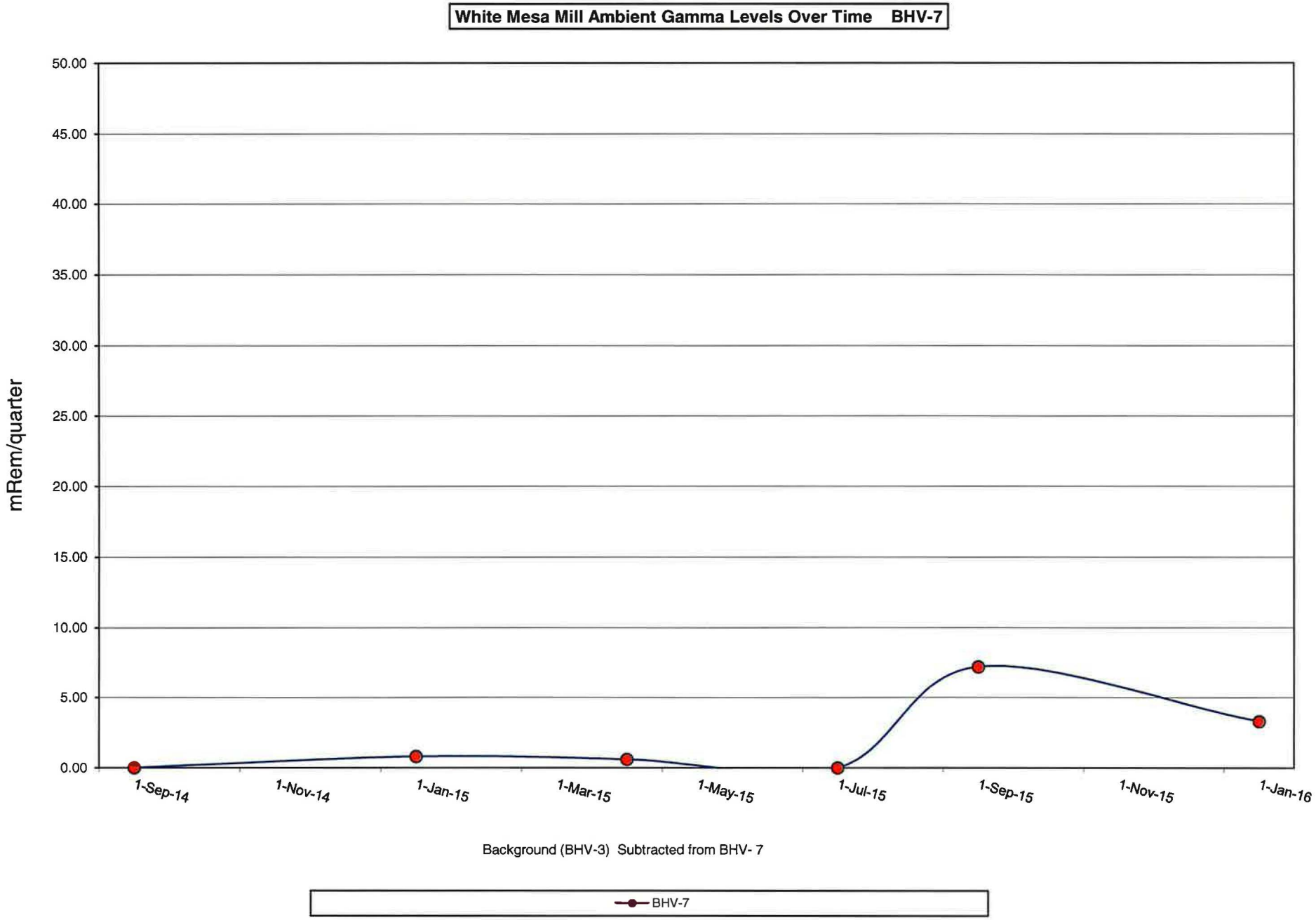

White Mesa Mill Ambient Gamma Levels Over Time BHV-2
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
30-Sep-81
30-Sep-89
30-Sep-97
30-Sep-05
30-Sep-13
Background (BHV-3) Subtracted from BHV-2
BHV-2

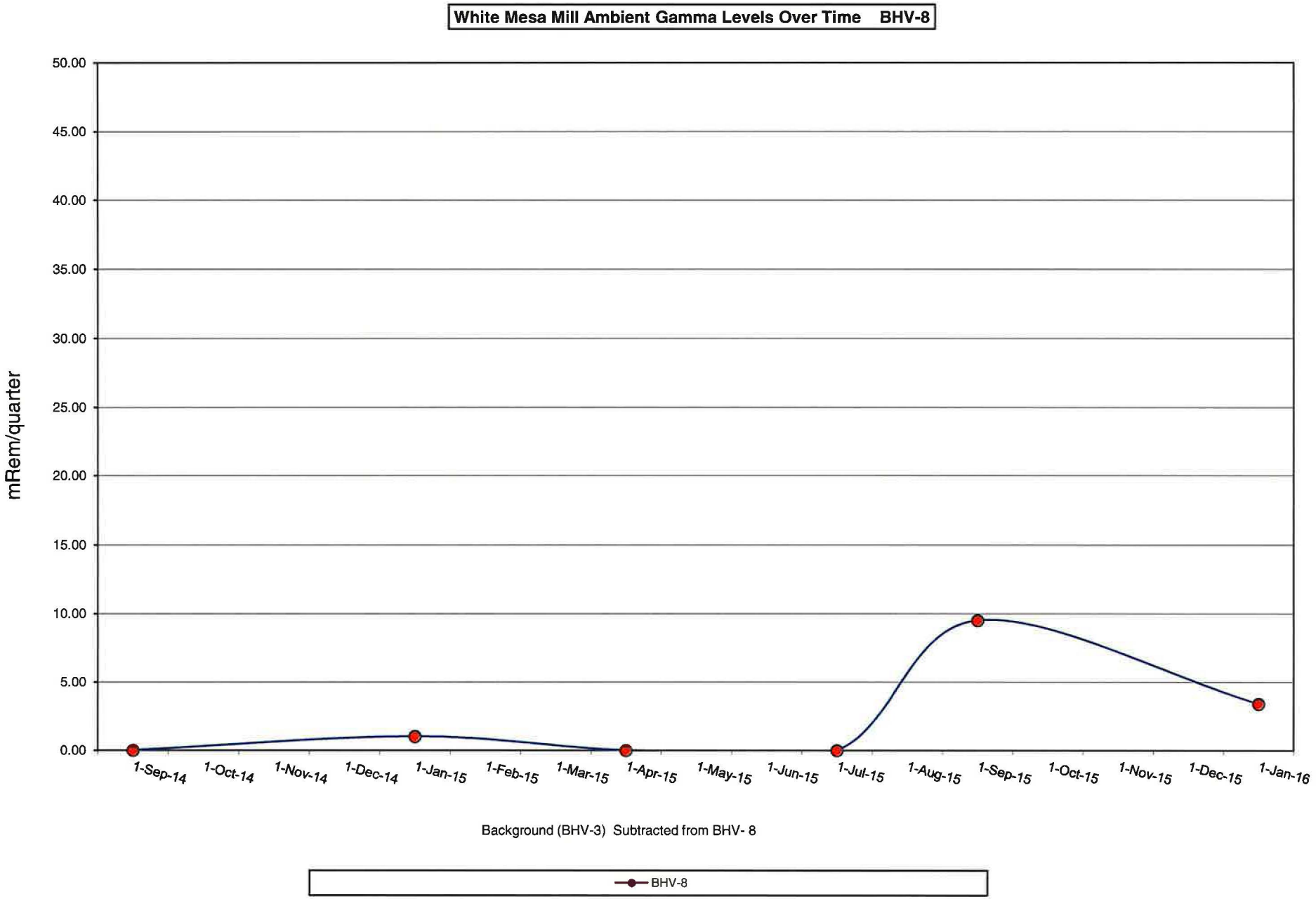

White Mesa Mill Ambient Gamma Levels Over Time BHV-3
60.00
50.00
40.00
30.00
20.00
10.00
0.00
mR/qtr
30-Sep-81
30-Sep-83
30-Sep-85
30-Sep-87
30-Sep-89
30-Sep-91
30-Sep-93
30-Sep-95
30-Sep-97
30-Sep-99
30-Sep-01
30-Sep-03
30-Sep-05
30-Sep-07
30-Sep-09
30-Sep-11
30-Sep-13
30-Sep-15
BHV-3


White Mesa Mill Ambient Gamma Levels Over Time BHV-4
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
mRem/quarter
30-Sep-81
30-Sep-84
30-Sep-87
30-Sep-90
30-Sep-93
30-Sep-96
30-Sep-99
30-Sep-02
30-Sep-05
30-Sep-08
30-Sep-11
30-Sep-14
Background (BHV-3) Subtracted from BHV-4
BHV-4


White Mesa Mill Ambient Gamma Levels Over Time BHV-5
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
mRem/quarter
30-Sep-81
30-Sep-84
30-Sep-87
30-Sep-90
30-Sep-93
30-Sep-96
30-Sep-99
30-Sep-02
30-Sep-05
30-Sep-08
30-Sep-11
30-Sep-14
Background (BHV-3) Subtracted from BHV- 5
BHV-5


White Mesa Mill Ambient Gamma Levels Over Time BHV-6
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
30-Sep-81
30-Sep-84
30-Sep-87
30-Sep-90
30-Sep-93
30-Sep-96
30-Sep-99
30-Sep-02
30-Sep-05
30-Sep-08
30-Sep-11
30-Sep-14
Background (BHV-3) Subtracted from BHV- 6
BHV-6


White Mesa Mill Ambient Gamma Levels Over Time BHV-7
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
1-Sep-14
1-Nov-14
1-Jan-15
1-Mar-15
1-May-15
1-Jul-15
1-Sep-15
1-Nov-15
1-Jan-16
Background (BHV-3) Subtracted from BHV- 7
BHV-7


White Mesa Mill Ambient Gamma Levels Over Time BHV-8
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
1-Sep-14
1-Oct-14
1-Nov-14
1-Dec-14
1-Jan-15
1-Feb-15
1-Mar-15
1-Apr-15
1-May-15
1-Jun-15
1-Jul-15
1-Aug-15
1-Sep-15
1-Oct-15
1-Nov-15
1-Dec-15
1-Jan-16
Background (BHV-3) Subtracted from BHV- 8
BHV-8

White Mesa Mill Third Quarter 2015 Environmental Spherical Gamma Monitor Results

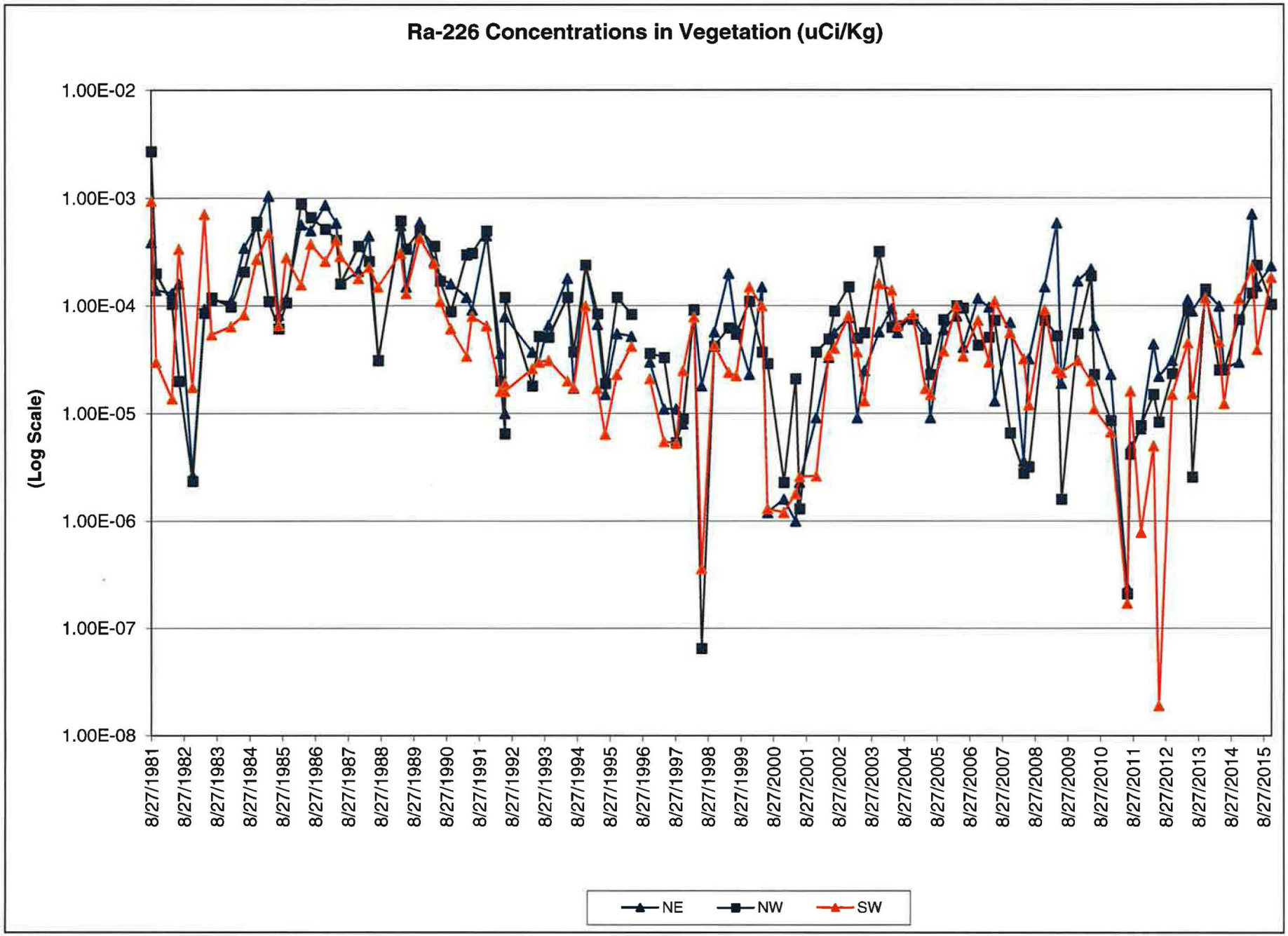
Badge Number	Location	Date Issued	Date Returned	Total Days Badge at WMM	Mean Ambient Dose Equivalent	mRem / hour	mRem / Day	mRem / Week
Control	Administration Vault	7/1/2015	9/25/2015	86	43.1	0.02	0.501	3.51
1	V2O5 Control Room	7/1/2015	9/25/2015	86	51	0.02	0.593	4.15
2	BHV-6	7/1/2015	9/25/2015	86	37.5	0.02	0.436	3.05
3	Ore Stor. - Barrel Area	7/1/2015	9/25/2015	86	223.9	0.11	2.603	18.22
4	Vanadium Precip.Area	7/1/2015	9/25/2015	86	101.4	0.05	1.179	8.25
5	Yellowcake Drying Area	7/1/2015	9/25/2015	86	387.1	0.19	4.501	31.51
6	Leach	7/1/2015	9/25/2015	86	125.3	0.06	1.457	10.20
7	SAG Mill Control Room	7/1/2015	9/25/2015	86	240.8	0.12	2.800	19.60
8	Yellowcake Precip.	7/1/2015	9/25/2015	86	265.2	0.13	3.084	21.59
9	Central Control Room	7/1/2015	9/25/2015	86	87.3	0.04	1.015	7.11
10	Ore pad - decontamination pad	7/1/2015	9/25/2015	86	140.1	0.07	1.629	11.40
11	North East Corner Ore Pad	7/1/2015	9/25/2015	86	290.9	0.14	3.383	23.68
12	Met. Lab	7/1/2015	9/25/2015	86	84.3	0.04	0.980	6.86
13	Filter Press Room	7/1/2015	9/25/2015	86	130.7	0.06	1.520	10.64
14	BHV-1	7/1/2015	9/25/2015	86	43.7	0.02	0.508	3.56
15	BHV-2	7/1/2015	9/25/2015	86	33.7	0.02	0.392	2.74
16	BHV-3	7/1/2015	9/25/2015	86	31.4	0.02	0.365	2.56
17	BHV-4	7/1/2015	9/25/2015	86	37.5	0.02	0.436	3.05
18	BHV-5	7/1/2015	9/25/2015	86	41.5	0.02	0.483	3.38
19	SAG Mill	7/1/2015	9/25/2015	86	264.6	0.13	3.077	21.54
20	Tails	7/1/2015	9/25/2015	86	66.7	0.03	0.776	5.43
21	CCD	7/1/2015	9/25/2015	86	78.2	0.04	0.909	6.37
22	North SX	7/1/2015	9/25/2015	86	74.5	0.04	0.866	6.06
23	Administration Building	7/1/2015	9/25/2015	86	46.5	0.02	0.541	3.78
24	Admin Parking Lot	7/1/2015	9/25/2015	86	86.7	0.04	1.008	7.06
25	Yellowcake Packaging	7/1/2015	9/25/2015	86	301.4	0.15	3.505	24.53
26	Yellowcake Storage	7/1/2015	9/25/2015	86	1143.6	0.55	13.298	93.08
27	Bucking Room	7/1/2015	9/25/2015	86	132.1	0.06	1.536	10.75
28	Mill Lunch Room	7/1/2015	9/25/2015	86	71.3	0.03	0.829	5.80
29	South SX	7/1/2015	9/25/2015	86	122.8	0.06	1.428	10.00
30	Mtce. Super.'s Office	7/1/2015	9/25/2015	86	55.1	0.03	0.641	4.48
31	Ore Feed Grizzly	7/1/2015	9/25/2015	86	371.5	0.18	4.320	30.24
32	Scalehouse	7/1/2015	9/25/2015	86	194.5	0.09	2.262	15.83
33	Sample Plant (OBS)	7/1/2015	9/25/2015	86	191.4	0.09	2.226	15.58
34	Front Gate	7/1/2015	9/25/2015	86	187.6	0.09	2.181	15.27
45	AF - Barrel Dump Station	7/1/2015	9/25/2015	86	163.4	0.08	1.900	13.30
46	AF Circuit - South	7/1/2015	9/25/2015	86	108.8	0.05	1.265	8.86
47	AF Circuit - North	7/1/2015	9/25/2015	86	92.3	0.04	1.073	7.51
51	North Control # 1	7/1/2015	9/25/2015	86	44	0.02	0.512	3.58
52	North Control # 2	7/1/2015	9/25/2015	86	38.8	0.02	0.451	3.16
53	CaF2 Barrel Dump Station - Operator Station	7/1/2015	9/25/2015	86	108.3	0.05	1.259	8.82
64	KF Barrel Dump Station	7/1/2015	9/25/2015	86	312.5	0.15	3.634	25.44
70	BHV-7	7/1/2015	9/25/2015	86	38.6	0.02	0.449	3.14
71	BHV-8	7/1/2015	9/25/2015	86	40.9	0.02	0.476	3.33

White Mesa Mill Fourth Quarter 2015 Environmental Spherical Gamma Monitor Results

Badge Number	Location	Date Issued	Date Returned	Total Days Badge at WMM	Mean Ambient Dose Equivalent	mRem / hour	mRem / Day	mRem / Week
Control	Administration Vault	9/25/2015	1/7/2016	104	39.5	0.02	0.380	2.66
1	V2O5 Control Room	9/25/2015	1/7/2016	104	54.9	0.02	0.528	3.70
2	BHV-6	9/25/2015	1/7/2016	104	34.7	0.01	0.334	2.34
3	Ore Stor. - Barrel Area	9/25/2015	1/7/2016	104	598.4	0.24	5.754	40.28
4	Vanadium Precip.Area	9/25/2015	1/7/2016	104	86.5	0.03	0.832	5.82
5	Yellowcake Drying Area	9/25/2015	1/7/2016	104	369.1	0.15	3.549	24.84
6	Leach	9/25/2015	1/7/2016	104		0.00	0.000	0.00
7	SAG Mill Control Room	9/25/2015	1/7/2016	104	275.7	0.11	2.651	18.56
8	Yellowcake Precip.	9/25/2015	1/7/2016	104	238	0.10	2.288	16.02
9	Central Control Room	9/25/2015	1/7/2016	104	91.1	0.04	0.876	6.13
10	Ore pad - decontamination pad	9/25/2015	1/7/2016	104	143.3	0.06	1.378	9.65
11	North East Corner Ore Pad	9/25/2015	1/7/2016	104		0.00	0.000	0.00
12	Met. Lab	9/25/2015	1/7/2016	104	84.5	0.03	0.813	5.69
13	Filter Press Room	9/25/2015	1/7/2016	104	139.9	0.06	1.345	9.42
14	BHV-1	9/25/2015	1/7/2016	104	45.5	0.02	0.438	3.06
15	BHV-2	9/25/2015	1/7/2016	104	38.4	0.02	0.369	2.58
16	BHV-3	9/25/2015	1/7/2016	104	34.1	0.01	0.328	2.30
17	BHV-4	9/25/2015	1/7/2016	104	37.7	0.02	0.363	2.54
18	BHV-5	9/25/2015	1/7/2016	104	47.2	0.02	0.454	3.18
19	SAG Mill	9/25/2015	1/7/2016	104	304.4	0.12	2.927	20.49
20	Tails	9/25/2015	1/7/2016	104	65.6	0.03	0.631	4.42
21	CCD	9/25/2015	1/7/2016	104	80.2	0.03	0.771	5.40
22	North SX	9/25/2015	1/7/2016	104	66.2	0.03	0.637	4.46
23	Administration Building	9/25/2015	1/7/2016	104	45.2	0.02	0.435	3.04
24	Admin Parking Lot	9/25/2015	1/7/2016	104	86.1	0.03	0.828	5.80
25	Yellowcake Packaging	9/25/2015	1/7/2016	104	314.1	0.13	3.020	21.14
26	Yellowcake Storage	9/25/2015	1/7/2016	104	1025.1	0.41	9.857	69.00
27	Bucking Room	9/25/2015	1/7/2016	104	159.3	0.06	1.532	10.72
28	Mill Lunch Room	9/25/2015	1/7/2016	104	75.4	0.03	0.725	5.08
29	South SX	9/25/2015	1/7/2016	104	166.2	0.07	1.598	11.19
30	Mtce. Super.'s Office	9/25/2015	1/7/2016	104	60.7	0.02	0.584	4.09
31	Ore Feed Grizzly	9/25/2015	1/7/2016	104	405.6	0.16	3.900	27.30
32	Scalehouse	9/25/2015	1/7/2016	104	229.9	0.09	2.211	15.47
33	Sample Plant (OBS)	9/25/2015	1/7/2016	104	240.1	0.10	2.309	16.16
34	Front Gate	9/25/2015	1/7/2016	104	204.8	0.08	1.969	13.78
45	AF - Barrel Dump Station	9/25/2015	1/7/2016	104	129.9	0.05	1.249	8.74
46	AF Circuit - South	9/25/2015	1/7/2016	104	82.2	0.03	0.790	5.53
47	AF Circuit - North	9/25/2015	1/7/2016	104	91.6	0.04	0.881	6.17
51	North Control # 1	9/25/2015	1/7/2016	104	43.7	0.02	0.420	2.94
52	North Control # 2	9/25/2015	1/7/2016	104	37.8	0.02	0.363	2.54
53	CaF2 Barrel Dump Station - Operator Station	9/25/2015	1/7/2016	104	243.8	0.10	2.344	16.41
64	KF Barrel Dump Station	9/25/2015	1/7/2016	104	308.5	0.12	2.966	20.76
70	BHV-7	9/25/2015	1/7/2016	104	37.4	0.01	0.360	2.52
71	BHV-8	9/25/2015	1/7/2016	104	37.5	0.02	0.361	2.52

ATTACHMENT F

VEGETATION GRAPHS, DATA TABLE, LABORATORY RESULTS AND QA/QC


Ra-226 Concentrations in Vegetation (uCi/Kg)
(Log Scale)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
8/27/1981
8/27/1982
8/27/1983
8/27/1984
8/27/1985
8/27/1986
8/27/1987
8/27/1988
8/27/1989
8/27/1990
8/27/1991
8/27/1992
8/27/1993
8/27/1994
8/27/1995
8/27/1996
8/27/1997
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8/27/1999
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8/27/2002
8/27/2003
8/27/2004
8/27/2005
8/27/2006
8/27/2007
8/27/2008
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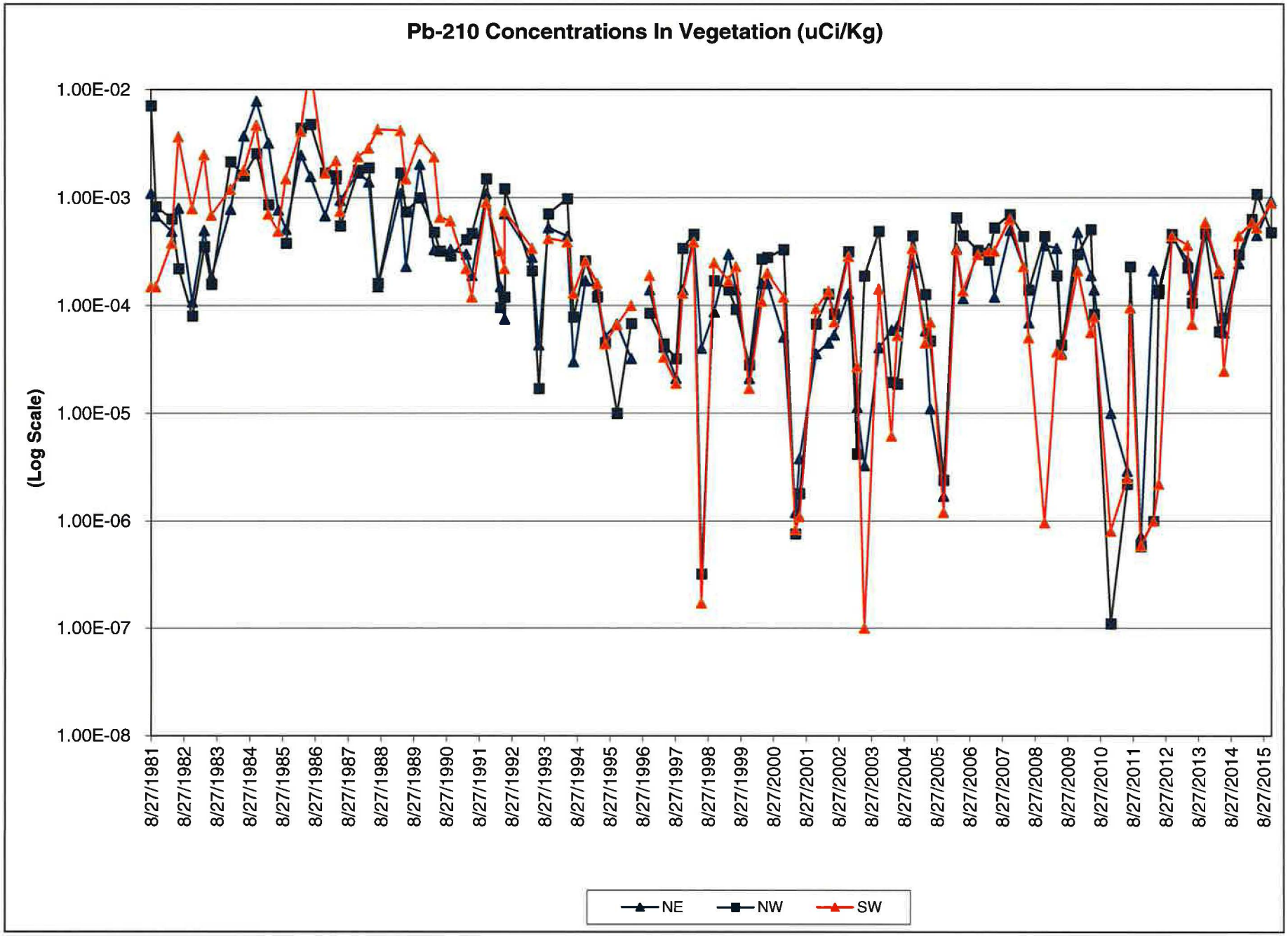
8/27/2012
8/27/2013
8/27/2014
8/27/2015
NE
NW
SW


Pb-210 Concentrations In Vegetation (uCi/Kg)
(Log Scale)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
8/27/1981
8/27/1982
8/27/1983
8/27/1984
8/27/1985
8/27/1986
8/27/1987
8/27/1988
8/27/1989
8/27/1990
8/27/1991
8/27/1992
8/27/1993
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8/27/2003
8/27/2004
8/27/2005
8/27/2006
8/27/2007
8/27/2008
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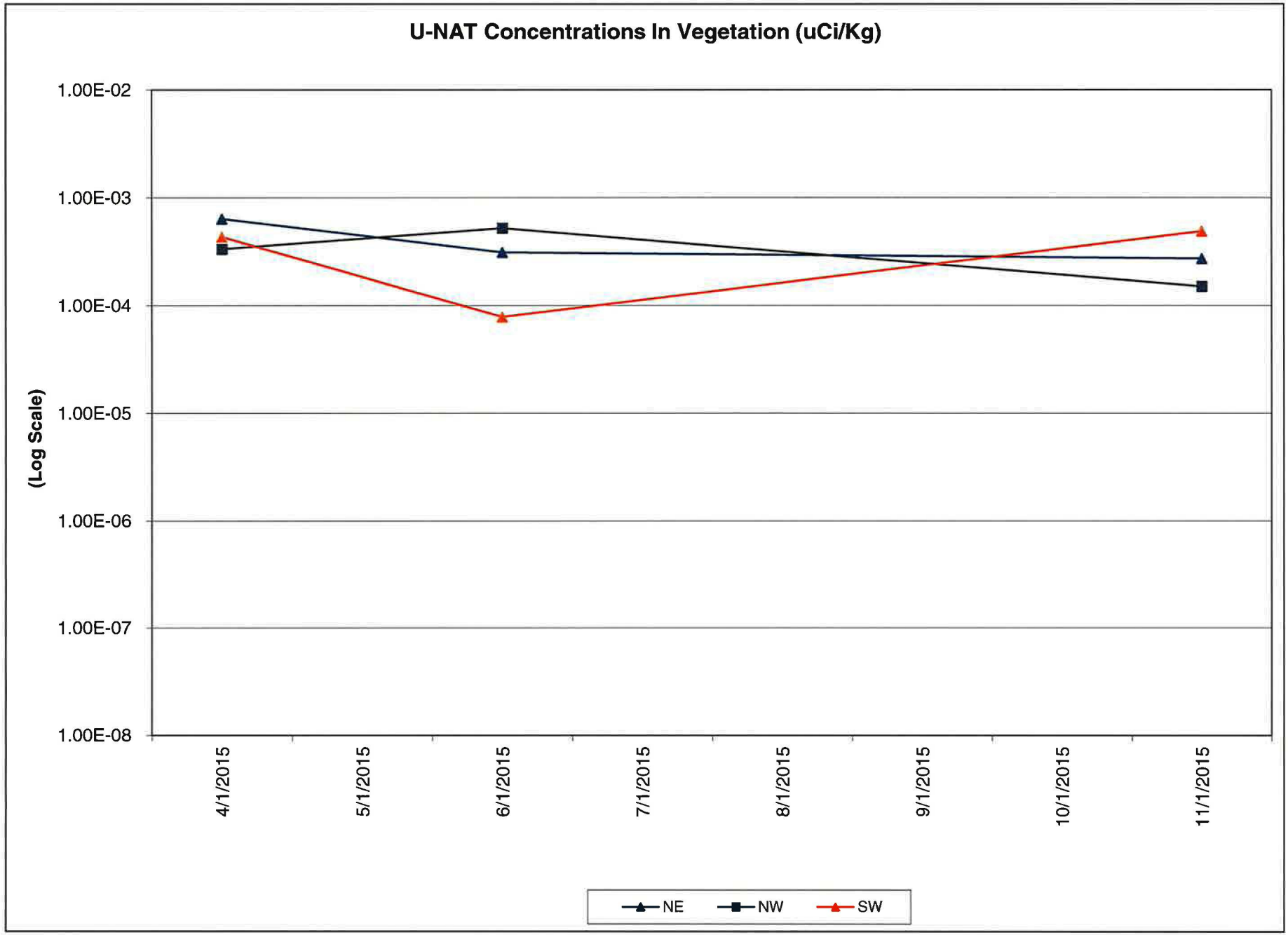
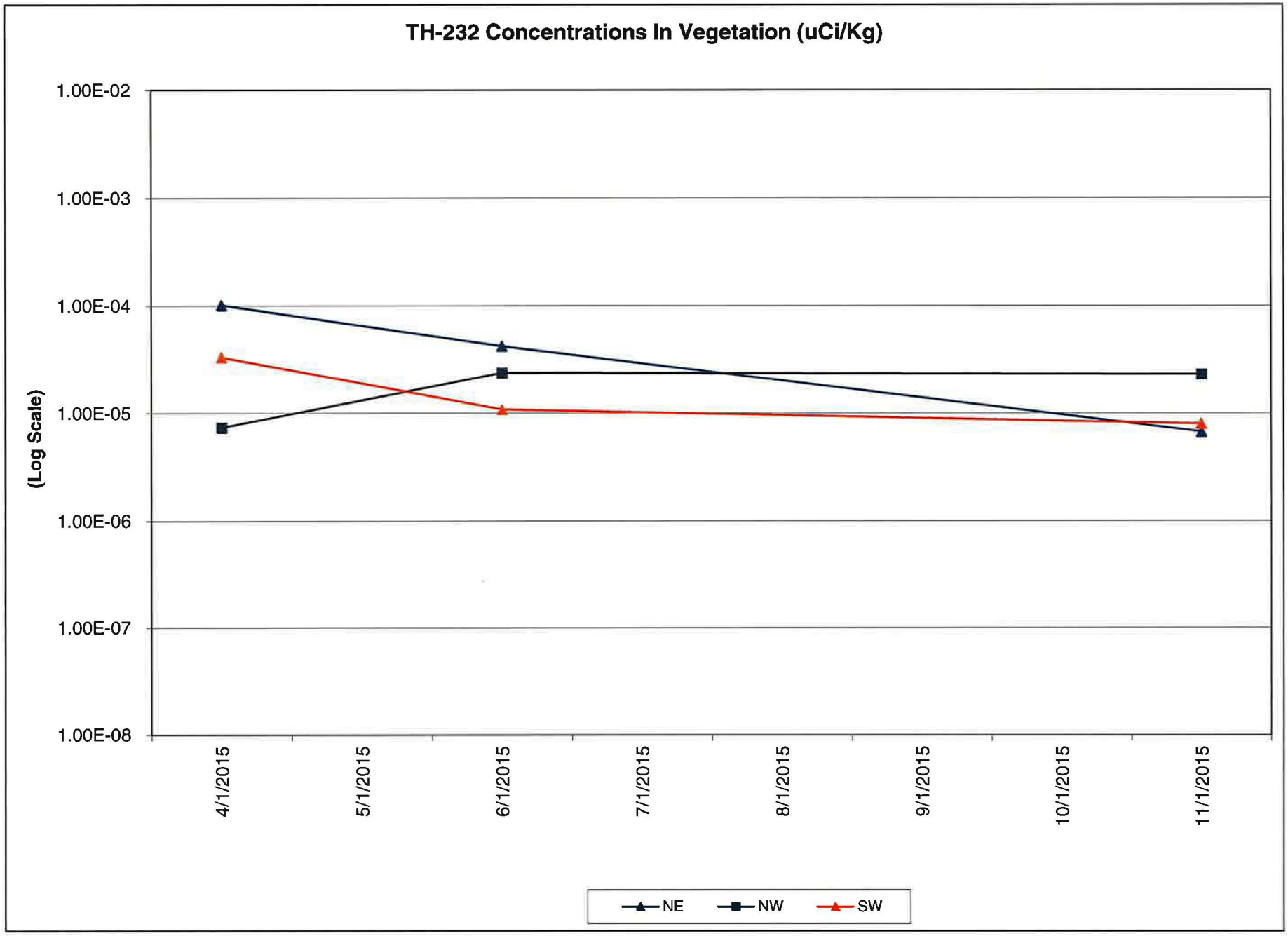
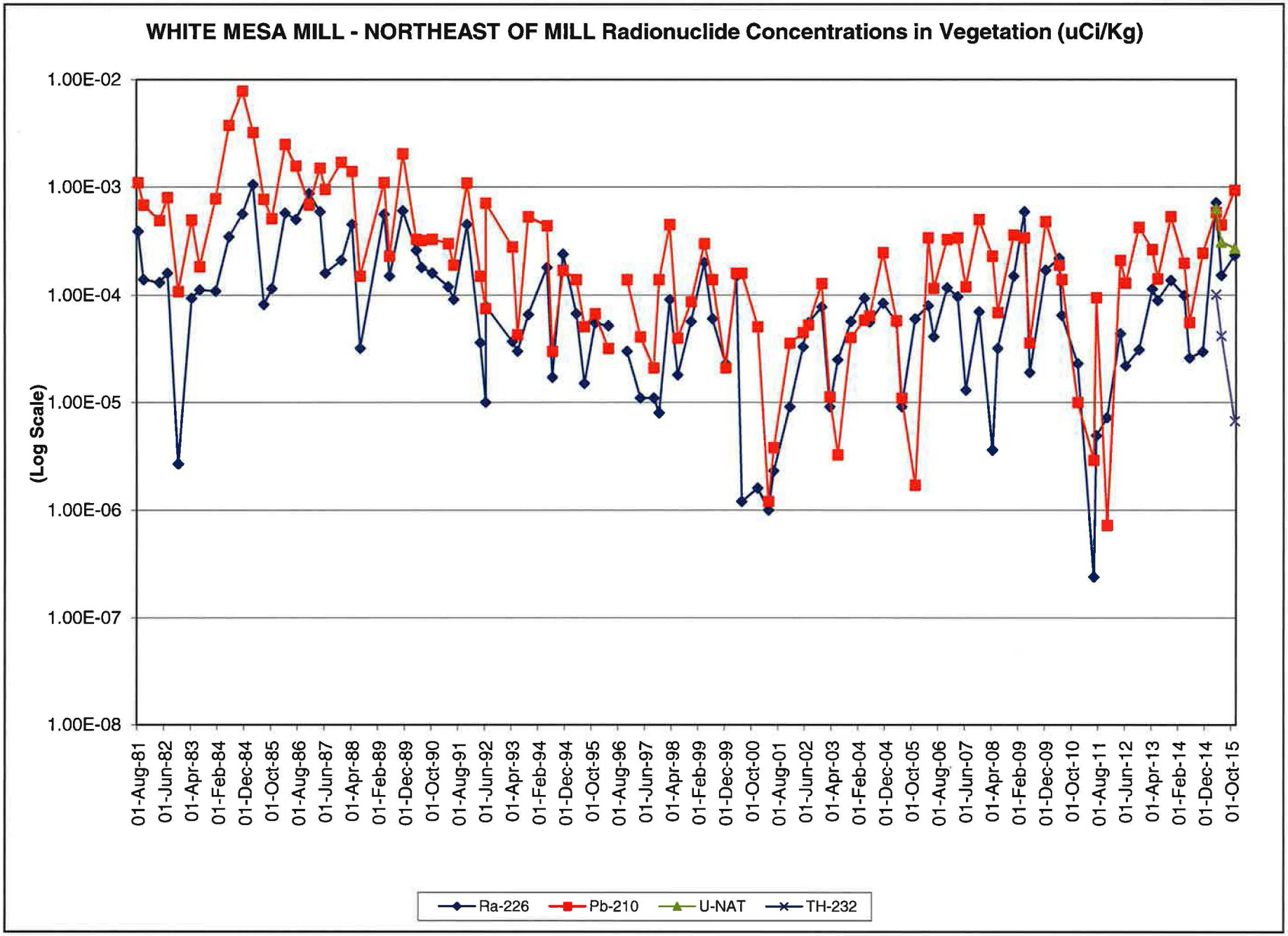
8/27/2013
8/27/2014
8/27/2015
NE
NW
SW


U-NAT Concentrations In Vegetation (uCi/Kg)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
(Log Scale)
4/1/2015
5/1/2015
6/1/2015
7/1/2015
8/1/2015
9/1/2015
10/1/2015
11/1/2015
NE
NW
SW


TH-232 Concentrations In Vegetation (uCi/Kg)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
(Log Scale)
4/1/2015
5/1/2015
6/1/2015
7/1/2015
8/1/2015
9/1/2015
10/1/2015
11/1/2015
NE
NW
SW


WHITE MESA MILL - NORTHEAST OF MILL Radionuclide Concentrations in Vegetation (uCi/Kg)
(Log Scale)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
01-Aug-81
01-Jun-82
01-Apr-83
01-Feb-84
01-Dec-84
01-Oct-85
01-Aug-86
01-Jun-87
01-Apr-88
01-Feb-89
01-Dec-89
01-Oct-90
01-Aug-91
01-Jun-92
01-Apr-93
01-Feb-94
01-Dec-94
01-Oct-95
01-Aug-96
01-Jun-97
01-Apr-98
01-Feb-99
01-Dec-99
01-Oct-00
01-Aug-01
01-Jun-02
01-Apr-03
01-Feb-04
01-Dec-04
01-Oct-05
01-Aug-06
01-Jun-07
01-Apr-08
01-Feb-09
01-Dec-09
01-Oct-10
01-Aug-11
01-Jun-12
01-Apr-13
01-Feb-14
01-Dec-14
01-Oct-15
Ra-226
Pb-210
U-NAT
TH-232

WHITE MESA MILL
FORAGE RADIONUCLIDE DATA
NORTHEAST OF MILL

SAMPLED QTR.	SAMPLED DATE	Ra-226	Ra-226	LLD	Pb-210	Pb-210	LLD	U-NAT	U-NAT	LLD	Th-232	Th-232	LLD
		VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (5.0E-08)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (1.0E-06)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)†
3rd '81	27-Aug-81	3.90E-04	1.00E-05	5.00E-08	1.10E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
4th '81	20-Oct-81	1.40E-04	1.00E-05	5.00E-08	6.80E-04	8.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '82	15-Apr-82	1.31E-04	1.30E-05	1.00E-06	4.90E-04	7.00E-05	8.00E-05	NS	NA	NA	NS	NA	NA
3rd '82	01-Jul-82	1.60E-04	1.00E-05	5.00E-08	8.00E-04	1.70E-04	1.00E-07	NS	NA	NA	NS	NA	NA
4th '82	30-Nov-82	2.67E-06	1.07E-06	1.00E-06	1.08E-04	9.00E-06	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '83	13-Apr-83	9.36E-05	6.20E-06	8.00E-09	4.97E-04	9.30E-05	1.00E-04	NS	NA	NA	NS	NA	NA
3rd '83	01-Jul-83	1.12E-04	1.20E-05	6.00E-06	1.84E-04	1.20E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '83	30-Jan-84	1.09E-04	8.00E-06	4.00E-06	7.80E-04	6.20E-05	6.00E-05	NS	NA	NA	NS	NA	NA
2nd '84	28-Jun-84	3.47E-04	1.20E-05	2.00E-09	3.75E-03	1.60E-04	4.00E-08	NS	NA	NA	NS	NA	NA
4th '84	14-Nov-84	5.61E-04	1.99E-04	2.00E-07	7.82E-03	3.30E-04	7.00E-08	NS	NA	NA	NS	NA	NA
2nd '85	27-Mar-85	1.05E-03	3.00E-05	2.00E-06	3.22E-03	1.40E-04	2.00E-05	NS	NA	NA	NS	NA	NA
3rd '85	15-Jul-85	8.20E-05	7.00E-06	3.00E-06	7.70E-04	1.30E-04	2.00E-04	NS	NA	NA	NS	NA	NA
4th '85	09-Oct-85	1.15E-04	1.00E-05	3.00E-06	5.10E-04	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '86	24-Mar-86	5.72E-04	2.10E-05	4.00E-06	2.49E-03	1.00E-04	1.00E-05	NS	NA	NA	NS	NA	NA
3rd '86	10-Jul-86	5.01E-04	1.30E-05	3.00E-06	1.57E-03	1.70E-03	2.00E-04	NS	NA	NA	NS	NA	NA
4th '86	18-Dec-86	8.70E-04	5.00E-05	3.00E-06	6.80E-04	3.00E-05	3.00E-06	NS	NA	NA	NS	NA	NA
2nd '87	20-Apr-87	5.90E-04	7.00E-05	5.00E-08	1.50E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '87	05-Jun-87	1.60E-04	3.00E-05	5.00E-08	9.50E-04	4.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '87	22-Dec-87	2.10E-04	4.00E-05	5.00E-08	1.70E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '88	19-Apr-88	4.50E-04	7.00E-05	5.00E-08	1.40E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '88	28-Jul-88	3.20E-05	2.20E-05	5.00E-08	1.50E-04	4.40E-04	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '89	07-Apr-89	5.60E-04	4.00E-05	***	1.10E-03	1.00E-01	***	NS	NA	NA	NS	NA	NA
3rd '89	06-Jun-89	1.50E-04	2.00E-05	***	2.30E-04	2.00E-05	***	NS	NA	NA	NS	NA	NA
4th '89	07-Nov-89	6.00E-04	5.00E-05	7.00E-06	2.04E-03	7.00E-05	1.40E-05	NS	NA	NA	NS	NA	NA
1st '90	17-Apr-90	2.60E-04	3.00E-05	4.00E-06	3.30E-04	2.00E-05	2.20E-05	NS	NA	NA	NS	NA	NA
2nd '90	20-Jun-90	1.80E-04	2.00E-05	5.00E-08	3.20E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '90	17-Oct-90	1.60E-04	2.00E-05	5.00E-08	3.30E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '91	10-Apr-91	1.20E-04	2.00E-05	5.00E-06	3.00E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '91	11-Jun-91	9.10E-05	1.60E-05	2.00E-07	1.90E-04	2.00E-05	2.00E-07	NS	NA	NA	NS	NA	NA
3rd '91	20-Nov-91	4.50E-04	4.00E-05	5.00E-08	1.09E-03	5.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '92	22-Apr-92	3.60E-05	1.00E-05	2.00E-06	1.50E-04	2.00E-05	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '92	10-Jun-92	1.00E-05	7.00E-06	2.00E-07	7.50E-05	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '92	10-Jun-92	7.90E-05	3.50E-05	3.00E-06	7.10E-04	7.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '93	13-Apr-93	3.70E-05	2.20E-05	3.00E-06	2.80E-04	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '93	26-Jun-93	3.00E-05	1.50E-05	3.00E-06	4.30E-05	3.50E-05	2.00E-05	NS	NA	NA	NS	NA	NA
3rd '93	12-Oct-93	6.60E-05	2.70E-05	3.00E-06	5.30E-04	6.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '94	11-May-94	1.80E-04	4.00E-05	3.00E-05	4.40E-04	6.00E-05	2.00E-04	NS	NA	NA	NS	NA	NA
2nd '94	19-Jul-94	1.71E-05	1.20E-06	9.00E-08	3.00E-05	6.10E-06	4.45E-06	NS	NA	NA	NS	NA	NA
3rd '94	28-Nov-94	2.40E-04	1.50E-05	1.70E-07	1.70E-04	1.10E-05	8.30E-07	NS	NA	NA	NS	NA	NA
1st '95	11-Apr-95	6.70E-05	5.40E-06	1.60E-07	1.40E-04	1.30E-05	7.90E-07	NS	NA	NA	NS	NA	NA
2nd '95	06-Jul-95	1.50E-05	1.50E-06	1.50E-07	5.10E-05	4.50E-06	7.60E-07	NS	NA	NA	NS	NA	NA
3rd '95	15-Nov-95	5.50E-05	5.00E-06	1.80E-07	6.70E-05	1.00E-05	8.80E-07	NS	NA	NA	NS	NA	NA
1st '96	23-Apr-96	5.20E-05	2.50E-06	1.50E-07	3.20E-05	4.50E-06	1.80E-07	NS	NA	NA	NS	NA	NA
2nd '96 *	31-Jul-96							NS	NA	NA	NS	NA	NA
3rd '96	14-Nov-96	3.00E-05	2.50E-06	1.80E-07	1.40E-04	7.10E-06	9.30E-07	NS	NA	NA	NS	NA	NA
1st '97	21-Apr-97	1.10E-05	4.70E-07	1.21E-07	4.10E-05	3.60E-06	6.10E-07	NS	NA	NA	NS	NA	NA
3rd '97	05-Sep-97	1.10E-05	4.30E-07	1.33E-07	2.10E-05	7.30E-07	6.66E-07	NS	NA	NA	NS	NA	NA
4th '97	20-Nov-97	8.00E-06	1.20E-06	5.60E-07	1.40E-04	4.60E-06	1.10E-07	NS	NA	NA	NS	NA	NA
1st '98	23-Mar-98	<9.10E-05	9.10E-05	9.10E-05	<4.50E-04	4.50E-04	4.50E-04	NS	NA	NA	NS	NA	NA
2nd '98	16-Jun-98	1.80E-05	1.20E-06	6.30E-08	4.00E-05	1.80E-06	3.20E-07	NS	NA	NA	NS	NA	NA
4th '98	05-Nov-98	5.70E-05	1.00E-06	8.20E-08	8.70E-05	5.00E-06	4.10E-07	NS	NA	NA	NS	NA	NA
2nd '99	15-Apr-99	2.00E-04	3.00E-06	1.20E-07	3.00E-04	1.00E-05	6.00E-05	NS	NA	NA	NS	NA	NA
3rd '99	07-Jul-99	6.03E-05	1.40E-06	8.30E-08	1.40E-04	4.70E-06	4.20E-07	NS	NA	NA	NS	NA	NA
4th '99	02-Dec-99	2.30E-05	1.00E-06	2.30E-07	2.10E-05	1.00E-06	1.10E-06	NS	NA	NA	NS	NA	NA
2nd '00	21-Apr-00	1.50E-04	3.00E-06	1.20E-07	1.60E-04	8.00E-06	5.90E-07	NS	NA	NA	NS	NA	NA
2nd '00	22-Jun-00	1.20E-06	1.00E-07	2.80E-07	1.60E-04	1.00E-05	1.40E-06	NS	NA	NA	NS	NA	NA
4th '00	21-Dec-00	1.60E-06	1.10E-06	3.70E-07	5.10E-05	5.00E-06	1.90E-06	NS	NA	NA	NS	NA	NA
1st '01	30-Apr-01	1.00E-06	1.00E-07	2.40E-07	<1.2E-06	1.00E-07	2.40E-07	NS	NA	NA	NS	NA	NA
2nd '01	14-Jun-01	2.30E-06	2.00E-07	9.90E-08	3.80E-06	2.00E-07	5.00E-07	NS	NA	NA	NS	NA	NA
4th '01	17-Dec-01	9.10E-06	2.40E-06	1.20E-07	3.57E-05	2.97E-06	6.00E-07	NS	NA	NA	NS	NA	NA
1st '02	07-May-02	3.30E-05	1.80E-06	7.60E-07	4.50E-05	2.61E-06	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '02	07-Jul-02	5.55E-05	2.81E-06	7.60E-07	5.31E-05	3.90E-06	1.00E-05	NS	NA	NA	NS	NA	NA
4th '02	15-Dec-02	7.75E-05	3.60E-06	7.60E-07	1.29E-04	6.15E-06	1.00E-05	NS	NA	NA	NS	NA	NA
1st '03	21-Mar-03	9.10E-06	1.30E-06	3.60E-07	1.13E-05	1.61E-06	3.36E-06	NS	NA	NA	NS	NA	NA
2nd '03	10-Jun-03	2.50E-05	1.30E-06	3.60E-07	3.26E-06	2.00E-06	7.38E-08	NS	NA	NA	NS	NA	NA
4th '03	20-Nov-03	5.70E-05	3.50E-06	1.50E-07	4.05E-05	5.82E-06	8.30E-07	NS	NA	NA	NS	NA	NA

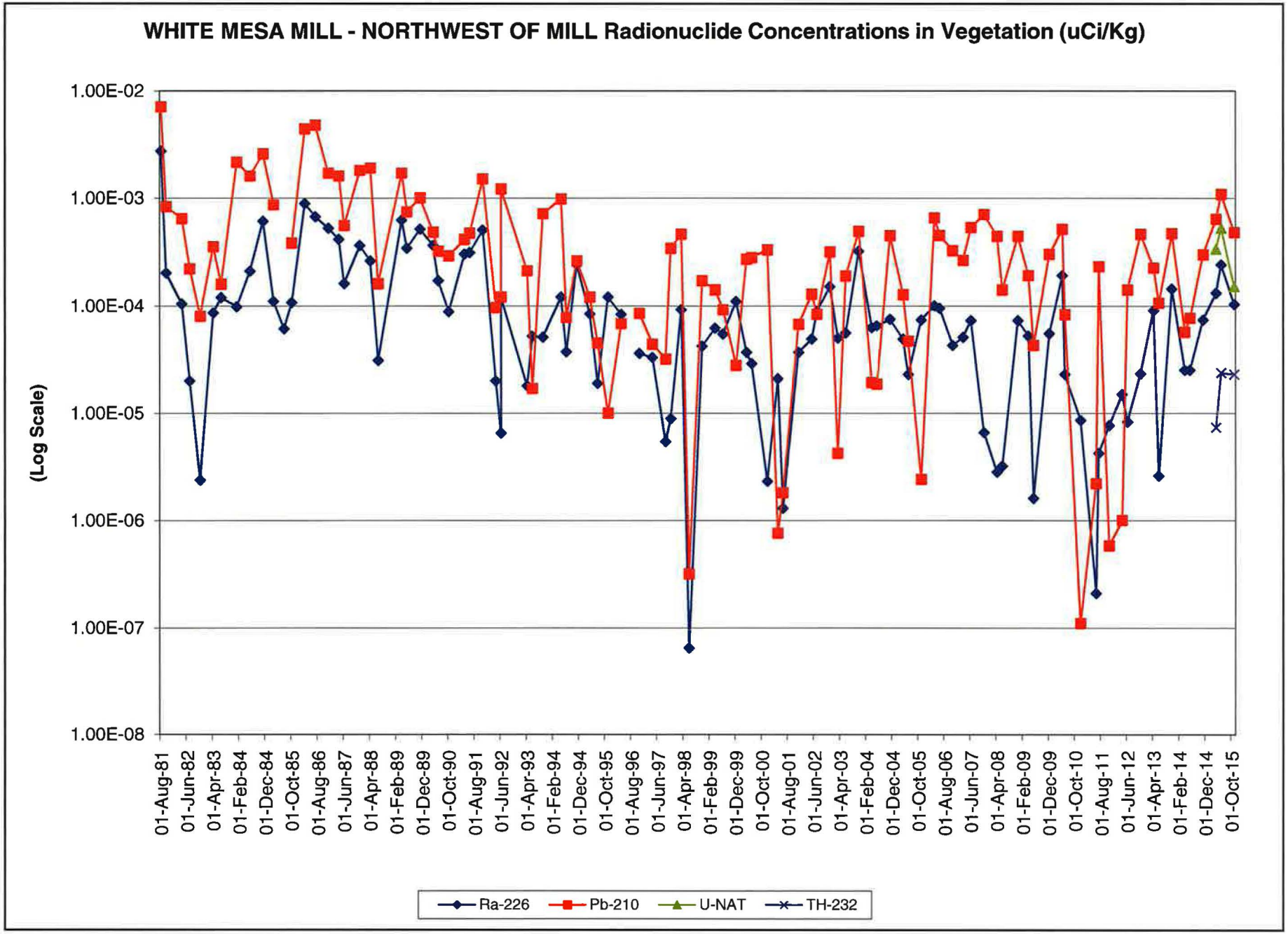
1st '04	08-Apr-04	9.38E-05	3.70E-06	1.10E-07	5.88E-05	3.00E-06	5.50E-07	NS	NA	NA	NS	NA	NA
2nd '04	12-Jun-04	5.63E-05	3.40E-06	1.80E-07	6.42E-05	5.90E-06	9.00E-07	NS	NA	NA	NS	NA	NA
4th '04	30-Nov-04	8.41E-05	5.50E-06	2.00E-08	2.48E-04	1.40E-05	3.00E-07	NS	NA	NA	NS	NA	NA
1st '05	21-Apr-05	5.60E-05	3.00E-06	1.40E-07	5.80E-05	4.00E-06	6.90E-07	NS	NA	NA	NS	NA	NA
2nd '05	13-Jun-05	9.10E-06	1.50E-06	1.80E-07	1.10E-05	1.20E-05	9.00E-07	NS	NA	NA	NS	NA	NA
4th '05	10-Nov-05	6.00E-05	3.00E-06	1.10E-10	1.70E-06	6.40E-07	5.50E-10	NS	NA	NA	NS	NA	NA
1st '06	03-Apr-06	8.00E-05	5.00E-06	5.00E-08	3.40E-04	1.20E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '06	16-Jun-06	4.10E-05	3.10E-06	5.00E-08	1.16E-04	6.10E-06	1.00E-06	NS	NA	NA	NS	NA	NA
4th '06	28-Nov-06	1.17E-04	4.60E-06	1.90E-07	3.28E-04	9.50E-06	9.50E-07	NS	NA	NA	NS	NA	NA
1st '07	30-Mar-07	9.70E-05	4.40E-06	1.90E-07	3.40E-04	8.70E-06	8.4-07	NS	NA	NA	NS	NA	NA
2nd '07	1-Jun-07	1.30E-05	1.60E-06	1.90E-07	1.20E-04	6.60E-06	9.70E-07	NS	NA	NA	NS	NA	NA
4th '07	23-Nov-07	7.00E-05	8.20E-06	2.00E-07	5.00E-04	2.00E-05	1.20E-06	NS	NA	NA	NS	NA	NA
1st '08	22-Apr-08	3.60E-06	3.00E-06	5.20E-07	2.30E-04	1.40E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '08	18-Jun-08	3.20E-05	3.20E-06	1.80E-06	6.90E-05	3.50E-05	5.50E-05	NS	NA	NA	NS	NA	NA
4th '08	12-Dec-08	1.50E-04	5.20E-06	9.90E-07	3.60E-04	2.90E-05	3.90E-05	NS	NA	NA	NS	NA	NA
1st '09	28-Apr-09	5.90E-04	1.35E-05	1.50E-06	3.40E-04	1.30E-05	1.50E-06	NS	NA	NA	NS	NA	NA
2nd '09	17-Jun-09	1.90E-05	1.45E-06	4.90E-07	3.60E-05	1.10E-05	1.80E-05	NS	NA	NA	NS	NA	NA
4th '09	18-Dec-09	1.70E-04	5.90E-06		4.80E-04	1.20E-05		NS	NA	NA	NS	NA	NA
1st '10	13-May-10	2.20E-04	7.20E-06	1.10E-06	1.90E-04	1.90E-05	2.90E-05	NS	NA	NA	NS	NA	NA
2nd '10	18-Jun-10	6.50E-05	3.40E-06	7.60E-07	1.40E-04	1.90E-05	2.90E-05	NS	NA	NA	NS	NA	NA
4th '10	20-Dec-10	2.30E-05	1.70E-06	5.20E-07	1.00E-05	1.50E-06	2.30E-06	NS	NA	NA	NS	NA	NA
2nd '11	23-Jun-11	2.40E-07	1.40E-07	1.80E-07	<2.9E-06	1.70E-06	2.90E-06	NS	NA	NA	NS	NA	NA
3rd '11	27-Jul-11	4.90E-06	6.30E-07	3.20E-07	9.50E-05	2.10E-06	2.50E-06	NS	NA	NA	NS	NA	NA
4th '11	23-Nov-11	7.20E-06	7.50E-07	2.90E-07	8.80E-08	4.30E-07	7.20E-07	NS	NA	NA	NS	NA	NA
2nd '12	11-Apr-12	4.40E-05	1.90E-06	3.60E-07	2.10E-04	2.00E-06	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '12	11-Jun-12	2.20E-05	8.40E-07	1.10E-07	1.30E-04	7.60E-06	5.90E-06	NS	NA	NA	NS	NA	NA
4th '12	06-Nov-12	3.10E-05	4.82E-07	4.63E-08	4.26E-04	3.72E-06	6.52E-07	NS	NA	NA	NS	NA	NA
2nd '13	30-Apr-13	1.14E-04	1.74E-06	5.34E-07	2.65E-04	4.41E-06	5.37E-06	NS	NA	NA	NS	NA	NA
3rd '13	20-Jun-13	8.91E-05	2.16E-06	1.42E-06	1.42E-04	3.68E-06	6.17E-06	NS	NA	NA	NS	NA	NA
4th '13	14-Nov-13	1.37E-04	3.87E-06	4.71E-06	5.33E-04	1.45E-05	2.27E-05	NS	NA	NA	NS	NA	NA
2nd '14	16-Apr-14	9.90E-05	1.01E-06	3.91E-07	1.99E-04	3.14E-06	3.38E-06	NS	NA	NA	NS	NA	NA
3rd '14	10-Jun-14	2.60E-05	8.46E-07	9.19E-07	5.60E-05	3.08E-06	7.12E-06	NS	NA	NA	NS	NA	NA
4th '14	25-Nov-14	2.98E-05	1.23E-06	1.30E-06	2.46E-04	5.38E-06	7.41E-06	NS	NA	NA	NS	NA	NA
1st '15	21-Apr-15	7.15E-04	8.01E-06	3.50E-06	5.85E-04	1.27E-05	2.51E-05	6.36E-04	2.70E-05	8.62E-06	1.01E-04	3.06E-06	4.04E-07
2nd '15	15-Jun-15	1.52E-04	3.48E-06	2.60E-06	4.49E-04	1.50E-05	3.33E-05	3.11E-04	1.58E-05	6.45E-06	4.19E-05	2.67E-06	6.78E-07
4th '15	23-Nov-15	2.34E-04	5.79E-06	3.89E-06	9.34E-04	1.36E-05	1.37E-05	2.73E-04	1.91E-05	6.31E-06	6.67E-06	7.98E-07	7.06E-07

*2nd quarter of 1996 San Juan County, Utah, was declared a disaster area due to drought, no samples were collected during this period

† NRC Regulatory Guide does not specify a Lower Limit of Detection (LLD) for Thorium 232 in vegetation (or any matrix). The LLD for Thorium 230 was used.

NS = Not Sampled

NA = Not Applicable


WHITE MESA MILL - NORTHWEST OF MILL Radionuclide Concentrations in Vegetation (uCi/Kg)
(Log Scale)
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
01-Aug-81
01-Jun-82
01-Apr-83
01-Feb-84
01-Dec-84
01-Oct-85
01-Aug-86
01-Jun-87
01-Apr-88
01-Feb-89
01-Dec-89
01-Oct-90
01-Aug-91
01-Jun-92
01-Apr-93
01-Feb-94
01-Dec-94
01-Oct-95
01-Aug-96
01-Jun-97
01-Apr-98
01-Feb-99
01-Dec-99
01-Oct-00
01-Aug-01
01-Jun-02
01-Apr-03
01-Feb-04
01-Dec-04
01-Oct-05
01-Aug-06
01-Jun-07
01-Apr-08
01-Feb-09
01-Dec-09
01-Oct-10
01-Aug-11
01-Jun-12
01-Apr-13
01-Feb-14
01-Dec-14
01-Oct-15
Ra-226
Pb-210
U-NAT
TH-232

WHITE MESA MILL
FORAGE RADIONUCLIDE DATA
NORTHWEST OF MILL

SAMPLED QTR.	SAMPLED DATE	Ra-226	Ra-226	LLD	Pb-210	Pb-210	LLD	U-NAT	U-NAT	LLD	Th-232	Th-232	LLD
		VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (5.0E-08)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (1.0E-06)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)†
3rd '81	27-Aug-81	2.73E-03	5.00E-05	5.00E-08	7.10E-03	3.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
4th '81	20-Oct-81	2.00E-04	1.00E-05	5.00E-08	8.30E-04	5.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '82	15-Apr-82	1.04E-04	9.00E-06	7.00E-06	6.40E-04	5.00E-05	4.00E-05	NS	NA	NA	NS	NA	NA
3rd '82	01-Jul-82	2.00E-05	1.00E-05	5.00E-08	2.20E-04	9.00E-05	1.00E-07	NS	NA	NA	NS	NA	NA
4th '82	30-Nov-82	2.36E-06	9.50E-07	1.00E-06	8.00E-05	1.00E-05	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '83	13-Apr-83	8.58E-05	1.36E-05	2.00E-08	3.53E-04	1.90E-05	1.00E-05	NS	NA	NA	NS	NA	NA
3rd '83	01-Jul-83	1.19E-04	1.10E-05	5.00E-06	1.58E-04	1.30E-05	1.00E-05	NS	NA	NA	NS	NA	NA
4th '83	30-Jan-84	9.78E-05	7.00E-06	2.00E-06	2.16E-03	3.40E-04	3.00E-04	NS	NA	NA	NS	NA	NA
2nd '84	28-Jun-84	2.08E-04	1.00E-05	3.00E-09	1.60E-03	7.00E-05	3.00E-08	NS	NA	NA	NS	NA	NA
4th '84	14-Nov-84	6.05E-04	1.64E-04	2.00E-07	2.58E-03	1.10E-04	3.00E-08	NS	NA	NA	NS	NA	NA
2nd '85	27-Mar-85	1.10E-04	8.00E-06	3.00E-06	8.63E-04	4.20E-05	3.00E-05	NS	NA	NA	NS	NA	NA
3rd '85	15-Jul-85	6.10E-05	6.00E-06	2.00E-06	5.40E-04	5.00E-05	5.00E-05	NS	NA	NA	NS	NA	NA
4th '85	09-Oct-85	1.07E-04	6.00E-06	2.00E-06	3.80E-04	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '86	24-Mar-86	8.86E-04	1.80E-05	2.00E-06	4.40E-03	1.90E-04	3.00E-05	NS	NA	NA	NS	NA	NA
3rd '86	10-Jul-86	6.66E-04	1.80E-05	3.00E-06	4.78E-03	2.10E-04	6.00E-05	NS	NA	NA	NS	NA	NA
4th '86	18-Dec-86	5.20E-04	1.00E-04	3.00E-06	1.70E-03	1.00E-04	6.00E-05	NS	NA	NA	NS	NA	NA
2nd '87	20-Apr-87	4.10E-04	1.00E-04	5.00E-08	1.60E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '87	05-Jun-87	1.60E-04	3.00E-05	5.00E-08	5.50E-04	4.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '87	22-Dec-87	3.60E-04	5.00E-05	5.00E-08	1.80E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '88	19-Apr-88	2.60E-04	5.00E-05	5.00E-08	1.90E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '88	28-Jul-88	3.10E-05	1.90E-05	5.00E-08	1.60E-04	4.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '89	07-Apr-89	6.20E-04	5.00E-05	***	1.70E-03	1.00E-04	***	NS	NA	NA	NS	NA	NA
3rd '89	06-Jun-89	3.40E-04	3.00E-05	***	7.40E-04	3.00E-05	***	NS	NA	NA	NS	NA	NA
4th '89	07-Nov-89	5.10E-04	6.00E-05	7.00E-06	1.00E-03	7.00E-05	1.40E-05	NS	NA	NA	NS	NA	NA
1st '90	17-Apr-90	3.60E-04	3.00E-05	4.00E-06	4.80E-04	2.00E-05	2.20E-05	NS	NA	NA	NS	NA	NA
2nd '90	20-Jun-90	1.70E-04	2.00E-05	5.00E-08	3.20E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '90	17-Oct-90	8.80E-05	1.60E-05	5.00E-08	2.90E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '91	10-Apr-91	3.00E-04	3.00E-05	5.00E-06	4.10E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '91	11-Jun-91	3.10E-04	3.00E-05	2.00E-07	4.70E-04	2.00E-05	2.00E-07	NS	NA	NA	NS	NA	NA
3rd '91	20-Nov-91	5.00E-04	4.00E-05	5.00E-08	1.50E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
1st '92	22-Apr-92	2.00E-05	8.00E-06	2.00E-06	9.60E-05	1.40E-05	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '92	10-Jun-92	6.50E-06	6.00E-06	2.00E-06	1.20E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '92	10-Jun-92	1.20E-04	4.00E-05	3.00E-06	1.21E-03	8.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '93	13-Apr-93	1.80E-05	1.70E-05	3.00E-06	2.10E-04	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '93	26-Jun-93	5.20E-05	1.90E-05	3.00E-06	1.70E-05	3.60E-05	2.00E-05	NS	NA	NA	NS	NA	NA
3rd '93	12-Oct-93	5.10E-05	2.30E-05	3.00E-06	7.10E-04	6.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '94	11-May-94	1.20E-04	1.00E-05	3.00E-05	9.80E-04	1.60E-04	2.00E-04	NS	NA	NA	NS	NA	NA
2nd '94	19-Jul-94	3.73E-05	1.60E-06	8.40E-08	7.80E-05	7.10E-06	4.20E-07	NS	NA	NA	NS	NA	NA
3rd '94	28-Nov-94	2.40E-04	1.50E-05	1.70E-07	2.60E-04	1.30E-05	8.30E-07	NS	NA	NA	NS	NA	NA
1st '95	11-Apr-95	8.40E-05	6.10E-06	1.50E-07	1.20E-04	1.10E-05	7.50E-05	NS	NA	NA	NS	NA	NA
2nd '95	06-Jul-95	1.90E-05	1.50E-06	1.40E-07	4.50E-05	4.30E-06	7.20E-07	NS	NA	NA	NS	NA	NA
3rd '95	15-Nov-95	1.20E-04	6.80E-06	1.40E-07	1.00E-05	5.80E-06	7.10E-07	NS	NA	NA	NS	NA	NA
1st '96	23-Apr-96	8.30E-05	3.30E-06	1.90E-07	6.80E-05	6.30E-06	1.80E-07	NS	NA	NA	NS	NA	NA
2nd '96 *	31-Jul-96							NS	NA	NA	NS	NA	NA
3rd '96	14-Nov-96	3.60E-05	2.50E-06	1.60E-07	8.50E-05	5.60E-06	8.40E-07	NS	NA	NA	NS	NA	NA
1st '97	21-Apr-97	3.30E-05	2.30E-06	1.70E-07	4.40E-05	4.80E-06	8.40E-07	NS	NA	NA	NS	NA	NA
3rd '97	05-Sep-97	5.40E-06	3.50E-07	1.56E-07	3.20E-05	9.00E-07	7.83E-07	NS	NA	NA	NS	NA	NA
4th '97	20-Nov-97	8.90E-06	7.20E-07	5.40E-07	3.40E-04	6.70E-06	1.10E-07	NS	NA	NA	NS	NA	NA
1st '98	23-Mar-98	<9.20E-05	9.20E-05	9.20E-05	<4.60E-04	4.60E-04	4.60E-04	NS	NA	NA	NS	NA	NA
2nd '98	16-Jun-98	< 6.50E-08	6.50E-08	6.50E-08	<3.20E-07	3.20E-07	3.20E-07	NS	NA	NA	NS	NA	NA
4th '98	05-Nov-98	4.20E-05	1.00E-06	1.10E-07	1.70E-04	1.00E-05	5.50E-07	NS	NA	NA	NS	NA	NA
2nd '99	15-Apr-99	6.20E-05	1.00E-06	1.00E-07	1.40E-04	7.00E-06	1.00E-07	NS	NA	NA	NS	NA	NA
3rd '99	07-Jul-99	5.45E-05	1.40E-06	8.30E-08	9.20E-05	4.00E-06	4.20E-07	NS	NA	NA	NS	NA	NA
4th '99	02-Dec-99	1.10E-04	3.00E-06	2.20E-07	2.80E-05	1.00E-06	1.10E-06	NS	NA	NA	NS	NA	NA
2nd '00	21-Apr-00	3.70E-05	1.00E-06	2.40E-07	2.70E-04	1.00E-05	1.20E-06	NS	NA	NA	NS	NA	NA
2nd '00	22-Jun-00	2.90E-05	1.00E-06	3.30E-07	2.80E-04	2.00E-05	1.70E-06	NS	NA	NA	NS	NA	NA
4th '00	21-Dec-00	2.30E-06	1.40E-06	3.70E-07	3.30E-04	5.00E-05	1.90E-06	NS	NA	NA	NS	NA	NA
1st '01	30-Apr-01	2.10E-05	1.00E-06	1.50E-07	<7.6E-07	N/A	7.60E-07	NS	NA	NA	NS	NA	NA
2nd '01	14-Jun-01	1.30E-06	4.00E-08	1.20E-07	1.80E-06	3.00E-08	5.90E-07	NS	NA	NA	NS	NA	NA
4th '01	17-Dec-01	3.70E-05	7.67E-07	8.30E-08	6.72E-05	2.62E-06	6.00E-07	NS	NA	NA	NS	NA	NA
1st '02	07-May-02	4.90E-05	2.40E-06	7.60E-07	1.28E-04	5.61E-06	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '02	07-Jul-02	8.88E-05	4.32E-06	7.60E-07	8.33E-05	4.32E-06	1.00E-05	NS	NA	NA	NS	NA	NA
4th '02	15-Dec-02	1.50E-04	6.20E-06	7.60E-07	3.16E-04	1.07E-05	1.00E-05	NS	NA	NA	NS	NA	NA
1st '03	21-Mar-03	5.00E-05	3.40E-06	2.71E-06	<4.2e-6		4.20E-06	NS	NA	NA	NS	NA	NA
2nd '03	10-Jun-03	5.60E-05	2.00E-06	4.10E-07	1.88E-04	5.14E-06	8.20E-08	NS	NA	NA	NS	NA	NA

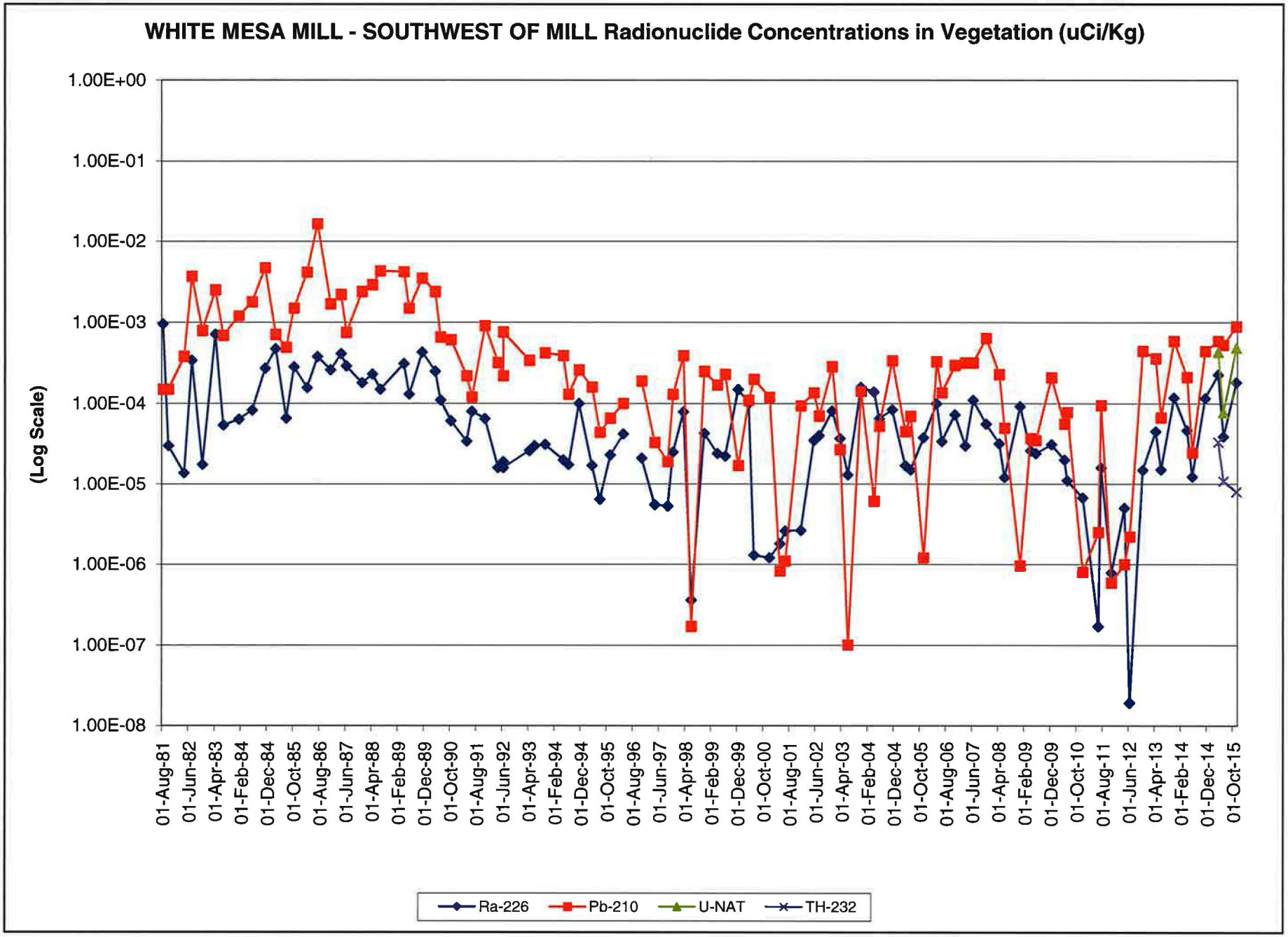
4th '03	20-Nov-03	3.20E-04	8.20E-06	1.70E-07	4.89E-04	1.25E-05	8.30E-07	NS	NA	NA	NS	NA	NA
1st '04	08-Apr-04	6.29E-05	4.10E-06	2.00E-07	1.94E-05	4.00E-06	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '04	12-Jun-04	6.51E-05	3.40E-06	1.30E-07	1.87E-05	3.90E-06	6.50E-07	NS	NA	NA	NS	NA	NA
4th '04	30-Nov-04	7.50E-05	4.60E-06	2.00E-08	4.45E-04	1.40E-05	3.00E-07	NS	NA	NA	NS	NA	NA
1st '05	21-Apr-05	4.90E-05	2.70E-06	1.30E-07	1.27E-04	4.80E-06	6.50E-07	NS	NA	NA	NS	NA	NA
2nd '05	13-Jun-05	2.30E-05	2.10E-06	1.50E-07	4.70E-05	5.10E-06	7.60E-07	NS	NA	NA	NS	NA	NA
4th '05	10-Nov-05	7.40E-05	3.50E-06	1.20E-10	2.40E-06	8.10E-08	5.80E-10	NS	NA	NA	NS	NA	NA
1st '06	03-Apr-06	1.00E-04	6.00E-06	5.00E-08	6.54E-04	1.50E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '06	16-Jun-06	9.50E-05	5.90E-06	5.00E-08	4.48E-04	1.40E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '06	28-Nov-06	8.13E-05	4.10E-06	2.20E-07	3.25E-04	1.12E-06	1.00E-05	NS	NA	NA	NS	NA	NA
1st '07	30-Mar-07	4.30E-05	2.60E-06	1.70E-07	2.64E-04	7.20E-06	8.60E-07	NS	NA	NA	NS	NA	NA
2nd '07	1-Jun-07	5.10E-05	3.20E-06	2.30E-07	5.30E-04	1.40E-06	1.20E-06	NS	NA	NA	NS	NA	NA
4th '07	23-Nov-07	7.30E-05	6.60E-06	5.00E-08	7.00E-04	2.20E-05	1.10E-06	NS	NA	NA	NS	NA	NA
1st '08	22-Apr-08	2.80E-06	2.80E-06	7.20E-07	4.40E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '08	18-Jun-08	3.20E-06	3.30E-06	1.80E-06	1.40E-04	3.30E-05	5.50E-05	NS	NA	NA	NS	NA	NA
4th '08	12-Dec-08	7.30E-05	3.20E-06	7.40E-07	4.40E-04	2.50E-05	3.20E-05	NS	NA	NA	NS	NA	NA
1st '09	28-Apr-09	5.25E-05	3.60E-06	1.10E-06	1.90E-04	1.50E-05	2.20E-05	NS	NA	NA	NS	NA	NA
2nd '09	17-Jun-09	2.30E-05	1.60E-05	5.20E-07	4.30E-05	1.00E-05	1.70E-05	NS	NA	NA	NS	NA	NA
4th '09	18-Dec-09	5.50E-05	3.50E-06		3.00E-04	1.10E-05		NS	NA	NA	NS	NA	NA
1st '10	13-May-10	1.90E-04	6.10E-06	9.40E-07	5.10E-04	2.40E-05	3.10E-05	NS	NA	NA	NS	NA	NA
2nd '10	18-Jun-10	2.30E-05	2.00E-06	7.70E-07	8.30E-05	1.80E-05	2.90E-05	NS	NA	NA	NS	NA	NA
4th '10	20-Dec-10	8.60E-06	9.10E-07	3.90E-07	1.10E-07	6.80E-07	1.10E-06	NS	NA	NA	NS	NA	NA
2nd '11	23-Jun-11	2.10E-07	1.20E-07	1.40E-07	<2.2E-06	1.30E-06	2.20E-06	NS	NA	NA	NS	NA	NA
3rd '11	28-Jul-11	4.20E-06	5.40E-07	2.70E-07	2.30E-04	2.50E-06	2.30E-06	NS	NA	NA	NS	NA	NA
4th '11	23-Nov-11	7.70E-06	6.80E-07	2.30E-07	<5.8E-08	3.40E-07	5.80E-07	NS	NA	NA	NS	NA	NA
2nd '12	11-Apr-12	1.50E-05	9.50E-07	2.60E-07	<7.0E-07	6.00E-07	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '12	11-Jun-12	8.30E-06	5.40E-07	1.20E-07	1.40E-04	8.30E-06	6.50E-06	NS	NA	NA	NS	NA	NA
4th '12	06-Nov-12	2.34E-05	4.10E-07	7.71E-08	4.59E-04	3.83E-06	6.18E-07	NS	NA	NA	NS	NA	NA
2nd'13	30-Apr-13	9.04E-05	1.68E-06	8.58E-07	2.24E-04	4.46E-06	4.68E-06	NS	NA	NA	NS	NA	NA
3rd '13	20-Jun-13	2.58E-06	9.59E-07	8.06E-07	1.06E-04	2.30E-06	3.28E-06	NS	NA	NA	NS	NA	NA
4th '13	14-Nov-13	1.43E-04	3.70E-06	2.17E-06	4.65E-04	1.17E-05	1.80E-05	NS	NA	NA	NS	NA	NA
2nd '14	16-Apr-14	2.53E-05	6.29E-07	5.51E-07	5.70E-05	2.21E-06	4.52E-06	NS	NA	NA	NS	NA	NA
3rd '14	10-Jun-14	2.53E-05	5.55E-07	5.77E-07	7.68E-05	2.08E-06	3.66E-06	NS	NA	NA	NS	NA	NA
4th '14	25-Nov-14	7.41E-05	1.90E-06	1.53E-06	2.98E-04	6.48E-06	1.06E-05	NS	NA	NA	NS	NA	NA
1st '15	21-Apr-15	1.31E-04	4.21E-06	5.92E-06	6.33E-04	1.17E-05	1.45E-05	3.35E-04	2.41E-05	1.17E-05	7.35E-06	8.57E-07	7.82E-07
2nd '15	15-Jun-15	2.39E-04	4.43E-06	3.45E-06	1.08E-03	2.02E-05	3.25E-05	5.24E-04	2.41E-05	9.70E-06	2.38E-05	2.12E-06	7.36E-07
4th '15	23-Nov-15	1.03E-04	3.95E-06	4.25E-06	4.78E-04	1.06E-05	1.75E-05	1.51E-04	1.53E-05	7.71E-06	2.30E-05	1.53E-06	4.23E-07

*2nd quarter of 1996 San Juan County, Utah, was declared a disaster area due to drought, no samples were collected during this period

† NRC Regulatory Guide does not specify a Lower Limit of Detection (LLD) for Thorium 232 in vegetation (or any matrix). The LLD for Thorium 230 was used.

NS = Not Sampled

NA = Not Applicable


WHITE MESA MILL - SOUTHWEST OF MILL Radionuclide Concentrations in Vegetation (uCi/Kg)
(Log Scale)
1.00E+00
1.00E-01
1.00E-02
1.00E-03
1.00E-04
1.00E-05
1.00E-06
1.00E-07
1.00E-08
01-Aug-81
01-Jun-82
01-Apr-83
01-Feb-84
01-Dec-84
01-Oct-85
01-Aug-86
01-Jun-87
01-Apr-88
01-Feb-89
01-Dec-89
01-Oct-90
01-Aug-91
01-Jun-92
01-Apr-93
01-Feb-94
01-Dec-94
01-Oct-95
01-Aug-96
01-Jun-97
01-Apr-98
01-Feb-99
01-Dec-99
01-Oct-00
01-Aug-01
01-Jun-02
01-Apr-03
01-Feb-04
01-Dec-04
01-Oct-05
01-Aug-06
01-Jun-07
01-Apr-08
01-Feb-09
01-Dec-09
01-Oct-10
01-Aug-11
01-Jun-12
01-Apr-13
01-Feb-14
01-Dec-14
01-Oct-15
Ra-226
Pb-210
U-NAT
TH-232

WHITE MESA MILL
FORAGE RADIONUCLIDE DATA
SOUTHWEST OF MILL

SAMPLED QTR.	SAMPLED DATE	Ra-226	Ra-226	LLD	Pb-210	Pb-210	LLD	U-NAT	U-NAT	LLD	Th-232	Th-232	LLD
		VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (5.0E-08)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (1.0E-06)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)†
3rd '81	27-Aug-81	9.50E-04	2.00E-05	5.00E-08	1.50E-04	1.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '81	20-Oct-81	3.00E-05	3.00E-06	5.00E-08	1.50E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '82	15-Apr-82	1.37E-05	3.00E-06	3.00E-06	3.80E-04	4.00E-05	4.00E-05	NS	NA	NA	NS	NA	NA
3rd '82	01-Jul-82	3.40E-04	2.00E-05	5.00E-08	3.68E-03	2.70E-04	1.00E-07	NS	NA	NA	NS	NA	NA
4th '82	30-Nov-82	1.75E-05	3.00E-06	2.00E-06	7.92E-04	4.00E-06	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '83	13-Apr-83	7.13E-04	7.30E-05	9.00E-08	2.51E-03	3.00E-04	3.00E-04	NS	NA	NA	NS	NA	NA
3rd '83	01-Jul-83	5.39E-05	4.50E-06	2.00E-06	6.88E-04	4.30E-05	4.00E-05	NS	NA	NA	NS	NA	NA
4th '83	30-Jan-84	6.40E-05	7.00E-06	4.00E-06	1.20E-03	1.00E-04	4.00E-05	NS	NA	NA	NS	NA	NA
2nd '84	28-Jun-84	8.27E-05	6.30E-06	3.00E-09	1.80E-03	1.00E-04	9.00E-08	NS	NA	NA	NS	NA	NA
4th '84	14-Nov-84	2.72E-04	1.48E-04	2.00E-07	4.70E-03	7.20E-04	3.00E-07	NS	NA	NA	NS	NA	NA
2nd '85	27-Mar-85	4.73E-04	1.60E-07	3.00E-06	7.07E-04	3.60E-05	3.00E-05	NS	NA	NA	NS	NA	NA
3rd '85	15-Jul-85	6.60E-05	7.00E-06	4.00E-06	4.90E-04	3.00E-05	3.00E-05	NS	NA	NA	NS	NA	NA
4th '85	09-Oct-85	2.83E-04	2.00E-05	7.00E-06	1.50E-03	1.00E-04	7.00E-05	NS	NA	NA	NS	NA	NA
2nd '86	24-Mar-86	1.57E-04	1.00E-05	4.00E-06	4.14E-03	1.80E-04	3.00E-05	NS	NA	NA	NS	NA	NA
3rd '86	10-Jul-86	3.78E-04	1.00E-05	2.00E-06	1.65E-02	7.00E-04	1.00E-04	NS	NA	NA	NS	NA	NA
4th '86	18-Dec-86	2.60E-04	2.00E-05	2.00E-06	1.70E-03	1.00E-04	1.00E-04	NS	NA	NA	NS	NA	NA
2nd '87	20-Apr-87	4.10E-04	7.00E-05	5.00E-08	2.20E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '87	05-Jun-87	2.90E-04	4.00E-05	5.00E-08	7.50E-04	5.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
4th '87	22-Dec-87	1.80E-04	3.00E-05	5.00E-08	2.40E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '88	19-Apr-88	2.30E-04	5.00E-05	5.00E-08	2.90E-03	1.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '88	28-Jul-88	1.50E-04	3.00E-05	5.00E-08	4.30E-03	2.00E-04	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '89	07-Apr-89	3.10E-04	4.00E-05	***	4.20E-03	1.00E-04	***	NS	NA	NA	NS	NA	NA
3rd '89	06-Jun-89	1.30E-04	2.00E-05	***	1.50E-03	1.00E-04	***	NS	NA	NA	NS	NA	NA
4th '89	07-Nov-89	4.30E-04	5.00E-05	1.40E-05	3.50E-03	1.40E-04	2.70E-05	NS	NA	NA	NS	NA	NA
1st '90	17-Apr-90	2.50E-04	3.00E-05	5.00E-06	2.39E-03	5.00E-05	2.50E-05	NS	NA	NA	NS	NA	NA
2nd '90	20-Jun-90	1.10E-04	2.00E-05	5.00E-08	6.60E-04	3.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '90	17-Oct-90	6.10E-05	1.40E-05	5.00E-08	6.10E-04	3.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '91	10-Apr-91	3.40E-05	1.10E-05	5.00E-06	2.20E-04	1.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '91	11-Jun-91	8.00E-05	6.00E-06	2.00E-07	1.20E-04	1.00E-05	2.00E-07	NS	NA	NA	NS	NA	NA
3rd '91	20-Nov-91	6.50E-05	1.40E-05	5.00E-08	9.10E-04	5.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '92	22-Apr-92	1.60E-05	7.00E-06	2.00E-06	3.20E-04	2.00E-05	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '92	10-Jun-92	1.90E-05	1.00E-05	2.00E-07	2.20E-04	2.00E-05	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '92	10-Jun-92	1.60E-05	1.80E-05	3.00E-06	7.60E-04	6.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '93	13-Apr-93	2.60E-05	2.00E-05	3.00E-06	3.40E-04	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
2nd '93	26-Jun-93	3.00E-05	1.40E-05	3.00E-06	0.00E+00	3.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
3rd '93	12-Oct-93	3.10E-05	1.60E-05	3.00E-06	4.20E-04	6.00E-05	2.00E-05	NS	NA	NA	NS	NA	NA
1st '94	11-May-94	2.00E-05	5.00E-06	3.00E-05	3.90E-04	8.00E-05	2.00E-04	NS	NA	NA	NS	NA	NA
2nd '94	19-Jul-94	1.75E-05	1.70E-06	7.60E-08	1.30E-04	7.80E-06	3.80E-07	NS	NA	NA	NS	NA	NA
3rd '94	28-Nov-94	1.00E-04	9.00E-06	1.50E-07	2.60E-04	1.20E-05	7.40E-07	NS	NA	NA	NS	NA	NA
1st '95	11-Apr-95	1.70E-05	1.50E-06	1.60E-07	1.60E-04	1.50E-05	8.10E-07	NS	NA	NA	NS	NA	NA
2nd '95	06-Jul-95	6.40E-06	6.00E-07	1.40E-07	4.40E-05	4.20E-06	7.00E-07	NS	NA	NA	NS	NA	NA
3rd '95	15-Nov-95	2.30E-05	2.20E-06	1.70E-07	6.60E-05	9.60E-06	8.30E-07	NS	NA	NA	NS	NA	NA
1st '96	23-Apr-96	4.20E-05	2.20E-06	1.70E-07	1.00E-04	6.70E-06	1.80E-07	NS	NA	NA	NS	NA	NA
2nd '96 *	31-Jul-96							NS	NA	NA	NS	NA	NA
3rd '96	14-Nov-96	2.10E-05	2.00E-06	1.60E-07	1.90E-04	7.30E-06	8.20E-07	NS	NA	NA	NS	NA	NA
1st '97	21-Apr-97	5.50E-06	4.20E-07	1.40E-07	3.30E-05	3.90E-06	7.00E-07	NS	NA	NA	NS	NA	NA
3rd '97	05-Sep-97	5.30E-06	3.20E-07	1.26E-07	1.90E-05	6.90E-07	6.34E-07	NS	NA	NA	NS	NA	NA
4th '97	20-Nov-97	2.50E-05	9.50E-07	5.90E-07	1.30E-04	4.70E-06	1.20E-07	NS	NA	NA	NS	NA	NA
1st '98	23-Mar-98	<7.90E-05	7.90E-05	7.90E-05	<3.90E-04	3.90E-04	3.90E-04	NS	NA	NA	NS	NA	NA
2nd '98	16-Jun-98	3.60E-07	1.40E-07	3.30E-08	<1.7E-07	1.70E-07	1.70E-07	NS	NA	NA	NS	NA	NA
4th '98	05-Nov-98	4.30E-05	1.00E-06	7.60E-08	2.50E-04	1.00E-05	3.80E-07	NS	NA	NA	NS	NA	NA
2nd '99	15-Apr-99	2.40E-05	1.00E-06	1.20E-07	1.70E-04	8.00E-06	6.20E-07	NS	NA	NA	NS	NA	NA
3rd '99	07-Jul-99	2.23E-05	8.60E-07	1.20E-07	2.30E-04	7.00E-06	5.90E-07	NS	NA	NA	NS	NA	NA
4th '99	02-Dec-99	1.50E-04	3.00E-06	2.00E-07	1.70E-05	1.00E-06	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '00	21-Apr-00	1.00E-04	2.00E-06	1.20E-07	1.10E-04	7.00E-06	6.10E-07	NS	NA	NA	NS	NA	NA
2nd '00	22-Jun-00	1.30E-06	1.00E-07	2.40E-07	2.00E-04	1.00E-05	1.20E-06	NS	NA	NA	NS	NA	NA
4th '00	21-Dec-00	1.20E-06	9.00E-07	2.40E-07	1.20E-04	3.00E-05	1.20E-06	NS	NA	NA	NS	NA	NA
1st '01	30-Apr-01	1.80E-06	1.00E-07	1.70E-07	<8.3E-07	N/A	8.30E-07	NS	NA	NA	NS	NA	NA
2nd '01	14-Jun-01	2.60E-06	2.00E-07	9.90E-08	1.10E-06	2.00E-08	5.00E-07	NS	NA	NA	NS	NA	NA
4th '01	17-Dec-01	2.63E-06	4.60E-05	1.20E-07	9.40E-05	3.72E-06	6.00E-07	NS	NA	NA	NS	NA	NA
1st '02	07-May-02	3.50E-05	2.20E-06	7.60E-07	1.36E-04	5.61E-06	1.00E-05	NS	NA	NA	NS	NA	NA
2nd '02	07-Jul-02	4.02E-05	2.34E-06	7.60E-07	7.04E-05	4.11E-06	1.00E-05	NS	NA	NA	NS	NA	NA
4th '02	15-Dec-02	8.10E-05	3.90E-06	7.60E-07	2.87E-04	8.54E-06	1.00E-05	NS	NA	NA	NS	NA	NA
1st '03	21-Mar-03	3.70E-05	2.60E-06	2.41E-06	2.69E-05	2.01E-06	3.73E-06	NS	NA	NA	NS	NA	NA
2nd '03	10-Jun-03	1.30E-05	1.00E-06	5.20E-07	<1.00E-07		1.00E-07	NS	NA	NA	NS	NA	NA
4th '03	20-Nov-03	1.60E-04	1.30E-05	1.20E-07	1.42E-04	6.42E-06	5.90E-07	NS	NA	NA	NS	NA	NA

1st '04	08-Apr-04	1.40E-04	7.70E-06	1.10E-07	6.10E-06	2.70E-06	5.50E-07	NS	NA	NA	NS	NA	NA
2nd '04	12-Jun-04	6.51E-05	3.20E-06	1.50E-07	5.27E-05	4.90E-06	7.60E-07	NS	NA	NA	NS	NA	NA
4th '04	30-Nov-04	8.40E-05	5.70E-06	3.00E-08	3.39E-04	1.60E-05	3.00E-07	NS	NA	NA	NS	NA	NA
1st '05	21-Apr-05	1.70E-05	1.60E-06	1.30E-07	4.50E-05	3.50E-06	6.50E-07	NS	NA	NA	NS	NA	NA
2nd '05	13-Jun-05	1.50E-05	1.60E-06	1.40E-07	7.00E-05	5.10E-06	6.90E-07	NS	NA	NA	NS	NA	NA
4th '05	10-Nov-05	3.80E-05	2.10E-06	8.60E-10	1.20E-06	4.80E-08	4.30E-10	NS	NA	NA	NS	NA	NA
1st '06	03-Apr-06	1.00E-04	6.00E-06	5.00E-08	3.30E-04	1.10E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '06	16-Jun-06	3.40E-05	2.50E-06	5.00E-08	1.37E-04	6.00E-06	1.00E-06	NS	NA	NA	NS	NA	NA
4th '06	28-Nov-06	7.31E-05	3.20E-06	1.60E-07	2.98E-04	8.50E-06	8.20E-07	NS	NA	NA	NS	NA	NA
1st '07	30-Mar-07	3.00E-05	2.20E-06	1.70E-07	3.20E-04	7.90E-06	8.40E-07	NS	NA	NA	NS	NA	NA
2nd '07	1-Jun-07	1.10E-04	4.60E-06	2.3-07	3.20E-04	1.10E-05	1.10E-06	NS	NA	NA	NS	NA	NA
4th '07	23-Nov-07	5.60E-05	5.20E-06	5.00E-08	6.40E-04	1.90E-05	1.00E-06	NS	NA	NA	NS	NA	NA
1st '08	22-Apr-08	3.20E-05	2.30E-06	7.20E-07	2.30E-04	1.50E-05	1.00E-06	NS	NA	NA	NS	NA	NA
2nd '08	18-Jun-08	1.25E-05	2.20E-06	1.80E-06	5.00E-05	3.00E-05	4.80E-03	NS	NA	NA	NS	NA	NA
4th '08	12-Dec-08	9.20E-05	4.10E-06	9.60E-07	4.10E-04	3.00E-05	4.00E-05	NS	NA	NA	NS	NA	NA
1st '09	28-Apr-09	2.60E-05	2.90E-06	1.40E-06	3.70E-05	1.50E-06	2.50E-05	NS	NA	NA	NS	NA	NA
2nd '09	17-Jun-09	2.40E-05	1.40E-06	3.90E-07	3.50E-05	7.90E-06	1.30E-05	NS	NA	NA	NS	NA	NA
4th '09	18-Dec-09	3.10E-05	2.30E-06		2.10E-04	8.40E-06		NS	NA	NA	NS	NA	NA
1st '10	13-May-10	2.00E-05	2.10E-06	9.40E-07	5.60E-05	1.50E-05	2.40E-05	NS	NA	NA	NS	NA	NA
2nd '10	18-Jun-10	1.10E-05	1.30E-06	6.60E-07	7.80E-05	1.60E-05	2.50E-05	NS	NA	NA	NS	NA	NA
4th '10	20-Dec-10	6.70E-06	9.10E-07	4.80E-07	8.00E-07	7.90E-07	1.30E-06	NS	NA	NA	NS	NA	NA
2nd '11	23-Jun-11	<1.7E-07	6.90E-08	1.70E-07	<2.5E-06	1.50E-06	2.50E-06	NS	NA	NA	NS	NA	NA
3rd '11	27-Jul-11	1.60E-05	1.00E-06	2.60E-07	9.50E-05	1.60E-06	1.70E-06	NS	NA	NA	NS	NA	NA
4th '11	23-Nov-11	7.80E-07	2.50E-07	2.30E-07	<5.9E-07	3.50E-07	5.90E-07	NS	NA	NA	NS	NA	NA
2nd '12	11-Apr-12	5.00E-06	6.00E-07	3.00E-07	<7.0E-07	7.00E-07	1.00E-06	NS	NA	NA	NS	NA	NA
3rd '12	11-Jun-12	1.90E-08	6.20E-08	1.10E-07	<2.5E-07	1.30E-06	2.20E-06	NS	NA	NA	NS	NA	NA
4th '12	06-Nov-12	1.49E-05	3.41E-07	4.25E-08	4.45E-04	4.01E-06	8.57E-07	NS	NA	NA	NS	NA	NA
2nd '13	30-Apr-13	4.50E-05	1.19E-06	5.39E-07	3.62E-04	6.30E-06	9.90E-06	NS	NA	NA	NS	NA	NA
3rd '13	20-Jun-13	1.51E-05	1.06E-06	1.96E-06	6.71E-05	2.93E-06	6.24E-06	NS	NA	NA	NS	NA	NA
4th '13	14-Nov-13	1.18E-04	3.39E-06	2.97E-06	5.92E-04	1.27E-05	1.62E-05	NS	NA	NA	NS	NA	NA
2nd '14	16-Apr-14	4.65E-05	1.08E-06	7.35E-07	2.13E-04	5.93E-06	1.31E-05	NS	NA	NA	NS	NA	NA
3rd '14	10-Jun-14	1.23E-05	4.97E-07	6.97E-07	2.46E-05	1.84E-06	4.63E-06	NS	NA	NA	NS	NA	NA
4th '14	25-Nov-14	1.16E-04	2.25E-06	1.53E-06	4.43E-04	1.04E-05	1.94E-05	NS	NA	NA	NS	NA	NA
1st '15	21-Apr-15	2.27E-04	5.01E-06	4.08E-06	5.90E-04	1.16E-05	1.67E-05	4.33E-04	1.86E-05	5.14E-06	3.31E-05	2.15E-06	1.14E-06
2nd '15	15-Jun-15	3.90E-05	1.88E-06	2.71E-06	5.29E-04	1.61E-05	3.36E-05	7.78E-05	8.47E-06	6.43E-06	1.08E-05	1.28E-06	1.21E-06
4th '15	23-Nov-15	1.83E-04	6.96E-06	9.64E-06	8.94E-04	1.43E-05	2.03E-05	4.88E-04	2.91E-05	9.00E-06	7.92E-06	7.67E-07	3.20E-07

*2nd quarter of 1996 San Juan County, Utah, was declared a disaster area due to drought, no samples were collected during this period

† NRC Regulatory Guide does not specify a Lower Limit of Detection (LLD) for Thorium 232 in vegetation (or any matrix). The LLD for Thorium 230 was used.

NS = Not Sampled

NA = Not Applicable

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: January 4, 2016

Company : Energy Fuels Resources (USA), Inc.
Address : 225 Union Boulevard
Suite 600
Lakewood, Colorado 80228
Contact: Ms. Kathy Weinel
Project: Vegetation Analysis

Client Sample ID: North East
Sample ID: 386428001
Matrix: SOLID
Collect Date: 23-NOV-15 09:30
Receive Date: 30-NOV-15
Collector: Client

Project: DNMI00101
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec Analysis												
Alphaspec Th-232, Solid "Dry Weight Corrected"												
Thorium-232		6.67E-06	+/-7.98E-07	7.06E-07	2.00E-07	uCi/kg		HAKB	12/23/15	0843	1529751	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		0.000134	+/-8.48E-06	2.16E-06	2.00E-07	uCi/kg		HAKB	12/21/15	1414	1529753	2
Uranium-235/236		6.63E-06	+/-2.20E-06	1.99E-06	2.00E-07	uCi/kg						
Uranium-238		0.000132	+/-8.45E-06	2.16E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000934	+/-1.36E-05	1.37E-05	1.00E-06	uCi/kg		KSD1	12/31/15	1056	1531263	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000234	+/-5.79E-06	3.89E-06	5.00E-08	uCi/kg		KSD1	12/23/15	1557	1531265	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	CXC1	12/04/15	1332	1528630

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, Th-01-RC Modified	
2	DOE EML HASL-300, U-02-RC Modified	
3	DOE RP280 Modified	
4	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Thorium-229 Tracer	Alphaspec Th-232, Solid "Dry Weight Corrected"			63.3	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			89.5	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			92.5	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			96.6	(25%-125%)

Notes:
Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

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Certificate of Analysis

Report Date: January 4, 2016

Company :	Energy Fuels Resources (USA), Inc.
Address :	225 Union Boulevard Suite 600 Lakewood, Colorado 80228
Contact:	Ms. Kathy Weinel
Project:	Vegetation Analysis

Client Sample ID:	North West	Project:	DNMI00101
Sample ID:	386428002	Client ID:	DNMI001
Matrix:	SOLID		
Collect Date:	23-NOV-15 09:00		
Receive Date:	30-NOV-15		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec Analysis												
Alphaspec Th-232, Solid "Dry Weight Corrected"												
Thorium-232		2.30E-05	+/-1.53E-06	4.23E-07	2.00E-07	uCi/kg		HAKB	12/23/15	0843	1529751	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		7.33E-05	+/-6.51E-06	2.55E-06	2.00E-07	uCi/kg		HAKB	12/21/15	1414	1529753	2
Uranium-235/236		7.09E-06	+/-2.35E-06	2.13E-06	2.00E-07	uCi/kg						
Uranium-238		7.08E-05	+/-6.41E-06	3.03E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000478	+/-1.06E-05	1.75E-05	1.00E-06	uCi/kg		KSD1	12/31/15	1056	1531263	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000103	+/-3.95E-06	4.25E-06	5.00E-08	uCi/kg		KSD1	12/23/15	1557	1531265	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	CXC1	12/04/15	1332	1528630

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, Th-01-RC Modified	
2	DOE EML HASL-300, U-02-RC Modified	
3	DOE RP280 Modified	
4	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Thorium-229 Tracer	Alphaspec Th-232, Solid "Dry Weight Corrected"			54.7	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			89.8	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			93.2	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			101	(25%-125%)

Notes:
Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: January 4, 2016

Company : Energy Fuels Resources (USA), Inc.
Address : 225 Union Boulevard
Suite 600
Lakewood, Colorado 80228
Contact: Ms. Kathy Weinel
Project: Vegetation Analysis

Client Sample ID: South West
Sample ID: 386428003
Matrix: SOLID
Collect Date: 23-NOV-15 10:30
Receive Date: 30-NOV-15
Collector: Client

Project: DNMI00101
Client ID: DNMI001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	DF	Analyst	Date	Time	Batch	Method
Rad Alpha Spec Analysis												
Alphaspec Th-232, Solid "Dry Weight Corrected"												
Thorium-232		7.92E-06	+/-7.67E-07	3.20E-07	2.00E-07	uCi/kg		HAKB	12/23/15	0843	1529751	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		0.000232	+/-1.26E-05	3.03E-06	2.00E-07	uCi/kg		HAKB	12/21/15	1414	1529753	2
Uranium-235/236		1.43E-05	+/-3.57E-06	2.53E-06	2.00E-07	uCi/kg						
Uranium-238		0.000242	+/-1.29E-05	3.44E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000894	+/-1.43E-05	2.03E-05	1.00E-06	uCi/kg		KSD1	12/31/15	1057	1531263	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000183	+/-6.96E-06	9.64E-06	5.00E-08	uCi/kg		KSD1	12/23/15	1825	1531265	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
Dry Soil Prep	Dry Soil Prep GL-RAD-A-021	CXC1	12/04/15	1332	1528630

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, Th-01-RC Modified	
2	DOE EML HASL-300, U-02-RC Modified	
3	DOE RP280 Modified	
4	EPA 900.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Thorium-229 Tracer	Alphaspec Th-232, Solid "Dry Weight Corrected"			78.2	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			74.9	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			96.1	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			97.3	(25%-125%)

Notes:
Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston SC 29417
2040 Savage Road Charleston SC 29407
P 843.556.8171
F 843.766.1178

gel.com

January 04, 2016

Ms. Kathy Weinel
Energy Fuels Resources (USA), Inc.
225 Union Boulevard
Suite 600
Lakewood, Colorado 80228

Re: Vegetation Analysis
Work Order: 386428

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 30, 2015. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Anna C Day

Anna Day for
Julie Robinson
Project Manager

Purchase Order: DW16138
Enclosures

Energy Fuels Resources (USA), Inc.
Vegetation Analysis
SDG: 386428

Case Narrative

Receipt Narrative
for
Energy Fuels Resources (USA), Inc.
SDG: 386428

January 04, 2016

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on November 30, 2015 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification: The laboratory received the following samples:

Laboratory ID	Client ID
386428001	North East
386428002	North West
386428003	South West

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.

Anna C Day
Anna Day for
Julie Robinson
Project Manager

Chain of Custody and Supporting Documentation

386428

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Gel Laboratories
2040 Savage Road
Charleston, SC 29407

Contact: Garrin Palmer
Ph: 435 678 2221
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Late Fall Vegetation 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
North East	11/23/2015	930	Ra 226, U-Nat, Th-232,PB 210
North West	11/23/2015	900	Ra 226, U-Nat, Th-232,PB 210
South West	11/23/2015	1030	Ra 226, U-Nat, Th-232,PB 210
			Weights:
			North East: 4220 Grams
			North West: 4250 Grams
			South West: 4800 Grams
			* Please use caution handling samples
			cactus and Yucca plants included
			in samples.

Comments: Please send report to Kathy Weinel at kweinel@energyfuels.com

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	11/23/15 1200	B. Huffman	11/30/15 0905
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DNMI			**SDG/AR/COC/Work Order:** 380428
Received By: Brielle Luthman			**Date Received:** 11/30/15 0905
Suspected Hazard Information	**Yes**	**No**	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?		/	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0
Classified Radioactive II or III by RSO?		/	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?		/	
Package, COC, and/or Samples marked as beryllium or asbestos containing?		/	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		/	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		/		Preservation Method: Ice bags Blue ice Dry ice (None) Other (describe) *all temperatures are recorded in Celsius 18°
2a	Daily check performed and passed on IR temperature gun?	/			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): ES0320153830
3	Chain of custody documents included with shipment?	/			
4	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?		/		Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	Do Low Level Perchlorate samples have headspace as required?		/		Sample ID's and containers affected:
7	VOA vials contain acid preservation?		/		(If unknown, select No)
8	VOA vials free of headspace (defined as < 6mm bubble)?		/		Sample ID's and containers affected:
9	Are Encore containers present?			/	(If yes, immediately deliver to Volatiles laboratory)
10	Samples received within holding time?	/			ID's and tests affected:
11	Sample ID's on COC match ID's on bottles?	/			Sample ID's and containers affected:
12	Date & time on COC match date & time on bottles?	/			Sample ID's affected:
13	Number of containers received match number indicated on COC?	/			Sample ID's affected:
14	Are sample containers identifiable as GEL provided?			/	
15	COC form is properly signed in relinquished/received sections?	/			
16	Carrier and tracking number.				Circle Applicable: FedEx Air FedEx Ground (UPS) Field Services Courier Other 1Z 187 Y4Y 03 9747 8610 1Z 187 Y4Y 03 9613 6393 1Z 187 Y4Y 03 9977 7007

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials J.R. Date 12-1-15 Page 1 of 1 GL-CHL-SR-001 Rev 2

GEL Laboratories LLC – Login Review Report

GEL Work Order/SDG: 386428 Late Fall Vegetation 2015
Client SDG: 386428
Project Manager: Julie Robinson
Project Name: DNMI00101 Vegetation Analysis
Purchase Order: DW16138
Package Level: LEVEL3
EDD Format: EIM_DNMI

Work Order Due Date: 31-DEC-15
Package Due Date: 28-DEC-15
EDD Due Date: 31-DEC-15
Due Date: 31-DEC-15
AXD4

Collector: C
Prelogin #: 20151138014
Project Workdef ID: 1310529
SDG Status: Closed
Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
386428001	North East		23-NOV-15 09:30	30-NOV-15 09:05	-2	1	VEGETATION		30		1		
386428002	North West		23-NOV-15 09:00	30-NOV-15 09:05	-2	1	VEGETATION		30		1		
386428003	South West		23-NOV-15 10:30	30-NOV-15 09:05	-2	1	VEGETATION		30		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data		Receive Codes
-001 North East	REVW	Alphaspec Th-232, Solid				Client Matrix	SOLID	
	REVW	Alphaspec U, Solid	U-Natural			Safety Issue	Use caution – Cactus and Yucca plants included	
	REVW	GFPC, Total Alpha Radium, solid						
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite – Dry prep instructions						
-002 North West	REVW	Alphaspec Th-232, Solid				Client Matrix	SOLID	
	REVW	Alphaspec U, Solid	U-Natural			Safety Issue	Use caution – Cactus and Yucca plants included	
	REVW	GFPC, Total Alpha Radium, solid						
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite – Dry prep instructions						
-003 South West	REVW	Alphaspec Th-232, Solid				Client Matrix	SOLID	
	REVW	Alphaspec U, Solid	U-Natural			Safety Issue	Use caution – Cactus and Yucca plants included	
	REVW	GFPC, Total Alpha Radium, solid						
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite – Dry prep instructions						

Product: ASP__THS **Workdef ID:** 1370540 **In Product Group?** No **Group Name:** **Group Reference:**

Method: DOE EML HASL-300, Th-01-RC Modified
Product Description: Alphaspec Th-232, Solid
Samples: 001, 002, 003
Parmname Check: All parmnames scheduled properly

Path: No Ash pCi/g
Product Reference:
Moisture Correction: "Dry Weight Corrected"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
7440-29-1	Thorium-232	.0000002	uCi/kg	REG	Y	Y	Yes

Product: LABCOMP_S **Workdef ID:** 1310628 **In Product Group?** No **Group Name:** **Group Reference:**

Method:
Product Description: Laboratory Composite – Dry prep instructions
Samples: 001, 002, 003
Parmname Check: All parmnames scheduled properly

Path: Rad Prep SPRP
Product Reference:
Moisture Correction: "As Received"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?

No

Product: GFC__PBS **Workdef ID:** 1310600 **In Product Group?** No **Group Name:** **Group Reference:**

Method: DOE RP280 Modified
Product Description: GFPC, Pb210, Solid
Samples: 001, 002, 003
Parmname Check: All parmnames scheduled properly

Path: Standard
Product Reference:
Moisture Correction: "Dry Weight Corrected"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
14255-04-0	Lead-210	.000001	uCi/kg	REG	Y	Y	Yes

Product: GFCTORAS **Workdef ID:** 1310679 **In Product Group?** No **Group Name:** **Group Reference:**

Method: EPA 900.1 Modified
Product Description: GFPC, Total Alpha Radium, solid
Samples: 001, 002, 003
Parmname Check: All parmnames scheduled properly

Path: Standard
Product Reference:
Moisture Correction: "Dry Weight Corrected"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Total Radium	.00000005	uCi/kg	REG	Y	Y	Yes

GEL Laboratories LLC – Login Review Report

Product: ASP__UUS **Workdef ID:** 1370669 **In Product Group?** No **Group Name:** **Group Reference:**

Method: DOE EML HASL-300, U-02-RC Modified
Product Description: Alphaspec U, Solid
Samples: 001, 002, 003
Parmname Check: All parmnames scheduled properly

Path: Standard
Product Reference: U-Natural
Moisture Correction: "Dry Weight Corrected"

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
13968-55-3/13966-	Uranium-233/234	.0000002	uCi/kg	REG	Y	Y	Yes
15117-96-1/13982-	Uranium-235/236	.0000002	uCi/kg	REG	Y	Y	
7440-61-1	Uranium-238	.0000002	uCi/kg	REG	Y	Y	

Contingent Tests

Action	Product Name	Description	Samples

Login Requirements:

Requirement	Include?	Comments
Are these vegetation sample?	Y	FOR VEGETATION: After logging in, change from DRY to WET in sample inquiry.
Login Reminder?	Y	FOR VEGETATION: After logging in, change from DRY to WET in sample inquiry. Log with lab comp.

Peer Review by:_____ Work Order (SDG#), PO# Checked?_____ C of C signed in receiver location? _____

Laboratory Certifications

List of current GEL Certifications as of 04 January 2016

State	Certification
Alaska	UST-110
Arkansas	88-0651
CLIA	42D0904046
California	2940 Interim
Colorado	SC00012
Connecticut	PH-0169
Delaware	SC000122013-10
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC000122013-10
Idaho Chemistry	SC00012
Idaho Radiochemistry	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana NELAP	03046 (AI33904)
Louisiana SDWA	LA150001
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC000122013-10
Nebraska	NE-OS-26-13
Nevada	SC000122016-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania NELAP	68-00485
S.Carolina Radchem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-15-10
Utah NELAP	SC000122015-19
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404

Radiochemistry
Technical Case Narrative
Energy Fuels Resources (DNMI)
SDG #: 386428

Method/Analysis Information

Product:	**Alphaspec Th-232, Solid**
Analytical Method:	DOE EML HASL-300, Th-01-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	1529751
Prep Batch Number:	1528630

Sample ID	Client ID
386428001	North East
386428002	North West
386428003	South West
1203449404	Method Blank (MB)
1203449406	Laboratory Control Sample (LCS)
1203449405	386428001(North East) Sample Duplicate (DUP)

Samples 386428 001, 002 and 003 in this SDG were analyzed on a "dry weight corrected" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-038 REV# 16.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: The blank,

1203449404 (MB), did not meet the detection limit due to keeping the blank volume consistent with the other sample aliquots. All other samples met the detection limits. The sample and the duplicate, 1203449405 (North EastDUP) and 386428001 (North East), did not meet the Th-232 relative percent difference requirement; however, they do meet the relative error ratio requirement with a value of 1.62.

Designated QC
The following sample was used for QC: 386428001 (North East).

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Recounts
Samples 1203449405 (North EastDUP), 386428001 (North East), 386428002 (North West) and 386428003 (South West) were given additional clean-up steps and recounted in order to improve the resolution. The recounts are reported.

Miscellaneous Information:

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integration
Manual integration of alpha spectroscopy spectra 1203449404 (MB) was performed to fully separate counts in Regions of Interest which would have been biased.

Sample-Specific MDA/MDC
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

Additional Comments
Additional comments were not required for this sample set.

Qualifier Information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**Alphaspec U, Solid**
Analytical Method:	DOE EML HASL-300, U-02-RC Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	1529753
Prep Batch Number:	1528630

Sample ID	Client ID
386428001	North East
386428002	North West
386428003	South West
1203449407	Method Blank (MB)
1203449409	Laboratory Control Sample (LCS)
1203449408	386428001(North East) Sample Duplicate (DUP)

Samples 386428 001, 002 and 003 in this SDG were analyzed on a "dry weight corrected" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 26.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: The blank, 1203449407 (MB), did not meet the U-233/234 and U-235/236 detection limits due to keeping the blank volume consistent with the other sample aliquots. All other samples met the detection limits. The U-238 blank activity is greater than the MDC but is less than five percent of the lowest activity in the batch.

Designated QC

The following sample was used for QC: 386428001 (North East).

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Recounts

None of the samples in this sample set were recounted.

Miscellaneous Information:

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Sample-Specific MDA/MDC
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

Additional Comments
Additional comments were not required for this sample set.

Qualifier Information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Pb210, Solid**
Analytical Method:	DOE RP280 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	1531263
Prep Batch Number:	1528630

Sample ID	Client ID
386428001	North East
386428002	North West
386428003	South West
1203453305	Method Blank (MB)
1203453308	Laboratory Control Sample (LCS)
1203453306	386428002(North West) Sample Duplicate (DUP)
1203453307	386428002(North West) Matrix Spike (MS)

Samples 386428 001, 002 and 003 in this SDG were analyzed on a "dry weight corrected" basis.
SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-018 REV# 13.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

Sample Geometry
All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information
The blank volume is representative of the sample volume in this batch.

QC Information
All of the QC samples meet the required acceptance limits with the following exceptions: The blank, 1203453305 (MB), did not meet the detection limit due to keeping the blank volume consistent with the other sample aliquots. All other samples met the detection limits.

Designated QC
The following sample was used for QC: 386428002 (North West).

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Recounts
Samples were recounted due to a suspected blank false positive. The recounts are reported.

Miscellaneous Information:

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Manual Integration
No manual integrations were performed on data in this batch.

Sample-Specific MDA/MDC
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

Additional Comments
The matrix spike, 1203453307 (North WestMS), aliquot was reduced to conserve sample volume.

Qualifier Information

Manual qualifiers were not required.

Method/Analysis Information

Product:	**GFPC, Total Alpha Radium, solid**
Analytical Method:	EPA 900.1 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	1531265
Prep Batch Number:	1528630

Sample ID	Client ID
386428001	North East
386428002	North West
386428003	South West
1203453315	Method Blank (MB)
1203453318	Laboratory Control Sample (LCS)
1203453316	386428002(North West) Sample Duplicate (DUP)
1203453317	386428002(North West) Matrix Spike (MS)

Samples 386428 001, 002 and 003 in this SDG were analyzed on a "dry weight corrected" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-010 REV# 15.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met.

Standards Information

Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: The blank, 1203453315 (MB), did not meet the detection limit due to keeping the blank volume consistent with the other sample aliquots. All other samples met the detection limits. The sample and the duplicate, 1203453316 (North WestDUP) and 386428002 (North West) , did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with a value of 2.09.

Designated QC
The following sample was used for QC: 386428002 (North West).

Technical Information:

Holding Time
All sample procedures for this sample set were performed within the required holding time.

Sample Re-prep/Re-analysis
None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries
All chemical recoveries meet the required acceptance limits for this sample set.

Recounts
None of the samples in this sample set were recounted.

Miscellaneous Information:

Data Exception (DER) Documentation
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Sample-Specific MDA/MDC
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

Additional Comments
The matrix spike, 1203453317 (North WestMS), aliquot was reduced to conserve sample volume.

Qualifier Information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 386428 GEL Work Order: 386428

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
** Analyte is a surrogate compound
U Analyte was analyzed for, but not detected above the CRDL.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Theresa L. Austin **Name: Theresa Austin**

Date: 04 JAN 2016 **Title: Group Leader**

QC Summary

Report Date: January 4, 2016

Energy Fuels Resources (USA), Inc.
225 Union Boulevard
Suite 600
Lakewood, Colorado

Contact: **Ms. Kathy Weinel**

Workorder: **386428**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 1529751										
QC1203449405 386428001 DUP										
Thorium-232		6.67E-06		4.90E-06	uCi/kg	30.6*		(0%-20%)	HAKB	12/23/15 08:43
	Uncertainty	+/-7.98E-07		+/-5.15E-07						
QC1203449406 LCS										
Thorium-232	6.58E-05			7.95E-05	uCi/kg		121	(75%-125%)		12/21/15 12:06
	Uncertainty			+/-2.88E-06						
QC1203449404 MB										
Thorium-232			U	9.17E-08	uCi/kg					12/21/15 12:06
	Uncertainty			+/-1.28E-07						
Batch 1529753										
QC1203449408 386428001 DUP										
Uranium-233/234		0.000134		0.000135	uCi/kg	0.931		(0%-20%)	HAKB	12/21/15 14:14
	Uncertainty	+/-8.48E-06		+/-9.00E-06						
Uranium-235/236		6.63E-06		6.58E-06	uCi/kg	0.822		(0% - 100%)		
	Uncertainty	+/-2.20E-06		+/-2.34E-06						
Uranium-238		0.000132		0.00014	uCi/kg	5.65		(0%-20%)		
	Uncertainty	+/-8.45E-06		+/-9.17E-06						
QC1203449409 LCS										
Uranium-233/234				9.42E-05	uCi/kg					12/21/15 14:14
	Uncertainty			+/-7.56E-06						
Uranium-235/236				8.85E-06	uCi/kg					
	Uncertainty			+/-2.68E-06						
Uranium-238	8.92E-05			9.29E-05	uCi/kg		104	(75%-125%)		
	Uncertainty			+/-7.51E-06						
QC1203449407 MB										
Uranium-233/234			U	8.17E-07	uCi/kg					12/21/15 14:14
	Uncertainty			+/-9.72E-07						
Uranium-235/236			U	1.31E-06	uCi/kg					
	Uncertainty			+/-1.19E-06						
Uranium-238				2.73E-06	uCi/kg					
	Uncertainty			+/-1.36E-06						
Rad Gas Flow										
Batch 1531263										
QC1203453306 386428002 DUP										
Lead-210		0.000478		0.000455	uCi/kg	4.86		(0%-20%)	KSD1	12/31/15 10:57
	Uncertainty	+/-1.06E-05		+/-9.93E-06						
QC1203453308 LCS										
Lead-210	0.00986			0.0107	uCi/kg		109	(75%-125%)		12/31/15 10:57
	Uncertainty			+/-0.000148						
QC1203453305 MB										
Lead-210			U	6.09E-06	uCi/kg					12/31/15 10:57

QC Summary

Workorder: 386428

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 1531263										
	Uncertainty			+/-8.01E-06						
QC1203453307 386428002 MS										
Lead-210	0.0351	0.000478		0.0416	uCi/kg		117	(75%-125%)	KSD1	12/31/15 10:57
	Uncertainty	+/-1.06E-05		+/-0.000467						
Batch 1531265										
QC1203453316 386428002 DUP										
Total Radium		0.000103		0.000127	uCi/kg	21*		(0%-20%)	KSD1	12/23/15 18:25
	Uncertainty	+/-3.95E-06		+/-5.53E-06						
QC1203453318 LCS										
Total Radium	0.00394			0.00348	uCi/kg		88.2	(75%-125%)		12/23/15 13:32
	Uncertainty			+/-7.81E-05						
QC1203453315 MB										
Total Radium			U	1.78E-07	uCi/kg					12/23/15 18:25
	Uncertainty			+/-3.74E-06						
QC1203453317 386428002 MS										
Total Radium	0.0142	0.000103		0.0131	uCi/kg		91.8	(75%-125%)		12/23/15 13:32
	Uncertainty	+/-3.95E-06		+/-0.000276						

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
F	Estimated Value
H	Analytical holding time was exceeded
K	Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L	Analyte present. Reported value may be biased low. Actual value is expected to be higher.
M	M if above MDC and less than LLD
M	Matrix Related Failure
N/A	RPD or %Recovery limits do not apply.
N1	See case narrative
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.

QC Summary

Workorder: 386428

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the CRDL.
UI	Gamma Spectroscopy--Uncertain identification
UJ	Gamma Spectroscopy--Uncertain identification
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

ATTACHMENT G

STACK SAMPLE LABORATORY RESULTS

THIRD QUARTER
RADIONUCLIDE EMISSIONS TEST
CONDUCTED AT
ENERGY FUELS RESOURCES
SOUTH YELLOW CAKE SCRUBBER
YELLOW CAKE DRYER BAGHOUSE

BLANDING, UTAH

August 18-20, 2015

by:

TETCO
391 East 620 South
American Fork, UT 84003
Phone (801) 492-9106
Fax (801) 492-9107 fax

Prepared for:

Energy Fuels Resources
6425 S Hwy 91
Blanding, Utah 84511

Date of Report:

October 5, 2015

CERTIFICATION OF REPORT INTEGRITY

Technical Emissions Testing Company (TETCO) certifies that this report represents the truth as well as can be derived by the methods employed. Every effort was made to obtain accurate and representative data and to comply with procedures set forth in the Federal Register.

Mike McNamara

Reviewer: _____

Date: 10-5-2015

Dean Kitchen

Reviewer: _____

Date: 10-5-15

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INTRODUCTION

Test Purpose

This test project was conducted to determine the total radionuclide emissions from the South Yellow Cake Scrubber and the Yellow Cake Dryer Baghouse exhausts in terms of Curies per dry standard cubic foot (Ci/dscf).

Test Location and Type of Process

Energy Fuels Resources is located about 5 miles south of Blanding, Utah. Uranium ore is processed into yellow cake, which is shipped to other facilities for additional processing. There are two yellow cake dryers with individual scrubbers. Both dryer enclosures discharge into the Yellow Cake Dryer Baghouse. The packaging enclosure also discharges into the Yellow Cake Dryer Baghouse. The South Yellow Cake (SYC) dryer was the only operating dryer at the time of the test. The North Yellow Cake dryer is currently not operational.

Stack schematics are shown as Figures 1 and 2 in Appendix D.

Test Dates

The first test run on the SYC Scrubber was completed August 19, 2015 and the second run on August 20, 2015.

One run was completed on the Yellow Cake Dryer Baghouse August 20, 2015.

Pollutants Tested and Methods Applied

The tests were a determination of radionuclide emissions in accordance with EPA Method 5/114. The tests for the SYC and the Yellowcake Dryer Baghouse were for the following radionuclide: Th-228, Th-230, Th-232, U-234, U-235, U-238, Pb-210, Ra-226 and Ra-228.
Test run filters and front wash residues were sent to Test America located in Richland, Washington for radionuclide analysis.

Test Participants

Test Facility	Logan Shumway
State Agency	None
TETCO	Jeff Graton Mike McNamara Kawai McNamara

Deviations From EPA Methods

None.

Quality Assurance

Testing procedures and sample recovery techniques were according to those outlined in the Federal Register and the *Quality Assurance Handbook for Air Pollution Measurement Systems*.

SUMMARY OF RESULTS

Emission Results

Table I presents the findings of the test in Curies per dry standard cubic foot. Tables IV and V in Appendix A have more detailed information.

Table I. Measured Radionuclide Emissions

Run #	South Yellow Cake Scrubber		Yellow Cake Dryer Baghouse	
	pCi/dscf	pCi/hr	pCi/dscf	pCi/hr
1	76.702	4.381E+06	21.947	3.830E+06
2	82.607	4.680E+06		
AVE	**79.654**	**4.531E+06**	**21.947**	**3.830E+06**

Test run 1 on the Yellow Cake Dryer Baghouse was completed with 6 barrels being filled.

Process Data

The process was operated according to standard procedures. All pertinent process data was available for recording by agency personnel. Scrubber water flow, pressure drop readings (Δp) were recorded and are found in Appendix D. The Dryer Baghouse pressure drop readings (Δp) were recorded and are found on the test run sheets. Production data will be submitted by Energy Fuels Resources.

Description of Collected Samples

The test filters for the South Yellow Cake Scrubber were heavily covered with a white colored particulate. The front washes were cloudy in appearance.

The test filters for the Yellow Cake Dryer Baghouse there were no visible particulate matter. The front wash was clear in appearance.

Discussion of Errors or Irregularities

None

Percent Isokinetic Sampling

Each test run was isokinetic within the ±10% of 100% criterion specified in the Federal Register. Isokinetic values for each test run are presented in Table II.

Table II. Percent Isokinetic Sampling

Run #	South Yellow Cake Scrubber	Yellow Cake Dryer Baghouse
1	100	95
2	100	

SOURCE OPERATION

Process Control Devices Operation

All process control devices were operated normally. Recorded scrubber water flow, pressure and baghouse Δp readings were recorded and are found on the test run sheets or in Appendix D.

Process Representativeness

The facility was operated normally. Production data was retained by Energy Fuels Resources.

SAMPLING AND ANALYSIS PROCEDURES

Sampling Port Location

The inside diameter of the South Yellow Cake Scrubber stack is 12.75 inches. The two, four-inch diameter sample port are located 28.24 diameters (30 feet) downstream from the last disturbance and 6.59 diameters (7 feet) upstream from the next disturbance. Figure 1 in Appendix D is a schematic of the stack.

The inside diameter of the Yellow Cake Dryer Baghouse stack is 16.0 inches. The two, four-inch diameter sample ports are located 28.38 diameters (454 inches) downstream from the last disturbance and 3.56 diameters (57 inches) upstream from the next disturbance. The sample port locations are depicted in Figure 2 in Appendix D.

Sampling Point Location

Table III shows the distance of each sampling point from the inside wall according to EPA Method 1. Each point is marked and identified with a wrapping of glass tape and numbered. These points are determined by measuring the distance from the inside wall.

Table III. Sampling Point Location

Sample Point	Distance (inches) from Inside Wall	
	SYC Scrubber	Dryer Baghouse
1	0.85	0.70
2	3.19	2.34
3	9.56	4.74
4	11.90	11.26
5		13.66
6		15.30

Sampling Train Description

To determine the actual emission rates for this stack, 40 CFR 60, Appendix A, Methods 1-5/114 were followed.

All sampling trains were made of inert materials, (Teflon, stainless steel and glass) to prevent interference of the sampled gas and particulate. The stack analyzers used to conduct Methods 1-5/114 are constructed to meet the specifications outlined in the CFR. The temperature sensors are

K-type thermocouples. Heater, vacuum and pitot line connections have been designed to be interchangeable with all units used by the tester. A 316 stainless steel probe liner was used for the tests. Figure 4 in Appendix E is a sketch of the Methods 5/114 sampling train.

Sample boxes were prepared for testing by following the prescribed procedures outlined in Methods 5/114.

Sampling and Analytical Procedures

All sampling and analytical test procedures were as specified in 40 CFR 60, Appendix A, Methods 5/114.

Quality Assurance

All equipment setup, sampling procedures, sample recovery and equipment calibrations were carried out according to the procedures specified in 40 CFR 60 and the *Quality Assurance Handbook for Air Pollution Measurement Systems*.

APPENDIX

A: Complete Results and Sample Calculations
B: Raw Field Data
C: Laboratory Data and Chain of Custody
D: Raw Production Data
E: Calibration Procedures and Results
F: Related Correspondence

APPENDIX A

Table IV Complete Results, South Yellow Cake Scrubber
Table V Complete Results, Yellow Cake Dryer Baghouse

Nomenclature
Sample Equations

TABLE IV
COMPLETE RESULTS
ENERGY FUELS CORPORATION, BLANDING, UTAH
SOUTH YELLOWCAKE SCRUBBER EXHAUST

Symbol	Description	Dimensions	Run #1	Run #2	
Date			8/19/2015	8/20/2015	
Filter #			6494	6496	
Begin	Time Test Began		7:25	7:40	
End	Time Test Ended		15:27	17:24	
Pb_{in}	Meter Barometric Pressure	In. Hg. Abs	24.40	24.40	
ΔH	Orifice Pressure Drop	In. H_2O	1.056	1.037	
Y	Meter Calibration Y Factor	dimensionless	1.001	1.001	
Vm	Volume Gas Sampled--Meter Conditions	cf	332.155	328.677	
T_m	Avg Meter Temperature	°F	77.0	73.6	
$\sqrt{\Delta P}$	Sq Root Velocity Head	Root In. H_2O	0.3768	0.3755	
Wt_{wc}	Weight Water Collected	Grams	191.1	198.6	
T_t	Duration of Test	Minutes	480	480	
C_p	Pitot Tube Coefficient	Dimensionless	0.84	0.84	
D_n	Nozzle Diameter	Inches	0.3089	0.3089	
CO_2	Volume % Carbon Dioxide	Percent	2.40	2.60	
O_2	Volume % Oxygen	Percent	15.70	15.70	
N_2 & CO	Volume % Nitrogen and Carbon Monoxide	Percent	81.90	81.70	
Vm_{std}	Volume Gas Sampled (Standard)	dscf	267.451	266.321	
Vw	Volume Water Vapor	scf	9.010	9.364	
$Bw_{s\ (measured)}$	Fraction H_2O in Stack Gas (Measured)	Fraction	0.033	0.034	
$Bw_{s\ (saturated)}$	Fraction H_2O in Stack Gas (Saturated)	Fraction	0.096	0.105	
Bw_s	Fraction H_2O in Stack Gas *	Fraction	0.033	0.034	
X_d	Fraction of Dry Gas	Fraction	0.967	0.966	
M_d	Molecular Wt. Dry Gas	lb/lbmol	29.01	29.04	
M_s	Molecular Wt. Stack Gas	lb/lbmol	28.65	28.67	
%I	Percent Isokinetic	Percent	99.8	100.1	**AVG**
T_s	Avg Stack Temperature	°F	106.2	109.5	**107.9**
A_s	Stack Cross Sectional Area	Sq. Ft.	0.887	0.887	
P_G	Stack Static Pressure	In. H_2O	-0.101	-0.101	
Pb_p	Sample Port Barometric Pressure	In. Hg. Abs	24.33	24.33	
P_s	Stack Pressure	In. Hg. Abs	24.323	24.323	
Q_s	Stack Gas Volumetric Flow Rate (Std)	dscfm	9.52E+02	9.44E+02	**9.48E+02**
Q_a	Stack Gas Volumetric Flow Rate (Actual)	cfm	1.30E+03	1.30E+03	**1.30E+03**
V_s	Velocity of Stack Gas	fpm	1.46E+03	1.46E+03	**1.46E+03**
Curies	Radionuclides per sample	pCi	20514.18	22000.22	
Curies	Radionuclides per blank	pCi	0.22	0.22	
Net Curies	Net Radionuclides per sample	pCi	20513.96	22000.00	
Crad	Concentration of Radionuclides	pCi/dscf	76.702	82.607	**79.654**
ERrad	Emission Rate of Radionuclides	pCi/hr	4.381E+06	4.680E+06	**4.531E+06**

* If the measured moisture content is greater than the saturated moisture level (supersaturated), the saturated moisture value will be used in all calculations (40 CFR 60, Method 4,

TABLE V
COMPLETE RESULTS, PM
ENERGY FUELS CORPORATION, BLANDING, UTAH
YELLOW CAKE DRYER BAGHOUSE

Symbol	Description	Dimensions	Run #1
Date	Date		8/20/2015
Filter #			6495
Begin	Time Test Began		9:12
End	Time Test Ended		15:34
Pb_m	Meter Barometric Pressure	In. Hg. Abs	24.40
ΔH	Orifice Pressure Drop	In. H_2O	1.105
Y	Meter Calibration Y Factor	dimensionless	1.002
Vm	Volume Gas Sampled--Meter Conditions	cf	79.282
T_m	Avg Meter Temperature	°F	78.8
$\sqrt{\Delta P}$	Sq Root Velocity Head	Root In. H_2O	0.6896
Wt_{wc}	Weight Water Collected	Grams	10.7
T_t	Duration of Test	Minutes	120
C_p	Pitot Tube Coefficient	Dimensionless	0.84
D_n	Nozzle Diameter	Inches	0.2220
CO_2	Volume % Carbon Dioxide	Percent	0.00
O_2	Volume % Oxygen	Percent	20.90
N_2 & CO	Volume % Nitrogen and Carbon Monoxide	Percent	79.10
Vm_{std}	Volume Gas Sampled (Standard)	dscf	63.697
Vw	Volume Water Vapor	scf	0.505
Bw_s	Fraction H_2O in Stack Gas	Fraction	0.008
X_d	Fraction of Dry Gas	Fraction	0.992
M_d	Molecular Wt. Dry Gas	lb/lbmol	28.84
M_s	Molecular Wt. Stack Gas	lb/lbmol	28.75
%I	Percent Isokinetic	Percent	94.8
T_s	Avg Stack Temperature	°F	66.8
A_s	Stack Cross Sectional Area	Sq. Ft.	1.396
P_G	Stack Static Pressure	In. H_2O	-0.48
Pb_p	Sample Port Barometric Pressure	In. Hg. Abs	24.33
P_s	Stack Pressure	In. Hg. Abs	24.295
Q_s	Stack Gas Volumetric Flow Rate (Std)	dscfm	2.91E+03
Q_a	Stack Gas Volumetric Flow Rate (Actual)	cfm	3.60E+03
V_s	Velocity of Stack Gas	fpm	2.58E+03
Curies	Radionuclides per sample	pCi	1398.20
Curies	Radionuclides per blank	pCi	0.22
Net Curies	Net Radionuclides per sample	pCi	1397.98
Crad	Concentration of Radionuclides	pCi/dscf	21.947
ERrad	Emission Rate of Radionuclides	pCi/hr	3.830E+06

General Nomenclature

$\%I$ = percent isokinetic

A_s = $(D_s^2 / 4) \cdot \pi$

$AS\Delta P$ = see $\sqrt{\Delta P}$

Btu = unit heat value (British thermal unit)

B_{ws} = fraction of water in stack gas (may have designation of "measured" or "saturated")
"measured" represents measured moisture based upon sample volume and water collected
"saturated" is a calculated value based upon stack pressure and temperature

C_0 = average of initial and final system zero gas calibration bias checks (ppm, percent)

C_{avg} = average gas concentration (as measured)

C_B = concentration of particulate matter, back half (gr/dscf,lb/dscf, etc.)

C_{cond} = concentration of condensibles (grain/dscf)

C_{cors} = concentration of coarse particulate (gr/dscf)

C_{dir} = measured concentration of a calibration gas when introduced in direct calibration mode

C_{fa} = concentration of particulate matter, front half, actual stack flow (gr /acf)

C_F = concentration of particulate matter, front half (gr/dscf,lb/dscf, etc.)

C_{gas} = C_{avg} corrected for initial and final system bias checks (Equation 7E-5)

C_m = average of initial and final system upscale gas calibration bias checks (ppm, percent)

C_{ma} = actual concentration of upscale calibration gas

C_{metal} = concentration of metals (ppm, $\mu g/ft^3$, etc.) atomic symbol replaces "metal"

CO_2 = percent carbon dioxide in the stack gas

C_p = pitot tube coefficient (0.84)

C_{PM10} = concentration of PM_{10} particulate (gr/dscf)

C_{rad} = concentration of radionuclides (pCi/dscf)

CS = measured concentration of a calibration gas when introduced in system calibration mode

C_X = any species symbol may replace X. Units may be expressed as ppm, lb/dscf, etc.

$C_{X\ (corr)}$ = actual gas concentration corrected to required percent O_2

Curies = measured radionuclides per sample. Units may be pCi or uCi.

D_c = jet diameter (cm)

D/F = dioxins and furans (See laboratory report for D/F descriptions and nomenclature)

ΔH = orifice pressure drop (inches H_2O)

$\Delta H_@$ = orifice pressure (inches H_2O)

ΔH_d = orifice pressure head (inches H_2O) needed for impactor flow rate

D_n = nozzle diameter (inches)

ΔP = stack flow pressure differential (inches H_2O)

Dp_{50} = 50% effective cutoff diameter of particle (cm)

D_s = diameter of the stack (feet)

EA = percent excess air

ER_B = emission rate of back half particulate (lb/hr)

ER_{cond} = emission rate of condensibles (lb/hr)

ER_{cors} = emission rate of coarse particulate (lb/hr)

ER_F = emission rate of front half particulate (lb/hr)

ER_{gas} = emission rate of a gas (lb/hr)

ER_{mmBtu} = emission rate per mmBtu of fuel

ER_{PM10} = emission rate of PM_{10} particulate (lb/hr)

Errad = emission rate of radionuclides (pCi/hr)

ER_X = emission rate of compound which replaces X. Units are usually in lb/hr.

F_D = dry based fuel factor. Ratio of the gas volume of the products of combustion to the heat content
See 40 CFR 60, Appendix A, Method 19, Table 19-2 for fuel factor values.

K_c = Cunningham slip correction factor

λ = mean free path of molecules in gas phase (cm)

mmBtu = million Btu

General Nomenclature

M_{cond} = mass of condensibles (milligrams)
M_{cors} = mass of coarse particulate (milligrams)
M_d = molecular weight of stack gas, dry basis (lb/lb-mol)
M_F = mass of particulate on filter (mg)
M_{FP} = mass of particulate matter on filter and probe (mg)
mmBtu = million Btu
M_P = mass of particulate matter in probe and front wash (mg)
M_{PM10} = mass of PM_{10} particulate (milligrams)
M_s = molecular weight of stack gas, wet basis (lb/lbmol)
M_X = mass of species "X". Units may vary and other descriptive subscripts may apply.
μ_s = gas viscosity (poise)
M_{wr} = molecular weight of gas species (g/gmol)
N = number of jets per plate
N_2 = percent nitrogen in the stack gas
O_2 = percent oxygen in the stack gas
$\sqrt{\Delta P}$ = average of the square roots of ΔP (may also be referred to as $AS\Delta P$)
$\sqrt{\Delta P_1}$ = square root of ΔP at point 1 of the current test, Method 201A
$\sqrt{\Delta P_1'}$ = square root of ΔP at point 1 of the previous traverse, Method 201A
$\sqrt{\Delta P'_{ave}}$ = average of the square roots of ΔP from the previous traverse, Method 201A
Pb_m = absolute barometric pressure at the dry gas meter (inches Hg)
Pb_p = absolute barometric pressure at the sample location (inches Hg)
P_G = stack static pressure (inches H_2O)
P_s = absolute stack pressure (inches Hg)
P_{std} = absolute pressure at standard conditions (29.92 inches Hg.)
θ = time of test (minutes)
θ_1 = sample time (duration in minutes) at first sample point for Method 201A
θ_n = sample time (duration in minutes) at sample point "n" for Method 201A
θ_{test} = target test time for Method 201A (minutes)
Q_a = stack gas volumetric flow rate (acfm)
Q_s = stack gas volumetric flow rate (dscfm)
Q_{sc} = actual gas flow rate through the cyclone (acfm)
Q_{sce} = actual gas flow rate through the impactor (acfm)
Q_w = wet stack gas std. volumetric flow (ft^3/min, wscfm)
R = gas constant (21.85 inches Hg*ft^3/(lbmol*R))
ρ_p = particle density (1 g/cm^3)
ρ_s = stack gas density (g/cm^3)
T_m = stack temperature (°F)
T_s = stack temperature (°F)
T_{std} = absolute temperature at standard conditions (528°R)
Tt = duration of test run in minutes. Also see θ
u_m = mean molecular speed (cm/s)
Vm = sample volume (ft^3) at meter conditions
Vm_{std} = volume standard (dscf), sample volume adjusted to 68°F and 29.92 inches Hg.
V_s = velocity of stack gas (fpm)
V_w = volume water vapor (scf) at 68°F and 29.92 inches Hg.
Wt_{wc} = weight of the condensed water collected (grams)
X_d = fraction of dry gas
Y = meter calibration Y-factor (dimensionless)
ψ = dimensionless inertial impaction parameter, 0.14

General Sample Equations

$$\%I = Vm_{std} \bullet (T_s + 460) \bullet 1039 / (\theta \bullet V_s \bullet P_s \bullet X_d \bullet D_n^2)$$

$$A_s = (D_s^2 / 4) \bullet \pi$$

$$B_{ws} = V_w / (Vm_{std} + V_w)$$

$$C_B = M_B \bullet 0.01543 / Vm_{std}$$

$$C_{cond} = M_{cond} \bullet 0.01543 / Vm_{std}$$

$$C_{cors} = M_{cors} \bullet 0.01543 / Vm_{std}$$

$$C_{fa} = T_{std} \bullet C_{fp} \bullet P_s \bullet X_d / [P_{std} \bullet (T_m + 460)]$$

$$C_f = M_{fp} \bullet 0.01543 / Vm_{std}$$

$$C_{PM10} = M_{PM10} \bullet 0.01543 / Vm_{std}$$

$$C_{rad} = Curies/Vm_{std}$$

$$C_{gas\ (corr)} = C_{gas} \bullet (20.9 - \text{desired } \%O_2) / (20.9 - \text{actual } \%O_2)$$

$$_{casc}\ Dp_{50} = \sqrt{[\mu s \bullet \psi \bullet N \bullet \pi \bullet D_c^3 \bullet 18 / (K_c \bullet \rho_p \bullet Q_{sce} \bullet 4)]}$$

$$_{PM_{10}}\ Dp_{50} = 0.15625 \bullet [(T_s + 460) / (M_s \bullet P_s)]^{0.2091} \bullet (\mu_s / Q_{sc})^{0.7091}$$

$$ER_{cond} = C_{cond} \bullet Q_s \bullet 0.00857$$

$$ER_{cors} = C_{cors} \bullet Q_s \bullet 0.00857$$

$$ER_F = C_f \bullet Q_s \bullet 0.00857$$

$$ER_{gas} = P_{std} \bullet Q_s \bullet M_{wgas} \bullet C_{gas} \bullet 60 / (R \bullet T_{std} \bullet 10^6)$$

$$ER_{gas} = C_{gas(lb/dscf)} \bullet Qs \bullet 60$$

(Either ER_{gas} equation gives equivalent lb/hr values to 3 sig. figures)

$$ER_{lnmBtu} = C_{gas(lb/dscf)} \bullet F_d \bullet (20.9/(20.9 - \%O_2)$$, Method 19 Equation 19-1

$$ER_{PM10} = C_{PM10} \bullet Q_s \bullet 0.00857$$

$$Errad = C_{rad} \bullet Qs \bullet 60$$

$$K_c = 1 + 2 \bullet \lambda \bullet 1.257 / Dp_{50}$$

$$\lambda = \mu_s / (0.499 \bullet \rho_s \bullet u_m)$$

$$M_d = CO_2 \bullet 0.44 + O_2 \bullet 0.32 + N_2 \bullet 0.28$$

$$M_s = (M_d \bullet X_d) + (18 \bullet B_{ws})$$

$$\mu_s = [51.05 + 0.207 \bullet (T_s + 460) + 3.24 \bullet 10^{-5} \bullet (T_s + 460)_2 + 0.53147 \bullet \%O_2 - 74.143 \bullet B_{ws}] \bullet 10^{-6}$$

$$P_s = Pb_p + (P_G / 13.6)$$

$$\theta_1 = (\sqrt{\Delta P_1}' / \sqrt{\Delta P'_{ave}}) \bullet (\theta_{test} / pts)$$

$$\theta_n = \theta_1 \bullet \sqrt{\Delta P_n} / \sqrt{\Delta P_1}$$

$$Q_a = V_s \bullet A_s$$

$$Q_s = Q_a \bullet X_d \bullet P_s \bullet T_{std} / [(T_s + 460) \bullet P_{std}]$$

$$Q_{sc} = [(T_s + 460) \bullet P_{std} / (T_{std} \bullet P_s)] \bullet [(Vm_{std} + V_w) / \theta]$$

$$Q_{sce} = [(T_s + 460) \bullet P_{std} / (T_{std} \bullet P_s)] \bullet [(Vm_{std} + V_w) / \theta]$$

$$Q_w = Q_s / X_d$$

$$\rho_s = P_s \bullet M_s \bullet 3386.39 \bullet 10^{-6} / [R \bullet (T_s + 460) / 1.8]$$

$$u_m = 100 \bullet \sqrt{\{[R \bullet (T_s + 460) / 1.8 \bullet 8 \bullet 10^3] / [\pi \bullet M_s]\}}$$

$$Vm_{std} = Vm \bullet Y \bullet T_{std} \bullet (Pb_m + \Delta H / 13.6) / [P_{std} \bullet (T_m + 460)]$$

$$V_s = 85.49 \bullet 60 \bullet Cp \bullet \sqrt{\Delta P} \bullet \sqrt{[(T_s + 460) / (P_s \bullet M_s)]}$$

$$V_w = Wt_{wc} \bullet 0.04715$$

$$X_d = 1 - B_{ws}$$

General Sample & Pretest Equations

$$\%I = Vm_{std} \bullet (T_s + 460) \bullet 1039 / (\theta \bullet V_s \bullet P_s \bullet X_d \bullet D_n^2)$$

$$A_s = Ds^2 / 4 \bullet \pi$$

$$B_{ws} = V_w / (Vm_{std} + V_w)$$

$$C_B = M_B \bullet 0.01543 / Vm_{std}$$

$$C_{cond} = M_{cond} \bullet 0.01543 / Vm_{std}$$

$$C_{cors} = M_{cors} \bullet 0.01543 / Vm_{std}$$

$$C_f = M_{fp} \bullet 0.01543 / Vm_{std}$$

$$C_{fa} = T_{std} \bullet C_{fp} \bullet P_s \bullet X_d / [P_{std} \bullet (T_m + 460)]$$

$$C_{PM10} = M_{PM10} \bullet 0.01543 / Vm_{std}$$

$$C_{X\,(act)} = (C_{X\,(avg)} - C_0) \bullet C_{ma} / (C_m - C_0)$$

$$C_{X\,(corr)} = C_{X\,(avg)} \bullet (20.9 - \text{desired } \%O_2) / (20.9 - \text{actual } \%O_2)$$

$$C_{X\,(mass)} = M_w \bullet C_{X\,(ppm)} \bullet P_{std} / (R \bullet T_{std} \bullet 10^6)$$

$$D_{eq} = 2 \bullet L \bullet W / (L + W)$$

$${}_{casc}\Delta H_d = [Q_{sce}' \bullet X_d \bullet P_s / (T_s + 460)]^2 \bullet [(T_m + 460) \bullet M_d \bullet 1.083 \bullet \Delta H_@ / Pb_m]$$

$${}_{PM_{10}}\Delta H_d = [Q_{sc}' \bullet X_d \bullet P_s / (T_s + 460)]^2 \bullet [(T_m + 460) \bullet M_d \bullet 1.083 \bullet \Delta H_@ / Pb_m]$$

$$D_{n\,des} = \sqrt{\{0.0269 \bullet (Pb_m + 0.0735) / [(T_m + 460) \bullet C_p \bullet X_d \bullet \sqrt{[(T_s + 460) \bullet M_s) / (P_s \bullet \Delta P)]}\}}$$

$${}_{casc}Dp_{50} = \sqrt{[\mu s \bullet \psi \bullet N \bullet \pi \bullet D_c^3 \bullet 18 / (K_c \bullet \rho_p \bullet Q_{sce} \bullet 4)]}$$

$${}_{PM_{10}}Dp_{50} = 0.15625 \bullet [(T_s + 460) / (M_s \bullet P_s)]^{0.2091} \bullet (\mu_s / Q_{sc})^{0.7091}$$

$$\Delta P_{max} = 1.3686 \bullet 10^{-4} \bullet P_s \bullet M_s \bullet V_{max}^2 / [(T_s + 460) \bullet C_p^2]$$

$$\Delta P_{min} = 1.3686 \bullet 10^{-4} \bullet P_s \bullet M_s \bullet V_{min}^2 / [(T_s + 460) \bullet C_p^2]$$

$$EA = (\%O_2 - 0.5\,\%CO) / [0.264\,\%N_2 - (\%O_2 - 0.5\,\%CO)]$$

$$ER_B = C_B \bullet Q_s \bullet 0.00857$$

$$ER_{cond} = C_{cond} \bullet Q_s \bullet 0.00857$$

$$ER_{cors} = C_{cors} \bullet Q_s \bullet 0.00857$$

$$ER_F = C_f \bullet Q_s \bullet 0.00857$$

$$ER_{gas} = P_{std} \bullet Q_s \bullet M_{wx} \bullet C_{X\,(act)} \bullet 60 / (R \bullet T_{std} \bullet 10^6)$$

$$ER_{mmBtu} = ER_X / (\text{mmBtu / hr})$$

$$ER_{PM10} = C_{PM10} \bullet Q_s \bullet 0.00857$$

$$K_c = 1 + 2 \bullet \lambda \bullet 1.257 / Dp_{50}$$

$$\text{K-fact} = 846.72 \bullet Dn^4 \bullet \Delta H_@ \bullet C_p^2 \bullet X_d^2 \bullet M_d \bullet P_s \bullet (T_m + 460) / [M_s \bullet (T_s + 460) \bullet (Pb_m + \Delta H / 13.6)]$$

$$\lambda = \mu_s / (0.499 \bullet \rho_s \bullet u_m)$$

$$M_d = CO_2 \bullet 0.44 + O_2 \bullet 0.32 + N_2 \bullet 0.28$$

$$M_s = (M_d \bullet X_d) + (18 \bullet B_{ws})$$

$$\mu_s = [51.05 + 0.207 \bullet (T_s + 460) + 3.24 \bullet 10^{-5} \bullet (T_s + 460)_2 + 0.53147 \bullet \%O_2 - 74.143 \bullet B_{ws}] \bullet 10^{-6}$$

$$P_s = Pb_p + (P_G / 13.6)$$

$$\theta_1 = (\sqrt{\Delta P_1}' / \sqrt{\Delta P}') \bullet (\theta_{test} / pts)$$

$$Q_a = V_s \bullet A_s$$

$$\theta_n = \theta_1 \bullet \sqrt{\Delta P_n} / \sqrt{\Delta P_1}$$

$$Q_s = Q_a \bullet Xd \bullet Ps \bullet T_{std} / [(Ts + 460) \bullet P_{std}]$$

$$Q_{sc} = [(T_s + 460) \bullet P_{std} / (T_{std} \bullet P_s)] \bullet [(Vm_{std} + V_w) / \theta]$$

$$Q_{sc}' = \mu_s \bullet 0.002837 \bullet [(T_s + 460) / (M_s \bullet P_s)]^{0.2949}$$

General Sample & Pretest Equations

$$Q_{sce} = [(T_s + 460) \cdot P_{std} / (T_{std} \cdot P_s)] \cdot [(Vm_{std} + V_w) / \theta]$$

$$Q_{sce}' = (60 / 28316.8) \cdot 9 \cdot \mu_s \cdot \psi \cdot \pi \cdot N \cdot D_c^3 / \{2 \cdot \rho_p \cdot [(Dp_{50} \cdot 10^{-4} + 1.257 \cdot \lambda)^2 - (1.257 \cdot \lambda)^2]\}$$

$$Q_w = Q_s / X_d$$

$$R_{max} = 0.4457 + \sqrt{[0.5690 + (0.2603 \cdot \sqrt{Q_{sc}}' \cdot \mu_s / V_n^{1.5})]}$$

$$R_{min} = 0.2457 + \sqrt{[0.3072 - (0.2603 \cdot \sqrt{Q_{sc}}' \cdot \mu_s / V_n^{1.5})]}$$

$$\rho_s = P_s \cdot M_s \cdot 3386.39 \cdot 10^{-6} / [R \cdot (T_s + 460) / 1.8]$$

$$u_m = 100 \cdot \sqrt{\{[R \cdot (T_s + 460) / 1.8 \cdot 8 \cdot 10^3] / [\pi \cdot M_s]\}}$$

$$V_{max} = V_n \cdot R_{max}$$

$$V_{min} = V_n \cdot R_{min}$$

$$Vm_{std} = Vm \cdot Y \cdot T_{std} \cdot (Pb_m + \Delta H / 13.6) / [P_{std} \cdot (T_m + 460)]$$

$$V_n = 3.056 \cdot Q_{sc}' / Dn^2$$

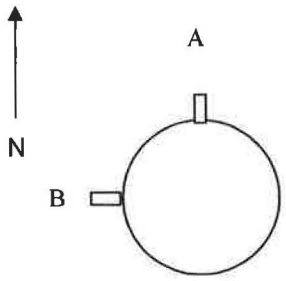
$$V_s = 85.49 \cdot 60 \cdot Cp \cdot \sqrt{\Delta P} \cdot \sqrt{[(T_s + 460) / (P_s \cdot M_s)]}$$

$$V_{wc} = Wt_{wc} \cdot 0.04715$$

$$X_d = 1 - B_{ws}$$

South Yellow Cake Dryer Scrubber

Prelim 6 pts blank



Stack Dia. 12.75 Reference: 0

Ports are 7' Upstream from next disturbance

Ports are 30' Downstream from last disturbance

Facility Energy Fuels

Stack Identification South Yellow Cake Dryer Scrubber

Date 8/19/15

Barometric Pressure

Pb_m 24.40 in Hg Pb_p 24.33 in Hg

Static Pressure (P_G) -.101 in H_2O

Estimated Moisture (Bw_s) 4-6% %

Sample Height from Ground 70 feet

Comments:

Traverse Point	Percent Diameter	Distance From: ID	Distance From: Reference	Ports A	B	C	D	E	F
1	6.7	0.85	0.85	.140 102					
2	25.0	3.19	3.19	.150 104					
3	75.0	9.56	9.56	.111 106					
4	93.3	11.90	11.90	.175 109					

Averages:

T_S _____ ∠ Flow _____

ΔP _____ $\sqrt{\Delta P}$ _____

KEY => T_S ∠ Flow ΔP

MD Field Data Sheet

Filter 6494 Sample Box B

Page 1 of 1 Run # 1

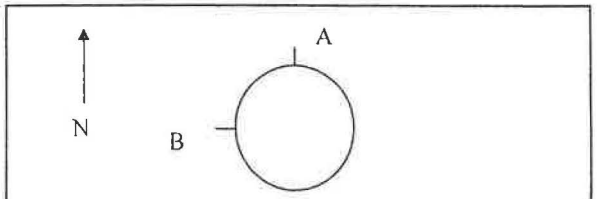
Plant: Energy Fuels

Date: 8/19/15

Location: South Yellow Cake Dryer Scrubber

Operator: JEFF GRATON

								1	2	3	4	5	6	7
Traverse Point	Time		DGM	ΔP	ΔH (in H_2O)		Vacuum	Temperatures (°F)					DGM Temp (T_m)	
	Clock	Min (0)	(ft^3)	(in H_2O)	Desired	Actual	(in Hg)	Stack (T_s)	Probe	Probe out	Oven	Effluent	Out	In
1	7:25	0	817.602	.130	.97	.97	3	98	250	245	245	38	68	67
1		20	831.030	.135	1.01	1.01	3	99	250	245	245	38	68	71
1		40	844.870	.135	1.01	1.01	3	99	250	250	250	38	68	72
2		60	858.780	.140	1.05	1.05	3	101	245	250	250	38	69	74
2		80	872.455	.140	1.05	1.05	3	100	245	252	252	43	72	77
2		100	885.930	.140	1.05	1.05	4	102	250	255	255	37	74	79
3		120	899.550	.135	1.01	1.01	4	102	250	255	255	37	75	80
3		140	913.160	.145	1.08	1.08	4	105	254	270	270	35	76	80
3		160	927.015	.150	1.11	1.11	4	106	257	260	260	35	76	81
4		180	941.140	.150	1.11	1.11	4	107	255	255	255	36	75	79
4		200	955.301	.150	1.11	1.11	4	107	250	255	255	35	74	79
4		220	969.240	.150	1.11	1.11	4	108	252	260	260	36	74	78
1	11:27	240	983.474	.140	1.05	1.05	5	107	258	265	265	35	73	76
1		260	996.890	.145	1.07	1.07	5	108	245	250	250	35	74	78
1		280	1010.740	.150	1.11	1.11	5	108	251	258	258	38	74	79
2		300	1025.055	.150	1.11	1.11	5	109	251	258	258	38	76	81
2		320	1039.275	.150	1.11	1.11	5	110	253	258	258	35	77	82
2		340	1053.445	.150	1.11	1.11	5	109	255	260	260	37	78	83
3		360	1067.735	.135	.995	.995	6	110	258	261	261	40	78	84
3		380	1081.310	.140	1.03	1.03	6	110	260	260	260	48	79	85
3		400	1094.930	.140	1.03	1.03	6	111	260	255	255	48	79	84
4		420	1108.580	.135	.995	.995	6	111	255	250	250	50	79	84
4	1122.160	440	1122.160	.140	1.03	1.03	6	111	260	264	264	52	79	85
4		460	1135.850	.140	1.03	1.03	6	111	260	265	265	54	80	86
		480	1149.757											
Total			332.155 ✓	9.0427 ✓	25.340 ✓		2548 ✓						3698 ✓	
Average				.3768 ✓	1.056		106.2						77.0	



Stack Diameter 12.75" Port Reference 0"

Ports are 7' Upstream from next disturbance

Ports are 30' Downstream from last disturbance

Assumed Moisture 4-6 %

Probe 18G Cp 0.84

Nozzle Calibration

.310 .310 .310 .309

Avg D_n .3089 inches

Gas Bag C-07

Console 4

Y-Factor 1.001

$\Delta H_@$ 1.476 in H_2O

Barometric Pressures

Pb_m 24.40 in Hg

Pb_p 24.33 in Hg

P_G -.101 in H_2O

Leak Check:	Pre	Post
ft^3/min	0.001	0.002
vac in Hg	22	22
Pitot Rate	0.00	0.00
In H_2O	.22	.22

Water Collected 191.1 g

Time Sampled 480 min

Review Hawk / JSO

K = @T_m

K = @T_m

Additional (Extra) Leak Check Information

	DGM before Leak Check	Vac ("Hg)	Rate (ft^3/min)	DGM After Leak Check	Vac ("Hg)	Rate (ft^3/min)

Field Data Sheet

Filter 6496 Sample Box B

Page 1 of 1 Run # 2

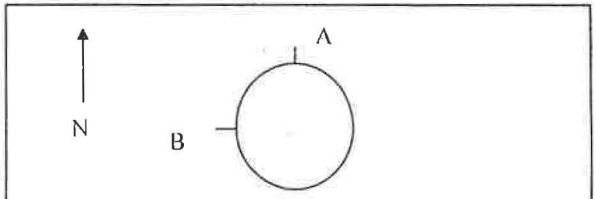
Plant: Energy Fuels

Date: 8/20/15

Location: South Yellow Cake Dryer Scrubber

Operator: JEFF GRATON

Traverse Point	Time Clock	Time Min (θ)	DGM (ft³)	ΔP (in H₂O)	ΔH (in H₂O) Desired	ΔH (in H₂O) Actual	Vacuum (in Hg)	Temperatures (°F) Stack (T_s)	Probe	Probe out	Oven	Effluent	DGM Temp (T_m) Out	In
					1	2	3	4	5				6	7
1	7:40	0	150.904	.140	1.03	1.03	2	102	250	250	250	35	62	63
1		20	164.508	.145	1.07	1.07	2	102	249	252	252	36	65	69
1		40	178.348	.145	1.07	1.07	3	102	260	256	256	37	67	71
2		60	192.000	.150	1.11	1.11	3	102	255	265	265	40	67	71
2		80	205.652	.150	1.11	1.11	3	104	260	269	269	61	66	71
2		100	220.820	.150	1.11	1.11	3	103	260	262	262	49	66	71
3		120	235.988	.155	1.15	1.15	3	104	262	268	268	48	67	71
3		140	249.592	.150	1.11	1.11	3	106	265	274	274	51	70	76
3		160	263.955	.155	1.15	1.15	3	107	260	256	256	55	72	73
4		180	278.255	.150	1.10	1.10	4	109	267	255	255	56	67	72
4		200	292.435	.150	1.10	1.10	4	111	268	270	270	60	71	75
4		220	306.240	.150	1.10	1.10	4	111	260	255	255	60	71	76
1	13:24	240	319.980	.125	.917	.917	4	112	265	265	265	40	71	74
1		260	332.970	.120	.877	.877	4	112	265	265	265	35	72	75
1		280	345.630	.120	.877	.877	4	113	263	261	261	35	72	76
2		300	358.240	.120	.877	.877	4	113	268	262	262	39	73	77
2		320	370.850	.140	1.02	1.02	4	114	260	267	267	39	74	78
2		340	384.165	.150	1.09	1.09	5	114	262	265	265	40	75	79
3		360	398.155	.150	1.09	1.09	5	115	270	268	268	40	76	81
3		380	412.240	.135	.983	.983	5	115	271	274	274	36	78	82
3		400	425.740	.130	.950	.950	5	114	269	265	265	36	79	84
4		420	439.035	.130	.950	.950	5	114	260	260	260	38	79	83
4		440	452.308	.140	1.02	1.02	5	114	260	261	261	40	79	84
4		460	465.945	.140	1.02	1.02	5	114	257	250	250	37	79	85
	17:24	480	479.581											
Total			328.677 ✓ −9.0126	9.0126 ✓ √24.88	24.88 ✓ 26.27			2627 ✓					3535 ✓	
Average				√0.3755	1.037			109.5					73.6	



Stack Diameter 12.75" Port Reference 0"

Ports are 7' Upstream from next disturbance

Ports are 30' Downstream from last disturbance

Assumed Moisture 4-6 %

Probe 18G Cp 0.84

Nozzle Calibration

.310 .310 .310 .309

Avg D_n .3089 inches

Gas Bag H-07

Console 4

Y-Factor 1.001

$\Delta H_@$ 1.476 in H_2O

Barometric Pressures

Pb_m 24.40 in Hg

Pb_p 24.33 in Hg

P_g -.101 in H_2O

Leak Check:	Pre	Post
ft³/min	0.001	0.001
vac in Hg	22.0	22.0
Pitot Rate	0.00	0.00
In H_2O	.20	.22

Water Collected ~~480~~ 198.6 g

Time Sampled 480 min

Review JG

K = @T_m

K = @T_m

Additional (Extra) Leak Check Information

	DGM before Leak Check	Vac ("Hg)	Rate (ft³/min)	DGM After Leak Check	Vac ("Hg)	Rate (ft³/min)

10:07 SHUT DOWN = Central fewdge down. Pin Broke.

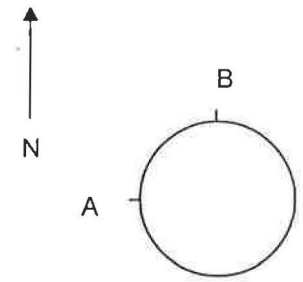
10:22 RE-START

10:35 SHUT DOWN = Central fewdge down. Pin Broke.

12:02 RE-START

Yellow Cake Dryer Bag House

Prelim 6 pts blank



Stack Dia. 16 Reference: 0

Ports are 57" Upstream from next disturbance

Ports are 468" Downstream from last disturbance

Facility Denison Mines

Stack Identification North Yellow Cake Dryer Baghouse

Date 8/20/2015

Barometric Pressure

Pb_m 24.40 in Hg Pb_p 24.33 in Hg

Static Pressure (P_G) -.48 in H_2O

Estimated Moisture (Bw_s) 1 %

Sample Height from Ground _____ feet

Comments: _____

Traverse Point	Percent Diameter	Distance From: ID	Distance From: Reference	Ports A	B	C	D	E	F
1	4.4	0.70	0.70	.45 73					
2	14.6	2.34	2.34	.51 75					
3	29.6	4.74	4.74	.52 68					
4	70.4	11.26	11.26	.50 71					
5	85.4	13.66	13.66	.50 70					
6	95.6	15.30	15.30	.51 73					

Averages:

T_S _____ ∠ Flow _____

ΔP _____ $\sqrt{\Delta P}$ _____

KEY => | T_S ∠ Flow ΔP |

_____ Field Data Sheet

Filter 6495 TETCO Sample Box A

Page 1 of 1 Run # 1

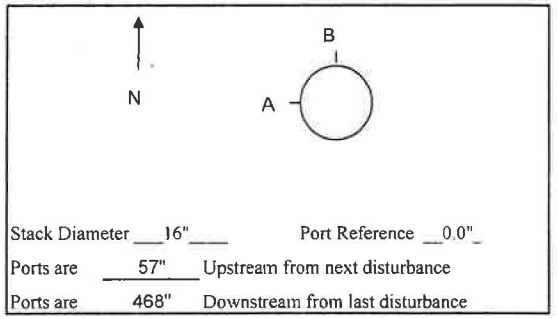
Plant: Energy Fuels

Date: 8/20/2015

Location: Yellowcake Dryer Baghouse

Operator: M. McNamara

Traverse Point	Time Clock	Time Min (θ)	DGM (ft³)	ΔP (in H₂O)	ΔH (in H₂O) Desired	ΔH (in H₂O) Actual	Vacuum (in Hg)	Temperatures (°F) Stack (T_s)	Probe	Probe Out	Filter	Effluent	DGM Temp (T_m) Out	In
B 1	9:12	0	816.017	.38	.86	.86	2	54	230	263	263	38	66	66
2		10	86.960	.38	.90	.90	2	55	234	259	259	38	68	77
3		20	93.090	.39	.92	.92	2	57	242	257	257	38	71	90
4		30	99.200	.54	1.27	1.27	2	59	239	257	257	38	73	83
5		40	106.285	.53	1.22	1.22	2	75	235	244	249	38	71	72
6		50	113.090	.52	1.20	1.20	2	71	230	233	233	38	72	78
A 1	14:34	60	120.095	.45	1.04	1.04	2	73	270	249	249	38	75	83
2		70	126.520	.51	1.17	1.17	2	75	268	249	249	38	77	86
3		80	133.255	.52	1.20	1.20	2	68	245	295	245	37	78	89
4		90	140.010	.50	1.15	1.15	2	71	243	242	242	37	79	90
5		100	146.720	.50	1.15	1.15	2	70	252	248	248	38	81	91
6		110	153.430	.51	1.18	1.18	2	73	265	241	241	39	82	92
	15:34	120	160.299											
Total			79.282 ✓	√ 8.2758 ✓	13.260 ✓			801.0 ✓					1890 ✓	
Average				√ .6896	1.105			66.8					78.8	



Stack Diameter 16" Port Reference 0.0"

Ports are 57" Upstream from next disturbance

Ports are 468" Downstream from last disturbance

Assumed Moisture 1 %

Probe 27-G Cp 0.84

Nozzle Calibration .220 .220 .221 .221

Avg D_n .2205 inches

Gas Bag Ambient Air

Console 6

Y-Factor 1.002

ΔH@ 1.640 in H_2O

Barometric Pressures

Pb_m 24.40 in Hg

Pb_p 24.33 in Hg

P_g -.48 in H_2O

Leak Check:	Pre	Post
ft^3/min	0.001	0.002
vac in Hg	20.0	10.0
Pitot Rate	0.0	0.0
In H_2O	8.0	8.0

Water Collected 107 g

Time Sampled 120 min

Review

K = @T_m

K = @T_m

Comments:

Time	Baghouse ΔP
9:15	2.53
9:30	2.90
9:45	3.37
14:15	3.73

Time	Baghouse ΔP
14:37	5.19
14:56	7.14
15:09	7.53

4 Barrels were Packaged.

Shut down @ 9:46 stopped Packing Pugmill to fix Bin vibrator Broke.

Restart 14:06

APPENDIX C

South Yellow Cake Scrubber
- Sample Recovery
- Gas Analysis Data (ORSAT)

Yellow Cake Dryer Baghouse
- Sample Recovery
- Gas Analysis Data (Ambient)

Chain of Custody

Lab Analysis

South Yellow Cake Dryer Scrubber

NYC

Facility: Denison Mines Date: 8/19/15

Stack Identification: SYC Scrubber

IMPINGERS

Run: 1 Sample Box: B

Filter Number: 6494

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	drop out	-	100	100	-	SG
	1	2	3	4	5	6
Final (g)	530.2	581.5	728.7	705.3	615.0	932.5
Initial (g)	477.0	~~528.9~~	707.5	699.8	610.8	878.6
Net (g)	53.2	53.1	21.2	5.5	4.2	53.9

~~582.9 plus~~

Total (g) 191.1

IMPINGERS

Run: 2 Sample Box: B

Filter Number: 6496

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	drop out	100	100	~~100~~ MT	SG	SG
	1	2	3	4	5	6
Final (g)	505.2	686.4	726.5	628.7	963.1	
Initial (g)	476.0	627.9	698.7	610.5	898.2	
Net (g)	29.2	58.5	27.8	18.2	64.9	

Total (g) 198.6

IMPINGERS

Run: _____ Sample Box: _____

Filter Number: _____

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	drop out	-	100	100	-	SG
	1	2	3	4	5	6
Final (g)						
Initial (g)						
Net (g)						

Total (g) _____

Plant Energy Fuels Location SYC

Analytical Method ORSAT

Date 8/19/2015
Test No. 1
Gas Bag No. C-07
Ambient Temp 75
Operator [illegible]

Gas	RUN 1 Actual Reading	RUN 1 Net	RUN 2 Actual Reading	RUN 2 Net	RUN 3 Actual Reading	RUN 3 Net	Average Net Volume
CO_2	2.4	2.4	2.4	2.4	2.4	2.4	2.4
O_2 (Net is Actual O_2 Reading Minus Actual CO_2 Reading).	18.1	15.7	18.1	15.7	18.1	15.7	15.7
N_2 (Net is 100 Minus Actual O_2 Reading).							

Date 8/20/2015
Test No. 2
Gas Bag No. H-07
Ambient Temp 75
Operator [illegible]

Gas	RUN 1 Actual Reading	RUN 1 Net	RUN 2 Actual Reading	RUN 2 Net	RUN 3 Actual Reading	RUN 3 Net	Average Net Volume
CO_2	2.6	2.6	2.6	2.6	2.6	2.6	2.6
O_2 (Net is Actual O_2 Reading Minus Actual CO_2 Reading).	18.3	15.7	18.3	15.7	18.3	15.7	15.7
N_2 (Net is 100 Minus Actual O_2 Reading).							

Date
Test No.
Gas Bag No.
Ambient Temp
Operator

Gas	RUN 1 Actual Reading	RUN 1 Net	RUN 2 Actual Reading	RUN 2 Net	RUN 3 Actual Reading	RUN 3 Net	Average Net Volume
CO_2							
O_2 (Net is Actual O_2 Reading Minus Actual CO_2 Reading).							
N_2 (Net is 100 Minus Actual O_2 Reading).							

CO is not measured, as it has the same molecular weight as N_2

Yellow Cake Dryer Bag House

Dryer Baghouse

Facility: Denison Mines Date: 8/20/19

Stack Identification: Yellow Cake Dryer Baghouse

IMPINGERS

Run: _____ Sample Box: A

Filter Number: 6495

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	100	100	-	SG		
Final (g)	517.4	548.6	710.1			
Initial (g)	628.4	672.9	600.2	840.9		
Net (g)						

Total (g) _____

IMPINGERS

Run: _____ Sample Box: A

Filter Number: 6495

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	100	100	-	SG		
Final (g)	614.7	677.4	603.1	857.9		
Initial (g)	628.4	672.9	600.2	840.9		
Net (g)	-13.7	4.5	2.9	17.0		

Total (g) 10.7

IMPINGERS

Run: _____ Sample Box: _____

Filter Number: _____

	Impinger Number					
	1	2	3	4	5	6
	Initial Volume of liquid (H_2O) in impingers, (ml)					
	100	100	-	SG		
Final (g)						
Initial (g)						
Net (g)						

Total (g) _____

Analytical Data Package Prepared For

Denison Mines (USA) Corp.

Radiochemical Analysis By

TestAmerica Inc

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code:

Data Package Contains 20 ***Pages***

Report No.: 67290

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
50180		6494 R1 SYC Scubber filter and	J5H260413-2	M7HV21AD	9M7HV210	5238039
		6494 R1 SYC Scubber filter and	J5H260413-2	M7HV21AC	9M7HV210	5238040
		6494 R1 SYC Scubber filter and	J5H260413-2	M7HV23AA	9M7HV230	5238041
		6494 R1 SYC Scubber filter and	J5H260413-2	M7HV21AE	9M7HV210	5238042
		6494 R1 SYC Scubber filter and	J5H260413-2	M7HV21AF	9M7HV210	5238043
		6495 R1 Dryer BH filter and be	J5H260413-1	M7HV01AD	9M7HV010	5238039
		6495 R1 Dryer BH filter and be	J5H260413-1	M7HV01AC	9M7HV010	5238040
		6495 R1 Dryer BH filter and be	J5H260413-1	M7HV03AA	9M7HV030	5238041
		6495 R1 Dryer BH filter and be	J5H260413-1	M7HV01AE	9M7HV010	5238042
		6495 R1 Dryer BH filter and be	J5H260413-1	M7HV01AF	9M7HV010	5238043
		6496 R2 SYC Scubber filter and	J5H260413-3	M7HV41AD	9M7HV410	5238039
		6496 R2 SYC Scubber filter and	J5H260413-3	M7HV41AC	9M7HV410	5238040
		6496 R2 SYC Scubber filter and	J5H260413-3	M7HV43AA	9M7HV430	5238041
		6496 R2 SYC Scubber filter and	J5H260413-3	M7HV41AE	9M7HV410	5238042
		6496 R2 SYC Scubber filter and	J5H260413-3	M7HV41AF	9M7HV410	5238043

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

September 30, 2015
October 2, 2015

Denison Mines (USA) Corp
1050 17th Street, Suite 950
Denver, CO 80265

Attention: Dean Kitchen

Date Received at Lab	:	August 26, 2015
Project Name	:	Energy Fuels 2015 3rd Quarter
Sample Type	:	Three (3) Stack Filter Samples
SDG Number	:	50180

CASE NARRATIVE

This data report has been amended to include Th228 results for sample 6495R1Dryer BH that was inadvertently omitted. All amendments in the case narrative are bold, italicized and underlined.

I. Introduction

On August 26, 2015, three stack filter samples were received at TestAmerica's Richland laboratory for radiochemical analysis. Upon receipt, the samples were assigned the TestAmerica identification numbers as described on the cover page of the Analytical Data Package report form. The samples were assigned to Lot Numbers J5H260413.

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information; analytical results and the appropriate associated statistical uncertainties.

The analysis requested was:

Alpha Spectroscopy
Thorium-228, -230, -232 by method RL-ALP-001
Uranium-234, -235, -238 by method RL-ALP-004
Gas Proportional Counting
Radium-228 by method RL-RA-001
Pb-210 by method RL-GPC-011

Denison Mines (USA) Corp
September 30, 2015
October 2, 2015

Alpha Scintillation
Radium-226 by method RL-RA-001

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

V. Comments

Alpha Spectroscopy
Thorium-228, -230, -232 by method RL-ALP-001
The LCS is just slightly above acceptance criteria; 126%. The batch blank result for Th-230 was above the achieved MDA; a recount confirmed results and there is no sample remaining for reanalysis. The achieved MDA of the batch exceeds the detection limit from reduced aliquot sizes taken due to historical process knowledge. Data is reported. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Uranium-234, -235, -238 by method RL-ALP-004
The achieved MDA of the batch exceeds the detection limit due to the reduced aliquot sizes taken due to historical process knowledge. In most cases, the sample activity exceeds the MDA and CRDL. Data is accepted. Except as noted; the LCS, batch blank and sample results are within acceptance limits.

Gas Proportional Counting
Radium-228 by method RL-RA-001
The achieved MDA in the batch exceeds the CRDL due to method limitations for the matrix. The tracer yields and LCS recovery meet acceptance criteria. The sample results show no indication of method contribution. The LCS recovery yield exceeds acceptance criteria. The assumed presence of Pb-210 would cause a high method bias in the Ra228 results. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Pb-210 by method RL-GPC-011
The achieved MDA in the batch exceeds the CRDL due to method limitations for the matrix. The tracer yields and LCS recovery meet acceptance criteria. The sample results show no indication of method contribution. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Alpha Scintillation Counting
Radium-226 by method RL-RA-001
The achieved MDA in the batch exceeds the CRDL due to method limitations for the matrix. The tracer yields and LCS recovery meet acceptance criteria. The sample results show no indication of method contribution. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/?n), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
CSU (#s) ***u_c Combined Standard Uncert.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined standard uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2 + TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 02-Oct-15

TestAmerica Inc

Ordered by Method, Batch No., Client Sample ID.

Report No. : 67290 **SDG No:** 50180

Batch	Client Id / Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RER2
5238041 RICHRC5011									
6494 R1 SYC Scubber filter and									
	M7HV23AA	TH-228	2.16E-08 +- 4.7E-08	U	uCi/Sample	35%	8.88E-08	3.00E-15	
		TH-230	5.22E-07 +- 1.7E-07		uCi/Sample	35%	5.39E-08	3.00E-15	
		TH-232	2.09E-08 +- 3.1E-08	U	uCi/Sample	35%	5.39E-08	3.00E-15	
6495 R1 Dryer BH filter and be									
	M7HV03AA	TH-228	2.66E-08 +- 4.5E-08	U	uCi/Sample	42%	7.68E-08	3.00E-15	
		TH-230	3.47E-07 +- 1.2E-07		uCi/Sample	42%	4.98E-08	3.00E-15	
		TH-232	2.41E-08 +- 2.9E-08	U	uCi/Sample	42%	4.16E-08	3.00E-15	
6496 R2 SYC Scubber filter and									
	M7HV43AA	TH-228	6.92E-09 +- 3.2E-08	U	uCi/Sample	63%	6.48E-08	3.00E-15	
		TH-230	4.01E-07 +- 1.1E-07		uCi/Sample	63%	2.88E-08	3.00E-15	
		TH-232	5.57E-09 +- 1.2E-08	U	uCi/Sample	63%	2.88E-08	3.00E-15	
5238039 FFSR									
6494 R1 SYC Scubber filter and									
	M7HV21AD	U-234	1.07E-02 +- 2.0E-03		uCi/Sample	85%	6.24E-05	9.00E-15	
		U-235	4.18E-04 +- 1.7E-04		uCi/Sample	85%	5.49E-05	9.00E-15	
		U-238	9.35E-03 +- 1.8E-03		uCi/Sample	85%	7.19E-05	9.00E-15	
6495 R1 Dryer BH filter and be									
	M7HV01AD	U-234	7.21E-04 +- 2.3E-04		uCi/Sample	93%	5.61E-05	9.00E-15	
		U-235	2.45E-05 +- 3.6E-05	U	uCi/Sample	93%	4.23E-05	9.00E-15	
		U-238	6.44E-04 +- 2.1E-04		uCi/Sample	93%	6.30E-05	9.00E-15	
6496 R2 SYC Scubber filter and									
	M7HV41AD	U-234	1.05E-02 +- 1.9E-03		uCi/Sample	102%	9.22E-05	9.00E-15	
		U-235	7.53E-04 +- 2.4E-04		uCi/Sample	102%	6.18E-05	9.00E-15	
		U-238	1.07E-02 +- 2.0E-03		uCi/Sample	102%	8.75E-05	9.00E-15	
5238040 RICHRC5011									
6494 R1 SYC Scubber filter and									
	M7HV21AC	Pb-210	3.75E-05 +- 6.3E-06		uCi/Sample	100%	3.06E-07	6.00E-14	
6495 R1 Dryer BH filter and be									
	M7HV01AC	Pb-210	2.08E-06 +- 4.2E-07		uCi/Sample	100%	3.01E-07	6.00E-14	
6496 R2 SYC Scubber filter and									
	M7HV41AC	Pb-210	3.88E-05 +- 6.7E-06		uCi/Sample	100%	2.95E-07	6.00E-14	
5238042 BRTE									
6494 R1 SYC Scubber filter and									
	M7HV21AE	Ra-226	9.87E-08 +- 5.6E-08		uCi/sample	73%	7.73E-08	9.00E-14	
6495 R1 Dryer BH filter and be									
	M7HV01AE	Ra-226	4.69E-08 +- 4.3E-08	U	uCi/sample	93%	6.68E-08	9.00E-14	
6496 R2 SYC Scubber filter and									

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RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

Sample Results Summary

Date: 02-Oct-15

TestAmerica Inc

Ordered by Method, Batch No., Client Sample ID.

Report No. : 67290 **SDG No:** 50180

Batch	Client Id / Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RER2
5238042	**BRTE**								
	6496 R2 SYC Scubber filter and								
	M7HV41AE	Ra-226	1.35E-07 +- 4.9E-08		uCi/sample	83%	5.29E-08	9.00E-14	
5238043	**BRTF**								
	6494 R1 SYC Scubber filter and								
	M7HV21AF	Ra-228	8.02E-06 +- 1.3E-06		uCi/Sample	65%	5.84E-07	9.00E-14	
	6495 R1 Dryer BH filter and be								
	M7HV01AF	Ra-228	6.14E-06 +- 9.4E-07		uCi/Sample	86%	4.39E-07	9.00E-14	
	6496 R2 SYC Scubber filter and								
	M7HV41AF	Ra-228	7.87E-06 +- 1.2E-06		uCi/Sample	76%	6.01E-07	9.00E-14	

No. of Results: 27

TestAmerica Inc **RER2** - **Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.**

rptTALRchSaSum mary2 V5.4 A2002

QC Results Summary

Date: 02-Oct-15

TestAmerica Inc

Ordered by Method, Batch No, QC Type,.

Report No. : 67290 **SDG No.:** 50180

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
RICHRC5011								
5238041 BLANK QC,								
M7HWQ3AA	TH-228	-1.68E-08 +- 4.2E-08	U	Ci/Sample	43%			1.05E-07
	TH-230	5.85E-07 +- 1.8E-07		Ci/Sample	43%			6.29E-08
	TH-232	1.80E-08 +- 2.7E-08	U	Ci/Sample	43%			4.67E-08
5238041 LCS,								
M7HWQ4AC	TH-230	2.86E-06 +- 4.9E-07		Ci/Sample	54%	126%	0.3	4.75E-08
FFSR								
5238039 BLANK QC,								
M7HWN1AA	U-234	-9.84E-09 +- 2.6E-08	U	Ci/Sample	89%			7.29E-08
	U-235	-2.59E-09 +- 2.6E-08	U	Ci/Sample	89%			5.45E-08
	U-238	3.26E-08 +- 4.5E-08	U	Ci/Sample	89%			6.52E-08
5238039 LCS,								
M7HWN1AC	U-234	1.49E-06 +- 3.8E-07		Ci/Sample	83%	92%	-0.1	5.42E-08
	U-238	1.95E-06 +- 4.7E-07		Ci/Sample	83%	115%	0.2	6.48E-08
RICHRC5011								
5238040 BLANK QC,								
M7HWP1AA	Pb-210	1.26E-07 +- 1.9E-07	U	Ci/Sample	97%			3.04E-07
5238040 LCS,								
M7HWP1AC	Pb-210	1.01E-05 +- 1.7E-06		Ci/Sample	90%	111%	0.1	2.92E-07
BRTE								
5238042 BLANK QC,								
M7HWR1AA	Ra-226	8.37E-08 +- 5.3E-08		Ci/sample	77%			5.89E-08
5238042 LCS,								
M7HWR1AC	Ra-226	9.25E-06 +- 3.7E-06		Ci/sample	94%	93%	-0.1	4.60E-08
BRTF								
5238043 BLANK QC,								
M7HWT1AA	Ra-228	5.96E-06 +- 1.0E-06		Ci/Sample	71%			5.94E-07
5238043 LCS,								
M7HWT1AC	Ra-228	1.56E-05 +- 2.1E-06		Ci/Sample	85%	160%	0.6	6.50E-07

No. of Results: 15

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Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180 **Collection Date:** 8/19/2015 7:25:00 AM

Lot-Sample No.: J5H260413-2 **Report No. :** 67290 **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6494 R1 SYC Scubber filter and **COC No. :** **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5238039	FFSR			**Work Order:** M7HV21AD		**Report DB ID:** 9M7HV210						
U-234	**1.07E-02**		7.6E-04	2.0E-03	6.24E-05	uCi/Sample	85%	*(171.1)*	9/14/15 02:35 p	1.0	0.00101	ALP2
						1.75E-05	9.00E-15	*(10.6)*		Sample	Sample	
U-235	**4.18E-04**		1.5E-04	1.7E-04	5.49E-05	uCi/Sample	85%	*(7.6)*	9/14/15 02:35 p	1.0	0.00101	ALP2
						1.39E-05	9.00E-15	*(5.)*		Sample	Sample	
U-238	**9.35E-03**		7.1E-04	1.8E-03	7.19E-05	uCi/Sample	85%	*(130.)*	9/14/15 02:35 p	1.0	0.00101	ALP2
						2.22E-05	9.00E-15	*(10.5)*		Sample	Sample	
								Ratio U-234/238 = 1.1				
Batch: 5238040	RICHRC5011			**Work Order:** M7HV21AC		**Report DB ID:** 9M7HV210						
Pb-210	**3.75E-05**		6.7E-07	6.3E-06	3.06E-07	uCi/Sample	100%	*(122.7)*	9/28/15 10:24 a	1.0	0.98973	GPC31C
						1.49E-07	6.00E-14	*(11.9)*		Sample	Sample	
Batch: 5238041	RICHRC5011			**Work Order:** M7HV23AA		**Report DB ID:** 9M7HV230						
TH-228	**2.16E-08**	U	4.7E-08	4.7E-08	8.88E-08	uCi/Sample	35%	*0.24*	9/23/15 10:47 p	1.0	0.9897	ALP420
						3.86E-08	3.00E-15	*0.91*		Sample	Sample	
TH-230	**5.22E-07**		1.5E-07	1.7E-07	5.39E-08	uCi/Sample	35%	*(9.7)*	9/23/15 10:47 p	1.0	0.9897	ALP420
						2.26E-08	3.00E-15	*(6.)*		Sample	Sample	
TH-232	**2.09E-08**	U	3.1E-08	3.1E-08	5.39E-08	uCi/Sample	35%	*0.39*	9/23/15 10:47 p	1.0	0.9897	ALP420
						2.26E-08	3.00E-15	*(1.4)*		Sample	Sample	
Batch: 5238042	BRTE			**Work Order:** M7HV21AE		**Report DB ID:** 9M7HV210						
Ra-226	**9.87E-08**		5.1E-08	5.6E-08	7.73E-08	uCi/sample	73%	*(1.3)*	9/24/15 03:33 p	1.0	0.9897	ASCFRM
						3.67E-08	9.00E-14	*(3.5)*		g	g	
Batch: 5238043	BRTF			**Work Order:** M7HV21AF		**Report DB ID:** 9M7HV210						

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180 **Collection Date:** 8/19/2015 7:25:00 AM

Lot-Sample No.: J5H260413-2 **Report No. :** 67290 **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6494 R1 SYC Scubber filter and **COC No. :** **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Ra-228	8.02E-06		8.3E-07	1.3E-06	5.84E-07	uCi/Sample	65%	*(13.7)*	9/25/15 05:57 p	1.0	0.98973	GPC3C
						2.48E-07	9.00E-14	*(12.8)*		Sample	Sample	

No. of Results: 9 **Comments:**

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc | **SDG:** 50180 | **Collection Date:** 8/20/2015 9:00:00 AM

Lot-Sample No.: J5H260413-1 | **Report No. :** 67290 | **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6495 R1 Dryer BH filter and be | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5238039	FFSR			**Work Order:**	M7HV01AD	**Report DB ID:**	9M7HV010					
U-234	**7.21E-04**		1.9E-04	2.3E-04	5.61E-05	uCi/Sample	93%	*(12.9)*	9/14/15 02:35 p	1.0	0.00102	ALP1
						1.54E-05	9.00E-15	*(6.3)*		Sample	Sample	
U-235	**2.45E-05**	U	3.5E-05	3.6E-05	4.23E-05	uCi/Sample	93%	*0.58*	9/14/15 02:35 p	1.0	0.00102	ALP1
						8.96E-06	9.00E-15	*(1.4)*		Sample	Sample	
U-238	**6.44E-04**		1.8E-04	2.1E-04	6.30E-05	uCi/Sample	93%	*(10.2)*	9/14/15 02:35 p	1.0	0.00102	ALP1
						1.88E-05	9.00E-15	*(6.1)*		Sample	Sample	
								Ratio U-234/238 = 1.1				
Batch: 5238040	RICHRC5011			**Work Order:**	M7HV01AC	**Report DB ID:**	9M7HV010					
Pb-210	**2.08E-06**		2.3E-07	4.2E-07	3.01E-07	uCi/Sample	100%	*(6.9)*	9/28/15 10:24 a	1.0	0.99	GPC31B
						1.47E-07	6.00E-14	*(9.8)*		Sample	Sample	
Batch: 5238041	RICHRC5011			**Work Order:**	M7HV03AA	**Report DB ID:**	9M7HV030					
TH-228	**2.66E-08**	U	4.4E-08	4.5E-08	7.68E-08	uCi/Sample	42%	*0.35*	9/23/15 10:47 p	1.0	0.99	ALP419
						3.38E-08	3.00E-15	*(1.2)*		Sample	Sample	
TH-230	**3.47E-07**		1.1E-07	1.2E-07	4.98E-08	uCi/Sample	42%	*(7.)*	9/23/15 10:47 p	1.0	0.99	ALP419
						2.10E-08	3.00E-15	*(5.8)*		Sample	Sample	
TH-232	**2.41E-08**	U	2.9E-08	2.9E-08	4.16E-08	uCi/Sample	42%	*0.58*	9/23/15 10:47 p	1.0	0.99	ALP419
						1.74E-08	3.00E-15	*(1.7)*		Sample	Sample	
Batch: 5238042	BRTE			**Work Order:**	M7HV01AE	**Report DB ID:**	9M7HV010					
Ra-226	**4.69E-08**	U	4.1E-08	4.3E-08	6.68E-08	uCi/sample	93%	*0.7*	9/24/15 03:33 p	1.0	0.99	ASC9RA
						3.17E-08	9.00E-14	*(2.2)*		g	g	
Batch: 5238043	BRTF			**Work Order:**	M7HV01AF	**Report DB ID:**	9M7HV010					

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V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180 **Collection Date:** 8/20/2015 9:00:00 AM

Lot-Sample No.: J5H260413-1 **Report No. :** 67290 **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6495 R1 Dryer BH filter and be **COC No. :** **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Ra-228	6.14E-06		6.3E-07	9.4E-07	4.39E-07	uCi/Sample	86%	*(14.)*	9/25/15 05:57 p	1.0	0.99	GPC3B
						1.86E-07	9.00E-14	*(13.)*		Sample	Sample	

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc | **SDG:** 50180 | **Collection Date:** 8/20/2015 7:30:00 AM

Lot-Sample No.: J5H260413-3 | **Report No. :** 67290 | **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6496 R2 SYC Scubber filter and | **COC No. :** | **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5238039	FFSR			**Work Order:**	M7HV41AD	**Report DB ID:**	9M7HV410					
U-234	1.05E-02		7.4E-04	1.9E-03	9.22E-05	uCi/Sample	102%	*(113.4)*	9/14/15 02:35 p	1.0	0.0009	ALP3
						3.38E-05	9.00E-15	*(10.9)*		Sample	Sample	
U-235	7.53E-04		2.0E-04	2.4E-04	6.18E-05	uCi/Sample	102%	*(12.2)*	9/14/15 02:35 p	1.0	0.0009	ALP3
						1.83E-05	9.00E-15	*(6.4)*		Sample	Sample	
U-238	1.07E-02		7.5E-04	2.0E-03	8.75E-05	uCi/Sample	102%	*(122.5)*	9/14/15 02:35 p	1.0	0.0009	ALP3
						3.14E-05	9.00E-15	*(10.9)*		Sample	Sample	
								Ratio U-234/238 = 1.0				
Batch: 5238040	RICHRC5011			**Work Order:**	M7HV41AC	**Report DB ID:**	9M7HV410					
Pb-210	3.88E-05		6.9E-07	6.7E-06	2.95E-07	uCi/Sample	100%	*(131.6)*	9/28/15 10:24 a	1.0	0.98967	GPC31D
						1.43E-07	6.00E-14	*(11.7)*		Sample	Sample	
Batch: 5238041	RICHRC5011			**Work Order:**	M7HV43AA	**Report DB ID:**	9M7HV430					
TH-228	6.92E-09	U	3.2E-08	3.2E-08	6.48E-08	uCi/Sample	63%	*0.11*	9/23/15 10:48 p	1.0	0.9897	ALP422
						2.91E-08	3.00E-15	*0.43*		Sample	Sample	
TH-230	4.01E-07		9.5E-08	1.1E-07	2.88E-08	uCi/Sample	63%	*(13.9)*	9/23/15 10:48 p	1.0	0.9897	ALP422
						1.21E-08	3.00E-15	*(7.2)*		Sample	Sample	
TH-232	5.57E-09	U	1.2E-08	1.2E-08	2.88E-08	uCi/Sample	63%	*0.19*	9/23/15 10:48 p	1.0	0.9897	ALP422
						1.21E-08	3.00E-15	*0.93*		Sample	Sample	
Batch: 5238042	BRTE			**Work Order:**	M7HV41AE	**Report DB ID:**	9M7HV410					
Ra-226	1.35E-07		3.9E-08	4.9E-08	5.29E-08	uCi/sample	83%	*(2.6)*	9/24/15 03:33 p	1.0	0.9897	ASCGAB
						2.50E-08	9.00E-14	*(5.6)*		g	g	
Batch: 5238043	BRTF			**Work Order:**	M7HV41AF	**Report DB ID:**	9M7HV410					

TestAmerica Inc
rptSTLRchSample
V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

Date: 02-Oct-15

SAMPLE RESULTS

Lab Name: TestAmerica Inc **SDG:** 50180 **Collection Date:** 8/20/2015 7:30:00 AM

Lot-Sample No.: J5H260413-3 **Report No. :** 67290 **Received Date:** 8/26/2015 10:00:00 AM

Client Sample ID: 6496 R2 SYC Scubber filter and **COC No. :** **Matrix:** SOLID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Ra-228	7.87E-06		7.9E-07	1.2E-06	6.01E-07	uCi/Sample	76%	*(13.1)*	9/25/15 05:58 p	1.0	0.98967	GPC4A
						2.62E-07	9.00E-14	*(13.)*		Sample	Sample	

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180

Matrix: SOLID **Report No. :** 67290

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5238040	RICHRC5011			**Work Order:**	M7HWP1AA	**Report DB ID:**		M7HWP1AB				
Pb-210	1.26E-07	U	1.8E-07	1.9E-07	3.04E-07	uCi/Sample	97%	0.41	9/28/15 10:24 a	1.0	1.0	GPC32A
					1.48E-07	6.00E-14		(1.4)		Sample	Sample	
Batch: 5238042	BRTE			**Work Order:**	M7HWR1AA	**Report DB ID:**		M7HWR1AB				
Ra-226	8.37E-08		3.9E-08	5.3E-08	5.89E-08	uCi/sample	77%	(1.4)	9/24/15 03:33 p	1.0	1.0	ASCLMB
					2.78E-08	9.00E-14		(3.1)		g	g	
Batch: 5238043	BRTF			**Work Order:**	M7HWT1AA	**Report DB ID:**		M7HWT1AB				
Ra-228	5.96E-06		7.2E-07	1.0E-06	5.94E-07	uCi/Sample	71%	(10.)	9/25/15 05:58 p	1.0	1.0	GPC4B
					2.55E-07	9.00E-14		(11.8)		Sample	Sample	
Batch: 5238039	FFSR			**Work Order:**	M7HWN1AA	**Report DB ID:**		M7HWN1AB				
U-234	-9.84E-09	U	2.6E-08	2.6E-08	7.29E-08	uCi/Sample	89%	-0.13	9/14/15 02:35 p	1.0	1.07	ALP4
					2.33E-08	9.00E-15		-0.75		Sample	Sample	
U-235	-2.59E-09	U	2.6E-08	2.6E-08	5.45E-08	uCi/Sample	89%	-0.05	9/14/15 02:35 p	1.0	1.07	ALP4
					1.42E-08	9.00E-15		-0.2		Sample	Sample	
U-238	3.26E-08	U	4.5E-08	4.5E-08	6.52E-08	uCi/Sample	89%	0.5	9/14/15 02:35 p	1.0	1.07	ALP4
					1.94E-08	9.00E-15		(1.4)		Sample	Sample	
						Ratio U-234/238 = -0.3						
Batch: 5238041	RICHRC5011			**Work Order:**	M7HWQ3AA	**Report DB ID:**		M7HWQ3AB				
TH-228	-1.68E-08	U	4.1E-08	4.2E-08	1.05E-07	uCi/Sample	43%	-0.16	9/23/15 10:48 p	205.78	205.78	ALP423
					4.71E-08	3.00E-15		-0.81		Sample	Sample	
TH-230	5.85E-07		1.5E-07	1.8E-07	6.29E-08	uCi/Sample	43%	(9.3)	9/23/15 10:48 p	205.78	205.78	ALP423
					2.69E-08	3.00E-15		(6.6)		Sample	Sample	

TestAmerica Inc
rptSTLRchBlank
V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180

Matrix: SOLID **Report No. :** 67290

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
TH-232	1.80E-08	U	2.7E-08	2.7E-08	4.67E-08 1.95E-08	uCi/Sample 3.00E-15	43%	0.39 (1.4)	9/23/15 10:48 p	205.78 Sample	205.78 Sample	ALP423

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchBlank
V5.4 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 02-Oct-15

Lab Name: TestAmerica Inc **SDG:** 50180

Matrix: SOLID **Report No. :** 67290

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 5238040	RICHRC5011			**Work Order:** M7HWP1AC			**Report DB ID:** M7HWP1CS						
Pb-210	1.01E-05		3.9E-07	1.7E-06	2.92E-07	uCi/Sample	90%	9.06E-06	1.54E-07	111%	9/28/15 10:24 a	1.0	GPC32B
							Rec Limits:	75	125	0.1		Sample	
Batch: 5238042	BRTE			**Work Order:** M7HWR1AC			**Report DB ID:** M7HWR1CS						
Ra-226	9.25E-06		1.9E-07	3.7E-06	4.60E-08	uCi/sample	94%	9.97E-06	1.01E-07	93%	9/24/15 03:33 p	1.0	ASCNMD
							Rec Limits:	75	125	-0.1		g	
Batch: 5238043	BRTF			**Work Order:** M7HWT1AC			**Report DB ID:** M7HWT1CS						
Ra-228	1.56E-05		1.0E-06	2.1E-06	6.50E-07	uCi/Sample	85%	9.78E-06	1.12E-07	160%	9/25/15 05:58 p	1.0	GPC4C
							Rec Limits:	75	125	0.6		Sample	
Batch: 5238039	FFSR			**Work Order:** M7HWN1AC			**Report DB ID:** M7HWN1CS						
U-234	1.49E-06		2.8E-07	3.8E-07	5.42E-08	uCi/Sample	83%	1.62E-06	8.87E-09	92%	9/14/15 02:35 p	1.06	ALP5
							Rec Limits:	75	125	-0.1		Sample	
U-238	1.95E-06		3.2E-07	4.7E-07	6.48E-08	uCi/Sample	83%	1.69E-06	9.29E-09	115%	9/14/15 02:35 p	1.06	ALP5
							Rec Limits:	75	125	0.2		Sample	
Batch: 5238041	RICHRC5011			**Work Order:** M7HWQ4AC			**Report DB ID:** M7HWQ4CS						
TH-230	2.86E-06		2.6E-07	4.9E-07	4.75E-08	uCi/Sample	54%	2.27E-06	2.35E-08	126%	9/25/15 07:19 p	201.41	ALP1
							Rec Limits:	75	125	0.3		Sample	

No. of Results: 6 **Comments:**

TestAmerica Inc **Bias** **- (Result/Expected)-1 as defined by ANSI N13.30.**

rptSTLRchLcs
V5.4 A2002

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Tetco	Dean Kitchen	8/24/2015	

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 1
391 East 620 South	801-492-9106		

City	State	Zip Code	Site Contact	Lab Contact
American Fork	Ut	84003	Logan Shumway	

Project Name and Location (State)	Carrier/Waybill Number
Energy Fuels 2015 3RD Quarter	

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: U-Nat	Ra-226	Ra-228	Th-228	Th-230	Th-232	Lead-210	Special Instructions/ Conditions of Receipt
6495 R1 Dryer BH filter and beaker	8/20/15	9:00	X										X	X	X	X	X	X	X	MJHV0
6494 R1 SYC Scrubber filter and beaker	8/19/15	7:25	X										X	X	X	X	X	X	X	MJHV2
6496 R2 SYC Scrubber filter and beaker	8/20/15	7:30	X										X	X	X	X	X	X	X	MJHV4
J5H260413																				
SD6-50180																				
Due 9-23-15																				

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other as per method

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
[signature]	8/24/15	12:00	J. Friesz TALK	8/26/15	1000
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

When Complete Email to: Dean or Paul tetco@tetco-ut.com

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

J5H260413

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

REVISION 1

Date/Time Received: 8/26/15 1000 Container GM Screen Result: (Airlock) 20 cpm Initials[JF]
Sample GM Screen Result (Sample Receiving) 60 cpm Initials[JF]

Client: Den SDG #: 50180 SAF #: _____ NA [JF]

Lot Number: 550426043

Chain of Custody # N/A

Shipping Container ID or Air Bill Number : _____ NA [JF]

Samples received inside shipping container/cooler/box Yes [JF] Continue with 1 through 4. Initial appropriate response.
No [ ] Go to 5, add comment to #16.

1. Custody Seals on shipping container intact? Yes [ ] No [ ] No Custody Seal [JF]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [JF]
3. Cooler temperature: _____ °C NA [JF]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [JF]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [JF] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 3
7. Containers received: 3x filter, 3x 250 glass
8. Sample holding times exceeded? NA [ ] Yes [ ] No [JF]
9. Samples have: ____tape ____hazard labels ____custody seals JF appropriate sample labels
10. Matrix: ____A (FLT, Wipe, Solid, Soil) ____I (Water) ____S (Air, Niosh 7400) JF T (Biological, Ni-63)
11. Samples:
JF are in good condition ____are leaking ____are broken
____have air bubbles (Only for samples requiring no head space) ____Other _____
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [JF]
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO_3 added and pH after addition on table)
13. Were any anomalies identified in sample receipt? Yes [ ] No [JF]
14. Description of anomalies (include sample numbers): NA [JF] _____
15. Sample Location, Sample Collector Listed on COC? * Yes [ ] No [JF]
*For documentation only. No corrective action needed.
16. Additional Information: N/A

[ ] Client/Courier denied temperature check. [ ] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: _____ Date: 8/26/15

Client Notification needed? Yes [ ] No [ ] Date: _____
By: _____
Person contacted: _____

[X] No action necessary; process as is

Project Manager Erika Ford Date 8-26-15

APPENDIX D

South Yellow Cake Scrubber
Figure 1. Facility Schematic Representation

Yellow Cake Dryer Baghouse
Figure 2. Facility Schematic Representation

Process Data
South Yellow Cake (Scrubber Flow Rates)
Yellow Cake Dryer Baghouse (Δ p readings on Field Sheet)

Facility: Denison Mines

Stack Identification: South Yellow Cake Scrubber

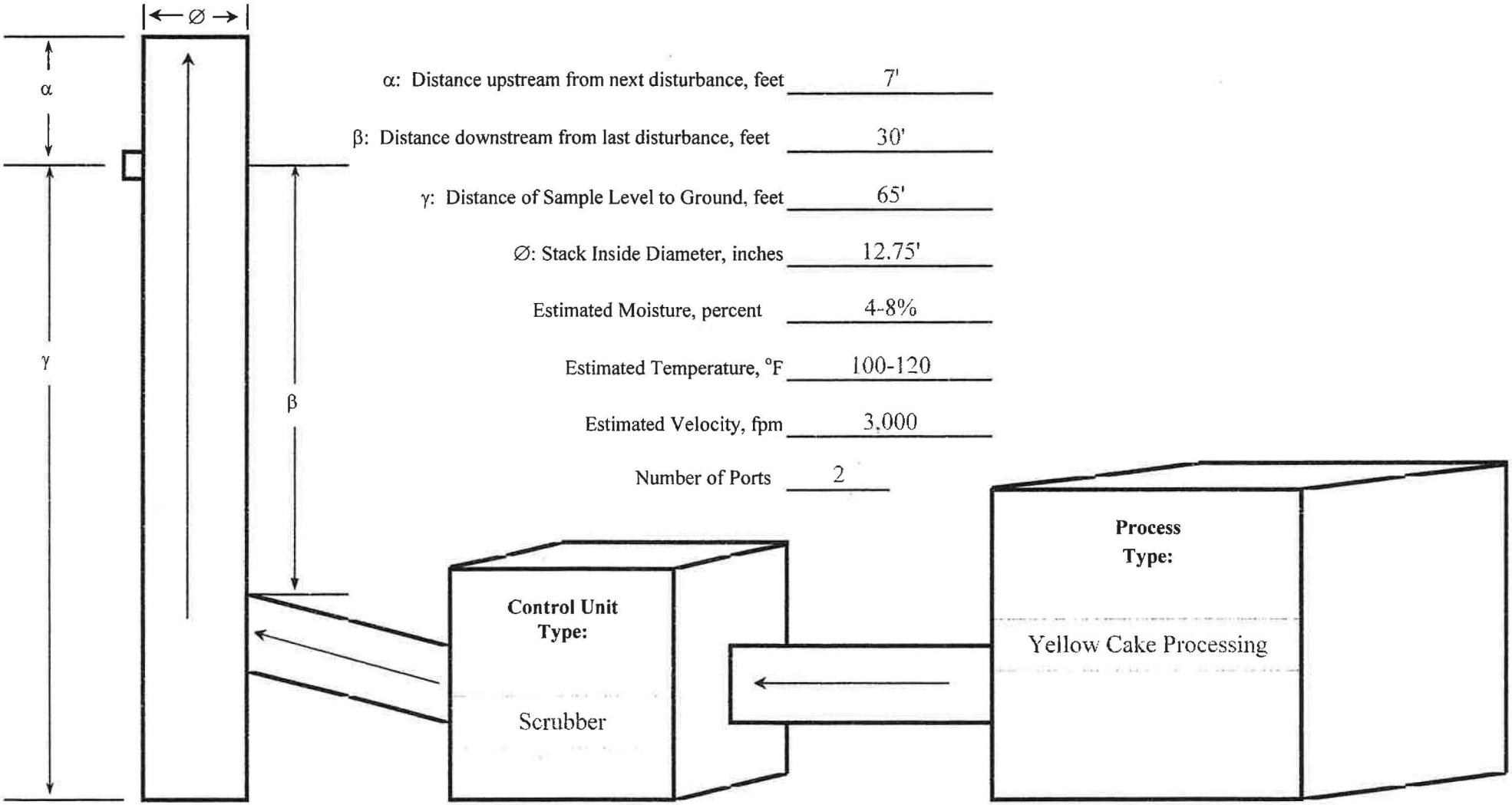


Figure 1. Facility Schematic Representation

Facility: Denison Mines

Stack Identification: Baghouse

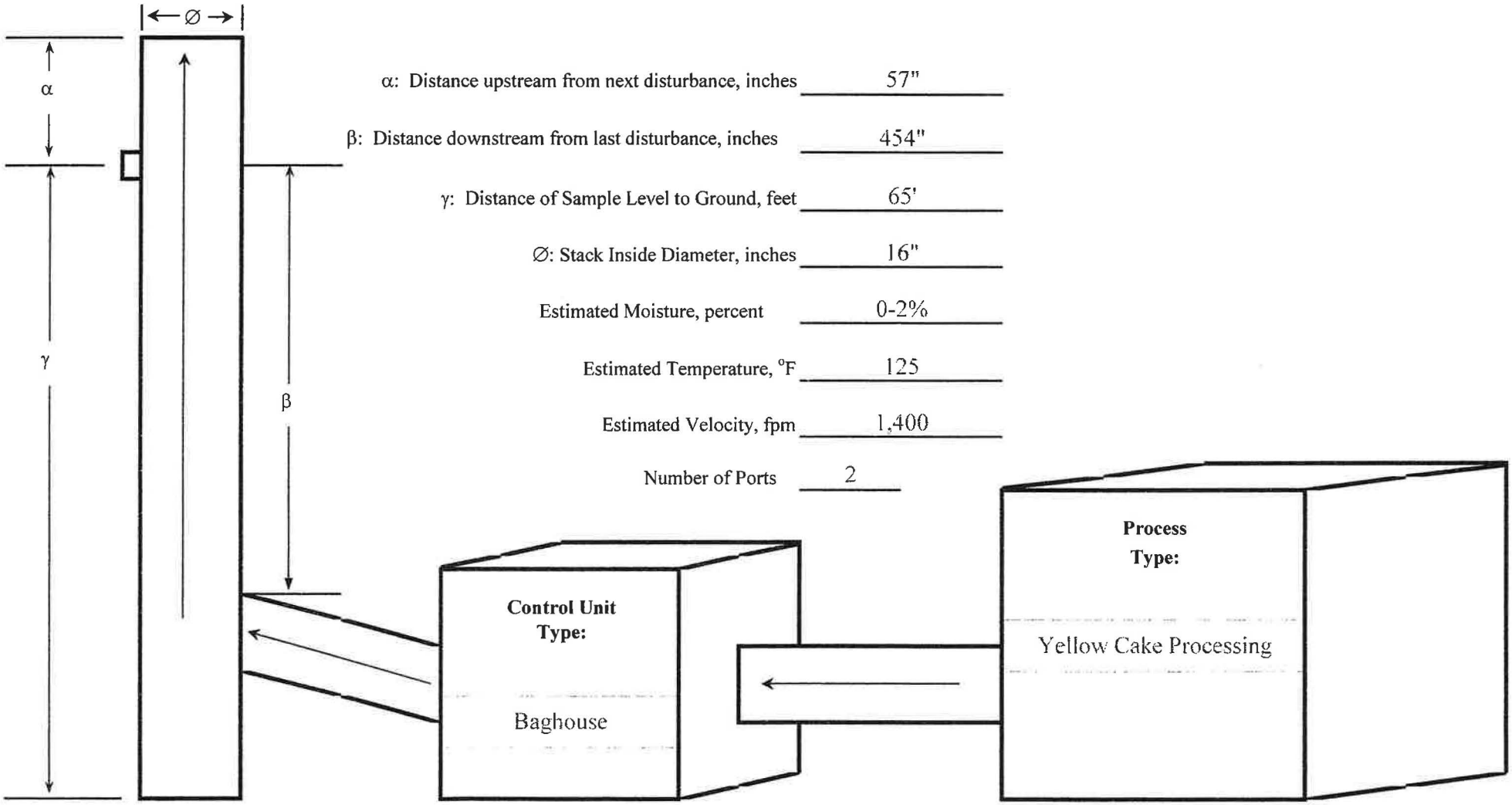


Figure 2. Facility Schematic Representation

Energy Fuels Resources, Blanding, UT Process Data

Source: South Yellow Cake		Date: 8/19/2015
	Scrubber Flow GPM	
Time	#1	#2	ΔP
7:26	3.7/6.1	30.6	8.16
8:05	3.7/6.1	30.5	8.06
8:35	3.6/6.1	30.2	8.01
9:07	3.7/6.2	30.6	7.83
9:34	3.7/6.2	30.6	8.06
10:00	3.7/6.1	30.6	8.00
10:37	3.7/6.1	30.6	7.92
11:15	3.7/6.1	30.6	7.92
11:42	3.7/6.2	30.6	8.01
12:10	3.7/6.1	30.6	8.01
12:35	3.6/6.2	30.6	8.04
13:20	3.7/6.2	30.6	8.01
13:55	3.6/6.1	30.6	8.01
14:25	3.7/6.2	30.7	7.99
14:50	3.7/6.2	30.7	8.03
15:15	3.6/6.1	30.4	7.96

Energy Fuels Resources, Blanding, UT Process Data

Source: South Yellow Cake		Date: 8/20/2015
	Scrubber Flow GPM	
Time	#1	#2	ΔP
7:43	3.7/6.5	30.6	8.05
8:15	3.6/6.4	30.5	7.86
8:42	3.6/6.5	30.5	7.84
9:12	3.6/6.5	30.6	7.76
9:45	3.6/6.5	30.6	7.66
10:15	3.6/6.5	30.6	7.67
12:02	3.6/6.5	30.6	7.69
12:25	3.6/6.5	30.7	7.71
13:05	3.6/6.5	30.7	7.78
13:40	3.6/6.4	30.7	7.76
14:10	3.6/6.5	30.7	7.84
14:45	3.6/6.5	30.6	7.93
15:20	3.6/6.5	30.6	8.01
15:48	3.6/6.5	30.6	7.99
16:15	3.6/6.5	30.4	7.79
16:44	3.6/6.5	30.4	7.82
17:15	3.6/6.5	30.4	7.86

METHOD 5 DRY GAS METER CALIBRATION USING CRITICAL ORIFICES

1) Select three critical orifices to calibrate the dry gas meter which bracket the expected operating range.
2) Record barometric pressure before and after calibration procedure.
3) Run at tested vacuum (from Orifice Calibration Report), for a period of time necessary to achieve a minimum total volume of 5 cubic feet.
4) Record data and information in the GREEN cells. YELLOW cells are calculated.

Quality - Service - Reliability

2014 Pre-Calibration

DATE: 12/6/2013 | METER SERIAL #: 27863 | BAROMETRIC PRESSURE (in Hg): INITIAL 25.45, FINAL 25.25, AVG (P_{bar}) 25.35

METER PART #: Console 4 | CRITICAL ORIFICE SET SERIAL #: 1453S | EQUIPMENT ID #: Console #4

IF Y VARIATION EXCEEDS 2.00%, ORIFICE SHOULD BE RECALIBRATED

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH ($in H_2O$)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y VARIATION (%)	$\Delta H_@$
30	1	0.8137	13	261.525	268.512	6.987	69	75	75	77	80	76.75	6.50	2.60	5.8683	5.8312	0.994		1.526
	2	0.8137	13	268.512	275.475	6.963	69	76	75	76	80	76.75	6.50	2.60	5.8481	5.8312	0.997		1.526
	3	0.8137	13	275.475	281.878	6.403	69	72	77	76	82	76.50	6.00	2.60	5.3803	5.3826	1.000		1.527
																AVG =	0.997	-0.28	
19	1	0.5317	13	300.021	306.251	6.230	69	67	68	68	69	68.00	9.00	1.10	5.2963	5.2758	0.996		1.531
	2	0.5317	13	306.251	312.128	5.877	69	68	69	68	71	69.00	8.50	1.10	4.9867	4.9827	0.999		1.528
	3	0.5317	13	312.128	318.340	6.212	69	68	71	67	70	69.00	9.00	1.10	5.2710	5.2758	1.001		1.528
																AVG =	0.999	-0.11	
12	1	0.3307	13	242.840	248.398	5.558	69	65	64	69	70	67.00	13.00	0.40	4.7244	4.7397	1.003		1.439
	2	0.3307	13	248.398	254.428	6.030	69	69	70	69	71	69.75	14.00	0.40	5.0989	5.1043	1.001		1.431
	3	0.3307	13	254.428	260.240	5.812	69	69	71	75	76	72.75	13.50	0.40	4.8869	4.9220	1.007		1.423
																AVG =	1.004	0.48	

USING THE CRITICAL ORIFICES AS CALIBRATION STANDARDS:

The following equations are used to calculate the standard volumes of air passed through the DGM, V_m (std), and the critical orifice, V_{cr} (std), and the DGM calibration factor, Y. These equations are automatically calculated in the spreadsheet above.

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.000

AVERAGE $\Delta H_@$ = 1.495

(1) $$Vm_{(std)} = K_1 * Vm * \frac{Pbar + (\Delta H / 13.6)}{Tm}$$

= Net volume of gas sample passed through DGM, corrected to standard conditions

K_1 = 17.64 °R/in. Hg (English), 0.3858 °K/mm Hg (Metric)

T_m = Absolute DGM avg. temperature (°R - English, °K - Metric)

(2) $$Vcr_{(std)} = K' * \frac{Pbar * \Theta}{\sqrt{Tamb}}$$

= Volume of gas sample passed through the critical orifice, corrected to standard conditions

T_{amb} = Absolute ambient temperature (°R - English, °K - Metric)

K' = Average K' factor from Critical Orifice Calibration

(3) $$Y = \frac{Vcr_{(std)}}{Vm_{(std)}}$$

= DGM calibration factor

$$\Delta H_@ = \left(\frac{0.75\,\theta}{V_{cr(std)}}\right)^2 \Delta H \left(\frac{V_{m(std)}}{V_m}\right)$$

Temperature Sensors

	Reference °F	In °F	Out °F
Ice Bath	33	33	33
Ambient Air	62	62	62
Boiling Water	202	203	203

METHOD 5 DRY GAS METER CALIBRATION USING CRITICAL ORIFICES

2015 Pre-Calibration

1) Select three critical orifices to calibrate the dry gas meter which bracket the expected operating range.
2) Record barometric pressure before and after calibration procedure.
3) Run at tested vacuum (from Orifice Calibration Report), for a period of time necessary to achieve a minimum total volume of 5 cubic feet.
4) Record data and information in the GREEN cells, YELLOW cells are calculated.

DATE:	12/8/14	METER SERIAL #:	26144	BAROMETRIC PRESSURE (in Hg):	INITIAL 25.29	FINAL 25.29	AVG (P_{bar}) 25.29	IF Y VARIATION EXCEEDS 2.00%, ORIFICE SHOULD BE RECALIBRATED
METER PART #:	Console 6	CRITICAL ORIFICE SET SERIAL #:	1453S	EQUIPMENT ID #:	Console #6			

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (H_2O)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y VARIATION (%)	$\Delta H_@$
30	1	0.8137	12	647.0	655.937	8.937	75	69	79	70	82	75	8.50	2.90	7.5194	7.5645	1.006		1.733
	2	0.8137	12	655.937	665.455	9.518	75	70	82	73	83	77	9.00	2.90	7.9784	8.0095	1.004		1.727
	3	0.8137	12	665.455	681.418	15.963	75	73	83	77	89	80.5	15.00	2.90	13.2942	13.3491	1.004		1.715
																AVG =	1.005	0.26	
19	1	0.5317	12	681.70	687.935	6.235	75	74	70	72	77	73.25	9.00	1.20	5.2374	5.2337	0.999		1.677
	2	0.5317	12	687.935	694.499	6.564	75	72	77	74	84	76.75	9.50	1.20	5.4778	5.5244	1.009		1.666
	3	0.5317	12	694.499	701.440	6.941	75	74	84	76	84	79.50	10.00	1.20	5.7629	5.8152	1.009		1.657
																AVG =	1.006	0.36	
12	1	0.3307	12	701.521	707.439	5.918	75	77	80	78	80	78.75	13.50	0.43	4.9094	4.8828	0.995		1.534
	2	0.3307	12	707.439	715.795	8.356	75	78	80	81	85	81.00	19.00	0.43	6.9030	6.8720	0.996		1.527
	3	0.3307	12	715.795	721.525	5.730	75	81	85	82	85	83.25	13.00	0.43	4.7140	4.7019	0.997		1.521
																AVG =	0.996	-0.62	

USING THE CRITICAL ORIFICES AS CALIBRATION STANDARDS:
The following equations are used to calculate the standard volumes of air passed through the DGM, V_m (std), and the critical orifice, V_{cr} (std), and the DGM calibration factor, Y. These equations are automatically calculated in the spreadsheet above.

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.002

AVERAGE $\Delta H_@$ = 1.640

(1) $$Vm_{(std)} = K_1 * Vm * \frac{Pbar + (\Delta H / 13.6)}{Tm}$$

= Net volume of gas sample passed through DGM, corrected to standard conditions
K_1 = 17.64 °R/in. Hg (English), 0.3858 °K/mm Hg (Metric)
T_m = Absolute DGM avg. temperature (°R - English, °K - Metric)

(2) $$Vcr_{(std)} = K' * \frac{Pbar * \Theta}{\sqrt{Tamb}}$$

= Volume of gas sample passed through the critical orifice, corrected to standard conditions
T_{amb} = Absolute ambient temperature (°R - English, °K - Metric)
K' = Average K' factor from Critical Orifice Calibration

(3) $$Y = \frac{Vcr_{(std)}}{Vm_{(std)}}$$

= DGM calibration factor

$$\Delta H_@ = \left(\frac{0.75\,\theta}{V_{cr(std)}}\right)^2 \Delta H \left(\frac{V_{m(std)}}{V_m}\right)$$

Temperature Sensors

Reference °F	In °F	Out °F
33	33	33
68	67	68
202	202	202

METHOD 5 DRY GAS METER CALIBRATION USING CRITICAL ORIFICES

1) Select three critical orifices to calibrate the dry gas meter which bracket the expected operating range.
2) Record barometric pressure before and after calibration procedure.
3) Run at tested vacuum (from Orifice Calibration Report), for a period of time necessary to achieve a minimum total volume of 5 cubic feet.
4) Record data and information in the GREEN cells, YELLOW cells are calculated.

Energy Fuels
South Yellow Cake Dryer

DATE: 8/21/2015 | METER SERIAL #: 27863 | BAROMETRIC PRESSURE (in Hg): INITIAL 25.30, FINAL 25.30, AVG (P_{bar}) 25.30
METER PART #: Console 4 | CRITICAL ORIFICE SET SERIAL #: 1453S | EQUIPMENT ID #: Console #4

IF Y VARIATION EXCEEDS 2.00%, ORIFICE SHOULD BE RECALIBRATED

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y VARIATION (%)	$\Delta H_@$
30	1	0.8137				.0						0							
	2	0.8137				.0						0							
	3	0.8137				.0						0.00							
																AVG =			
19	1	0.5317	12	484.500	491.638	7.138	77	74	75	78	83	77.50	10.50	1.10	5.9491	6.0970	1.025		1.529
	2	0.5317	12	491.750	497.536	5.786	77	75	76	83	85	79.75	8.50	1.10	4.8022	4.9357	1.028		1.523
	3	0.5317	12	497.536	503.299	5.763	77	76	77	85	87	81.25	8.50	1.10	4.7699	4.9357	1.035	42172.00	1.519
																AVG =	1.029	0.00	
12	1	0.3307				.0						0.00							
	2	0.3307				.0						0.00							
	3	0.3307				.0						0.00							
																AVG =			

USING THE CRITICAL ORIFICES AS CALIBRATION STANDARDS:
The following equations are used to calculate the standard volumes of air passed through the DGM, V_m (std), and the critical orifice, V_{cr} (std), and the DGM calibration factor, Y. These equations are automatically calculated in the spreadsheet above.

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.029

AVERAGE $\Delta H_@$ = 1.524

(1) $$Vm_{(std)} = K_1 * Vm * \frac{Pbar + (\Delta H / 13.6)}{Tm}$$

= Net volume of gas sample passed through DGM, corrected to standard conditions
K_1 = 17.64 °R/in. Hg (English), 0.3858 °K/mm Hg (Metric)
T_m = Absolute DGM avg. temperature (°R - English, °K - Metric)

(2) $$Vcr_{(std)} = K' * \frac{Pbar * \Theta}{\sqrt{Tamb}}$$

= Volume of gas sample passed through the critical orifice, corrected to standard conditions
T_{amb} = Absolute ambient temperature (°R - English, °K - Metric)
K' = Average K' factor from Critical Orifice Calibration

(3) $$Y = \frac{Vcr_{(std)}}{Vm_{(std)}}$$

= DGM calibration factor

$$\Delta H_@ = \left(\frac{0.75\,\theta}{V_{cr(std)}}\right)^2 \Delta H \left(\frac{V_{m(std)}}{V_m}\right)$$

Temperature Sensors

	Reference °F	In °F	Out °F
Ice Bath	33	33	33
Ambient Air	62	62	62
Boiling Water	202	203	203

METHOD 5 DRY GAS METER CALIBRATION USING CRITICAL ORIFICES

1) Select three critical orifices to calibrate the dry gas meter which bracket the expected operating range.
2) Record barometric pressure before and after calibration procedure.
3) Run at tested vacuum (from Orifice Calibration Report), for a period of time necessary to achieve a minimum total volume of 5 cubic feet.
4) Record data and information in the GREEN cells, YELLOW cells are calculated.

Quality - Service - Reliability

Energy Fuels
Yellow Cake Baghouse

DATE:	8/21/2015	METER SERIAL #:	26144	BAROMETRIC PRESSURE (In Hg):	INITIAL 25.30	FINAL 25.30	AVG (P_{bar}) 25.30	IF Y VARIATION EXCEEDS 2.00%,
METER PART #:	Console 6	CRITICAL ORIFICE SET SERIAL #:	1453S	EQUIPMENT ID #:	Console #6			ORIFICE SHOULD BE RECALIBRATED

ORIFICE #	RUN #	K' FACTOR (AVG)	TESTED VACUUM (in Hg)	DGM READINGS (FT^3) INITIAL	DGM READINGS (FT^3) FINAL	DGM READINGS (FT^3) NET (V_m)	TEMPERATURES °F AMBIENT	DGM INLET INITIAL	DGM INLET FINAL	DGM OUTLET INITIAL	DGM OUTLET FINAL	DGM AVG	ELAPSED TIME (MIN) θ	DGM ΔH (in H_2O)	(1) V_m (STD)	(2) V_{cr} (STD)	(3) Y	Y VARIATION (%)	$\Delta H_@$
19	1	0.5317	12	192.202	202.317	10.115	80	83	83	80	77	80.75	14.50	1.20	8.3820	8.3962	1.002		1.668
	2	0.5317	12	202.317	210.686	8.369	80	83	84	77	77	80.25	12.00	1.20	6.9416	6.9486	1.001		1.670
	3	0.5317	12	210.686	216.961	6.275	80	84	85	77	81	81.75	9.00	1.20	5.1903	5.2114	1.004		1.665
																AVG =	1.002	0.00	
	1					.0						0.00							
	2					.0						0.00							
	3					.0						0.00							
																AVG =			
	1					.0						0.00							
	2					.0						0.00							
	3					.0						0.00							
																AVG =			

USING THE CRITICAL ORIFICES AS CALIBRATION STANDARDS:
The following equations are used to calculate the standard volumes of air passed through the DGM, V_m (std), and the critical orifice, V_{cr} (std), and the DGM calibration factor, Y. These equations are automatically calculated in the spreadsheet above.

AVERAGE DRY GAS METER CALIBRATION FACTOR, Y = 1.002

AVERAGE $\Delta H_@$ = 1.668

(1) $$Vm_{(std)} = K_1 * Vm * \frac{Pbar + (\Delta H / 13.6)}{Tm}$$

= Net volume of gas sample passed through DGM, corrected to standard conditions
K_1 = 17.64 °R/in. Hg (English), 0.3858 °K/mm Hg (Metric)
T_m = Absolute DGM avg. temperature (°R - English, °K - Metric)

(2) $$Vcr_{(std)} = K' * \frac{Pbar * \Theta}{\sqrt{Tamb}}$$

= Volume of gas sample passed through the critical orifice, corrected to standard conditions
T_{amb} = Absolute ambient temperature (°R - English, °K - Metric)
K' = Average K' factor from Critical Orifice Calibration

(3) $$Y = \frac{Vcr_{(std)}}{Vm_{(std)}}$$

= DGM calibration factor

$$\Delta H_@ = \left(\frac{0.75\,\theta}{V_{cr(std)}}\right)^2 \Delta H \left(\frac{V_{m(std)}}{V_m}\right)$$

Temperature Sensors

Reference °F	In °F	Out °F
33	34	34
67	66	66
121	120	120

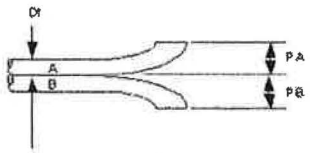
Post test Console #6 2015

Type S Pitot Tube Inspection Data

Date: 12/11/2014

Pitot Tube Identification: 18 G

Technician: A. Moore



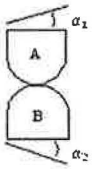
Dt= 0.375 in.

Is $P_A = P_B$? Yes

Is $1.05 \cdot D_t \le P_A \& P_B \le 1.50 \cdot D_t$? Yes

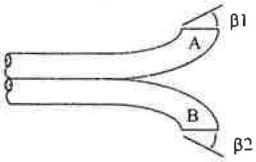
P_A = 0.452 in.

P_B = 0.452 in.



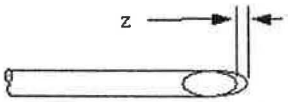
$\alpha_1 < 10°$ α_1 = 1 °

$\alpha_2 < 10°$ α_2 = 2 °

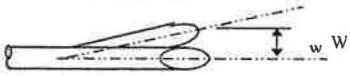


$\beta_1 < 5°$ β_1 = 0 °

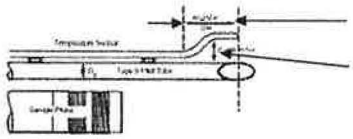
$\beta_2 < 5°$ β_2 = 1 °



Z ≤ 0.125 in. Z = 0.016 in.

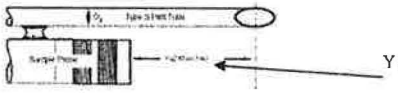


W ≤ 0.03125 in. W = 0.008 in.



W > 3 inches W = 6 3/4 in.

Z > 3/4 inch Z = 1 in.



Y ≥ 3 inches Y = 3 1/2 in.

The pitot tube meets the specifications for a calibration factor of 0.84? Yes

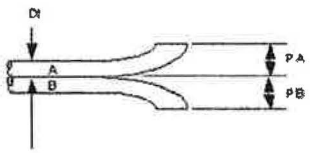
Temperature Sensor Calibration Reference: Omega CL3512A				
Probe	Continuity Check			Yes
	Heat Check 248			Yes
	Temperature Source (Medium)	Temperature Reference (°F)	Temperature Sensor (°F)	Temperature Difference (°F)
Probe	AIR	68	69	1
Stack	AIR	71	71	0
	ICE WATER	34	34	0
	BOIL WATER	204	205	1
	SILICONE OIL			

Type S Pitot Tube Inspection Data

Date: 12/12/2014

Pitot Tube Identification: 27 G

Technician: K. McNamara



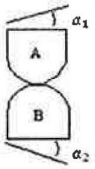
Dt= 0.375 in.

Is $P_A = P_B$? Yes

Is $1.05 \cdot D_t \le P_A \& P_B \le 1.50 \cdot D_t$? Yes

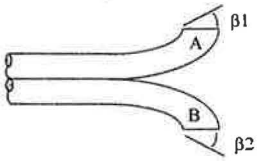
P_A = 0.443 in.

P_B = 0.443 in.



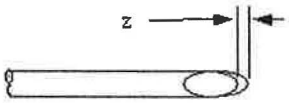
$\alpha_1 < 10^o$ α_1 = 3 °

$\alpha_2 < 10^o$ α_2 = 2 °

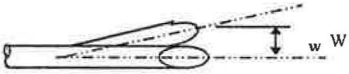


$\beta_1 < 5^o$ β_1 = 1 °

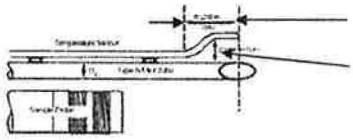
$\beta_2 < 5^o$ β_2 = 1 °



Z ≤ 0.125 in. Z = 0.062 in.

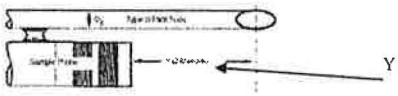


W ≤ 0.03125 in. W = 0.007 in.



W > 3 inches W = 7 in.

Z > 3/4 inch Z = 1 1/2 in.



Y ≥ 3 inches Y = 3 1/2 in.

The pitot tube meets the specifications for a calibration factor of 0.84? Yes

Temperature Sensor Calibration Reference: Omega CL3512A				
Probe	Continuity Check			Yes
	Heat Check 248			Yes
	Temperature Source (Medium)	Temperature Reference (°F)	Temperature Sensor (°F)	Temperature Difference (°F)
Probe	AIR	66	68	2
Stack	AIR	66	67	1
	ICE WATER	33	34	1
	BOIL WATER	204	204	0
	SILICONE OIL			

TETCO

Sample Box Temperature Sensor Calibration

Date: 12/12/14 Calibrator: Alex Moore Reference: Omega CL3512A

Unit ID	Thermocouple Location	Temperature Source (Medium)	Temperature		Temperature Difference (°F)
			Reference (°F)	Sensor (°F)	
A	Oven	Water	33	34	1
		Water	204	206	2
	Oven (4)	Water	33	32	-1
		Water	204	205	1
	Impinger Out	Water	33	34	1
		Water	204	206	2
B	Oven	Water	33	34	1
		Water	204	206	2
	Oven (4)	Water	33	32	-1
		Water	204	204	0
	Impinger Out	Water	33	34	1
		Water	204	205	1
C	Oven	Water	33	34	1
		Water	204	206	2
	Oven (4)	Water	33	33	0
		Water	204	204	0
	Impinger Out	Water	33	35	2
		Water	204	203	-1
D	Oven	Water	33	33	0
		Water	204	206	2
	Oven (4)	Water	33	33	0
		Water	204	204	0
	Impinger Out	Water	33	35	2
		Water	204	203	-1
E	Oven	Water	33	34	1
		Water	204	204	0
	Oven (4)	Water	33	33	0
		Water	204	203	-1
	Impinger Out	Water	33	35	2
		Water	204	204	0
F	Oven	Water	33	32	-1
		Water	204	204	0
	Oven (4)	Water	33	31	-2
		Water	204	203	-1
	Impinger Out	Water	33	34	1
		Water	204	203	-1
	Impinger Out G	Water	33	35	2
		Water	204	203	-1
	Impinger Out H	Water	33	35	2
		Water	204	203	-1
	Impinger Out I	Water	33	35	2
		Water	204	204	0
	Impinger Out J	Water	33	35	2
		Water	204	203	-1
	Impinger Out K	Water	33	35	2
		Water	204	204	0

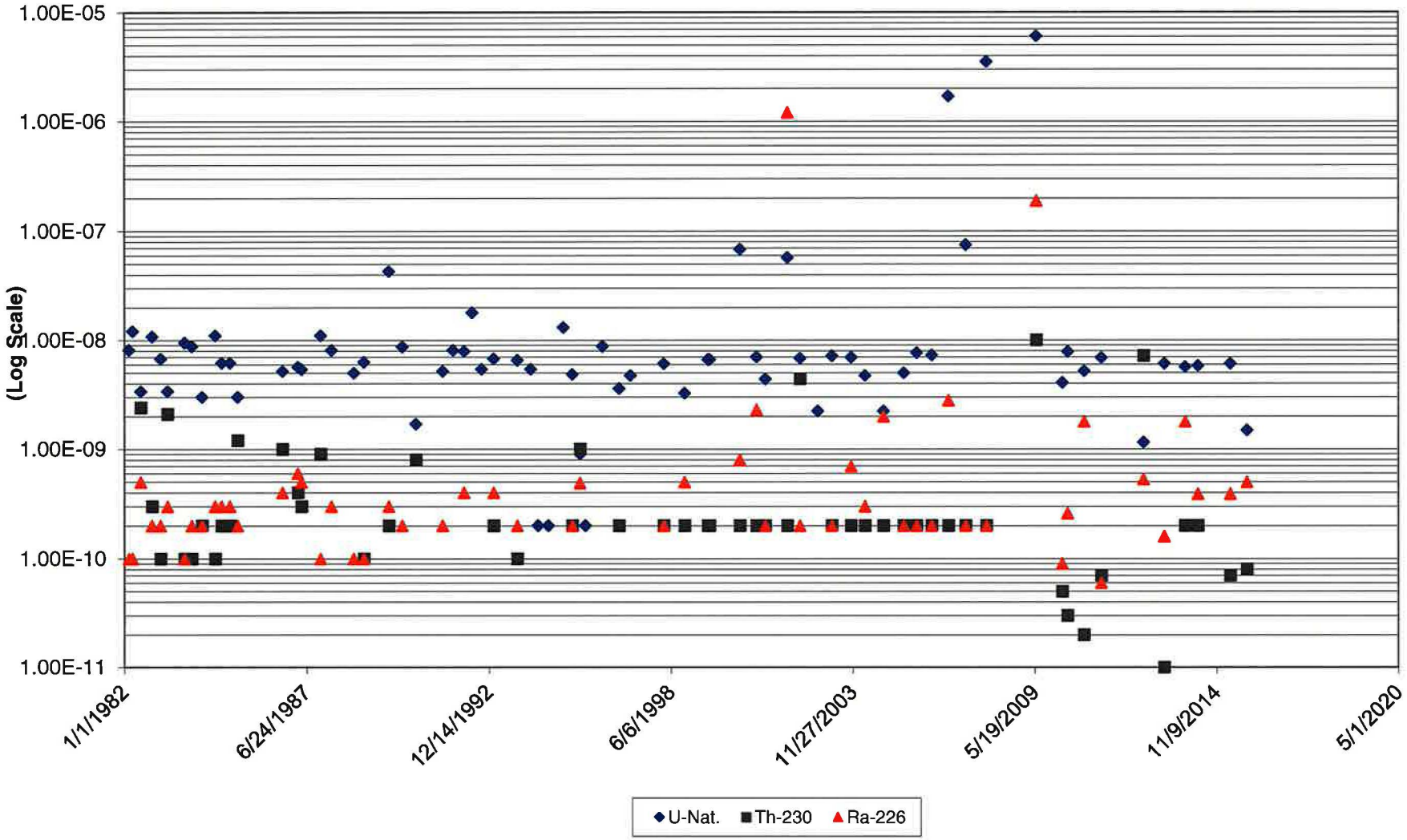
APPENDIX F

The testing followed the same procedures as outlined in previous protocols and tests at this facility.

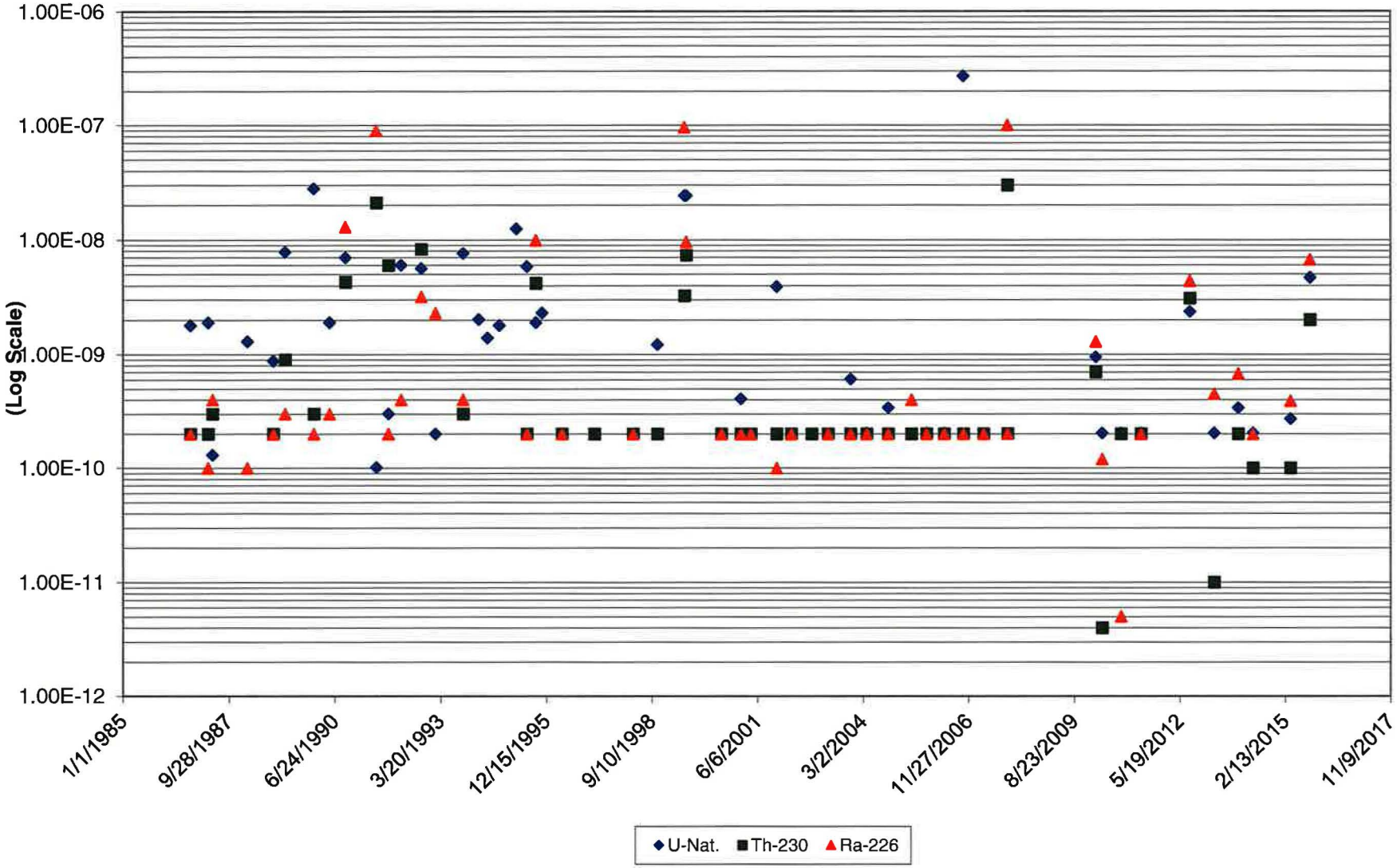
ATTACHMENT H

SURFACE WATER GRAPHS AND FIELD DATA SHEETS

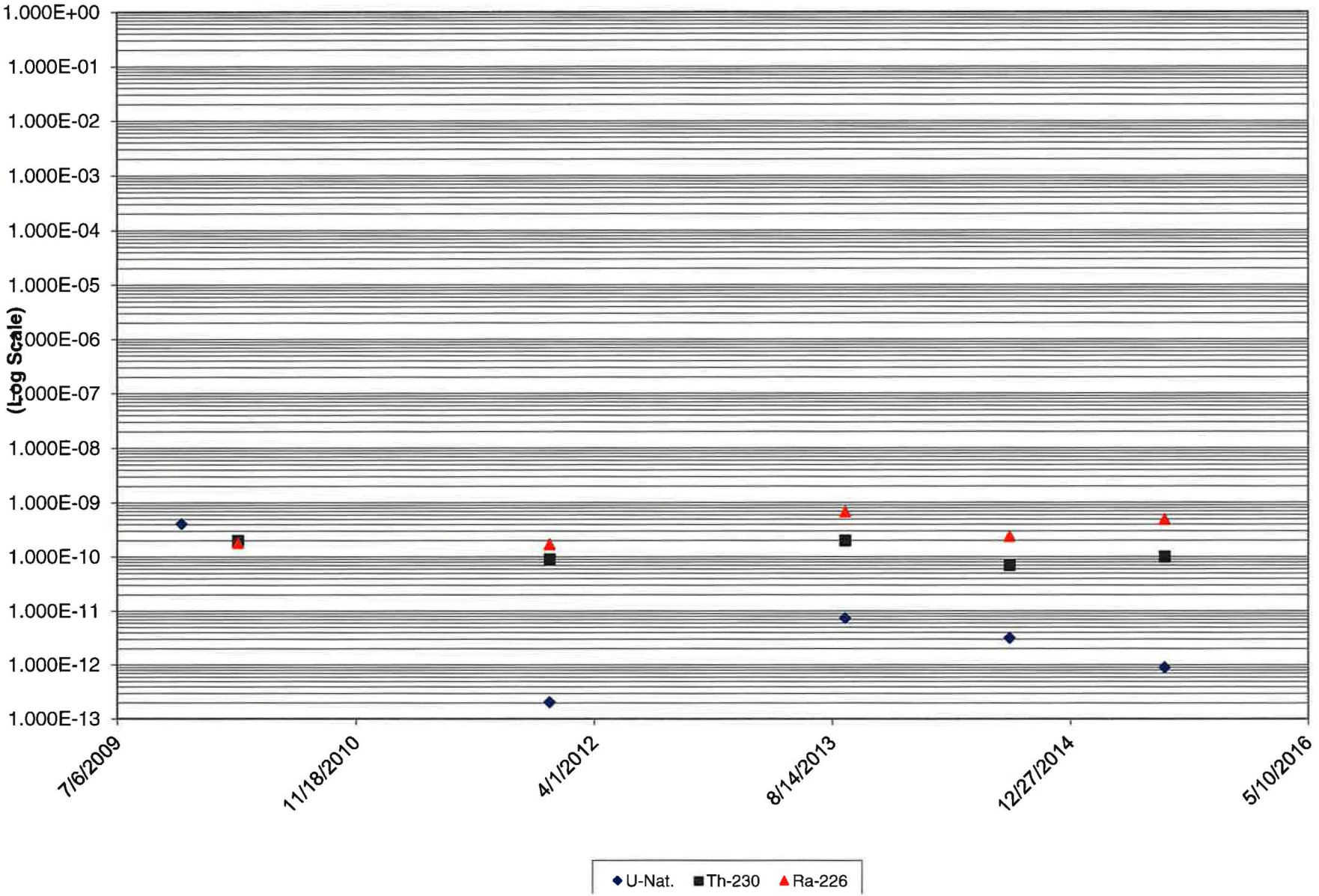
Cottonwood Creek Dissolved Radionuclide Concentrations (uCi/ml)



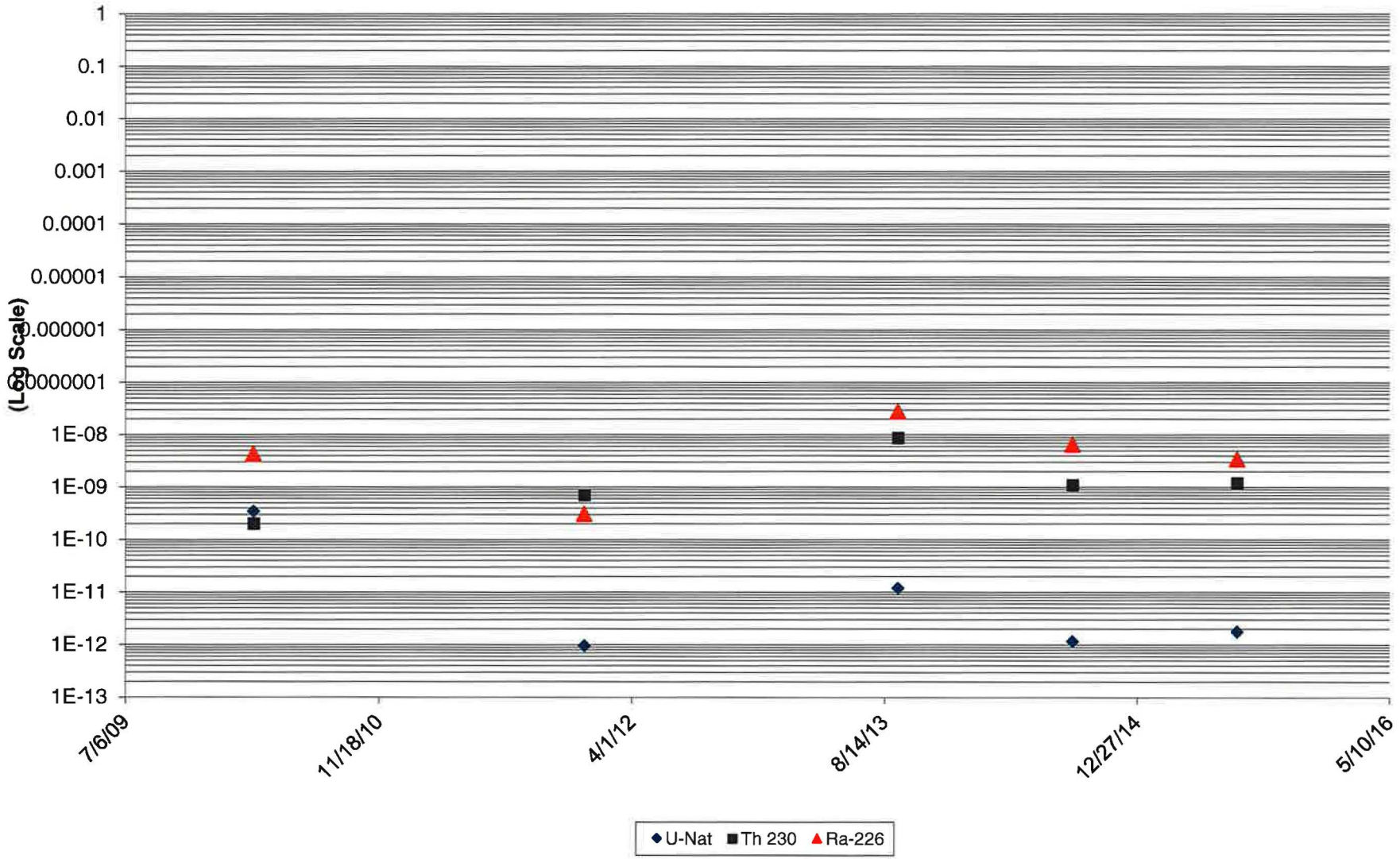
Cottonwood Creek Suspended Radionuclide Concentrations (uCi/ml)



Westwater Creek Dissolved Radionuclide Concentrations (uCi/ml)



Westwater Creek Suspended Radionuclide Concentrations (uCi/ml)



Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek / Westwater Canyon Other (describe)_____

DATE: 7/6/2015 BY: Tanner Holliday /TH
(Sampler's initials)

pH BUFFER 7.0 7.0 pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: 15"

pH of WATER 8.30 TEMP 8.30

COND µmhos 469.7 COND µmhos @ 473

pH Units 8.30 pH units 8.30

Temp °C 22.40 Temp °C 22.39

COND µmhos 470 COND µmhos 475

pH units 8.30 pH units 8.30

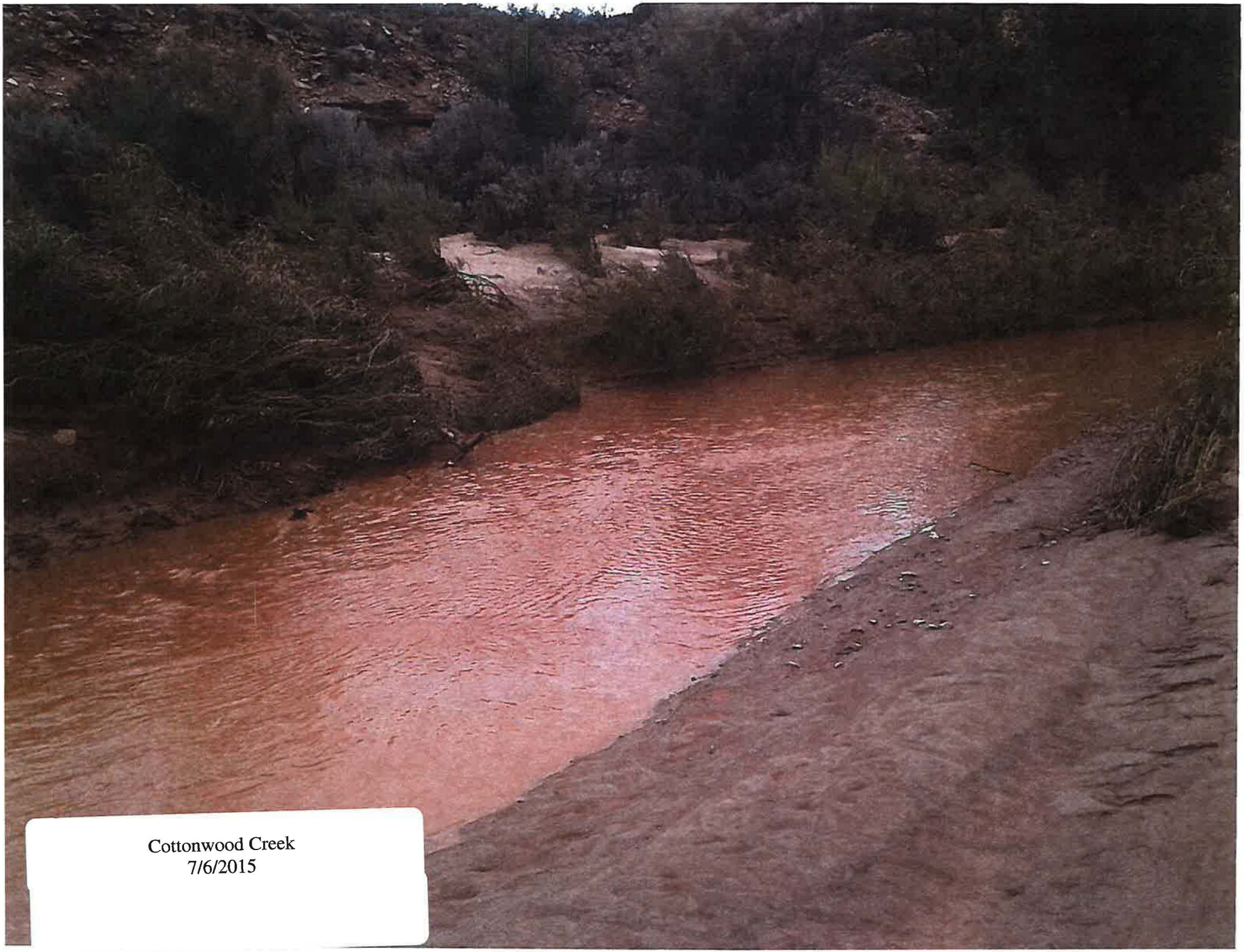
Temp °C 22.39 Temp °C 22.39

Comments:

Samples collected at 1330.

Arrived on site at 1315. Tanner, Garrin, David present for event.

Grab samples were collected. Left site at 1335.


Cottonwood Creek
7/6/2015

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ANALYTICAL SUMMARY REPORT

July 13, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15070273

Project Name: 3rd Quarter Surface Water 2015

Energy Laboratories, Inc. Casper WY received the following 1 sample for Energy Fuels Resources (USA) Inc on 7/8/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15070273-001	Cottonwood Creek	07/06/15 13:30	07/08/15	Aqueous	Solids, Total Dissolved Solids, Total Suspended

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Kathryn Hamre
Report Proofing Specialist

Digitally signed by
Kathy Hamre
Date: 2015.07.13 14:42:57 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015
Work Order: C15070273

Report Date: 07/13/15

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

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SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
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GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015
Work Order: C15070273

Report Date: 07/13/15

CASE NARRATIVE

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
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ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

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eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

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ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015
Lab ID: C15070273-001
Client Sample ID: Cottonwood Creek

Report Date: 07/13/15
Collection Date: 07/06/15 13:30
DateReceived: 07/08/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	386	mg/L		10		A2540 C	07/09/15 13:30 / lmc
Solids, Total Suspended TSS @ 105 C	272	mg/L		10		A2540 D	07/09/15 10:53 / lmc

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/13/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070273

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS150709B
Lab ID: MB-1_150709B		Method Blank				Run: BAL-18_150709C				07/09/15 13:06
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	9						
Lab ID: LCS-2_150709B		Laboratory Control Sample				Run: BAL-18_150709C				07/09/15 13:06
Solids, Total Dissolved TDS @ 180 C		1140	mg/L	11	103	90	110			
Lab ID: C15070255-001A DUP		Sample Duplicate				Run: BAL-18_150709C				07/09/15 13:07
Solids, Total Dissolved TDS @ 180 C		8170	mg/L	98				0.4	5	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/13/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070273

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A2540 D**									Batch: TSS150709A	
Lab ID: **MB-1_150709A**	Method Blank				Run: BAL-18_150709A				07/09/15 10:47	
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: **LCS-2_150709A**	Laboratory Control Sample				Run: BAL-18_150709A				07/09/15 10:48	
Solids, Total Suspended TSS @ 105 C		106	mg/L	10	106	80	120			
Lab ID: **C15070199-001ADUP**	Sample Duplicate				Run: BAL-18_150709A				07/09/15 10:48	
Solids, Total Suspended TSS @ 105 C		ND	mg/L	10					5	

- Since the difference between the analytical result for the sample and its duplicate is less than the reporting limit, the RPD variance is not considered significant.

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C15070273

Login completed by: Acacia M. Mathews
Date Received: 7/8/2015

Reviewed by: BL2000\swaldrop
Received by: amm

Reviewed Date: 7/9/2015
Carrier name: NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	1.8°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
3rd Quarter Surface Water 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
Cottonwood Creek	7/6/2015	1330	TDS
			TSS

C15070273

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	7/7/2015 1000		
Relinquished By:(Signature) Garrin Palmer	Date/Time 7/7/15 1000	Received By:(Signature)	Date/Time 7/8/15 10:10

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek (Westwater Canyon) Other (describe) _____

DATE: 7/13/2015 BY: Tanner Holliday (Sampler's initials)

pH BUFFER 7.0 7.0 pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: 4"

pH of WATER _____ TEMP _____

COND µmhos 253	COND µmhos 260
pH Units 7.53	pH units 7.55
Temp °C 17.68	Temp °C 17.69
COND µmhos 255	COND µmhos 260
pH units 7.55	pH units 7.55
Temp °C 17.70	Temp °C 17.68

Comments:

Samples collected at 0800

Westwater Creek
7/13/2015

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ANALYTICAL SUMMARY REPORT

July 30, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15070473

Project Name: 3rd Quarter Surface Water 2015

Energy Laboratories, Inc. Casper WY received the following 1 sample for Energy Fuels Resources (USA) Inc on 7/14/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15070473-001	Westwater Creek	07/13/15 8:00	07/14/15	Aqueous	Sample Filtering Uranium, Dissolved Uranium, Suspended Digestion, Total Metals Gross Alpha, Gross Beta Radium 226, Dissolved Radium 226, Suspended Thorium, Isotopic Thorium, Suspended Isotopic Solids, Total Dissolved Solids, Total Suspended

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Report Proofing Specialist

Digitally signed by
Randy Horton
Date: 2015.07.30 12:30:22 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Report Date: 07/30/15

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
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eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

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ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015
Lab ID: C15070473-001
Client Sample ID: Westwater Creek

Report Date: 07/30/15
Collection Date: 07/13/15 08:00
DateReceived: 07/14/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	337	mg/L		20		A2540 C	07/16/15 10:05 / lmc
Solids, Total Suspended TSS @ 105 C	4390	mg/L		100		A2540 D	07/15/15 08:18 / mag
METALS - DISSOLVED							
Uranium	0.0013	mg/L		0.0003		E200.8	07/17/15 14:07 / smm
METALS - SUSPENDED							
Uranium	0.0026	mg/L		0.0003		E200.8	07/17/15 14:01 / smm
RADIONUCLIDES - DISSOLVED							
Gross Alpha	2.2	pCi/L				E900.0	07/24/15 00:56 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	07/24/15 00:56 / trs
Gross Alpha MDC	1.5	pCi/L				E900.0	07/24/15 00:56 / trs
Radium 226	0.49	pCi/L				E903.0	07/27/15 09:07 / trs
Radium 226 precision (±)	0.15	pCi/L				E903.0	07/27/15 09:07 / trs
Radium 226 MDC	0.14	pCi/L				E903.0	07/27/15 09:07 / trs
Thorium 230	0.1	pCi/L	U			E908.0	07/27/15 09:19 / cng
Thorium 230 precision (±)	0.1	pCi/L				E908.0	07/27/15 09:19 / cng
Thorium 230 MDC	0.2	pCi/L				E908.0	07/27/15 09:19 / cng
RADIONUCLIDES - SUSPENDED							
Radium 226	3.4	pCi/L				E903.0	07/28/15 13:06 / trs
Radium 226 precision (±)	0.69	pCi/L				E903.0	07/28/15 13:06 / trs
Radium 226 MDC	0.14	pCi/L				E903.0	07/28/15 13:06 / trs
Thorium 230	1.2	pCi/L				E908.0	07/24/15 14:37 / cng
Thorium 230 precision (±)	0.2	pCi/L				E908.0	07/24/15 14:37 / cng
Thorium 230 MDC	0.2	pCi/L				E908.0	07/24/15 14:37 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/30/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS150716A
Lab ID: MB-1_150716A		Method Blank				Run: BAL-18_150716B				07/16/15 09:59
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	9						
Lab ID: LCS-2_150716A		Laboratory Control Sample				Run: BAL-18_150716B				07/16/15 10:00
Solids, Total Dissolved TDS @ 180 C		1140	mg/L	11	103	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/30/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A2540 D**										Batch: TSS150715A
Lab ID: **MB-1_150715A**		Method Blank				Run: BAL-18_150715A				07/15/15 08:15
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: **LCS-2_150715A**		Laboratory Control Sample				Run: BAL-18_150715A				07/15/15 08:15
Solids, Total Suspended TSS @ 105 C		90.0	mg/L	10	90	80	120			
Lab ID: **C15070466-001BDUP**		Sample Duplicate				Run: BAL-18_150715A				07/15/15 08:16
Solids, Total Suspended TSS @ 105 C		ND	mg/L	10					5	

- Since the difference between the analytical result for the sample and its duplicate is less than the reporting limit, the RPD variance is not considered significant.

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 3rd Quarter Surface Water 2015

Report Date: 07/30/15
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS2-C_150717A	
Lab ID: ICV	Initial Calibration Verification Standard								07/17/15 13:49	
Uranium		0.0501	mg/L	0.00030	100	90	110			
Method: E200.8									Batch: 45204	
Lab ID: MB-45204	Method Blank					Run: ICPMS2-C_150717A			07/17/15 13:56	
Uranium		0.0002	mg/L	6E-05						
Lab ID: LCS2-45204	Laboratory Control Sample					Run: ICPMS2-C_150717A			07/17/15 13:58	
Uranium		0.0923	mg/L	0.00030	92	85	115			
Lab ID: C15070473-001EMS	Sample Matrix Spike					Run: ICPMS2-C_150717A			07/17/15 14:03	
Uranium		0.0117	mg/L	0.00030	108	70	130			
Lab ID: C15070473-001EMSD	Sample Matrix Spike Duplicate					Run: ICPMS2-C_150717A			07/17/15 14:04	
Uranium		0.0122	mg/L	0.00030	114	70	130	3.9	20	
Method: E200.8									Batch: R201733	
Lab ID: LRB	Method Blank					Run: ICPMS2-C_150717A			07/17/15 11:23	
Uranium		2E-05	mg/L	1E-05						
Lab ID: LFB	Laboratory Fortified Blank					Run: ICPMS2-C_150717A			07/17/15 11:25	
Uranium		0.0505	mg/L	0.00030	101	85	115			
Lab ID: C15070374-002CMS4	Sample Matrix Spike					Run: ICPMS2-C_150717A			07/17/15 14:26	
Uranium		0.0551	mg/L	0.00030	109	70	130			
Lab ID: C15070374-002CMSD	Sample Matrix Spike Duplicate					Run: ICPMS2-C_150717A			07/17/15 14:27	
Uranium		0.0551	mg/L	0.00030	109	70	130	0.0	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/30/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-2088
Lab ID: Th230-GrAB-2088		Laboratory Control Sample				Run: G542M_150722A				07/24/15 00:56
Gross Alpha		92.1	pCi/L		93	80	120			
Lab ID: MB-GrAB-2088	3	Method Blank				Run: G542M_150722A				07/24/15 00:56
Gross Alpha		-0.3	pCi/L							U
Gross Alpha precision (±)		0.8	pCi/L							
Gross Alpha MDC		1	pCi/L							
Lab ID: C15070660-002AMS		Sample Matrix Spike				Run: G542M_150722A				07/24/15 00:56
Gross Alpha		107	pCi/L		81	70	130			
Lab ID: C15060916-001DDUP	3	Sample Duplicate				Run: G542M_150722A				07/24/15 00:56
Gross Alpha		6660	pCi/L					14	48.7	
Gross Alpha precision (±)		1290	pCi/L							
Gross Alpha MDC		7.39	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/30/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: R202122
Lab ID: MB-45204	3	Method Blank				Run: BERTHOLD 770-2_150722A				07/28/15 13:06
Radium 226		-0.2	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: C15070473-001EMS		Sample Matrix Spike				Run: BERTHOLD 770-2_150722A				07/28/15 13:06
Radium 226		32	pCi/L		90	70	130			
Lab ID: C15070473-001EMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_150722A				07/28/15 13:06
Radium 226		31	pCi/L		89	70	130	2.4	48.2	
Lab ID: LCS-45204		Laboratory Control Sample				Run: BERTHOLD 770-2_150722A				07/28/15 13:06
Radium 226		26	pCi/L		81	80	120			
Lab ID: LCS-45225		Laboratory Control Sample				Run: BERTHOLD 770-2_150722A				07/28/15 19:44
Radium 226		16.6	pCi/L		87	80	120			
Lab ID: MB-45225	3	Method Blank				Run: BERTHOLD 770-2_150722A				07/28/15 19:44
Radium 226		-0.3	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Method: E903.0										Batch: RA226-7755
Lab ID: LCS-RA226-7755		Laboratory Control Sample				Run: G5000W_150717A				07/27/15 09:07
Radium 226		10.0	pCi/L		96	80	120			
Lab ID: MB-RA226-7755	3	Method Blank				Run: G5000W_150717A				07/27/15 09:07
Radium 226		0.2	pCi/L							
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C15070417-001FMS		Sample Matrix Spike				Run: G5000W_150717A				07/27/15 09:07
Radium 226		19	pCi/L		89	70	130			
Lab ID: C15070417-001FMSD		Sample Matrix Spike Duplicate				Run: G5000W_150717A				07/27/15 09:07
Radium 226		20	pCi/L		92	70	130	3.3	49.3	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 07/30/15
Project: 3rd Quarter Surface Water 2015
Work Order: C15070473

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: RA-TH-ISO-2284
Lab ID: LCS-RA-TH-ISO-2284		Laboratory Control Sample				Run: ALPHANALYST_150722A				07/27/15 09:19
Thorium 230		5.7	pCi/L		78	80	120			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, MSD, and all tracer recoveries are acceptable the batch is approved.										
Lab ID: C15070599-004DMS		Sample Matrix Spike				Run: ALPHANALYST_150722A				07/27/15 09:19
Thorium 230		12	pCi/L		83	70	130			
Lab ID: C15070599-004DMSD		Sample Matrix Spike Duplicate				Run: ALPHANALYST_150722A				07/27/15 09:19
Thorium 230		16	pCi/L		109	70	130	26	48	
Lab ID: MB-RA-TH-ISO-2284	3	Method Blank				Run: ALPHANALYST_150722A				07/27/15 15:54
Thorium 230		0.6	pCi/L							U
Thorium 230 precision (±)		1	pCi/L							
Thorium 230 MDC		2	pCi/L							
Method: E908.0										Batch: R202037
Lab ID: LCS-45144		Laboratory Control Sample				Run: EGG-ORTEC_150722A				07/24/15 08:53
Thorium 230		31	pCi/L		111	80	120			
Lab ID: C15070242-003HMS		Sample Matrix Spike				Run: EGG-ORTEC_150722A				07/24/15 08:53
Thorium 230		110	pCi/L		100	70	130			
Lab ID: C15070242-003HMSD		Sample Matrix Spike Duplicate				Run: EGG-ORTEC_150722A				07/24/15 08:53
Thorium 230		110	pCi/L		100	70	130	0.4	48	
Lab ID: MB-45144	3	Method Blank				Run: EGG-ORTEC_150722A				07/24/15 08:53
Thorium 230		0.7	pCi/L							U
Thorium 230 precision (±)		0.6	pCi/L							
Thorium 230 MDC		0.9	pCi/L							
Lab ID: MB-45192	3	Method Blank				Run: EGG-ORTEC_150722A				07/24/15 14:37
Thorium 230		1	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Thorium 230 MDC		0.9	pCi/L							
Lab ID: MB-45204	3	Method Blank				Run: EGG-ORTEC_150722A				07/24/15 14:37
Thorium 230		1.0	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Thorium 230 MDC		0.8	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C15070473

Login completed by: Dorian Quis
Date Received: 7/14/2015

Reviewed by: BL2000\swaldrop
Received by: amm

Reviewed Date: 7/16/2015
Carrier name: NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	1.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
3rd Quarter Surface Water 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
Westwater Creek	7/13/2015	800	TDS
			TSS
			Dissolved Gross Alpha
			Suspended U-nat
			Dissolved U-nat
			Suspended Ra-226
			Dissolved Ra-226
			Suspended Th-230
			Dissolved Th-230
			C.15070473

Comments: Samples are non filtered and non preserved.

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer Garrin Palmer	7/13/2015 1230		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Lacie D Mathews	7/14/15 9:35

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): (Cottonwood Creek) Westwater Canyon Other (describe)_____

DATE: 10-7-15 BY: GP (Sampler's initials)

pH BUFFER 7.0 7.0 pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: 8"

pH of WATER 7.26 TEMP 12.59

COND µmhos 178.9	COND µmhos 181
pH Units 7.21	pH units 7.25
Temp °C 12.59	Temp °C 12.59
COND µmhos 182	COND µmhos 180
pH units 7.28	pH units 7.30
Temp °C 12.60	Temp °C 12.60

Comments:

Arrived on site at 1000. Garmin and Tanner present for sampling. Grab samples were collected at 1015. Left site at 1020. Water was dirty/muddy.

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek Westwater Canyon Other (describe) Creek 65

DATE: 10-7-15

BY: GP
(Sampler's initials)

pH BUFFER 7.0 7.0

pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: _____

pH of WATER _____

TEMP _____

COND µmhos _____

pH Units _____

Temp °C _____

COND µmhos _____

pH units _____

Temp °C _____

COND µmhos _____

pH units _____

Temp °C _____

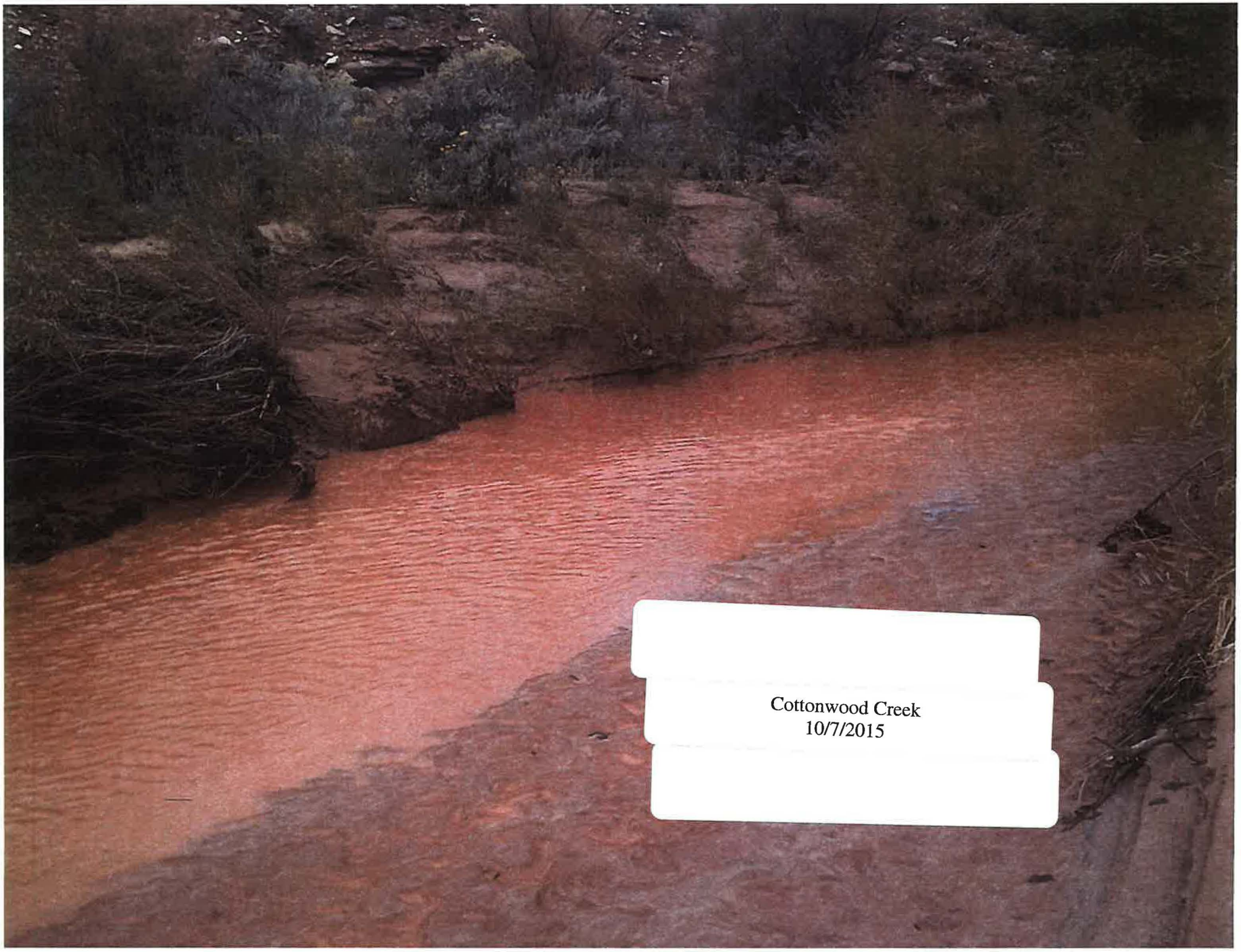
COND µmhos _____

pH units _____

Temp °C _____

Comments:

Duplicate of Cottonwood Creek.


Cottonwood Creek
10/7/2015

ANALYTICAL SUMMARY REPORT

November 13, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15100377

Project Name: 4th Quarter Surface Water 2015

Energy Laboratories, Inc. Casper WY received the following 2 samples for Energy Fuels Resources (USA) Inc on 10/9/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15100377-001	Cottonwood Creek	10/07/15 10:15	10/09/15	Aqueous	Sample Filtering Uranium, Dissolved Uranium, Suspended Digestion, Total Metals, Radiochemistry Gross Alpha, Gross Beta Radium 226, Dissolved Radium 226, Suspended Thorium, Isotopic Thorium, Suspended Isotopic Solids, Total Dissolved Solids, Total Suspended
C15100377-002	Cottonwood 65	10/07/15 10:15	10/09/15	Aqueous	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Stephanie D Waldrop
Reporting Supervisor

Digitally signed by
Stephanie Waldrop
Date: 2015.11.13 11:30:59 -07:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Surface Water 2015
Work Order: C15100377

Report Date: 11/13/15

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Surface Water 2015
Lab ID: C15100377-001
Client Sample ID: Cottonwood Creek

Report Date: 11/13/15
Collection Date: 10/07/15 10:15
DateReceived: 10/09/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	218	mg/L		10		A2540 C	10/13/15 08:27 / mag
Solids, Total Suspended TSS @ 105 C	2600	mg/L		100		A2540 D	10/12/15 08:40 / mag
METALS - DISSOLVED							
Uranium	0.0022	mg/L		0.0003		E200.8	10/15/15 00:58 / smm
METALS - SUSPENDED							
Uranium	0.0069	mg/L		0.0003		E200.8	10/27/15 17:54 / smm
RADIONUCLIDES - DISSOLVED							
Gross Alpha	1.6	pCi/L	U			E900.0	10/19/15 23:01 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	10/19/15 23:01 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	10/19/15 23:01 / trs
Radium 226	0.50	pCi/L				E903.0	10/19/15 08:53 / plj
Radium 226 precision (±)	0.15	pCi/L				E903.0	10/19/15 08:53 / plj
Radium 226 MDC	0.15	pCi/L				E903.0	10/19/15 08:53 / plj
Thorium 230	0.08	pCi/L	U			E908.0	10/23/15 10:05 / cng
Thorium 230 precision (±)	0.09	pCi/L				E908.0	10/23/15 10:05 / cng
Thorium 230 MDC	0.2	pCi/L				E908.0	10/23/15 10:05 / cng
RADIONUCLIDES - SUSPENDED							
Radium 226	6.7	pCi/L				E903.0	10/26/15 15:37 / rdw
Radium 226 precision (±)	1.5	pCi/L				E903.0	10/26/15 15:37 / rdw
Radium 226 MDC	0.59	pCi/L				E903.0	10/26/15 15:37 / rdw
Thorium 230	2.0	pCi/L				E908.0	11/11/15 11:01 / cng
Thorium 230 precision (±)	0.4	pCi/L				E908.0	11/11/15 11:01 / cng
Thorium 230 MDC	0.5	pCi/L				E908.0	11/11/15 11:01 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Surface Water 2015
Lab ID: C15100377-002
Client Sample ID: Cottonwood 65

Report Date: 11/13/15
Collection Date: 10/07/15 10:15
DateReceived: 10/09/15
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	226	mg/L		10		A2540 C	10/13/15 08:28 / mag
Solids, Total Suspended TSS @ 105 C	2570	mg/L		100		A2540 D	10/12/15 08:40 / mag
METALS - DISSOLVED							
Uranium	0.0021	mg/L		0.0003		E200.8	10/15/15 01:00 / smm
METALS - SUSPENDED							
Uranium	0.0071	mg/L		0.0003		E200.8	10/27/15 17:56 / smm
RADIONUCLIDES - DISSOLVED							
Gross Alpha	3.7	pCi/L				E900.0	10/19/15 23:01 / trs
Gross Alpha precision (±)	1.7	pCi/L				E900.0	10/19/15 23:01 / trs
Gross Alpha MDC	1.7	pCi/L				E900.0	10/19/15 23:01 / trs
Radium 226	0.90	pCi/L				E903.0	10/19/15 08:53 / plj
Radium 226 precision (±)	0.19	pCi/L				E903.0	10/19/15 08:53 / plj
Radium 226 MDC	0.15	pCi/L				E903.0	10/19/15 08:53 / plj
Thorium 230	0.05	pCi/L	U			E908.0	10/23/15 14:47 / cng
Thorium 230 precision (±)	0.08	pCi/L				E908.0	10/23/15 14:47 / cng
Thorium 230 MDC	0.2	pCi/L				E908.0	10/23/15 14:47 / cng
RADIONUCLIDES - SUSPENDED							
Radium 226	6.9	pCi/L				E903.0	10/26/15 15:37 / rdw
Radium 226 precision (±)	1.6	pCi/L				E903.0	10/26/15 15:37 / rdw
Radium 226 MDC	0.58	pCi/L				E903.0	10/26/15 15:37 / rdw
Thorium 230	1.4	pCi/L				E908.0	11/11/15 11:01 / cng
Thorium 230 precision (±)	0.3	pCi/L				E908.0	11/11/15 11:01 / cng
Thorium 230 MDC	0.4	pCi/L				E908.0	11/11/15 11:01 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/13/15
Project: 4th Quarter Surface Water 2015
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A2540 C**										Batch: TDS151013A
Lab ID: **MB-1_151013A**		Method Blank				Run: BAL-18_151013A				10/13/15 08:21
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	9						
Lab ID: **LCS-2_151013A**		Laboratory Control Sample				Run: BAL-18_151013A				10/13/15 08:21
Solids, Total Dissolved TDS @ 180 C		1120	mg/L	11	101	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/13/15
Project: 4th Quarter Surface Water 2015
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A2540 D**										Batch: TSS151012A
Lab ID: **LCS-2_151012A**		Laboratory Control Sample				Run: BAL-18_151012A				10/12/15 08:28
Solids, Total Suspended TSS @ 105 C		96.0	mg/L	10	96	80	120			
Lab ID: **MB-25_151012A**		Method Blank				Run: BAL-18_151012A				10/12/15 08:37
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/13/15
Project: 4th Quarter Surface Water 2015
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS2-C_151014B	
Lab ID: ICV	Initial Calibration Verification Standard								10/14/15 17:29	
Uranium		0.0479	mg/L	0.00030	96	90	110			
Method: E200.8									Batch: R205405	
Lab ID: LRB	Method Blank					Run: ICPMS2-C_151014B			10/14/15 17:49	
Uranium		3E-05	mg/L	8E-06						
Lab ID: LFB	Laboratory Fortified Blank					Run: ICPMS2-C_151014B			10/14/15 17:51	
Uranium		0.0540	mg/L	0.00030	108	85	115			
Lab ID: C15100355-003BMS4	Sample Matrix Spike					Run: ICPMS2-C_151014B			10/15/15 01:23	
Uranium		0.252	mg/L	0.00030	133	70	130			S
Lab ID: C15100355-003BMSD	Sample Matrix Spike Duplicate					Run: ICPMS2-C_151014B			10/15/15 01:25	
Uranium		0.246	mg/L	0.00030	122	70	130	2.2	20	
Method: E200.8									Batch: 45942	
Lab ID: MB-45942	Method Blank					Run: ICPMS2-C_151019A			10/20/15 05:35	
Uranium		ND	mg/L	6E-05						
Lab ID: C15100395-007AMS	Sample Matrix Spike					Run: ICPMS2-C_151019A			10/20/15 06:14	
Uranium		0.0531	mg/L	0.00030	106	70	130			
Lab ID: C15100395-007AMSD	Sample Matrix Spike Duplicate					Run: ICPMS2-C_151019A			10/20/15 06:17	
Uranium		0.0538	mg/L	0.00030	107	70	130	1.3	20	
Lab ID: LCS2-45942	Laboratory Control Sample					Run: ICPMS2-C_151019A			10/20/15 08:55	
Uranium		0.201	mg/L	0.00030	100	85	115			
Method: E200.8									Analytical Run: ICPMS2-C_151027A	
Lab ID: ICV	Initial Calibration Verification Standard								10/27/15 12:47	
Uranium		0.0499	mg/L	0.00030	100	90	110			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Surface Water 2015

Report Date: 11/13/15
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E900.0**										Batch: GrAB-2156
Lab ID: **Th230-GrAB-2156**		Laboratory Control Sample				Run: G542M_151016A				10/19/15 23:01
Gross Alpha		92.1	pCi/L		92	80	120			
Lab ID: **MB-GrAB-2156**	3	Method Blank				Run: G542M_151016A				10/19/15 23:01
Gross Alpha		0.7	pCi/L							U
Gross Alpha precision (±)		0.8	pCi/L							
Gross Alpha MDC		1	pCi/L							
Lab ID: **C15100397-001EDUP**	3	Sample Duplicate				Run: G542M_151016A				10/19/15 23:01
Gross Alpha		5.14	pCi/L					9.5	83.8	
Gross Alpha precision (±)		1.94	pCi/L							
Gross Alpha MDC		1.79	pCi/L							
Lab ID: **C15100377-002CMS**		Sample Matrix Spike				Run: G542M_151016A				10/19/15 23:01
Gross Alpha		97.1	pCi/L		93	70	130			

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 11/13/15
Project: 4th Quarter Surface Water 2015
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-7864
Lab ID: LCS-RA226-7864		Laboratory Control Sample				Run: G5000W_151013B				10/19/15 08:53
Radium 226		9.5	pCi/L		92	80	120			
Lab ID: MB-RA226-7864	3	Method Blank				Run: G5000W_151013B				10/19/15 08:53
Radium 226		0.09	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C15100387-001CMS		Sample Matrix Spike				Run: G5000W_151013B				10/19/15 08:53
Radium 226		17	pCi/L		78	70	130			
Lab ID: C15100387-001CMSD		Sample Matrix Spike Duplicate				Run: G5000W_151013B				10/19/15 08:53
Radium 226		18	pCi/L		84	70	130	5.4	49.3	
Method: E903.0										Batch: 45942
Lab ID: MB-45942	3	Method Blank				Run: G542M_151019E				10/26/15 15:37
Radium 226		0.2	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: LCS-45942		Laboratory Control Sample				Run: G542M_151019E				10/26/15 15:37
Radium 226		90.7	pCi/L		93	80	120			
Lab ID: C15100517-001HMS		Sample Matrix Spike				Run: G542M_151019E				10/26/15 15:37
Radium 226		21	pCi/L		81	70	130			
Lab ID: C15100517-001HMSD		Sample Matrix Spike Duplicate				Run: G542M_151019E				10/26/15 15:37
Radium 226		21	pCi/L		83	70	130	1.7	49.2	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 4th Quarter Surface Water 2015

Report Date: 11/13/15
Work Order: C15100377

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: RA-TH-ISO-2342
Lab ID: LCS-RA-TH-ISO-2342		Laboratory Control Sample				Run: ALPHANALYST_151019A				10/23/15 10:05
Thorium 230		6.2	pCi/L		93	80	120			
Lab ID: C15100377-001CMS		Sample Matrix Spike				Run: ALPHANALYST_151019A				10/23/15 14:47
Thorium 230		11	pCi/L		80	70	130			
Lab ID: C15100377-001CMSD		Sample Matrix Spike Duplicate				Run: ALPHANALYST_151019A				10/23/15 14:47
Thorium 230		13	pCi/L		91	70	130	13	48	
Lab ID: MB-RA-TH-ISO-2342	3	Method Blank				Run: ALPHANALYST_151019A				10/23/15 14:47
Thorium 230		0.1	pCi/L							U
Thorium 230 precision (±)		0.1	pCi/L							
Thorium 230 MDC		0.2	pCi/L							
Method: E908.0										Batch: 45942
Lab ID: LCS-45942		Laboratory Control Sample				Run: EGG-ORTEC_151105A				11/11/15 11:01
Thorium 230		32	pCi/L		107	80	120			
Lab ID: C15100358-001HMS		Sample Matrix Spike				Run: EGG-ORTEC_151105A				11/11/15 11:01
Thorium 230		120	pCi/L		102	70	130			
Lab ID: C15100358-001HMSD		Sample Matrix Spike Duplicate				Run: EGG-ORTEC_151105A				11/11/15 11:01
Thorium 230		110	pCi/L		97	70	130	5.2	48	
Lab ID: MB-45942	3	Method Blank				Run: EGG-ORTEC_151105A				11/11/15 11:01
Thorium 230		1	pCi/L							
Thorium 230 precision (±)		0.2	pCi/L							
Thorium 230 MDC		0.8	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc C15100377

Login completed by: Cherol J. Minton
Date Received: 10/9/2015
Reviewed by: BL2000\cwagner
Received by: lr
Reviewed Date: 10/13/2015
Carrier name: NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.3°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Samples for dissolved metals and radionuclides were subsampled, filtered and preserved with 2 mLs nitric acid in lab upon receipt to pH <2. According to 40CFR136, samples for Dissolved Metals should be filtered and preserved within 15 minutes of collection.

RS-NO

R<50

Temp. Probe ~~IR-2~~ 1104

Sheet 1 of 1

TB 1.3 C

~~3.7C~~

UPS-NDA

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Custody Seal intact

Chain of Custody/Sampling Analysis Request

Sig matches

Project	Samplers Name	Samplers Signature
4th Quarter Surface Water 2015	Garrin Palmer	

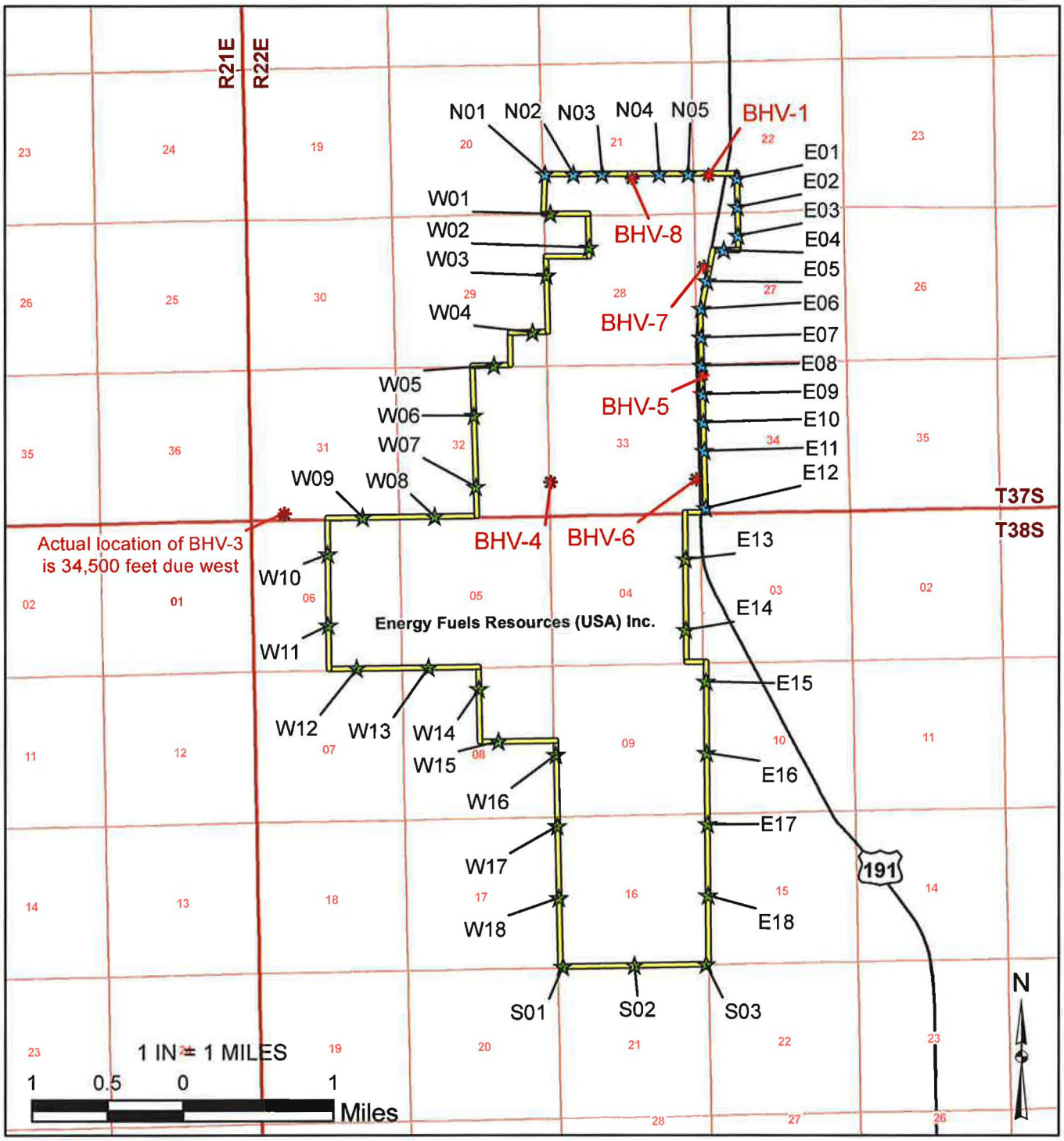
Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
Cottonwood Creek	10/7/2015	1015	TDS
			TSS
			Dissolved Gross Alpha
			Suspended U-nat
			Dissolved U-nat
			Suspended Ra-226
			Dissolved Ra-226
			Suspended Th-230
			Dissolved Th-230
Cottonwood 65	10/7/2015	1015	TDS
			TSS
			Dissolved Gross Alpha
			Suspended U-nat
			Dissolved U-nat
			Suspended Ra-226
			Dissolved Ra-226
			Suspended Th-230
			Dissolved Th-230
			*samples were not filed filtered or preserved

Comments: C15100377

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	10/8/2015 1230		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		L. Russell	10/9/15 9:20 AM

ATTACHMENT I

SOIL SAMPLE GRAPHS, DATA TABLE, LABORATORY RESULTS AND QA/QC



Legend

Proposed Soil Monitoring Location
- 1,000 Feet
- 2,500 Feet
- Air Monitoring Station
- Property Boundary
- Road
- Township and Range
- Section

Coordinate System: NAD 1983 StatePlane Utah South FIPS 4303 Feet

ENERGY FUELS

REVISIONS		Project:	WHITE MESA MILL	
Date:	By:	County: San Juan	State: Utah	
		Location: -		

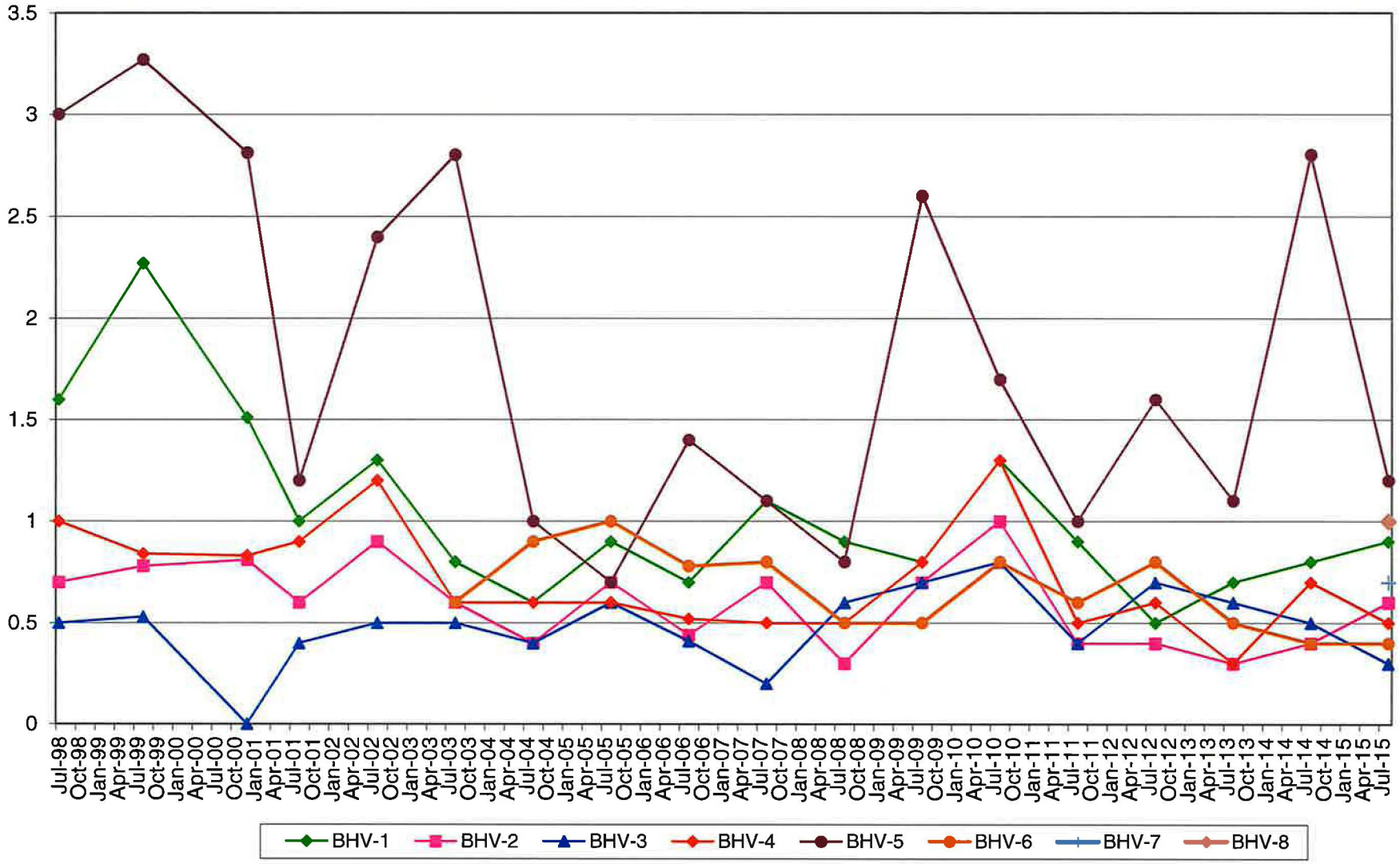
FIGURE I-1

SOIL MONITORING LOCATIONS

Author: areither	Date: 2/16/2016	Drafted By: areither

S:\Source\UT\WhiteMesaMill\Maps\SoilMonitoringLocations.mxd / 2/16/2016 2:03:08 PM by areither

Radium-226 Concentrations In Soil (pCi/g)



Uranium-Nat. Concentrations In Soil (pCi/g)

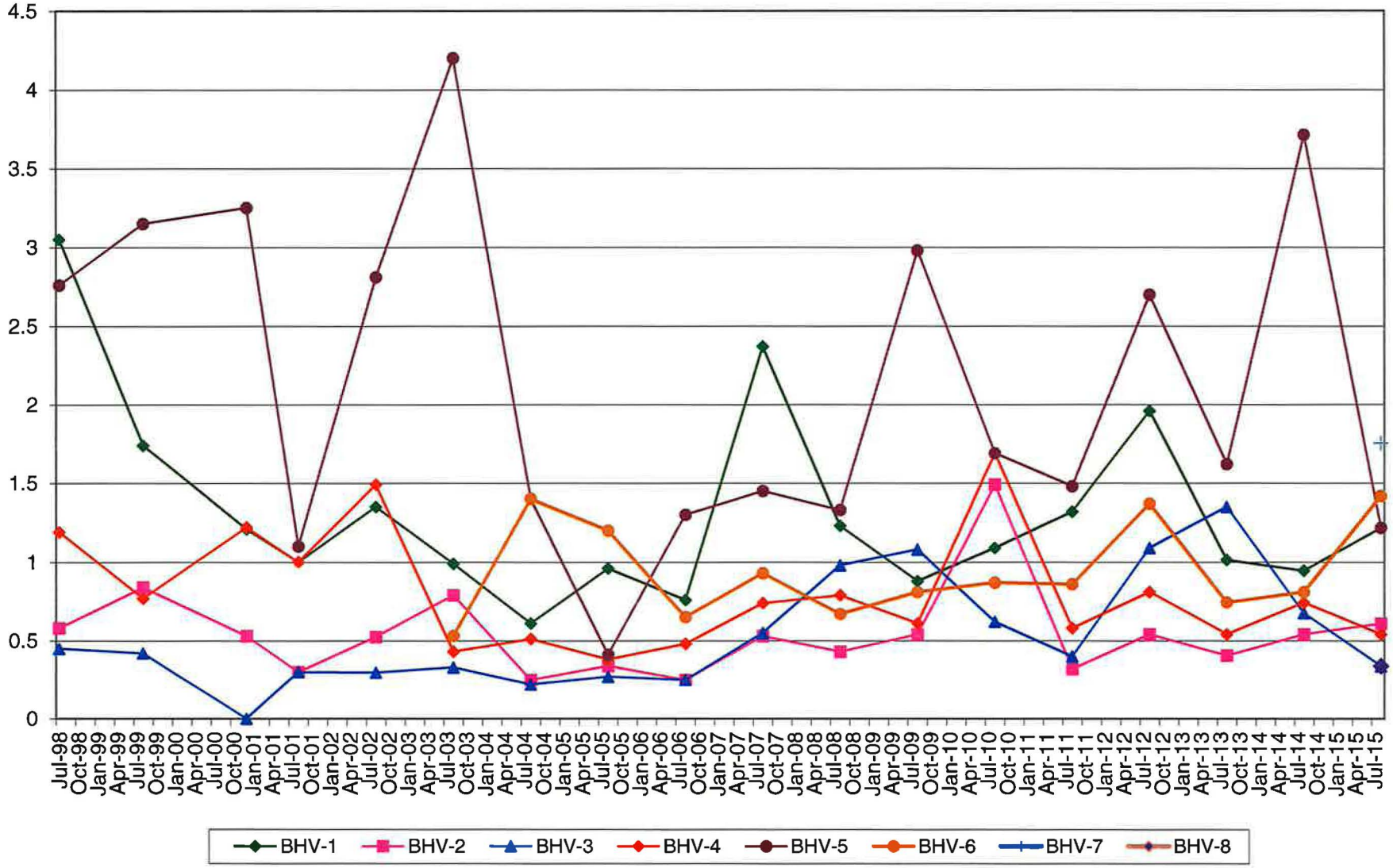


Table I-1
WHITE MESA MILL
Soil Sampling Results at BHV Stations 1-8
(pCi/g)

Date	BHV-1				BHV-2				BHV-3				BHV-4				BHV-5				BHV-6				BHV-7				BHV-8			
	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232	Ra-226	U-Nat	Pb-210	Th-232
9/7/1980	0.65	0.42	-	-	0.34	0.42	-	-	0.42	0.42	-	-	0.41	12.194	-	-	0.23	14.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9/8/1981	0.4	1.8	-	-	0.3	0.6	-	-	0.3	0.6	-	-	0.2	3	-	-	0.3	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/3/1981	0.79	0.77	-	-	0.44	0.56	-	-	0.89	0.42	-	-	0.75	0.63	-	-	0.55	0.42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/30/1982	0.423	0.384	-	-	0.412	0.18	-	-	0.265	0.207	-	-	0.478	0.26	-	-	0.449	0.216	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/5/1983	0.471	0.41	-	-	0.569	0.55	-	-	0.461	0.34	-	-	0.643	0.34	-	-	0.147	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/4/1984	0.713	0.866	-	-	0.618	0.683	-	-	0.489	0.471	-	-	0.124	0.324	-	-	0.132	0.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/12/1984	2.96	0.886	-	-	2.33	0.069	-	-	2.88	0.721	-	-	3.49	0.804	-	-	2.55	0.817	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/28/1985	1.63	0.8	-	-	2.19	0.424	-	-	2.27	0.424	-	-	4.33	0.294	-	-	1.28	0.577	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/1986	0.369	0.654	-	-	0.466	0.866	-	-	0.382	0.694	-	-	0.396	0.826	-	-	0.728	0.836	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/17/1987	0.6	0.8	-	-	1.5	0.9	-	-	0.8	0.6	-	-	1.2	0.7	-	-	1.5	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/28/1988	1.5	1.6	-	-	1.3	0.7	-	-	0.6	0.9	-	-	1	1.3	-	-	3.8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/25/1988	1.2	1.6	-	-	1.1	3	-	-	0.8	1	-	-	1.1	1.4	-	-	2.9	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/1990	2.9	5.8	-	-	1	1.4	-	-	0.8	1.4	-	-	1.8	1.3	-	-	3.7	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/5/1991	3.9	8.8	-	-	1.7	2.6	-	-	2.6	5.7	-	-	1.8	2.6	-	-	2.5	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/13/1992	1.2	2.2	-	-	0.9	1.4	-	-	0.8	1.2	-	-	0.9	0.9	-	-	1.1	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/13/1993	2	1.7	-	-	1.4	1.7	-	-	1.1	1.9	-	-	0.8	1.6	-	-	4.8	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/3/1994	1	1.6	-	-	0.7	0.8	-	-	0.7	0.9	-	-	0.7	1.1	-	-	3	3.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/28/1995	2.81	4.7	-	-	0.68	0.2	-	-	0.88	0.65	-	-	0.58	0.24	-	-	2.8	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/13/1996	1.7	2.15	-	-	0.6	0.46	-	-	0.3	0.21	-	-	0.5	0.52	-	-	1.9	2.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/1997	0.54	0.31	-	-	0.56	0.16	-	-	0.41	0.27	-	-	0.41	0.26	-	-	1.7	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/1/1998	1.6	3.05	-	-	0.7	0.58	-	-	0.5	0.45	-	-	1	1.19	-	-	3	2.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/24/1999	2.27	1.74	-	-	0.78	0.84	-	-	0.53	0.42	-	-	0.84	0.77	-	-	3.27	3.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/1/2000	1.51	1.21	-	-	0.81	0.53	-	-	*	*	-	-	0.83	1.22	-	-	2.81	3.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/23/2001	1	1	-	-	0.6	0.3	-	-	0.4	0.3	-	-	0.9	1	-	-	1.2	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/1/2002	1.3	1.35	-	-	0.9	0.524	-	-	0.5	0.297	-	-	1.2	1.49	-	-	2.4	2.81	-	-	60	0.55	-	-	-	-	-	-	-	-	-	-
8/5/2003	0.8	0.99	-	-	0.6	0.79	-	-	0.5	0.33	-	-	0.6	0.43	-	-	0.28	0.42	-	-	0.6	0.53	-	-	-	-	-	-	-	-	-	-
8/9/2004	0.6	0.61	-	-	0.4	0.25	-	-	0.4	0.22	-	-	0.6	0.51	-	-	1	1.4	-	-	0.9	1.4	-	-	-	-	-	-	-	-	-	-
8/3/2005	0.9	0.96	-	-	0.7	0.34	-	-	0.6	0.27	-	-	0.6	0.38	-	-	0.7	0.41	-	-	1	1.2	-	-	-	-	-	-	-	-	-	-
8/7/2006	0.7	0.76	-	-	0.44	0.25	-	-	0.41	0.25	-	-	0.52	0.48	-	-	1.4	1.3	-	-	0.78	0.65	-	-	-	-	-	-	-	-	-	-
8/8/2007	1.1	2.37	-	-	0.7	0.53	-	-	0.2	0.55	-	-	0.5	0.74	-	-	1.1	1.45	-	-	0.8	0.93	-	-	-	-	-	-	-	-	-	-
8/20/2008	0.9	1.23	-	-	0.3	0.43	-	-	0.6	0.98	-	-	0.5	0.79	-	-	0.8	1.33	-	-	0.5	0.67	-	-	-	-	-	-	-	-	-	-
8/10/2009	0.8	0.88	-	-	0.7	0.54	-	-	0.7	1.08	-	-	0.8	0.61	-	-	2.6	2.98	-	-	0.5	0.81	-	-	-	-	-	-	-	-	-	-
8/2/2010	1.3	1.09	-	-	1	1.49	-	-	0.8	0.62	-	-	1.3	1.69	-	-	1.7	1.69	-	-	0.8	0.87	-	-	-	-	-	-	-	-	-	-
8/23/2011	0.9	1.32	-	-	0.4	0.32	-	-	0.4	0.4	-	-	0.5	0.58	-	-	1	1.48	-	-	0.6	0.86	-	-	-	-	-	-	-	-	-	-
8/20/2012	0.5	1.96	-	-	0.4	0.54	-	-	0.7	1.09	-	-	0.6	0.81	-	-	1.6	2.7	-	-	0.8	1.37	-	-	-	-	-	-	-	-	-	-
8/21/2013	0.7	1.013	-	-	0.3	0.405	-	-	0.6	1.35	-	-	0.3	0.54	-	-	1.1	1.62	-	-	0.5	0.743	-	-	-	-	-	-	-	-	-	-
8/25/2014	0.8	0.945	-	-	0.4	0.54	-	-	0.5	0.675	-	-	0.7	0.743	-	-	2.8	3.71	-	-	0.4	0.81	-	-	-	-	-	-	-	-	-	-
8/18/2015	0.9	1.215	1.2	0.2	0.6	0.608	0.8	0.3	0.3	0.338	0.7	0.3	0.5	0.54	0.2	0.3	1.2	1.215	1.0	0.3	0.4	1.418	0.3	0.3	0.7	1.755	0.5	0.09	1.0	0.338	0.8	0.05

- Data not available.

Table I-2
WHITE MESA MILL
Soil Sampling Results in the Four Cardinal Directions
(pCi/g)

Sample date	Location	Ra-226	U-Nat	Pb-210	Th-232
8/18/2015 8/19/2015	N-01	0.30	0.47	0.80	0.30
	N-02	0.50	0.41	0.30	0.30
	N-03	0.60	0.61	0.90	0.40
	N-04	0.60	0.41	0.20	0.20
	N-05	0.80	0.95	1.00	0.30
	S-01	0.30	0.20	1.10	0.30
	S-02	0.60	0.54	0.50	0.60
	S-03	0.30	0.34	1.10	0.06
	E-01	2.60	3.11	2.40	0.20
	E-02	1.30	1.69	1.00	0.20
	E-03	1.20	2.70	0.70	0.30
	E-04	0.90	1.69	0.70	0.20
	E-05	4.90	9.11	3.70	0.20
	E-06	2.60	3.11	2.10	0.20
	E-07	0.50	0.74	0.30	0.10
	E-08	3.50	4.79	3.20	0.20
	E-09	2.00	3.51	2.10	0.20
	E-10	1.80	3.51	2.80	0.40
	E-11	1.30	2.09	1.60	0.10
	E-12	0.60	0.74	0.60	0.20
	E-13	0.60	0.41	0.70	0.20
	E-14	0.40	0.54	1.10	0.20
	E-15	0.40	0.47	1.10	0.20
	E-16	0.50	0.34	0.80	0.30
	E-17	0.50	0.41	1.30	0.30
	E-18	0.60	0.34	0.90	0.30
	W-01	0.50	0.41	0.20	0.30
	W-02	0.60	0.68	0.60	0.20
	W-03	0.90	0.81	1.30	0.20
	W-04	0.90	1.08	1.00	0.30
	W-05	0.50	0.81	0.80	0.40
	W-06	0.40	0.34	0.50	0.30
	W-07	0.40	0.34	0.60	0.20
	W-08	0.40	0.61	0.90	0.20
	W-09	0.20	0.41	0.70	0.09
	W-10	0.40	0.34	0.30	0.30
	W-11	0.50	0.20	0.50	0.40
	W-12	0.20	0.14	1.10	0.10
	W-13	0.40	0.27	1.20	0.20
	W-14	0.40	0.27	1.10	0.20
	W-15	0.40	0.34	0.60	0.20
	W-16	0.60	0.34	0.70	0.40
	W-17	0.50	0.34	1.20	0.40
	W-18	0.50	0.34	0.90	0.20

Table I-3
WHITE MESA MILL
Soil Sampling Results
Duplicate Sample Results
(pCi/g)

	BHV-2	BHV-65	Relative Percent Difference (%)
	8/18/2015		
Ra-226	0.6	0.7	15.4
U-Nat	0.608	0.608	0
Pb-210	0.8	0.8	0
Th-232	0.3	0.2	40
	BHV-4	**BHV-70**	
	8/19/2015		
Ra-226	0.5	0.4	22.2
U-Nat	0.54	0.54	0
Pb-210	0.2	0.2	0
Th-232	0.3	0.1U	NC
	W-11	**W-75**	
	8/19/2015		
Ra-226	0.3	0.3	0
U-Nat	0.203	0.203	0
Pb-210	0.5	0.5	0
Th-232	0.4	0.08U	NC

NC - RPDs are calculated when both samples have reported detections.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-030
Client Sample ID: BHV-1

Report Date: 09/23/15
Collection Date: 08/18/15 08:25
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:50 / sf
METALS - TOTAL							
Uranium	1.8	mg/kg-dry	D	0.1		SW6020	08/29/15 00:55 / smm
RADIONUCLIDES							
Lead 210	1.2	pCi/g-dry				E909.0	09/19/15 01:54 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 01:54 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 01:54 / eli-cs
Radium 226	0.9	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-031
Client Sample ID: BHV-2

Report Date: 09/23/15
Collection Date: 08/18/15 09:20
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	0.9	mg/kg-dry	D	0.2		SW6020	08/29/15 00:56 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/19/15 03:15 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 03:15 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 03:15 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-012
Client Sample ID: BHV-3

Report Date: 09/23/15
Collection Date: 08/19/15 13:08
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.5	wt%		0.2		D2974	08/31/15 16:25 / tkr
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	09/01/15 11:13 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/20/15 06:22 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 06:22 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 06:22 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.07	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-013
Client Sample ID: BHV-4

Report Date: 09/23/15
Collection Date: 08/19/15 12:10
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.5	wt%		0.2		D2974	08/31/15 16:25 / tkr
METALS - TOTAL							
Uranium	0.8	mg/kg-dry	D	0.1		SW6020	09/01/15 11:15 / smm
RADIONUCLIDES							
Lead 210	0.2	pCi/g-dry				E909.0	09/20/15 07:43 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/20/15 07:43 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 07:43 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-033
Client Sample ID: BHV-5

Report Date: 09/23/15
Collection Date: 08/18/15 09:48
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	1.8	mg/kg-dry	D	0.1		SW6020	08/29/15 01:00 / smm
RADIONUCLIDES							
Lead 210	1.0	pCi/g-dry				E909.0	09/19/15 05:56 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 05:56 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 05:56 / eli-cs
Radium 226	1.2	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-034
Client Sample ID: BHV-6

Report Date: 09/23/15
Collection Date: 08/18/15 10:08
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.6	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	2.1	mg/kg-dry	D	0.1		SW6020	08/29/15 01:01 / smm
RADIONUCLIDES							
Lead 210	0.3	pCi/g-dry				E909.0	09/17/15 22:06 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/17/15 22:06 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/17/15 22:06 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-035
Client Sample ID: BHV-7

Report Date: 09/23/15
Collection Date: 08/18/15 08:55
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.3	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	2.6	mg/kg-dry	D	0.1		SW6020	08/29/15 01:03 / smm
RADIONUCLIDES							
Lead 210	0.5	pCi/g-dry				E909.0	09/19/15 07:17 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/19/15 07:17 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 07:17 / eli-cs
Radium 226	0.7	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 10:10 / dmf
Thorium 232	0.09	pCi/g-dry	U			E908.0	09/18/15 09:18 / cng
Thorium 232 precision (±)	0.02	pCi/g-dry				E908.0	09/18/15 09:18 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:18 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-036
Client Sample ID: BHV-8

Report Date: 09/23/15
Collection Date: 08/18/15 08:10
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.7	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.2		SW6020	08/29/15 01:04 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/20/15 17:04 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 17:04 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 17:04 / eli-cs
Radium 226	1.0	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.05	pCi/g-dry	U			E908.0	09/18/15 13:42 / cng
Thorium 232 precision (±)	0.01	pCi/g-dry				E908.0	09/18/15 13:42 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 13:42 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-032
Client Sample ID: BHV-65

Report Date: 09/23/15
Collection Date: 08/18/15 09:20
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.5	wt%		0.2		D2974	08/25/15 14:54 / sf
METALS - TOTAL							
Uranium	0.9	mg/kg-dry	D	0.1		SW6020	08/29/15 00:58 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/19/15 04:35 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 04:35 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 04:35 / eli-cs
Radium 226	0.7	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-014
Client Sample ID: BHV-70

Report Date: 09/23/15
Collection Date: 08/19/15 12:10
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.5	wt%		0.2		D2974	08/31/15 16:25 / tkr
METALS - TOTAL							
Uranium	0.8	mg/kg-dry	D	0.2		SW6020	09/01/15 11:16 / smm
RADIONUCLIDES							
Lead 210	0.2	pCi/g-dry				E909.0	09/20/15 09:04 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/20/15 09:04 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 09:04 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.1	pCi/g-dry	U			E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-016
Client Sample ID: N01

Report Date: 09/23/15
Collection Date: 08/18/15 07:45
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/31/15 16:32 / tkr
METALS - TOTAL							
Uranium	0.7	mg/kg-dry	D	0.1		SW6020	09/01/15 11:19 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/20/15 11:45 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 11:45 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 11:45 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 precision (±)	0.08	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-001
Client Sample ID: N02

Report Date: 09/23/15
Collection Date: 08/18/15 07:55
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:33 / sf
METALS - TOTAL							
Uranium	0.6	mg/kg-dry	D	0.1		SW6020	08/26/15 13:56 / smm
RADIONUCLIDES							
Lead 210	0.3	pCi/g-dry				E909.0	09/04/15 04:54 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/04/15 04:54 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 04:54 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-002
Client Sample ID: N03

Report Date: 09/23/15
Collection Date: 08/18/15 08:05
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/25/15 14:33 / sf
METALS - TOTAL							
Uranium	0.9	mg/kg-dry	D	0.1		SW6020	08/26/15 13:59 / smm
RADIONUCLIDES							
Lead 210	0.9	pCi/g-dry				E909.0	09/04/15 07:10 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/04/15 07:10 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 07:10 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-003
Client Sample ID: N04

Report Date: 09/23/15
Collection Date: 08/18/15 08:15
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	2.8	wt%		0.2		D2974	08/25/15 14:33 / sf
METALS - TOTAL							
Uranium	0.7	mg/kg-dry	D	0.1		SW6020	08/26/15 14:01 / smm
RADIONUCLIDES							
Lead 210	0.2	pCi/g-dry				E909.0	09/04/15 09:26 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/04/15 09:26 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 09:26 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-004
Client Sample ID: N05

Report Date: 09/23/15
Collection Date: 08/18/15 08:20
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.3	wt%		0.2		D2974	08/25/15 14:33 / sf
METALS - TOTAL							
Uranium	1.4	mg/kg-dry	D	0.2		SW6020	08/26/15 14:02 / smm
RADIONUCLIDES							
Lead 210	1	pCi/g-dry				E909.0	09/04/15 11:41 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/04/15 11:41 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 11:41 / eli-cs
Radium 226	0.8	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-021
Client Sample ID: S01

Report Date: 09/23/15
Collection Date: 08/18/15 13:35
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.5	wt%		0.2		D2974	08/25/15 14:47 / sf
METALS - TOTAL							
Uranium	0.3	mg/kg-dry	D	0.1		SW6020	08/29/15 00:27 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 13:46 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 13:46 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 13:46 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/16/15 15:19 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-019
Client Sample ID: S02

Report Date: 09/23/15
Collection Date: 08/20/15 08:00
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	3.8	wt%		0.2		D2974	08/31/15 16:33 / tkr
METALS - TOTAL							
Uranium	0.8	mg/kg-dry	D	0.2		SW6020	09/01/15 11:32 / smm
RADIONUCLIDES							
Lead 210	0.5	pCi/g-dry				E909.0	09/20/15 15:43 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 15:43 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 15:43 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Thorium 232	0.6	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.1	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-022
Client Sample ID: S03

Report Date: 09/23/15
Collection Date: 08/18/15 12:57
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.0	wt%		0.2		D2974	08/25/15 14:47 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:28 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 15:07 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 15:07 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 15:07 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.08	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.06	pCi/g-dry	U			E908.0	09/16/15 15:19 / cng
Thorium 232 precision (±)	0.01	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/16/15 15:19 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-005
Client Sample ID: E01

Report Date: 09/23/15
Collection Date: 08/18/15 08:30
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/25/15 14:34 / sf
METALS - TOTAL							
Uranium	4.6	mg/kg-dry	D	0.1		SW6020	08/26/15 14:12 / smm
RADIONUCLIDES							
Lead 210	2.4	pCi/g-dry				E909.0	09/04/15 13:57 / eli-cs
Lead 210 precision (±)	0.4	pCi/g-dry				E909.0	09/04/15 13:57 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/04/15 13:57 / eli-cs
Radium 226	2.6	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.5	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-006
Client Sample ID: E02

Report Date: 09/23/15
Collection Date: 08/18/15 08:35
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/25/15 14:34 / sf
METALS - TOTAL							
Uranium	2.5	mg/kg-dry	D	0.1		SW6020	08/26/15 14:13 / smm
RADIONUCLIDES							
Lead 210	1.0	pCi/g-dry				E909.0	09/04/15 15:26 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/04/15 15:26 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 15:26 / eli-cs
Radium 226	1.3	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.3	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-007
Client Sample ID: E03

Report Date: 09/23/15
Collection Date: 08/18/15 08:45
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/25/15 14:34 / sf
METALS - TOTAL							
Uranium	4.0	mg/kg-dry	D	0.1		SW6020	08/26/15 14:15 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/04/15 17:42 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/04/15 17:42 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 17:42 / eli-cs
Radium 226	1.2	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 08:26 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-008
Client Sample ID: E04

Report Date: 09/23/15
Collection Date: 08/18/15 08:50
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/25/15 14:35 / sf
METALS - TOTAL							
Uranium	2.5	mg/kg-dry	D	0.1		SW6020	08/26/15 14:16 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/04/15 19:58 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/04/15 19:58 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/04/15 19:58 / eli-cs
Radium 226	0.9	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-009
Client Sample ID: E05

Report Date: 09/23/15
Collection Date: 08/18/15 09:00
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/25/15 14:35 / sf
METALS - TOTAL							
Uranium	13.5	mg/kg-dry	D	0.2		SW6020	08/26/15 14:18 / smm
RADIONUCLIDES							
Lead 210	3.7	pCi/g-dry				E909.0	09/04/15 22:13 / eli-cs
Lead 210 precision (±)	0.6	pCi/g-dry				E909.0	09/04/15 22:13 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/04/15 22:13 / eli-cs
Radium 226	4.9	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.9	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-010
Client Sample ID: E06

Report Date: 09/23/15
Collection Date: 08/18/15 09:05
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/25/15 14:35 / sf
METALS - TOTAL							
Uranium	4.6	mg/kg-dry	D	0.1		SW6020	08/26/15 14:20 / smm
RADIONUCLIDES							
Lead 210	2.1	pCi/g-dry				E909.0	09/04/15 23:18 / eli-cs
Lead 210 precision (±)	0.4	pCi/g-dry				E909.0	09/04/15 23:18 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/04/15 23:18 / eli-cs
Radium 226	2.6	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.5	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-011
Client Sample ID: E07

Report Date: 09/23/15
Collection Date: 08/18/15 09:10
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/25/15 14:39 / sf
METALS - TOTAL							
Uranium	1.1	mg/kg-dry	D	0.1		SW6020	08/26/15 14:34 / smm
RADIONUCLIDES							
Lead 210	0.3	pCi/g-dry				E909.0	09/05/15 00:59 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/05/15 00:59 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/05/15 00:59 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.1	pCi/g-dry	U			E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-017
Client Sample ID: E08

Report Date: 09/23/15
Collection Date: 08/18/15 09:45
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/31/15 16:32 / tkr
METALS - TOTAL							
Uranium	7.1	mg/kg-dry	D	0.1		SW6020	09/01/15 11:28 / smm
RADIONUCLIDES							
Lead 210	3.2	pCi/g-dry				E909.0	09/20/15 13:06 / eli-cs
Lead 210 precision (±)	0.5	pCi/g-dry				E909.0	09/20/15 13:06 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 13:06 / eli-cs
Radium 226	3.5	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 precision (±)	0.7	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-012
Client Sample ID: E09

Report Date: 09/23/15
Collection Date: 08/18/15 09:52
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.1	wt%		0.2		D2974	08/25/15 14:39 / sf
METALS - TOTAL							
Uranium	5.2	mg/kg-dry	D	0.1		SW6020	08/26/15 14:35 / smm
RADIONUCLIDES							
Lead 210	2.1	pCi/g-dry				E909.0	09/05/15 03:15 / eli-cs
Lead 210 precision (±)	0.4	pCi/g-dry				E909.0	09/05/15 03:15 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/05/15 03:15 / eli-cs
Radium 226	2.0	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.4	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-018
Client Sample ID: E10

Report Date: 09/23/15
Collection Date: 08/18/15 09:55
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/31/15 16:32 / tkr
METALS - TOTAL							
Uranium	5.2	mg/kg-dry	D	0.1		SW6020	09/01/15 11:30 / smm
RADIONUCLIDES							
Lead 210	2.8	pCi/g-dry				E909.0	09/20/15 14:22 / eli-cs
Lead 210 precision (±)	0.5	pCi/g-dry				E909.0	09/20/15 14:22 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 14:22 / eli-cs
Radium 226	1.8	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 precision (±)	0.4	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-013
Client Sample ID: E11

Report Date: 09/23/15
Collection Date: 08/18/15 10:03
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.1	wt%		0.2		D2974	08/25/15 14:39 / sf
METALS - TOTAL							
Uranium	3.1	mg/kg-dry	D	0.1		SW6020	08/26/15 14:37 / smm
RADIONUCLIDES							
Lead 210	1.6	pCi/g-dry				E909.0	09/05/15 04:55 / eli-cs
Lead 210 precision (±)	0.3	pCi/g-dry				E909.0	09/05/15 04:55 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/05/15 04:55 / eli-cs
Radium 226	1.3	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.3	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.1	pCi/g-dry	U			E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.02	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-014
Client Sample ID: E12

Report Date: 09/23/15
Collection Date: 08/18/15 10:13
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:39 / sf
METALS - TOTAL							
Uranium	1.1	mg/kg-dry	D	0.1		SW6020	08/26/15 14:38 / smm
RADIONUCLIDES							
Lead 210	0.6	pCi/g-dry				E909.0	09/05/15 06:56 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/05/15 06:56 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/05/15 06:56 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/15/15 09:39 / dmf
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/15/15 09:39 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-015
Client Sample ID: E13

Report Date: 09/23/15
Collection Date: 08/18/15 10:22
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/25/15 14:39 / sf
METALS - TOTAL							
Uranium	0.6	mg/kg-dry	D	0.1		SW6020	08/26/15 14:40 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/03/15 20:37 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/03/15 20:37 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/03/15 20:37 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/09/15 10:05 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/15/15 14:14 / dmf
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/15/15 14:14 / dmf
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/15/15 14:14 / dmf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-016
Client Sample ID: E14

Report Date: 09/23/15
Collection Date: 08/18/15 10:35
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.0	wt%		0.2		D2974	08/25/15 14:42 / sf
METALS - TOTAL							
Uranium	0.8	mg/kg-dry	D	0.1		SW6020	08/26/15 14:41 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 04:17 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 04:17 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/18/15 04:17 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/16/15 09:55 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/16/15 09:55 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/16/15 09:55 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-017
Client Sample ID: E15

Report Date: 09/23/15
Collection Date: 08/18/15 10:43
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/25/15 14:42 / sf
METALS - TOTAL							
Uranium	0.7	mg/kg-dry	D	0.1		SW6020	08/26/15 14:43 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 06:33 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 06:33 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/18/15 06:33 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/16/15 09:55 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/16/15 09:55 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/16/15 09:55 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-018
Client Sample ID: E16

Report Date: 09/23/15
Collection Date: 08/18/15 10:52
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.3	wt%		0.2		D2974	08/25/15 14:42 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/26/15 14:45 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/18/15 08:49 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 08:49 / eli-cs
Lead 210 MDC	0.1	pCi/g-dry				E909.0	09/18/15 08:49 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/16/15 15:19 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-019
Client Sample ID: E17

Report Date: 09/23/15
Collection Date: 08/18/15 11:10
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/25/15 14:42 / sf
METALS - TOTAL							
Uranium	0.6	mg/kg-dry	D	0.1		SW6020	08/29/15 00:22 / smm
RADIONUCLIDES							
Lead 210	1.3	pCi/g-dry				E909.0	09/18/15 11:05 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 11:05 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 11:05 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/16/15 15:19 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-020
Client Sample ID: E18

Report Date: 09/23/15
Collection Date: 08/18/15 11:22
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.2	wt%		0.2		D2974	08/25/15 14:42 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:25 / smm
RADIONUCLIDES							
Lead 210	0.9	pCi/g-dry				E909.0	09/18/15 12:25 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 12:25 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 12:25 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 06:58 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 precision (±)	0.06	pCi/g-dry				E908.0	09/16/15 15:19 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/16/15 15:19 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-001
Client Sample ID: W01

Report Date: 09/23/15
Collection Date: 08/19/15 09:34
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.6	wt%		0.2		D2974	08/31/15 16:13 / tkr
METALS - TOTAL							
Uranium	0.6	mg/kg-dry	D	0.2		SW6020	09/01/15 10:33 / smm
RADIONUCLIDES							
Lead 210	0.2	pCi/g-dry				E909.0	09/19/15 16:54 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/19/15 16:54 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 16:54 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-002
Client Sample ID: W02

Report Date: 09/23/15
Collection Date: 08/19/15 09:41
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/31/15 16:13 / tkr
METALS - TOTAL							
Uranium	1.0	mg/kg-dry	D	0.1		SW6020	09/01/15 10:44 / smm
RADIONUCLIDES							
Lead 210	0.6	pCi/g-dry				E909.0	09/19/15 18:14 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 18:14 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 18:14 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-003
Client Sample ID: W03

Report Date: 09/23/15
Collection Date: 08/19/15 09:48
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.1	wt%		0.2		D2974	08/31/15 16:14 / tkr
METALS - TOTAL							
Uranium	1.2	mg/kg-dry	D	0.1		SW6020	09/01/15 10:45 / smm
RADIONUCLIDES							
Lead 210	1.3	pCi/g-dry				E909.0	09/19/15 19:35 / eli-cs
Lead 210 precision (±)	0.3	pCi/g-dry				E909.0	09/19/15 19:35 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 19:35 / eli-cs
Radium 226	0.9	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-004
Client Sample ID: W04

Report Date: 09/23/15
Collection Date: 08/19/15 09:54
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.3	wt%		0.2		D2974	08/31/15 16:14 / tkr
METALS - TOTAL							
Uranium	1.6	mg/kg-dry	D	0.1		SW6020	09/01/15 10:47 / smm
RADIONUCLIDES							
Lead 210	1	pCi/g-dry				E909.0	09/19/15 20:56 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 20:56 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 20:56 / eli-cs
Radium 226	0.9	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.2	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-005
Client Sample ID: W05

Report Date: 09/23/15
Collection Date: 08/19/15 10:01
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.7	wt%		0.2		D2974	08/31/15 16:14 / tkr
METALS - TOTAL							
Uranium	1.2	mg/kg-dry	D	0.1		SW6020	09/01/15 10:48 / smm
RADIONUCLIDES							
Lead 210	0.8	pCi/g-dry				E909.0	09/19/15 22:17 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 22:17 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 22:17 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 07:49 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-006
Client Sample ID: W06

Report Date: 09/23/15
Collection Date: 08/19/15 10:08
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.0	wt%		0.2		D2974	08/31/15 16:19 / tkr
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.2		SW6020	09/01/15 10:50 / smm
RADIONUCLIDES							
Lead 210	0.5	pCi/g-dry				E909.0	09/19/15 23:38 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 23:38 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 23:38 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-007
Client Sample ID: W07

Report Date: 09/23/15
Collection Date: 08/19/15 10:13
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/31/15 16:19 / tkr
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	09/01/15 10:53 / smm
RADIONUCLIDES							
Lead 210	0.6	pCi/g-dry				E909.0	09/20/15 00:58 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 00:58 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 00:58 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-008
Client Sample ID: W08

Report Date: 09/23/15
Collection Date: 08/19/15 10:18
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/31/15 16:19 / tkr
METALS - TOTAL							
Uranium	0.9	mg/kg-dry	D	0.2		SW6020	09/01/15 10:54 / smm
RADIONUCLIDES							
Lead 210	0.9	pCi/g-dry				E909.0	09/20/15 02:19 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 02:19 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 02:19 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-009
Client Sample ID: W09

Report Date: 09/23/15
Collection Date: 08/19/15 12:19
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.6	wt%		0.2		D2974	08/31/15 16:19 / tkr
METALS - TOTAL							
Uranium	0.6	mg/kg-dry	D	0.1		SW6020	09/01/15 10:56 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/20/15 03:40 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 03:40 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 03:40 / eli-cs
Radium 226	0.2	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.06	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.09	pCi/g-dry	U			E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.02	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.1	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-010
Client Sample ID: W10

Report Date: 09/23/15
Collection Date: 08/19/15 12:30
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.4	wt%		0.2		D2974	08/31/15 16:20 / tkr
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.2		SW6020	09/01/15 10:57 / smm
RADIONUCLIDES							
Lead 210	0.3	pCi/g-dry				E909.0	09/19/15 12:51 / eli-cs
Lead 210 precision (±)	0.1	pCi/g-dry				E909.0	09/19/15 12:51 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 12:51 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.3	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-011
Client Sample ID: W11

Report Date: 09/23/15
Collection Date: 08/19/15 12:35
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.8	wt%		0.2		D2974	08/31/15 16:25 / tkr
METALS - TOTAL							
Uranium	0.3	mg/kg-dry	D	0.1		SW6020	09/01/15 11:11 / smm
RADIONUCLIDES							
Lead 210	0.5	pCi/g-dry				E909.0	09/20/15 05:01 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 05:01 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 05:01 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 precision (±)	0.07	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 09:29 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/21/15 10:10 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 10:10 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-023
Client Sample ID: W12

Report Date: 09/23/15
Collection Date: 08/18/15 15:30
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.4	wt%		0.2		D2974	08/25/15 14:47 / sf
METALS - TOTAL							
Uranium	0.2	mg/kg-dry	D	0.1		SW6020	08/29/15 00:35 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 16:28 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 16:28 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 16:28 / eli-cs
Radium 226	0.2	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.06	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.1	pCi/g-dry	U			E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.02	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-024
Client Sample ID: W13

Report Date: 09/23/15
Collection Date: 08/18/15 15:15
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.5	wt%		0.2		D2974	08/25/15 14:47 / sf
METALS - TOTAL							
Uranium	0.4	mg/kg-dry	D	0.1		SW6020	08/29/15 00:36 / smm
RADIONUCLIDES							
Lead 210	1.2	pCi/g-dry				E909.0	09/18/15 17:49 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 17:49 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 17:49 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-025
Client Sample ID: W14

Report Date: 09/23/15
Collection Date: 08/18/15 14:50
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.2	wt%		0.2		D2974	08/25/15 14:48 / sf
METALS - TOTAL							
Uranium	0.4	mg/kg-dry	D	0.1		SW6020	08/29/15 00:38 / smm
RADIONUCLIDES							
Lead 210	1.1	pCi/g-dry				E909.0	09/18/15 19:10 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 19:10 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 19:10 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry	U			E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.03	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-026
Client Sample ID: W15

Report Date: 09/23/15
Collection Date: 08/18/15 14:38
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.5	wt%		0.2		D2974	08/25/15 14:50 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:39 / smm
RADIONUCLIDES							
Lead 210	0.6	pCi/g-dry				E909.0	09/18/15 20:30 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 20:30 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 20:30 / eli-cs
Radium 226	0.4	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.09	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.04	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-027
Client Sample ID: W16

Report Date: 09/23/15
Collection Date: 08/18/15 14:30
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	1.1	wt%		0.2		D2974	08/25/15 14:50 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:41 / smm
RADIONUCLIDES							
Lead 210	0.7	pCi/g-dry				E909.0	09/18/15 21:51 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 21:51 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 21:51 / eli-cs
Radium 226	0.6	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-028
Client Sample ID: W17

Report Date: 09/23/15
Collection Date: 08/18/15 14:12
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.5	wt%		0.2		D2974	08/25/15 14:50 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:42 / smm
RADIONUCLIDES							
Lead 210	1.2	pCi/g-dry				E909.0	09/18/15 23:12 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/18/15 23:12 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/18/15 23:12 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.4	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.07	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080810-029
Client Sample ID: W18

Report Date: 09/23/15
Collection Date: 08/18/15 14:00
DateReceived: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.9	wt%		0.2		D2974	08/25/15 14:50 / sf
METALS - TOTAL							
Uranium	0.5	mg/kg-dry	D	0.1		SW6020	08/29/15 00:53 / smm
RADIONUCLIDES							
Lead 210	0.9	pCi/g-dry				E909.0	09/19/15 00:33 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/19/15 00:33 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/19/15 00:33 / eli-cs
Radium 226	0.5	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 precision (±)	0.1	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Radium 226 MDC	0.04	pCi/g-dry				E903.0	09/15/15 08:35 / dmf
Thorium 232	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 precision (±)	0.05	pCi/g-dry				E908.0	09/18/15 09:17 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/18/15 09:17 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Lab ID: C15080878-015
Client Sample ID: W75

Report Date: 09/23/15
Collection Date: 08/19/15 12:35
DateReceived: 08/24/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	0.6	wt%		0.2		D2974	08/31/15 16:31 / tkr
METALS - TOTAL							
Uranium	0.3	mg/kg-dry	D	0.1		SW6020	09/01/15 11:18 / smm
RADIONUCLIDES							
Lead 210	0.5	pCi/g-dry				E909.0	09/20/15 10:25 / eli-cs
Lead 210 precision (±)	0.2	pCi/g-dry				E909.0	09/20/15 10:25 / eli-cs
Lead 210 MDC	0.2	pCi/g-dry				E909.0	09/20/15 10:25 / eli-cs
Radium 226	0.3	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 precision (±)	0.07	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Radium 226 MDC	0.03	pCi/g-dry				E903.0	09/21/15 11:01 / dmf
Thorium 232	0.08	pCi/g-dry	U			E908.0	09/21/15 15:36 / cng
Thorium 232 precision (±)	0.02	pCi/g-dry				E908.0	09/21/15 15:36 / cng
Thorium 232 MDC	0.2	pCi/g-dry				E908.0	09/21/15 15:36 / cng

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

ENERGY LABORATORIES
Trust our People. Trust our Data.
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Billings, MT 800.735.4489 • Casper, WY 888.235.0515
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

September 23, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15080878

Project Name: Annual Soils 2015

Energy Laboratories, Inc. Casper WY received the following 19 samples for Energy Fuels Resources (USA) Inc on 8/24/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15080878-001	W01	08/19/15 9:34	08/24/15	Soil	Uranium, Total Percent Moisture Digestion, Total Metals Digestion For RadioChemistry Digestion For RadioChemistry Lead 210 Radium 226 Thorium, Isotopic
C15080878-002	W02	08/19/15 9:41	08/24/15	Soil	Same As Above
C15080878-003	W03	08/19/15 9:48	08/24/15	Soil	Same As Above
C15080878-004	W04	08/19/15 9:54	08/24/15	Soil	Same As Above
C15080878-005	W05	08/19/15 10:01	08/24/15	Soil	Same As Above
C15080878-006	W06	08/19/15 10:08	08/24/15	Soil	Same As Above
C15080878-007	W07	08/19/15 10:13	08/24/15	Soil	Same As Above
C15080878-008	W08	08/19/15 10:18	08/24/15	Soil	Same As Above
C15080878-009	W09	08/19/15 12:19	08/24/15	Soil	Same As Above
C15080878-010	W10	08/19/15 12:30	08/24/15	Soil	Same As Above
C15080878-011	W11	08/19/15 12:35	08/24/15	Soil	Same As Above
C15080878-012	BHV-3	08/19/15 13:08	08/24/15	Soil	Same As Above
C15080878-013	BHV-4	08/19/15 12:10	08/24/15	Soil	Same As Above
C15080878-014	BHV-70	08/19/15 12:10	08/24/15	Soil	Same As Above
C15080878-015	W75	08/19/15 12:35	08/24/15	Soil	Same As Above
C15080878-016	N01	08/18/15 7:45	08/24/15	Soil	Same As Above
C15080878-017	E08	08/18/15 9:45	08/24/15	Soil	Same As Above
C15080878-018	E10	08/18/15 9:55	08/24/15	Soil	Same As Above
C15080878-019	S02	08/20/15 8:00	08/24/15	Soil	Same As Above

ANALYTICAL SUMMARY REPORT

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Report Proofing Specialist

Digitally signed by
Randy Horton
Date: 2015.09.23 11:42:55 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Work Order: C15080878

Report Date: 09/23/15

CASE NARRATIVE

BRANCH LABORATORY SUBCONTRACT ANALYSIS
Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015

Report Date: 09/23/15
Work Order: C15080878

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 45686
Lab ID: LCS-45686		Laboratory Control Sample				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		1.5	pCi/g-dry		89	80	120			
Lab ID: MB-45686	3	Method Blank				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		0.004	pCi/g-dry							U
Radium 226 precision (±)		0.005	pCi/g-dry							
Radium 226 MDC		0.007	pCi/g-dry							
Lab ID: C15080878-005AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		2.0	pCi/g-dry		91	70	130			
Lab ID: C15080878-005AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_150911A				09/21/15 09:29
Radium 226		2.0	pCi/g-dry		88	70	130	1.9	49.4	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 09/23/15
Project: Annual Soils 2015
Work Order: C15080878

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 45686
Lab ID: LCS5-45686		Laboratory Control Sample				Run: ALPHANALYST_150914B			09/21/15 10:10	
Thorium 230		4.7	pCi/g-dry		94	80	120			
Lab ID: C15080878-019AMS5		Sample Matrix Spike				Run: ALPHANALYST_150914B			09/21/15 15:36	
Thorium 230		4.0	pCi/g-dry		70	70	130			
Lab ID: C15080878-019AMS5		Sample Matrix Spike Duplicate				Run: ALPHANALYST_150914B			09/21/15 15:37	
Thorium 230		3.6	pCi/g-dry		62	70	130	10	48	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS/MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.										
Lab ID: MB-45686	3	Method Blank				Run: ALPHANALYST_150914B			09/21/15 15:37	
Thorium 232		0.002	pCi/g-dry							U
Thorium 232 precision (±)		0.006	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 09/23/15
Project: Annual Soils 2015
Work Order: C15080878

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_24155
Lab ID: MB-24155	3	Method Blank				Run: SUB-T65066				09/19/15 10:09
Lead 210		0.2	pCi/g-dry							U
Lead 210 precision (±)		0.2	pCi/g-dry							
Lead 210 MDC		0.3	pCi/g-dry							
Lab ID: LCS3-24155		Laboratory Control Sample				Run: SUB-T65066				09/19/15 11:30
Lead 210		3.4	pCi/g-dry		131	80	120			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Lab ID: C15080878-010AMS		Sample Matrix Spike				Run: SUB-T65066				09/19/15 14:12
Lead 210		3.2	pCi/g-dry		121	70	130			
Lab ID: C15080878-010AMSD		Sample Matrix Spike Duplicate				Run: SUB-T65066				09/19/15 15:33
Lead 210		3.0	pCi/g-dry		109	70	130	9.1	45.9	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015

Report Date: 09/23/15
Work Order: C15080878

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW6020**									Analytical Run: ICPMS2-C_150901A	
Lab ID: **ICV**	Initial Calibration Verification Standard								09/01/15 10:07	
Uranium		0.0493	mg/L	0.00030	99	90	110			
Lab ID: **ICSA**	Interference Check Sample A								09/01/15 10:08	
Uranium		9.80E-06	mg/L	0.00030						
Lab ID: **ICSAB**	Interference Check Sample AB								09/01/15 10:10	
Uranium		1.10E-06	mg/L	0.00030						
Method: **SW6020**									Batch: 45582	
Lab ID: **MB-45582**	Method Blank					Run: ICPMS2-C_150901A			09/01/15 10:27	
Uranium		0.0010	mg/kg	2E-05						
Lab ID: **LFB-45582**	Laboratory Fortified Blank					Run: ICPMS2-C_150901A			09/01/15 10:28	
Uranium		23.2	mg/kg	0.14	99	75	125			
Lab ID: **LCS3-45582**	Laboratory Control Sample					Run: ICPMS2-C_150901A			09/01/15 10:30	
Uranium		104	mg/kg	0.37	84	80	120			
Lab ID: **C15080878-001BDIL**	Serial Dilution					Run: ICPMS2-C_150901A			09/01/15 10:34	
Uranium		0.781	mg/kg-dry	0.76					10	
Lab ID: **C15080878-010BMS3**	Sample Matrix Spike					Run: ICPMS2-C_150901A			09/01/15 11:07	
Uranium		26.5	mg/kg-dry	0.15	107	75	125			
Lab ID: **C15080878-010BMSD**	Sample Matrix Spike Duplicate					Run: ICPMS2-C_150901A			09/01/15 11:08	
Uranium		26.9	mg/kg-dry	0.15	106	75	125	1.6	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C15080878

Login completed by: Cherol J. Minton
Date Received: 8/24/2015

Reviewed by: BL2000\swaldrop
Received by: cjm

Reviewed Date: 8/27/2015
Carrier name: Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	NA°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Soils 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
W01	8/19/2015	934	U-Nat, Ra-226, Pb-210, Th-232
W02	8/19/2015	941	U-Nat, Ra-226, Pb-210, Th-232
W03	8/19/2015	948	U-Nat, Ra-226, Pb-210, Th-232
W04	8/19/2015	954	U-Nat, Ra-226, Pb-210, Th-232
W05	8/19/2015	1001	U-Nat, Ra-226, Pb-210, Th-232
W06	8/19/2015	1008	U-Nat, Ra-226, Pb-210, Th-232
W07	8/19/2015	1013	U-Nat, Ra-226, Pb-210, Th-232
W08	8/19/2015	1018	U-Nat, Ra-226, Pb-210, Th-232
W09	8/19/2015	1219	U-Nat, Ra-226, Pb-210, Th-232
W10	8/19/2015	1230	U-Nat, Ra-226, Pb-210, Th-232
W11	8/19/2015	1235	U-Nat, Ra-226, Pb-210, Th-232
BHV-3	8/19/2015	1308	U-Nat, Ra-226, Pb-210, Th-232
BHV-4	8/19/2015	1210	U-Nat, Ra-226, Pb-210, Th-232
BHV-70	8/19/2015	1210	U-Nat, Ra-226, Pb-210, Th-232
W75	8/19/2015	1235	U-Nat, Ra-226, Pb-210, Th-232
N01	8/18/2015	745	U-Nat, Ra-226, Pb-210, Th-232
E08	8/18/2015	945	U-Nat, Ra-226, Pb-210, Th-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	8/20/2015 1200		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Cheryl Mint	8/24/15 9:15

C15080878

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Soils 2015	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
E10	8/18/2015	955	U-Nat, Ra-226, Pb-210, Th-232
S02	8/20/2015	800	U-Nat, Ra-226, Pb-210, Th-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer Garrin Palmer	8/20/2015 1200		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Cheryl Mitt	8/24/15 9:15

C15080878

ANALYTICAL SUMMARY REPORT

September 23, 2015

Energy Fuels Resources (USA) Inc
225 Union Blvd Ste 600
Lakewood, CO 80228-1826

Work Order: C15080810

Project Name: Annual Soils 2015

Energy Laboratories, Inc. Casper WY received the following 36 samples for Energy Fuels Resources (USA) Inc on 8/21/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15080810-001	N02	08/18/15 7:55	08/21/15	Soil	Uranium, Total Percent Moisture Digestion, Total Metals Digestion For RadioChemistry Digestion For RadioChemistry Lead 210 Radium 226 Thorium, Isotopic
C15080810-002	N03	08/18/15 8:05	08/21/15	Soil	Same As Above
C15080810-003	N04	08/18/15 8:15	08/21/15	Soil	Same As Above
C15080810-004	N05	08/18/15 8:20	08/21/15	Soil	Same As Above
C15080810-005	E01	08/18/15 8:30	08/21/15	Soil	Same As Above
C15080810-006	E02	08/18/15 8:35	08/21/15	Soil	Same As Above
C15080810-007	E03	08/18/15 8:45	08/21/15	Soil	Same As Above
C15080810-008	E04	08/18/15 8:50	08/21/15	Soil	Same As Above
C15080810-009	E05	08/18/15 9:00	08/21/15	Soil	Same As Above
C15080810-010	E06	08/18/15 9:05	08/21/15	Soil	Same As Above
C15080810-011	E07	08/18/15 9:10	08/21/15	Soil	Same As Above
C15080810-012	E09	08/18/15 9:52	08/21/15	Soil	Same As Above
C15080810-013	E11	08/18/15 10:03	08/21/15	Soil	Same As Above
C15080810-014	E12	08/18/15 10:13	08/21/15	Soil	Same As Above
C15080810-015	E13	08/18/15 10:22	08/21/15	Soil	Same As Above
C15080810-016	E14	08/18/15 10:35	08/21/15	Soil	Same As Above
C15080810-017	E15	08/18/15 10:43	08/21/15	Soil	Same As Above
C15080810-018	E16	08/18/15 10:52	08/21/15	Soil	Same As Above
C15080810-019	E17	08/18/15 11:10	08/21/15	Soil	Same As Above
C15080810-020	E18	08/18/15 11:22	08/21/15	Soil	Same As Above
C15080810-021	S01	08/18/15 13:35	08/21/15	Soil	Same As Above
C15080810-022	S03	08/18/15 12:57	08/21/15	Soil	Same As Above
C15080810-023	W12	08/18/15 15:30	08/21/15	Soil	Same As Above

ANALYTICAL SUMMARY REPORT

C15080810-024	W13	08/18/15 15:15	08/21/15	Soil	Same As Above
C15080810-025	W14	08/18/15 14:50	08/21/15	Soil	Same As Above
C15080810-026	W15	08/18/15 14:38	08/21/15	Soil	Same As Above
C15080810-027	W16	08/18/15 14:30	08/21/15	Soil	Same As Above
C15080810-028	W17	08/18/15 14:12	08/21/15	Soil	Same As Above
C15080810-029	W18	08/18/15 14:00	08/21/15	Soil	Same As Above
C15080810-030	BHV-1	08/18/15 8:25	08/21/15	Soil	Same As Above
C15080810-031	BHV-2	08/18/15 9:20	08/21/15	Soil	Same As Above
C15080810-032	BHV-65	08/18/15 9:20	08/21/15	Soil	Same As Above
C15080810-033	BHV-5	08/18/15 9:48	08/21/15	Soil	Same As Above
C15080810-034	BHV-6	08/18/15 10:08	08/21/15	Soil	Same As Above
C15080810-035	BHV-7	08/18/15 8:55	08/21/15	Soil	Same As Above
C15080810-036	BHV-8	08/18/15 8:10	08/21/15	Soil	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Report Proofing Specialist

Digitally signed by
Randy Horton
Date: 2015.09.23 11:22:46 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015
Work Order: C15080810

Report Date: 09/23/15

CASE NARRATIVE

BRANCH LABORATORY SUBCONTRACT ANALYSIS
Tests associated with analyst identified as ELI-CS were subcontracted to Energy Laboratories, 415 Graham Rd., College Station, TX, EPA Number TX01520.

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS
Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-cs - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:
USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA; Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Washington: C836

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 09/23/15
Project: Annual Soils 2015
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 45570
Lab ID: LCS-45570		Laboratory Control Sample				Run: BERTHOLD 770-2_150903A				09/09/15 08:26
Radium 226		1.6	pCi/g-dry		94	80	120			
Lab ID: MB-45570	3	Method Blank				Run: BERTHOLD 770-2_150903A				09/09/15 08:26
Radium 226		0.0002	pCi/g-dry							U
Radium 226 precision (±)		0.004	pCi/g-dry							
Radium 226 MDC		0.008	pCi/g-dry							
Lab ID: C15080810-013AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_150903A				09/09/15 10:05
Radium 226		2.6	pCi/g-dry		73	70	130			
Lab ID: C15080810-013AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_150903A				09/09/15 10:05
Radium 226		2.6	pCi/g-dry		76	70	130	1.8	49	
Method: E903.0										Batch: 45665
Lab ID: LCS-45665		Laboratory Control Sample				Run: BERTHOLD 770-2_150909A				09/15/15 06:58
Radium 226		1.4	pCi/g-dry		85	80	120			
Lab ID: MB-45665	3	Method Blank				Run: BERTHOLD 770-2_150909A				09/15/15 06:58
Radium 226		0.002	pCi/g-dry							U
Radium 226 precision (±)		0.005	pCi/g-dry							
Radium 226 MDC		0.008	pCi/g-dry							
Lab ID: C15080810-033AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_150909A				09/15/15 10:10
Radium 226		2.6	pCi/g-dry		86	70	130			
Lab ID: C15080810-033AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_150909A				09/15/15 10:10
Radium 226		2.6	pCi/g-dry		86	70	130	0.1	49.2	
Method: E903.0										Batch: 45686
Lab ID: LCS-45686		Laboratory Control Sample				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		1.5	pCi/g-dry		89	80	120			
Lab ID: MB-45686	3	Method Blank				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		0.004	pCi/g-dry							U
Radium 226 precision (±)		0.005	pCi/g-dry							
Radium 226 MDC		0.007	pCi/g-dry							
Lab ID: C15080878-005AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_150911A				09/21/15 07:49
Radium 226		2.0	pCi/g-dry		91	70	130			
Lab ID: C15080878-005AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_150911A				09/21/15 09:29
Radium 226		2.0	pCi/g-dry		88	70	130	1.9	49.4	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015

Report Date: 09/23/15
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 45570
Lab ID: C15080810-014AMS5		Sample Matrix Spike				Run: ALPHANALYST_150903A				09/15/15 14:14
Thorium 230		3.2	pCi/g-dry		55	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS/MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.										
Lab ID: C15080810-014AMS5		Sample Matrix Spike Duplicate				Run: ALPHANALYST_150903A				09/15/15 14:14
Thorium 230		3.7	pCi/g-dry		65	70	130	14	48	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS/MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.										
Lab ID: LCS-45570		Laboratory Control Sample				Run: ALPHANALYST_150903A				09/15/15 14:14
Thorium 230		5.2	pCi/g-dry		104	80	120			
Lab ID: MB-45570	3	Method Blank				Run: ALPHANALYST_150903A				09/15/15 14:14
Thorium 232		-0.0005	pCi/g-dry							U
Thorium 232 precision (±)		0.006	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							
Method: E908.0										Batch: R204212
Lab ID: LCS5-45679		Laboratory Control Sample				Run: ALPHANALYST_150911A				09/16/15 09:55
Thorium 230		5.1	pCi/g-dry		102	80	120			
Lab ID: C15080952-003AMS5		Sample Matrix Spike				Run: ALPHANALYST_150911A				09/16/15 09:55
Thorium 230		5.2	pCi/g-dry		96	70	130			
Lab ID: C15080952-003AMS5		Sample Matrix Spike Duplicate				Run: ALPHANALYST_150911A				09/16/15 09:55
Thorium 230		5.3	pCi/g-dry		100	70	130	2.8	48	
Lab ID: MB-45679	3	Method Blank				Run: ALPHANALYST_150911A				09/16/15 09:55
Thorium 232		-0.0009	pCi/g-dry							U
Thorium 232 precision (±)		0.006	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							
Lab ID: MB-45665	3	Method Blank				Run: ALPHANALYST_150911A				09/16/15 15:19
Thorium 232		-0.001	pCi/g-dry							U
Thorium 232 precision (±)		0.005	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 09/23/15
Project: Annual Soils 2015
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: R204322
Lab ID: LCS5-45665		Laboratory Control Sample				Run: ALPHANALYST_150914A				09/18/15 09:17
Thorium 230		5.3	pCi/g-dry		107	80	120			
Lab ID: C15080810-035AMS5		Sample Matrix Spike				Run: ALPHANALYST_150914A				09/18/15 13:41
Thorium 230		3.1	pCi/g-dry		53	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS/MSD pair are acceptable, the response is considered to be matrix related. The batch is approved.										
Lab ID: C15080810-035AMS5		Sample Matrix Spike Duplicate				Run: ALPHANALYST_150914A				09/18/15 13:41
Thorium 230		4.2	pCi/g-dry		75	70	130	30	48	
Lab ID: MB-45665	3	Method Blank				Run: ALPHANALYST_150914A				09/18/15 13:41
Thorium 232		0.004	pCi/g-dry							U
Thorium 232 precision (±)		0.007	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							
Lab ID: MB-45686	3	Method Blank				Run: ALPHANALYST_150914A				09/18/15 13:42
Thorium 232		0.0	pCi/g-dry							U
Thorium 232 precision (±)		0.006	pCi/g-dry							
Thorium 232 MDC		0.02	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Report Date: 09/23/15
Project: Annual Soils 2015
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_24075
Lab ID: MB-24075	3	Method Blank				Run: SUB-T64771				09/03/15 16:05
Lead 210		0.007	pCi/g-dry							U
Lead 210 precision (±)		0.01	pCi/g-dry							
Lead 210 MDC		0.02	pCi/g-dry							
Lab ID: C15080810-015AMS		Sample Matrix Spike				Run: SUB-T64771				09/03/15 22:52
Lead 210		2.7	pCi/g-dry		72	70	130			
Lab ID: C15080810-015AMSD		Sample Matrix Spike Duplicate				Run: SUB-T64771				09/04/15 00:50
Lead 210		3.3	pCi/g-dry		95	70	130	20	44.6	
Lab ID: LCS3-24075		Laboratory Control Sample				Run: SUB-T64771				09/03/15 18:21
Lead 210		2.1	pCi/g-dry		78	80	120			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Method: E909.0										Batch: T_24136
Lab ID: MB-24136	3	Method Blank				Run: SUB-T65065				09/17/15 17:57
Lead 210		0.07	pCi/g-dry							U
Lead 210 precision (±)		0.1	pCi/g-dry							
Lead 210 MDC		0.2	pCi/g-dry							
Lab ID: LCS3-24136		Laboratory Control Sample				Run: SUB-T65065				09/17/15 20:13
Lead 210		2.6	pCi/g-dry		103	80	120			
Lab ID: C15080810-034AMS		Sample Matrix Spike				Run: SUB-T65065				09/18/15 00:22
Lead 210		2.7	pCi/g-dry		98	70	130			
Lab ID: C15080810-034AMSD		Sample Matrix Spike Duplicate				Run: SUB-T65065				09/18/15 02:12
Lead 210		2.2	pCi/g-dry		80	70	130	18	44.9	
Method: E909.0										Batch: T_24155
Lab ID: MB-24155	3	Method Blank				Run: SUB-T65066				09/19/15 10:09
Lead 210		0.2	pCi/g-dry							U
Lead 210 precision (±)		0.2	pCi/g-dry							
Lead 210 MDC		0.3	pCi/g-dry							
Lab ID: LCS3-24155		Laboratory Control Sample				Run: SUB-T65066				09/19/15 11:30
Lead 210		3.4	pCi/g-dry		131	80	120			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Lab ID: C15080878-010AMS		Sample Matrix Spike				Run: SUB-T65066				09/19/15 14:12
Lead 210		3.2	pCi/g-dry		121	70	130			
Lab ID: C15080878-010AMSD		Sample Matrix Spike Duplicate				Run: SUB-T65066				09/19/15 15:33
Lead 210		3.0	pCi/g-dry		109	70	130	9.1	45.9	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015

Report Date: 09/23/15
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW6020**									Analytical Run: ICPMS2-C_150826A	
Lab ID: **ICSA**		Interference Check Sample A							08/26/15 11:19	
Uranium		5.40E-06	mg/L	0.00030						
Lab ID: **ICSAB**		Interference Check Sample AB							08/26/15 11:21	
Uranium		1.50E-06	mg/L	0.00030						
Lab ID: **ICV**		Initial Calibration Verification Standard							08/26/15 11:37	
Uranium		0.0495	mg/L	0.00030	99	90	110			
Method: **SW6020**									Batch: 45539	
Lab ID: **MB-45539**		Method Blank				Run: ICPMS2-C_150826A			08/26/15 13:50	
Uranium		0.002	mg/kg	2E-05						
Lab ID: **LFB-45539**		Laboratory Fortified Blank				Run: ICPMS2-C_150826A			08/26/15 13:51	
Uranium		25.0	mg/kg	0.14	108	75	125			
Lab ID: **LCS3-45539**		Laboratory Control Sample				Run: ICPMS2-C_150826A			08/26/15 13:53	
Uranium		145	mg/kg	0.37	117	80	120			
Lab ID: **C15080810-001BDIL**		Serial Dilution				Run: ICPMS2-C_150826A			08/26/15 13:58	
Uranium		0.528	mg/kg-dry	0.71					10	
Lab ID: **C15080810-010BMS3**		Sample Matrix Spike				Run: ICPMS2-C_150826A			08/26/15 14:21	
Uranium		30.0	mg/kg-dry	0.15	102	75	125			
Lab ID: **C15080810-010BMSD**		Sample Matrix Spike Duplicate				Run: ICPMS2-C_150826A			08/26/15 14:23	
Uranium		27.3	mg/kg-dry	0.13	102	75	125	9.6	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: Annual Soils 2015

Report Date: 09/23/15
Work Order: C15080810

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **SW6020**									Analytical Run: ICPMS2-C_150828B	
Lab ID: **ICV**		Initial Calibration Verification Standard							08/28/15 22:25	
Uranium		0.0502	mg/L	0.00030	100	90	110			
Lab ID: **ICSA**		Interference Check Sample A							08/28/15 22:26	
Uranium		2.28E-05	mg/L	0.00030						
Lab ID: **ICSAB**		Interference Check Sample AB							08/28/15 22:28	
Uranium		4.10E-06	mg/L	0.00030						
Method: **SW6020**									Batch: 45543	
Lab ID: **MB-45543**		Method Blank				Run: ICPMS2-C_150828B			08/29/15 00:16	
Uranium		0.003	mg/kg	2E-05						
Lab ID: **LFB-45543**		Laboratory Fortified Blank				Run: ICPMS2-C_150828B			08/29/15 00:17	
Uranium		24.0	mg/kg	0.14	102	75	125			
Lab ID: **LCS3-45543**		Laboratory Control Sample				Run: ICPMS2-C_150828B			08/29/15 00:19	
Uranium		110	mg/kg	0.37	87	80	120			
Lab ID: **C15080810-019BDIL**		Serial Dilution				Run: ICPMS2-C_150828B			08/29/15 00:24	
Uranium		0.576	mg/kg-dry	0.74					10	
Lab ID: **C15080810-028BMS3**		Sample Matrix Spike				Run: ICPMS2-C_150828B			08/29/15 00:44	
Uranium		26.5	mg/kg-dry	0.15	105	75	125			
Lab ID: **C15080810-028BMSD**		Sample Matrix Spike Duplicate				Run: ICPMS2-C_150828B			08/29/15 00:46	
Uranium		26.3	mg/kg-dry	0.15	104	75	125	0.5	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc C15080810

Login completed by: Cherol J. Minton
Date Received: 8/21/2015
Reviewed by: BL2000\swaldrop
Received by: cjm
Reviewed Date: 8/24/2015
Carrier name: Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Applicable ☑
Container/Temp Blank temperature:	NA°C		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Soils 2015	Garrin Palmer	

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
N02	8/18/2015	755	U-Nat, Ra-226, Pb-210, Th-232
N03	8/18/2015	805	U-Nat, Ra-226, Pb-210, Th-232
N04	8/18/2015	815	U-Nat, Ra-226, Pb-210, Th-232
N05	8/18/2015	820	U-Nat, Ra-226, Pb-210, Th-232
E01	8/18/2015	830	U-Nat, Ra-226, Pb-210, Th-232
E02	8/18/2015	835	U-Nat, Ra-226, Pb-210, Th-232
E03	8/18/2015	845	U-Nat, Ra-226, Pb-210, Th-232
E04	8/18/2015	850	U-Nat, Ra-226, Pb-210, Th-232
E05	8/18/2015	900	U-Nat, Ra-226, Pb-210, Th-232
E06	8/18/2015	905	U-Nat, Ra-226, Pb-210, Th-232
E07	8/18/2015	910	U-Nat, Ra-226, Pb-210, Th-232
E09	8/18/2015	952	U-Nat, Ra-226, Pb-210, Th-232
E11	8/18/2015	1003	U-Nat, Ra-226, Pb-210, Th-232
E12	8/18/2015	1013	U-Nat, Ra-226, Pb-210, Th-232
E13	8/18/2015	1022	U-Nat, Ra-226, Pb-210, Th-232
E14	8/18/2015	1035	U-Nat, Ra-226, Pb-210, Th-232
E15	8/18/2015	1043	U-Nat, Ra-226, Pb-210, Th-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	8/18/2015 1200		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Cheryl Mintun	8/21/15 9:45

C1508810

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboratories
2393 Salt Creek Hwy
Casper WY, 82601

Contact: Garrin Palmer
Ph: 435 678 4115
gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Soils 2015	Garrin Palmer	

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
E16	8/18/2015	1052	U-Nat, Ra-226, Pb-210, Th-232
E17	8/18/2015	1110	U-Nat, Ra-226, Pb-210, Th-232
E18	8/18/2015	1122	U-Nat, Ra-226, Pb-210, Th-232
S01	8/18/2015	1335	U-Nat, Ra-226, Pb-210, Th-232
S03	8/18/2015	1257	U-Nat, Ra-226, Pb-210, Th-232
W12	8/18/2015	1530	U-Nat, Ra-226, Pb-210, Th-232
W13	8/18/2015	1515	U-Nat, Ra-226, Pb-210, Th-232
W14	8/18/2015	1450	U-Nat, Ra-226, Pb-210, Th-232
W15	8/18/2015	1438	U-Nat, Ra-226, Pb-210, Th-232
W16	8/18/2015	1430	U-Nat, Ra-226, Pb-210, Th-232
W17	8/18/2015	1412	U-Nat, Ra-226, Pb-210, Th-232
W18	8/18/2015	1400	U-Nat, Ra-226, Pb-210, Th-232
BHV-1	8/18/2015	825	U-Nat, Ra-226, Pb-210, Th-232
BHV-2	8/18/2015	920	U-Nat, Ra-226, Pb-210, Th-232
BHV-65	8/18/2015	920	U-Nat, Ra-226, Pb-210, Th-232
BHV-5	8/18/2015	948	U-Nat, Ra-226, Pb-210, Th-232
BHV-6	8/18/2015	1008	U-Nat, Ra-226, Pb-210, Th-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	8/18/2015 1200		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
			8/21/15 9:45

C15080810

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to:	Energy Laboratories 2393 Salt Creek Hwy Casper WY, 82601	Contact:	Garrin Palmer Ph: 435 678 4115 gpalmer@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Soils 2015	Garrin Palmer	

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
BHV-7	8/18/2015	855	U-Nat, Ra-226, Pb-210, Th-232
BHV-8	8/18/2015	810	U-Nat, Ra-226, Pb-210, Th-232

Comments:

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	8/18/2015 1200		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Cheryl Mitchell	8/21/15 9:45

C15080810

ATTACHMENT J

RADON MONITORING GRAPHS AND DATA

White Mesa Mill Radon Sampling Results*

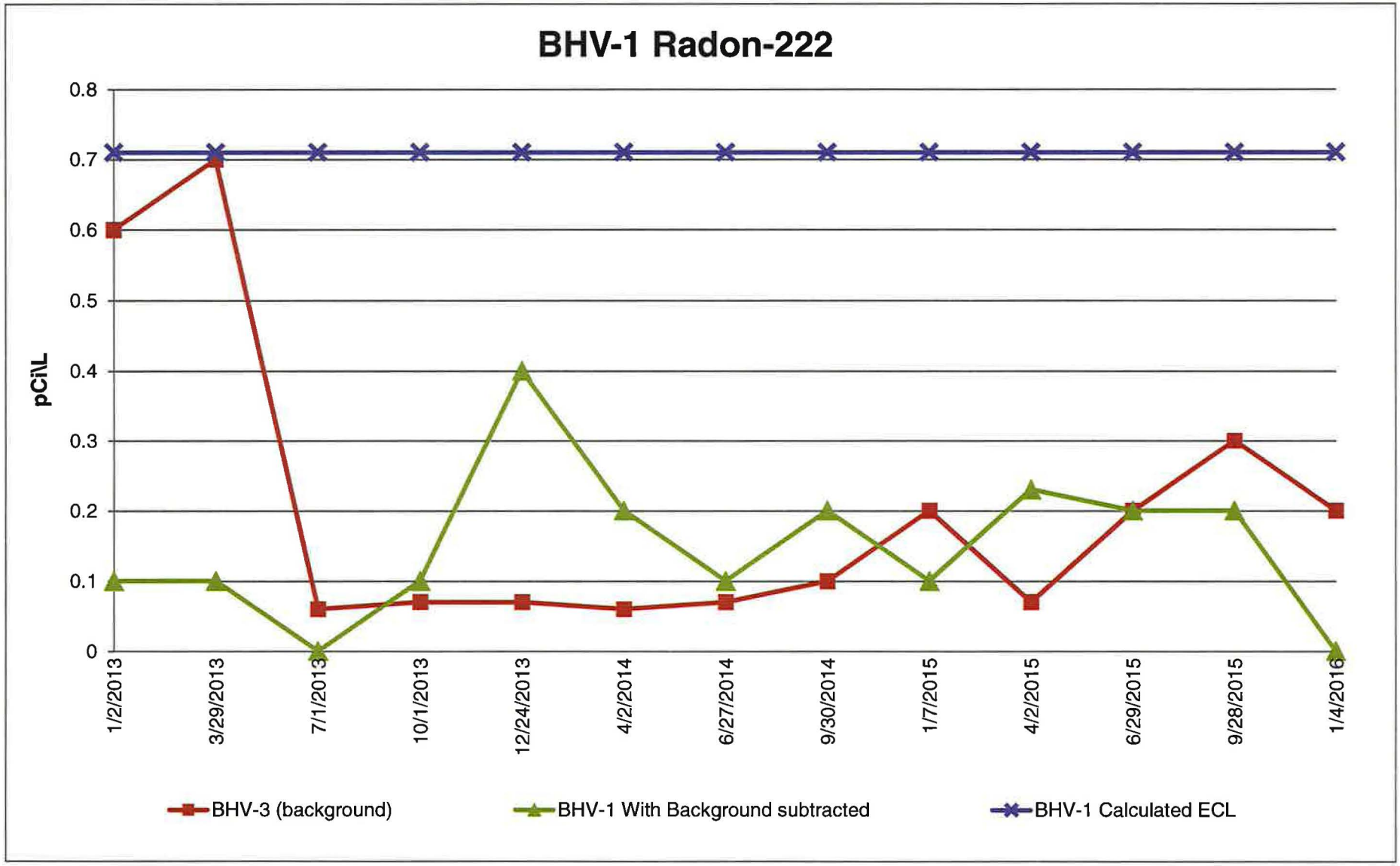
Date	BHV-1 (pCi/L)	BHV-1 Calculated ECL	BHV-2 (pCi-/L)	BHV-2 Calculated ECL	BHV-3 (pCi/L)	BHV-4 (pCi/L)	BHV-4 Calculated ECL	BHV-5 (pCi/L)	BHV-5 Calculated ECL	BHV-6 (pCi/L)	BHV-6 Calculated ECL	BHV-7 (pCi/L)	BHV-7 Calculated ECL	BHV-8 (pCi/L)	BHV-8 Calculated ECL
1/2/2013	0.1	0.71	0	0.34	0.6	0.4	0.5	0	1.43	0.4	0.83	NS	1.12	NS	0.71
3/29/2013	0.1	0.71	0	0.34	0.7	0.3	0.5	0.5	1.43	0.1	0.83	NS	1.12	NS	0.71
7/1/2013	0	0.71	0	0.34	0.06	0	0.5	0	1.43	0	0.83	NS	1.12	NS	0.71
10/1/2013	0.1	0.71	0	0.34	0.07	0	0.5	NA	1.43	0	0.83	NS	1.12	NS	0.71
12/24/2013	0.4	0.71	0	0.34	0.07	0.33	0.5	0.43	1.43	0.73	0.83	NS	1.12	NS	0.71
4/2/2014	0.2	0.71	0	0.34	0.06	0.04	0.5	0.54	1.43	0.24	0.83	NS	1.12	NS	0.71
6/27/2014	0.1	0.71	0	0.34	0.07	0	0.5	0.03	1.43	0.03	0.83	NS	1.12	NS	0.71
9/30/2014	0.2	0.71	0.1	0.34	0.1	0.2	0.5	0.3	1.43	0.2	0.83	NS	1.12	NS	0.71
1/7/2015	0.1	0.71	0	0.34	0.2	0.3	0.5	0.6	1.43	0.2	0.83	0.2	1.12	0.1	0.71
4/2/2015	0.23	0.71	0	0.34	0.07	0.23	0.5	0.43	1.43	0.23	0.83	0.33	1.12	0.03	0.71
6/29/2015	0.2	0.71	0.2	0.34	0.2	0.4	0.5	0.4	1.43	0.3	0.83	0.2	1.12	0.2	0.71
9/28/2015	0.2	0.71	0.1	0.34	0.3	0.2	0.5	0.6	1.43	0.3	0.83	0	1.12	0.1	0.71
1/4/2016	0.0	0.71	0.0	0.34	0.2	0.4	0.5	0.7	1.43	0.1	0.83	0.2	1.12	0.1	0.71

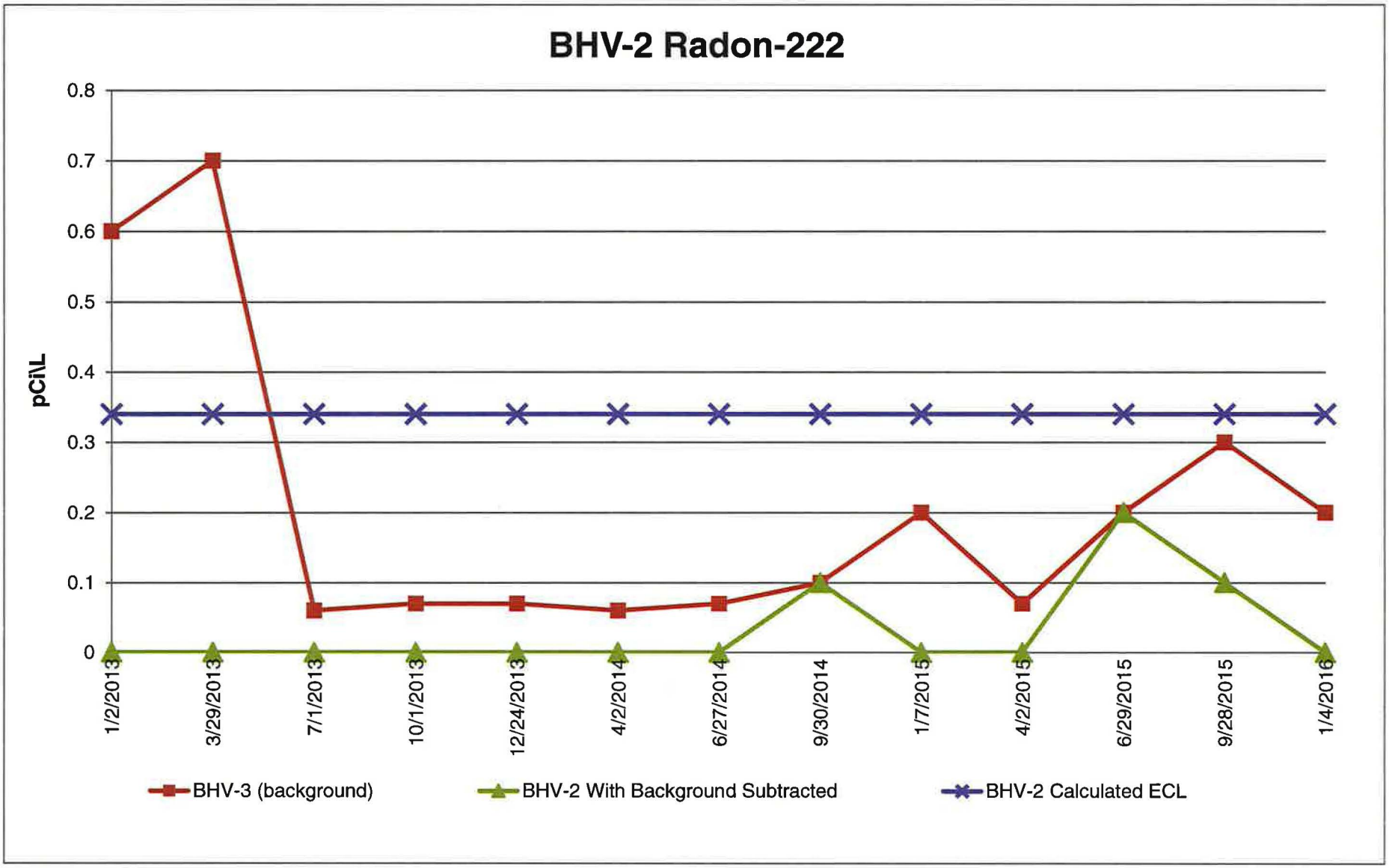
* - Measurements obtained from BHV-3 have been designated as background due to BHV-3's remoteness from the Mill site.
The results in the table above are the above-background results with background (BHV-3) subtracted. Any negative values are reported as zero for graphical purposes.
NA - Not Available - the canister was damaged. No data reported.
NS - Not Sampled - EFRI installed and began radon sampling at BHV-7 and BHV-8 in the fourth quarter of 2014.

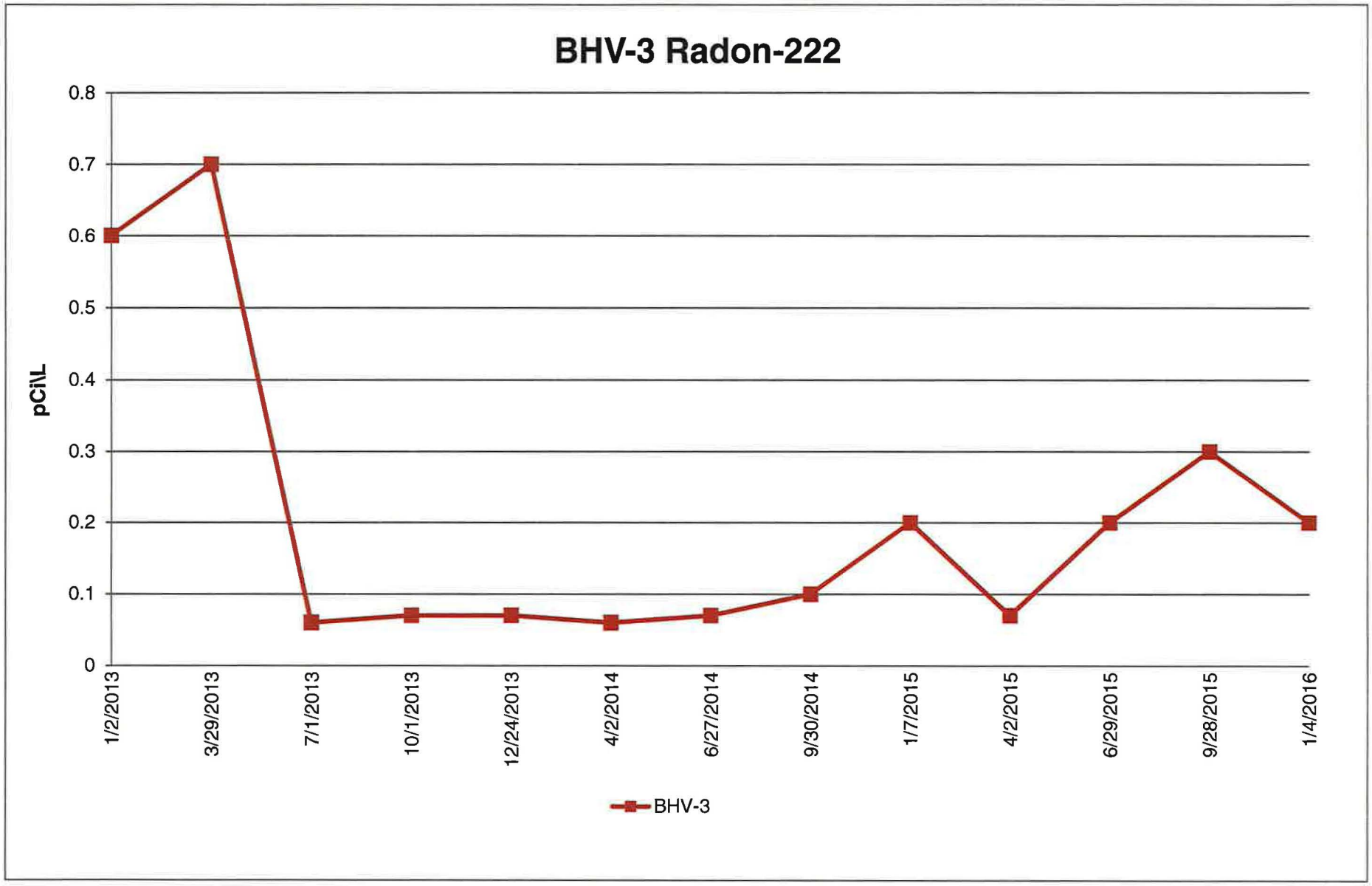
White Mesa Mill Radon Sampling

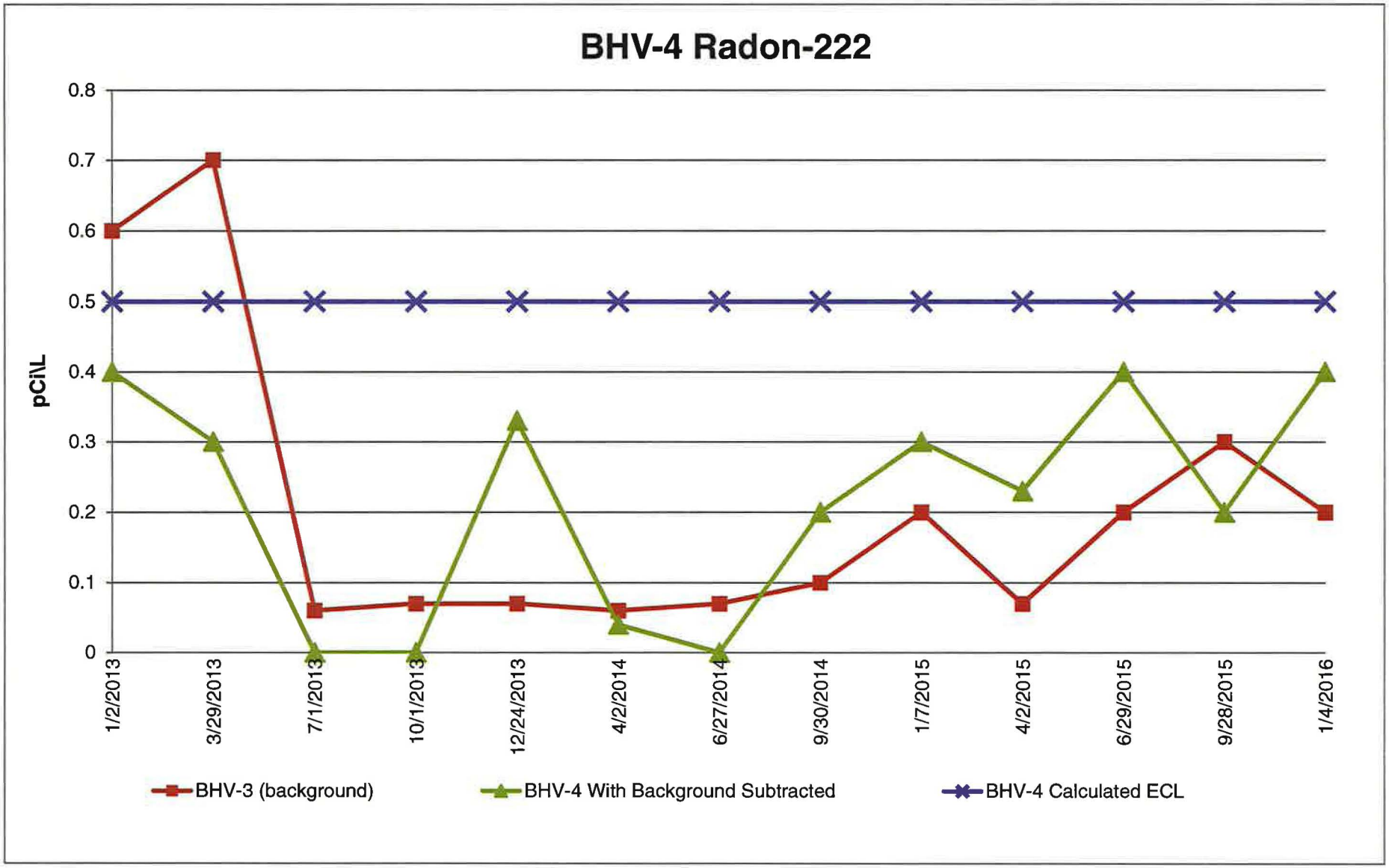
Quarterly Field Blank Results

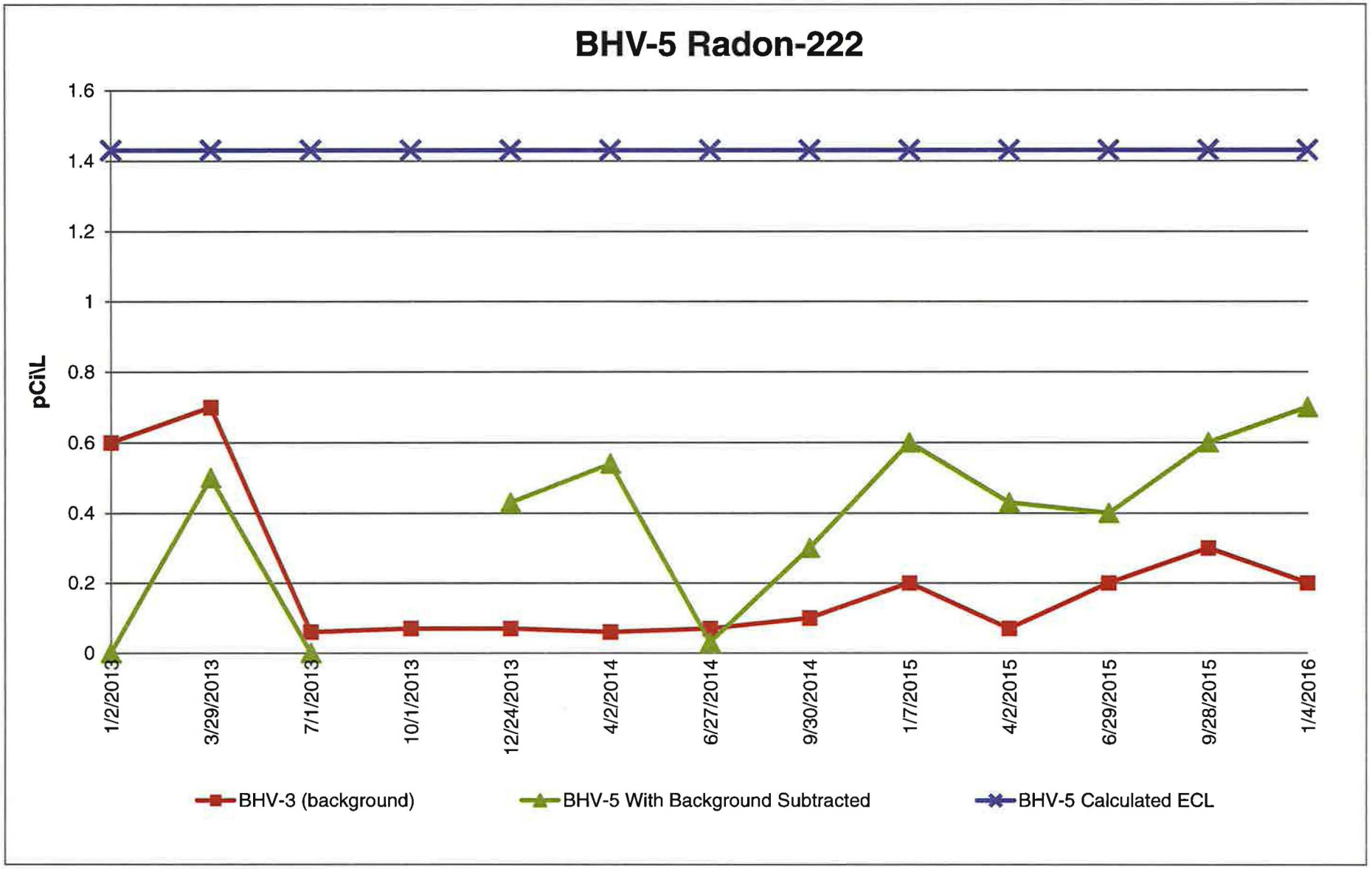
Date	Field Blank (pCi/L)
1/2/2013	2.4
3/29/2013	1.4
7/1/2013	0.7
10/1/2013	0.3
12/24/2013	0.7
4/2/2014	1.6
6/27/2014	1.1
9/30/2014	0.8
1/7/2015	1.4
4/2/2015	1.0
6/29/2015	1.7
9/28/2015	1.5
1/4/2016	1.8

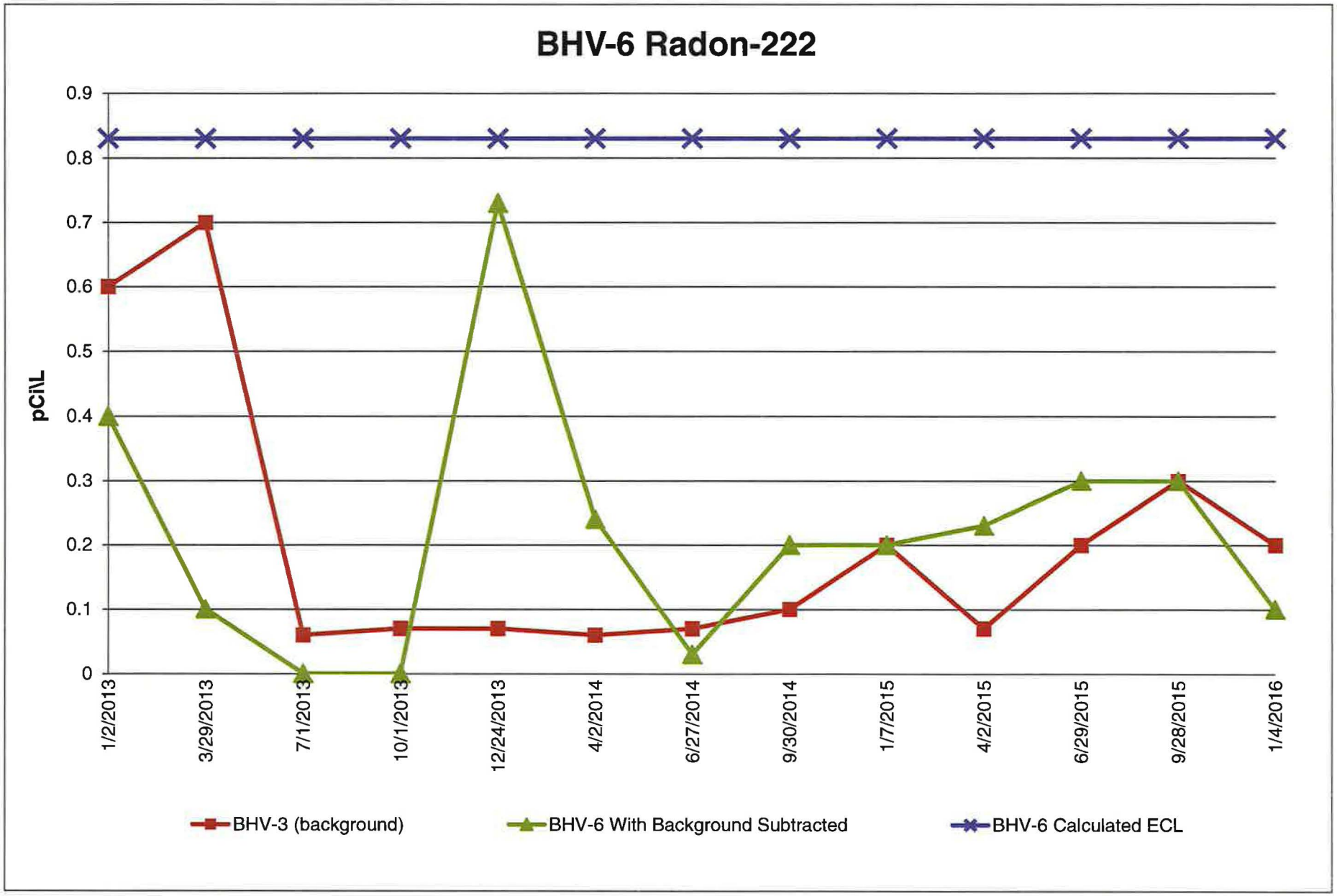

BHV-1 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-1 With Background subtracted
BHV-1 Calculated ECL

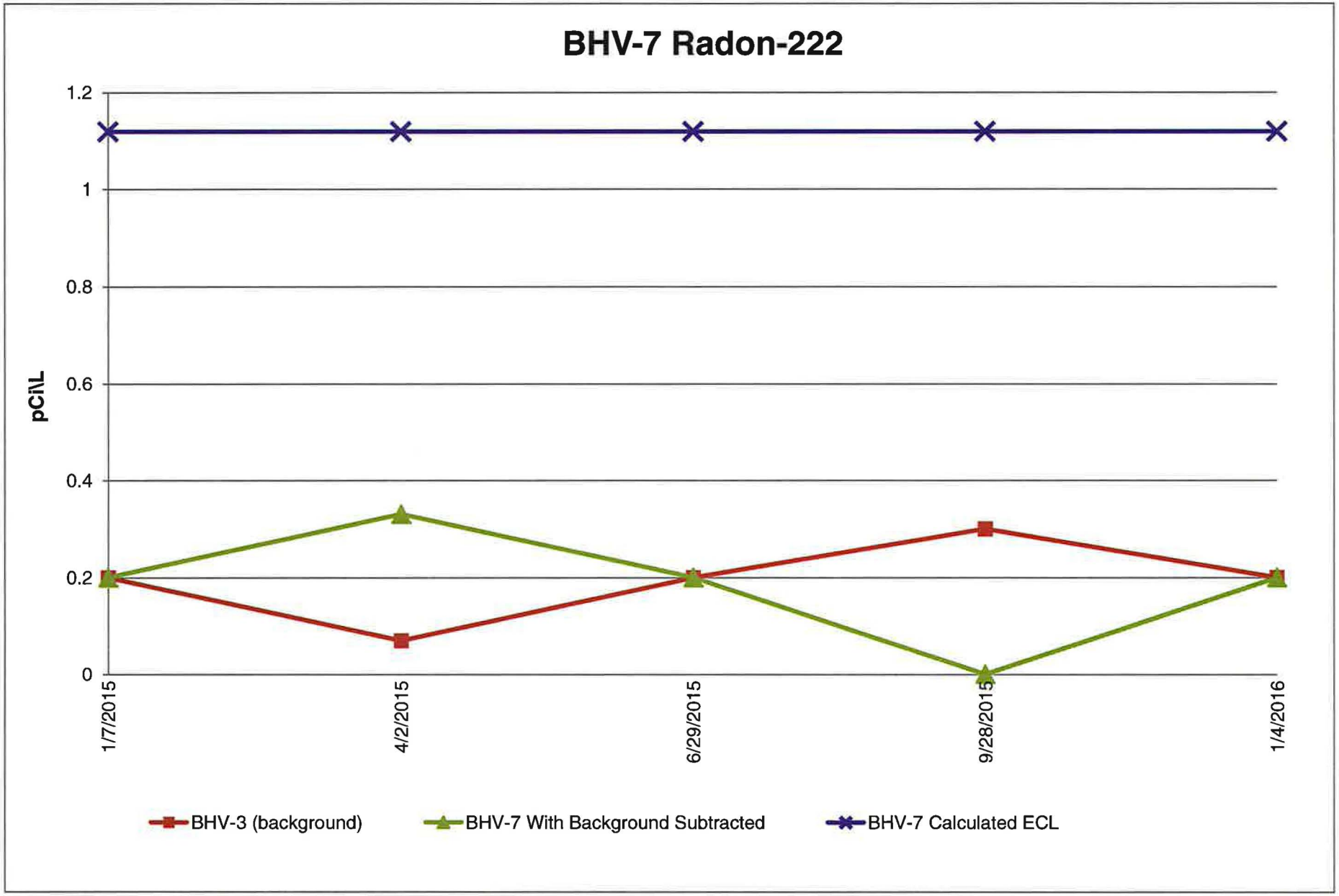

BHV-2 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-2 With Background Subtracted
BHV-2 Calculated ECL

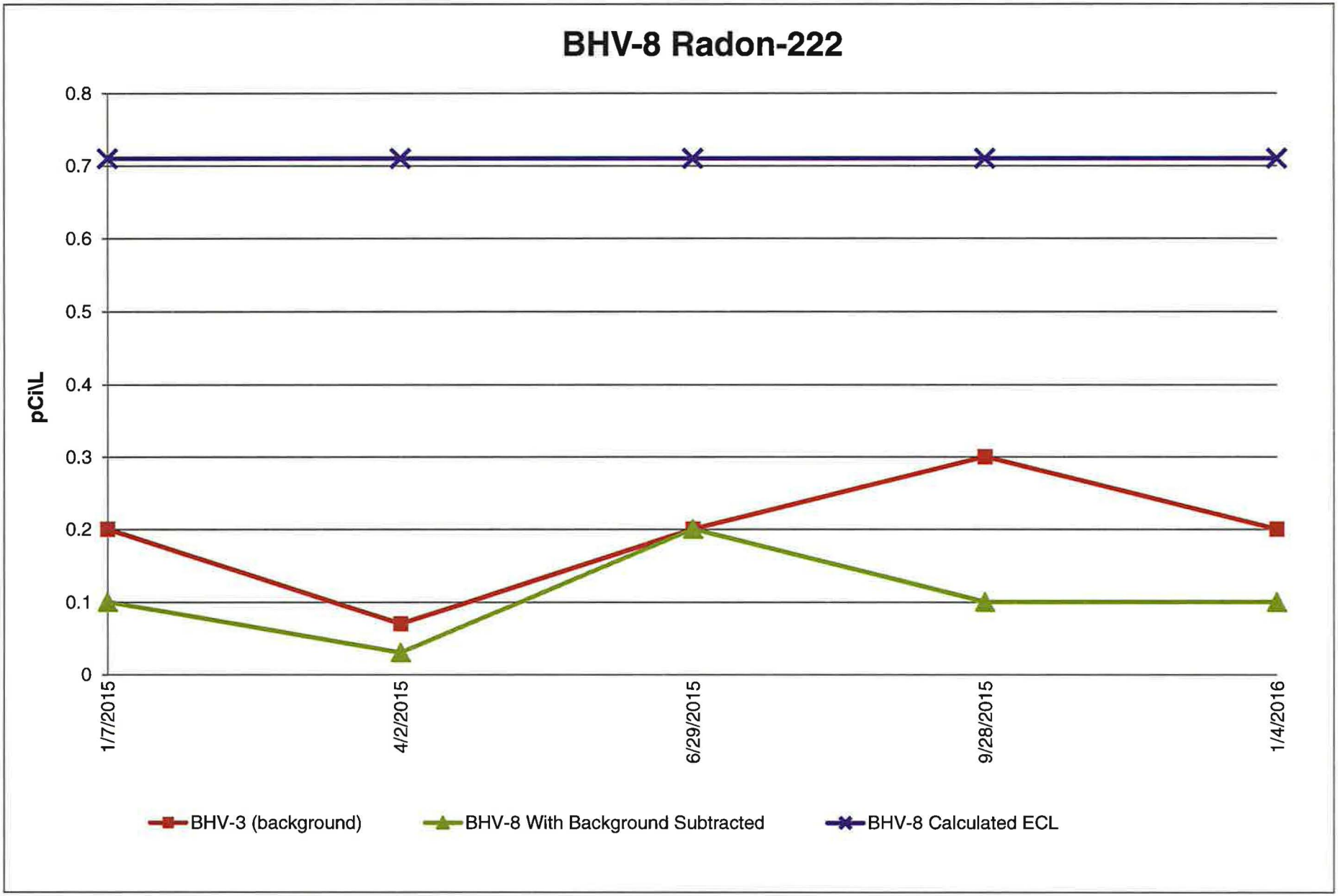

BHV-3 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3


BHV-4 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-4 With Background Subtracted
BHV-4 Calculated ECL


BHV-5 Radon-222
pCi\L
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-5 With Background Subtracted
BHV-5 Calculated ECL


BHV-6 Radon-222
pCi\L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-6 With Background Subtracted
BHV-6 Calculated ECL


BHV-7 Radon-222
1.2
1
0.8
0.6
0.4
0.2
0
pCi\L
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-7 With Background Subtracted
BHV-7 Calculated ECL


BHV-8 Radon-222
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
pCi\L
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
BHV-3 (background)
BHV-8 With Background Subtracted
BHV-8 Calculated ECL

Calculation of Location-Specific Effluent Concentration Limits for Radon Track Etch Monitoring Stations at White Mesa Mill

Calculation Methodology

For the purpose of evaluating alpha track data and compliance with the effluent concentration limit for radon, two referenced limits are listed in the regulations (10 CFR Part 20 Appendix B, Table 2, which are incorporated by reference into R313-15-302(2)(b)(i)). One limit (1x 10^{-10} uCi/ml or 0.1 pCi/l) is applicable in instances where radon daughters are present with the radon, and are in 100% equilibrium with the parent Rn-222. The other listed concentration limit (1 x 10^{-8} uCi/ml or 10 pCi/l) is applicable when radon daughters are not present. Both limits represent the concentration at which a member of the public would receive a 50 mrem dose assuming 100% (8760 hours) occupancy.

At the White Mesa Mill, the assumption of 100% equilibrium of radon progeny with parent Rn-222 is unrealistic given the short half-lives of the nuclides considered and the short travel time to the monitoring locations. Radon emanates from the ground (or mill tailings) without daughters present, and the daughters grow in over time. It is therefore necessary to evaluate radon daughter equilibrium at each air monitoring station utilizing site-specific wind speed and distance information to derive site-specific Effluent Concentration Limits (ECLs) for each station.

Such disequilibrium situations and alternative calculations are anticipated by the regulations and, in particular, R313-15-302(3) provides a means by which the licensee may adjust the effluent concentration values in 10 CFR Part 20 Appendix B, Table 2, which are incorporated by reference into R313-15-302(2)(b)(i), to account for disequilibrium. The regulatory purpose of such an adjustment is to appropriately take into account the actual characteristics of the measured effluents, including radioactive decay equilibrium.

An established (EPA, 1986) outdoor equilibrium formula to determine the appropriate Equilibrium Factor for use in calculating the ECL for disequilibrium conditions was used. The EPA expression of the outdoor Equilibrium Factor (EF) is derived by the following equation:

$$EF = 1.0 - 0.0479\exp^{(-t/4.39)} - 2.1963\exp^{(-t/38.6)} + 1.2442\exp^{(-t/28.4)}$$

[Where: t is the travel time in minutes (distance/wind speed)]

Once the Equilibrium Factor has been determined, the ECL for each air monitoring station is determined by dividing the 0.1 pCi/l limit (for situations when daughters are present) by the Equilibrium Factor (EF).

Results

By utilizing the above formula, the appropriate (equilibrium adjusted) ECLs for the location was calculated. In developing the ECLs, distances and corresponding travel times have been determined by:

- assuming a nominal centroid located approximately at the vanadium dryer stack,

- calculating average wind speeds appropriate for each direction from the centroid to each monitoring station location, and
- using Google Earth to develop the distances.

Meteorological data collected at the Mill's Met Station were utilized to compute the average wind speed for different directions. These data are applicable and sufficient for the for the purpose of these calculations.

It should be noted when comparing actual measurement values to the derived ECLs that the derived ECL provides ample protection for members of the public. More specifically, if dose calculations had been performed utilizing current ICRP 65 dose conversion conventions, the ECLs established here would represent approximately 25 mrem for continuous exposure at the monitoring stations. Therefore these values can serve as appropriate ALARA goals, since they yield doses well below the 100 mrem standard for individual members of the public.

References

United States Environmental Protection Agency (EPA). (1986). *Final rule for radon-222 emissions from licensed uranium mill tailings.* Washington, D.C.: Office of Radiation Programs, U.S. Environmental Protection Agency.

ATTACHMENT K

CELL 2 RADON FLUX DATA

National Emission Standards for Hazardous Air Pollutants
2015 Radon Flux Measurement Program

White Mesa Mill
6425 South Highway 191
Blanding, Utah 84511

July 2015 Sampling Results
Cell 2

Prepared for: Energy Fuels Resources (USA) Inc.
6425 S. Highway 191
P.O. Box 809
Blanding, Utah 84511

Prepared by: Tellco Environmental
P.O. Box 3987
Grand Junction, Colorado 81502

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Appendix A. Charcoal Canister Analyses Support Documents

Appendix B. Recount Data Analyses

Appendix C. Radon Flux Sample Laboratory Data, Including Blanks

Appendix D. Sample Locations Map (Figure 2)

1. INTRODUCTION

During July 20-21, 2015 Tellco Environmental, LLC (Tellco) of Grand Junction, Colorado, provided support to Energy Fuels Resources (USA) Inc. (Energy Fuels) to conduct radon flux measurements at its White Mesa Mill site regarding the required National Emission Standards for Hazardous Air Pollutants (NESHAPs) Radon Flux Measurements. These measurements are required of Energy Fuels to show compliance with Federal Regulations (further discussed in Section 3 below).

The standard is not an average per facility, but is an average per radon source. The standard allows mill owners or operators the option of either making a single set of measurements to represent the year or making multiple measurements over a one year period (e.g., weekly, monthly, or quarterly intervals). For the year 2015, Energy Fuels has opted to conduct radon flux measurements on a semiannual basis.

This report presents the radon flux measurements results for Cell 2 for the second half of the year 2015. Radon flux measurements were also performed for Cell 2 during January 2015; the results of that sampling, as well as radon flux measurements for Cell 3, are presented in separate reports. Tellco was contracted to provide radon canisters, equipment, and canister-placement personnel as well as lab analysis of samples collected. Energy Fuels personnel provided support for loading and unloading charcoal from the canisters. This report details the procedures employed by Energy Fuels and Tellco to obtain the results presented in Section 9.0 of this report.

2. SITE DESCRIPTION

The White Mesa Mill facility is located in San Juan County in southeastern Utah, six miles south of Blanding, Utah. The mill began operations in 1980 for the purpose of extracting uranium and vanadium from feed stocks. Processing effluents from the operation are deposited in lined cells, which vary in depth. Cell 1, Cell 4A, and Cell 4B did not require radon flux sampling, as explained in Section 3 below.

Cell 2, which has a total area of approximately 270,624 m^2, has been filled and covered with interim cover. This cell is comprised of one region, an interim soil cover of varying thickness, which requires NESHAPs radon flux monitoring. There was no standing liquid and were no apparent exposed tailings within Cell 2 during this sampling.

Cell 3, which has a total area of approximately 288,858 m^2, is nearly filled with tailings sand and is undergoing pre-closure activities. This cell is comprised of two source regions that require NESHAPs radon monitoring: a soil cover region of varying thickness and an exposed tailings "beaches" region. A portion of Cell 3 is covered by standing liquid in lower elevation areas. As previously mentioned, the results of radon flux measurements for Cell 3 are presented in separate reports.

3. REGULATORY REQUIREMENTS FOR THE SITE

Radon emissions from the uranium mill tailings at this site are regulated by the State of Utah's Division of Radiation Control and administered by the Utah Division of Air Quality under generally applicable standards set by the U.S. Environmental Protection Agency (EPA) for Operating Mills.

Applicable regulations are specified in 40 CFR Part 61, Subpart W, National Emission Standards for Radon Emissions from Operating Mill Tailings, with technical procedures in Appendix B. At present, there are no Subpart T uranium mill tailings at this site. These regulations are a subset of the NESHAPs. According to subsection 61.252 Standard, (a) radon-222 emissions to ambient air from an existing uranium mill tailings pile shall not exceed an average of 20 pCi/m^2-s for each pile (or cell). Subsection 61.253, Determining Compliance, states that: "Compliance with the emission standard in this subpart shall be determined annually through the use of Method 115 of Appendix B." Cell 1 is completely covered with standing liquid and therefore no radon flux measurements are required on Cell 1. The repaired Cell 4A, and newly constructed Cell 4B, were both constructed after December 15, 1989 and each was constructed with less than 40 acres surface area. Cell 4A and 4B comply with the requirements of 40 CFR 61.252(b), therefore no radon flux measurements are required on either Cell 4A or 4B.

4. SAMPLING METHODOLOGY

Radon emissions were measured using Large Area Activated Charcoal Canisters (canisters) in conformance with 40 CFR, Part 61, Appendix B, Method 115, Restrictions to Radon Flux Measurements, (EPA, 2015). These are passive gas adsorption sampling devices used to determine the flux rate of radon-222 gas from a surface. The canisters were constructed using a 10-inch diameter PVC end cap containing a bed of 180 grams of activated, granular charcoal. The prepared charcoal was placed in the canisters on a support grid on top of a ½ inch thick layer of foam and secured with a retaining ring under 1½ inches of foam (see Figure 1, page 10).

One hundred sampling locations were distributed throughout Cell 2 (consisting of one region) as depicted on the Sample Locations Map (see Figure 2, Appendix D). Each charged canister was placed directly onto the surface (open face down) and exposed to the surface for 24 hours. Radon gas adsorbed onto the charcoal and the subsequent radioactive decay of the entrained radon resulted in radioactive lead-214 and bismuth-214. These radon progeny isotopes emit characteristic gamma photons that can be detected through gamma spectroscopy. The original total activity of the adsorbed radon was calculated from these gamma ray measurements using calibration factors derived from cross-calibration of standard sources containing known total activities of radium-226 with geometry identical to the counted samples and from the principles of radioactive decay.

After approximately 24 hours, the exposed charcoal was transferred to a sealed plastic sample container (to prevent radon loss and/or further exposure during transport), identified and labeled, and transported to the Tellco laboratory in Grand Junction, Colorado for analysis. Tellco personnel maintained custody of the samples from collection through lab analysis.

Upon completion of on-site activities, the field equipment was alpha and beta-gamma scanned by Energy Fuels Radiation Safety personnel for possible contamination resulting from fieldwork activities. All of the field equipment used was subsequently released for unrestricted use.

5. FIELD OPERATIONS

5.1 Equipment Preparation

All charcoal was dried at 110°C before use in the field. Unused charcoal and recycled charcoal were treated the same. 180-gram aliquots of dried charcoal were weighed and placed in sample containers.

Proper balance operation was verified daily by checking a standard weight. The balance readout agreed with the known standard weight to within ± 0.1 percent.

After acceptable balance check, empty containers were individually placed on the balance and the scale was re-zeroed with the container on the balance. Unexposed and dried charcoal was carefully added to the container until the readout registered 180 grams. The lid was immediately placed on the container and sealed with plastic tape. The balance was checked for readout drift between readings.

Sealed containers with unexposed charcoal were placed individually in the shielded counting well, with the bottom of the container centered over the detector, and the background count rate was documented. Three five-minute background counts were conducted on ten percent of the containers, selected at random to represent the "batch". If the background counts were too high to achieve an acceptable lower limit of detection (LLD), the entire charcoal batch was labeled non-conforming and recycled through the heating/drying process.

5.2 Sample Locations, Identification, and Placement

On July 20, 2015, 100 sampling locations were spread out throughout the Cell 2 covered region. The approximate sampling locations that were established for previous samplings of Cell 2 were used for the placement of the canisters, although the actual sample identification numbers (IDs) are different. An individual ID was assigned to each sample point, using a sequential alphanumeric system indicating the charcoal batch and physical location within the region (e.g., F01…F100). This ID was written on an adhesive label and affixed to the top of the canister. The sample ID, date, and time of placement were recorded on the radon flux measurements data sheets for the set of one hundred measurements.

Prior to placing a canister at each sample location, the retaining ring, screen, and foam pad of each canister were removed to expose the charcoal support grid. A pre-measured charcoal charge was selected from a batch, opened and distributed evenly across the support grid. The canister was then reassembled and placed face down on the surface at each sampling location. Care was exercised not to push the device into the soil surface. The canister rim was "sealed" to the surface using a berm of local borrow material.

Five canisters (blanks) were similarly processed and these canisters were kept inside an airtight plastic bag during the 24-hour testing period.

5.3 Sample Retrieval

On July 21, 2015 at the end of the 24-hour testing period, all canisters were retrieved, disassembled and each charcoal sample was individually poured through a funnel into a container. Identification numbers were transferred to the appropriate container, which was sealed and placed in a box for transport. Retrieval date and time were recorded on the same data sheets as the sample placement information. The blank samples were similarly processed.

One of the samples (F96) was dropped during the retrieval process, spilling the charcoal. The remaining 99 charcoal samples from the Cell 2 covered region were successfully retrieved and containerized during the retrieval and unloading process.

5.4 Environmental Conditions

A rain gauge and thermometer were placed at Cell 2 to monitor rainfall and air temperatures during sampling; additionally, Energy Fuels maintains an onsite rain gauge.

In accordance with 40 CFR, Part 61, Appendix B, Method 115:

- Measurements were not initiated within 24 hours of rainfall at the site.
- There was no rainfall during the 24-hour sampling period.
- All canister seals remained intact during the 24-hour sampling period.
- The criteria regarding 35 degree F minimum ambient air temperature and unfrozen ground do not apply when performing sampling at multiple times throughout the year; however, the minimum air temperature during the 24-hour sampling period was 56 degrees F, and the ground was not frozen.

6. SAMPLE ANALYSIS

6.1 Apparatus

Apparatus used for the analysis:

- Single- or multi-channel pulse height analysis system, Ludlum Model 2200 with a Teledyne 3" x 3" sodium iodide, thallium-activated (NaI(Tl)) detector.
- Lead shielded counting well approximately 40 cm deep with 5-cm thick lead walls and a 7-cm thick base and 5 cm thick top.
- National Institute of Standards and Technology (NIST) traceable aqueous solution radium-226 absorbed onto 180 grams of activated charcoal.
- Ohaus Model C501 balance with 0.1-gram sensitivity.

6.2 Sample Inspection and Documentation

Once in the laboratory, the integrity of each charcoal container was verified by visual inspection of the plastic container. Laboratory personnel checked for damaged or unsealed containers and verified that the data sheet was complete.

All of the 99 sample containers and 5 blank containers received and inspected at the Tellco analytical laboratory were ultimately verified as valid and no damaged or unsealed containers were observed.

6.3 Background and Sample Counting

The gamma ray counting system was checked daily, including background and radium-226 source measurements prior to and after each counting session. Based on calibration statistics, using two sources with known radium-226 content, background and source control limits were established for each Ludlum/Teledyne system with shielded counting well (see Appendix A).

Gamma ray counting of exposed charcoal samples included the following steps:

- The length of count time was determined by the activity of the sample being analyzed, according to a data quality objective of a minimum of 1,000 accrued counts for any given sample.
- The sample container was centered on the NaI gamma detector and the shielded well door was closed.
- The sample was counted over a determined count length and then the mid-sample count time, date, and gross counts were documented on the radon flux measurements data sheet and used in the calculations.
- The above steps were repeated for each exposed charcoal sample.
- Approximately 10 percent of the containers counted were selected for recounting. These containers were recounted on the next day following the original count.

7. QUALITY CONTROL (QC) AND DATA VALIDATION

Charcoal flux measurement QC samples included the following intra-laboratory analytical frequency objectives:

- Blanks, 5 percent, and
- Recounts, 10 percent

All sample data were subjected to validation protocols that included assessments of sensitivity, precision, accuracy, and completeness. All method-required data quality objectives (EPA, 2015) were attained.

7.1 Sensitivity

A total of five blanks were analyzed by measuring the radon progeny activity in samples subjected to all aspects of the measurement process, excepting exposure to the source region. These blank sample measurements comprised approximately 5 percent of the field measurements. Analysis of the five blank samples measured radon flux rates ranging from approximately 0.02 to 0.03 pCi/m^2-s, with an average of approximately 0.02 pCi/m^2-s. The lower limit of detection (LLD) was approximately 0.04 pCi/m^2-s.

7.2 Precision

Ten recount measurements, distributed throughout the sample set, were performed by replicating analyses of individual field samples (see Appendix B). These recount measurements comprised approximately 10 percent of the total number of samples analyzed. The precision of recount measurements, expressed as relative percent difference (RPD), for sample results above 1 pCi/m^2-s ranged from less than 0.1 percent to 5.3 percent with an average precision of approximately 2.2 percent RPD.

7.3 Accuracy

Accuracy of field measurements was assessed daily by counting two laboratory control samples with known Ra-226 content. Accuracy of these lab control sample measurements, expressed as percent bias, ranged from approximately -2.0 percent to +2.0 percent. The arithmetic average bias of the lab control sample measurements was approximately 0.0 percent (see Appendix A).

7.4 Completeness

Ninety-nine out of the total 100 samples from the Cell 2 cover region were verified, representing 99 percent completeness.

8. CALCULATIONS

Radon flux rates were calculated for charcoal collection samples using calibration factors derived from cross-calibration to sources with known total activity with identical geometry as the charcoal containers. A yield efficiency factor was used to calculate the total activity of the sample charcoal containers. Individual field sample result values presented were not reduced by the results of the field blank analyses.

In practice, radon flux rates were calculated by a database computer program. The algorithms utilized by the data base program were as follows:

Equation 8.1:

$$\text{pCi Rn-222/m}^2\text{sec} = \frac{N}{[Ts*A*b*0.5^{(d/91.75)}]}$$

where: N = net sample count rate, cpm under 220-662 keV peak
Ts = sample duration, seconds
b = instrument calibration factor, cpm per pCi; values used:
0.1697, for M-01/D-21 and
0.1711, for M-02/D-20
d = decay time, elapsed hours between sample mid-time and count mid-time
A = area of the canister, m^2

Equation 8.2:

$$\text{Error},2\sigma = 2\times \frac{\sqrt{\frac{\text{Gross Sample, cpm}}{\text{Sample Count,t,min}} + \frac{\text{Background Sample,cpm}}{\text{Background Count,t,min}}}}{\text{Net,cpm}} \times \text{Sample Concentration}$$

Equation 8.3:

$$LLD = \frac{2.71 + (4.65)(S_b)}{[Ts*A*b*0.5^{(d/1.75)}]}$$

where: 2.71 = constant
4.65 = confidence interval factor
S_b = standard deviation of the background count rate
Ts = sample duration, seconds
b = instrument calibration factor, cpm per pCi; values used:
0.1697, for M-01/D-21 and
0.1711, for M-02/D-20
d = decay time, elapsed hours between sample mid-time and count mid-time
A = area of the canister, m^2

9. RESULTS

9.1 Mean Radon Flux

Referencing 40 CFR, Part 61, Subpart W, Appendix B, Method 115 - Monitoring for Radon-222 Emissions, Subsection 2.1.7 - Calculations, "the mean radon flux for each region of the pile and for the total pile shall be calculated and reported as follows:

(a) The individual radon flux calculations shall be made as provided in Appendix A EPA 86(1). The mean radon flux for each region of the pile shall be calculated by summing all individual flux measurements for the region and dividing by the total number of flux measurements for the region.

(b) The mean radon flux for the total uranium mill tailings pile shall be calculated as follows:

$$J_s = \frac{J_1A_1 + \ldots J_2A_2\ [+]\ \ldots J_iA_i}{A_t}$$

Where: J_s = Mean flux for the total pile (pCi/m^2-s)
J_i = Mean flux measured in region i (pCi/m^2-s)
A_i = Area of region i (m^2)
A_t = Total area of the pile (m^2)"

40 CFR 61, Subpart W, Appendix B, Method 115, Subsection 2.1.8, Reporting states "The results of individual flux measurements, the approximate locations on the pile, and the mean radon flux for each region and the mean radon flux for the total stack [pile] shall be included in the emission test report. Any condition or unusual event that occurred during the measurements that could significantly affect the results should be reported."

9.2 Site Results

Site Specific Sample Results (reference Appendix C)

(a) The mean radon flux for the Cell 2 region at the site is as follows:

Cell 2 - Cover Region = 9.5 pCi/m^2-s (based on 270,624 m^2 area)

Note: Reference Appendix C of this report for the entire summary of individual measurement results.

(b) Using the data presented above, the calculated mean radon flux for Cell 2 is as follows:

Cell 2 = 9.5 pCi/m^2-s

$$\frac{(9.5)(270{,}624)}{270{,}624} = 9.5$$

As shown above, the arithmetic mean radon flux rate of the July 2015 measurements for Cell 2 at Energy Fuels' White Mesa milling facility is below the U.S. Nuclear Regulatory Commission and EPA regulatory standard of 20 pCi/m^2-s.

Appendix C presents the summary of individual measurement results, including blank sample analysis.

Sample locations are depicted on Figure 2, which is included in Appendix D. The map was produced by Tellco.

References

U. S. Environmental Protection Agency, *Radon Flux Measurements on Gardinier and Royster Phosphogypsum Piles Near Tampa and Mulberry, Florida*, EPA 520/5-85-029, NTIS #PB86-161874, January 1986.

U. S. Environmental Protection Agency, *Title 40, Code of Federal Regulations*, July 2015.

U. S. Nuclear Regulatory Commission, *Radiological Effluent and Environmental Monitoring at Uranium Mills*, Regulatory Guide 4.14, April 1980.

U. S. Nuclear Regulatory Commission, *Title 10, Code of Federal Regulations*, Part 40, Appendix A, January 2015.

Figure 1

Large Area Activated Charcoal Canisters Diagram

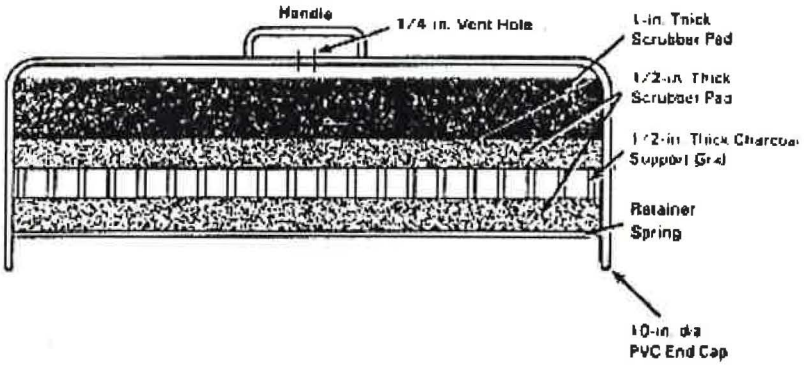


FIGURE 1 Large-Area Radon Collector

Appendix A

Charcoal Canister Analyses Support Documents

ACCURACY APPRAISAL TABLE
JULY 2015 RADON SAMPLING

ENERGY FUELS RESOURCES
WHITE MESA MILL, BLANDING, UTAH
2015 NESHAPs RADON FLUX MEASUREMENTS
CELL 2
SAMPLING DATES: 07/20/15-07/21/15

SYSTEM	COUNT	Bkg Counts (1 min. each)			Source Counts (1 min. each)			AVG NET	YIELD	FOUND	SOURCE	KNOWN	% BIAS
I.D.	DATE	#1	#2	#3	#1	#2	#3	cpm	cpm/pCi	pCi	ID	pCi	
M-01/D-21	7/23/2015	140	136	142	10296	10253	10299	10143	0.1697	59772	GS-04	59300	0.8%
M-01/D-21	7/23/2015	119	134	117	10482	10283	10291	10229	0.1697	60275	GS-04	59300	1.6%
M-01/D-21	7/24/2015	130	149	120	10222	10247	10454	10175	0.1697	59957	GS-04	59300	1.1%
M-01/D-21	7/24/2015	125	137	124	10321	10383	10466	10261	0.1697	60467	GS-04	59300	2.0%
M-01/D-21	7/25/2015	142	148	122	10505	10218	10315	10209	0.1697	60157	GS-04	59300	1.4%
M-01/D-21	7/25/2015	135	142	137	10092	10437	10385	10167	0.1697	59910	GS-04	59300	1.0%
M-01/D-21	7/23/2015	140	136	142	10066	9891	10137	9892	0.1697	58291	GS-05	59300	-1.7%
M-01/D-21	7/23/2015	119	134	117	10031	10090	10091	9947	0.1697	58617	GS-05	59300	-1.2%
M-01/D-21	7/24/2015	130	149	120	10194	10096	10143	10011	0.1697	58994	GS-05	59300	-0.5%
M-01/D-21	7/24/2015	125	137	124	10115	10259	10176	10055	0.1697	59250	GS-05	59300	-0.1%
M-01/D-21	7/25/2015	142	148	122	10188	10019	10153	9983	0.1697	58825	GS-05	59300	-0.8%
M-01/D-21	7/25/2015	135	142	137	10082	9987	10227	9961	0.1697	58696	GS-05	59300	-1.0%
M-02/D-20	7/23/2015	116	124	119	10296	10466	10414	10272	0.1711	60037	GS-04	59300	1.2%
M-02/D-20	7/23/2015	127	119	118	10250	10396	10485	10256	0.1711	59940	GS-04	59300	1.1%
M-02/D-20	7/24/2015	126	118	128	10324	10310	10350	10204	0.1711	59638	GS-04	59300	0.6%
M-02/D-20	7/24/2015	132	131	126	10304	10270	10398	10194	0.1711	59581	GS-04	59300	0.5%
M-02/D-20	7/25/2015	114	127	137	10395	10220	10568	10268	0.1711	60014	GS-04	59300	1.2%
M-02/D-20	7/25/2015	125	129	122	10275	10362	10305	10189	0.1711	59548	GS-04	59300	0.4%
M-02/D-20	7/23/2015	116	124	119	10185	9972	10025	9941	0.1711	58101	GS-05	59300	-2.0%
M-02/D-20	7/23/2015	127	119	118	10199	10105	10197	10046	0.1711	58712	GS-05	59300	-1.0%
M-02/D-20	7/24/2015	126	118	128	10392	10204	10148	10124	0.1711	59170	GS-05	59300	-0.2%
M-02/D-20	7/24/2015	132	131	126	10307	10223	10117	10086	0.1711	58948	GS-05	59300	-0.6%
M-02/D-20	7/25/2015	114	127	137	10071	10303	10154	10050	0.1711	58738	GS-05	59300	-0.9%
M-02/D-20	7/25/2015	125	129	122	10255	9949	9990	9939	0.1711	58091	GS-05	59300	-2.0%
												AVERAGE PERCENT BIAS FOR ALL ANALYTICAL SESSIONS:	0.0%

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, Utah

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-01/D-21 Calibration Date: 7/18/15 Due Date: 7/18/16

Scaler S/N: 51572 High Voltage: 1137 Window: 4.42 Thrshld: 2.20

Detector S/N: 41533 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3K pCi

Blank Canister Bkgd. Range, cpm: 2 σ = 92 to 167 3 σ = 74 to 186

Gross Source Range, cpm: 2 σ = 9915 to 10529 3 σ = 9761 to 10682

Technician: DL Cox

All counts times are one minute.

Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
		#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
7/23/15	DLC	140	136	142	139	10296	10253	10299	10283	Y
7/23/15	DLC	119	134	117	123	10482	10283	10291	10352	Y
7/24/15	DLC	130	149	120	133	10222	10247	10454	10308	Y
7/24/15	DLC	125	137	124	129	10321	10383	10466	10390	Y
7/25/15	DLC	142	148	122	137	10505	10218	10315	10346	Y
7/25/15	DLC	135	142	137	138	10092	10437	10385	10305	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, Utah

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-01 / D-21 Calibration Date: 7/18/15 Due Date: 7/18/16

Scaler S/N: 51572 High Voltage: 1137 Window: 4.42 Thrshld: 2.20

Detector S/N: 41533 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3K pCi

Blank Canister Bkgd. Range, cpm: 2 σ = 92 to 167 3 σ = 74 to 186

Gross Source Range, cpm: 2 σ = 9825 to 10510 3 σ = 9654 to 10681

Technician: DL Cooper

All counts times are one minute.

Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
		#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
7/23/15	DLC	140	136	142	139	10066	9891	10137	10031	Y
7/23/15	DLC	119	134	117	123	10031	10090	10091	10071	Y
7/24/15	DLC	130	149	120	133	10194	10096	10143	10144	Y
7/24/15	DLC	125	137	124	129	10115	10259	10176	10183	Y
7/25/15	DLC	142	148	122	137	10188	10019	10153	10120	Y
7/25/15	DLC	135	142	137	138	10082	9987	10227	10099	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, Utah

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-02/D-20 Calibration Date: 7/18/15 Due Date: 7/18/16

Scaler S/N: 51563 High Voltage: 863 Window: 4.42 Thrshld: 2.20

Detector S/N: 41532 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3KpC

Blank Canister Bkgd. Range, cpm: 2 σ = 90 to 156 3 σ = 74 to 173

Gross Source Range, cpm: 2 σ = 9909 to 10688 3 σ = 9714 to 10883

Technician: DL Cooper

All counts times are one minute.

Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
		#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
7/23/15	DLC	116	124	119	120	10296	10466	10414	10392	Y
7/23/15	DLC	127	119	118	121	10250	10396	10485	10377	Y
7/24/15	DLC	126	118	128	124	10324	10310	10350	10328	Y
7/24/15	DLC	132	131	126	130	10304	10270	10398	10324	Y
7/25/15	DLC	114	127	137	126	10395	10220	10568	10394	Y
7/25/15	DLC	125	129	122	125	10275	10362	10305	10314	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

CHARCOAL CANISTER ANALYSIS SYSTEM

SITE LOCATION: White Mesa Mill, Blanding, Utah

CLIENT: Energy Fuels Resources (USA)

Calibration Check Log

System ID: M-02/D-20 Calibration Date: 7/18/15 Due Date: 7/18/16

Scaler S/N: 51563 High Voltage: 863 Window: 4.42 Thrshld: 2.20

Detector S/N: 41532 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3 KpCi

Blank Canister Bkgd. Range, cpm: 2 σ = 90 to 156 3 σ = 74 to 173

Gross Source Range, cpm: 2 σ = 9904 to 10570 3 σ = 9738 to 10737

Technician: DL Coop

All counts times are one minute.

Date	By	Background Counts (1 min. each)				Source Counts (1 min. each)				ok?
		#1	#2	#3	Avg.	#1	#2	#3	Average	Y/N
7/23/15	DLC	116	124	119	120	10185	9972	10025	10061	Y
7/23/15	DLC	127	119	118	121	10199	10105	10197	10167	Y
7/24/15	DLC	126	118	128	124	10392	10204	10148	10248	Y
7/24/15	DLC	132	131	126	130	10307	10223	10117	10216	Y
7/25/15	DLC	114	127	137	126	10071	10303	10154	10176	Y
7/25/15	DLC	125	129	122	125	10255	9949	9990	10065	Y

Y/N: Y = average background and source cpm falls within the control limits.
N = average background and source cpm does not fall within the control limits.

The acceptable ranges were determined from prior background and source check data.

BALANCE OPERATION DAILY CHECK

Balance Model: Ohaus Port-o-gram SN: 12307

Standard Weight (g): 300.0 g

Date	Pre-check (g)	Post-check (g)	O.K. ± 0.1 % ?	By
7/23/15	300.0	300.0	Yes	DZ Log
7/24/15	300.0	299.9	Yes	DZ Log
7/25/15	300.0	300.0	Yes	DZ Log

Appendix B

Recount Data Analyses

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 15004.03

PILE: 2 BATCH: F SURFACE: SOIL AIR TEMP MIN: 56°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 7 20 15 RETRIEVED: 7 21 15 CHARCOAL BKG: 141 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CE,DLC, WM, TE COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 7/18/16

RECOUNT CANISTER ANALYSIS:

GRID LOCATION	SAMPLE I. D.	RETRIV HR	RETRIV MIN	ANALYSIS HR	ANALYSIS MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	PRECISION % RPD
F10	F10	7	26	7	40	7	24	15	17	11	1	12741	234.5	32.6	3.3	0.05	
RECOUNT	F10	7	26	7	40	7	25	15	8	55	1	11475	234.5	33.3	3.3	0.05	2.1%
F20	F20	7	46	7	45	7	24	15	17	18	1	11210	231.8	28.9	2.9	0.05	
RECOUNT	F20	7	46	7	45	7	25	15	8	55	1	10308	231.8	29.8	3.0	0.05	3.1%
F30	F30	7	26	7	41	7	24	15	17	32	1	4345	246.9	10.9	1.1	0.05	
RECOUNT	F30	7	26	7	41	7	25	15	8	57	1	3925	246.9	11.1	1.1	0.05	1.8%
F40	F40	7	46	7	46	7	24	15	17	41	3	1104	223.3	0.6	0.1	0.05	
RECOUNT	F40	7	46	7	46	7	25	15	8	59	3	1001	223.3	0.6	0.1	0.05	0.0%
F50	F50	7	26	7	40	7	24	15	17	55	1	2053	241.6	5.0	0.5	0.05	
RECOUNT	F50	7	26	7	40	7	25	15	9	3	1	1860	241.6	5.0	0.5	0.05	0.0%
F60	F60	7	46	7	45	7	24	15	18	3	1	2102	239.7	5.1	0.5	0.05	
RECOUNT	F60	7	46	7	45	7	25	15	9	3	1	1840	239.7	5.0	0.5	0.05	2.0%
F70	F70	8	10	7	55	7	24	15	18	12	1	1618	231.5	3.9	0.4	0.05	
RECOUNT	F70	8	10	7	55	7	25	15	9	6	1	1385	231.5	3.7	0.4	0.05	5.3%
F80	F80	7	58	7	52	7	24	15	18	22	1	2844	233.7	7.1	0.7	0.05	
RECOUNT	F80	7	58	7	52	7	25	15	9	9	1	2483	233.7	6.9	0.7	0.05	2.9%
F90	F90	8	12	7	56	7	24	15	18	32	1	3578	226.7	9.1	0.9	0.05	
RECOUNT	F90	8	12	7	56	7	25	15	9	10	1	3191	226.7	9.1	0.9	0.05	0.0%
F100	F100	7	52	7	51	7	24	15	18	56	5	1327	232.5	0.3	0.0	0.05	
RECOUNT	F100	7	52	7	51	7	25	15	9	12	5	1303	232.5	0.4	0.1	0.05	28.6%
																AVERAGE PERCENT PRECISION FOR THE CELL 2 COVER REGION:	4.6%

Appendix C

Radon Flux Sample Laboratory Data (including Blanks)

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 15004.03

PILE: 2 BATCH: F SURFACE: SOIL AIR TEMP MIN: 56°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 7 20 15 RETRIEVED: 7 21 15 CHARCOAL BKG: 141 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CE,DLC, WM, TE COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 7/18/16

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
F01	F01	7	8	7	36	7	24	15	17	0	1	1043	231.5	2.3	0.2	0.05	
F02	F02	7	10	7	36	7	24	15	17	0	1	3400	231.1	8.4	0.8	0.05	
F03	F03	7	12	7	37	7	24	15	17	2	2	1341	229.1	1.4	0.1	0.05	
F04	F04	7	14	7	37	7	24	15	17	2	1	7308	231.5	18.4	1.8	0.05	
F05	F05	7	16	7	38	7	24	15	17	5	3	1129	237.1	0.6	0.1	0.05	
F06	F06	7	18	7	38	7	24	15	17	5	3	1290	229.5	0.7	0.1	0.05	
F07	F07	7	20	7	39	7	24	15	17	8	2	1484	226.4	1.6	0.2	0.05	
F08	F08	7	22	7	39	7	24	15	17	7	1	3774	233.5	9.4	0.9	0.05	
F09	F09	7	24	7	40	7	24	15	17	11	2	1305	238.8	1.3	0.1	0.05	
F10	F10	7	26	7	40	7	24	15	17	11	1	12741	234.5	32.6	3.3	0.05	
F11	F11	7	28	7	41	7	24	15	17	12	1	1813	238.3	4.4	0.4	0.05	
F12	F12	7	30	7	41	7	24	15	17	12	1	14814	233.1	38.0	3.8	0.05	
F13	F13	7	32	7	42	7	24	15	17	14	1	3203	234.9	8.0	0.8	0.05	
F14	F14	7	34	7	42	7	24	15	17	14	1	6659	233.3	16.9	1.7	0.05	
F15	F15	7	36	7	43	7	24	15	17	15	1	6718	227.9	17.2	1.7	0.05	
F16	F16	7	38	7	43	7	24	15	17	15	1	1095	235.9	2.5	0.2	0.05	
F17	F17	7	40	7	44	7	24	15	17	17	1	3520	239.3	8.9	0.9	0.05	
F18	F18	7	42	7	44	7	24	15	17	17	1	6884	231.4	17.6	1.8	0.05	
F19	F19	7	44	7	45	7	24	15	17	18	1	3429	230.3	8.6	0.9	0.05	
F20	F20	7	46	7	45	7	24	15	17	18	1	11210	231.8	28.9	2.9	0.05	
F21	F21	7	8	7	37	7	24	15	17	20	2	1154	231.7	1.1	0.1	0.05	
F22	F22	7	10	7	37	7	24	15	17	22	4	1144	236.9	0.4	0.1	0.05	
F23	F23	7	12	7	38	7	24	15	17	26	3	1261	234.1	0.7	0.1	0.05	
F24	F24	7	14	7	38	7	24	15	17	26	2	1366	236.0	1.4	0.1	0.05	
F25	F25	7	16	8	22	7	24	15	17	28	1	23816	234.1	59.6	6.0	0.04	
F26	F26	7	18	7	39	7	24	15	17	28	1	2716	232.2	6.6	0.7	0.05	
F27	F27	7	20	7	40	7	24	15	17	30	1	1671	231.0	4.0	0.4	0.05	
F28	F28	7	22	7	40	7	24	15	17	30	2	1257	231.7	1.3	0.1	0.05	
F29	F29	7	24	8	24	7	24	15	17	32	1	11796	238.5	29.4	2.9	0.04	
F30	F30	7	26	7	41	7	24	15	17	32	1	4345	246.9	10.9	1.1	0.05	
F31	F31	7	28	7	41	7	24	15	17	33	1	5709	233.1	14.6	1.5	0.05	
F32	F32	7	30	7	42	7	24	15	17	33	1	3412	237.4	8.5	0.8	0.05	
F33	F33	7	32	7	42	7	24	15	17	35	1	3606	240.7	9.1	0.9	0.05	
F34	F34	7	34	7	43	7	24	15	17	35	1	1944	231.2	4.7	0.5	0.05	
F35	F35	7	36	7	43	7	24	15	17	36	1	4749	230.8	12.1	1.2	0.05	
F36	F36	7	38	7	44	7	24	15	17	36	1	2336	231.8	5.7	0.6	0.05	
F37	F37	7	40	8	26	7	24	15	17	38	1	5044	234.6	12.5	1.2	0.05	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 15004.03

PILE: 2 BATCH: F SURFACE: SOIL AIR TEMP MIN: 56°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 7 20 15 RETRIEVED: 7 21 15 CHARCOAL BKG: 141 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CE,DLC, WM, TE COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 7/18/16

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
F38	F38	7	42	7	45	7	24	15	17	38	1	2762	231.0	6.8	0.7	0.05	
F39	F39	7	44	7	45	7	24	15	17	40	1	10496	235.1	27.3	2.7	0.05	
F40	F40	7	46	7	46	7	24	15	17	41	3	1104	223.3	0.6	0.1	0.05	
F41	F41	7	8	7	36	7	24	15	17	43	2	1021	230.3	1.0	0.1	0.05	
F42	F42	7	10	7	36	7	24	15	17	43	3	1066	239.3	0.6	0.1	0.05	
F43	F43	7	12	7	37	7	24	15	17	48	6	1020	229.5	0.1	0.0	0.05	
F44	F44	7	14	7	37	7	24	15	17	45	1	2289	229.3	5.5	0.6	0.05	
F45	F45	7	16	7	38	7	24	15	17	52	1	1548	232.7	3.7	0.4	0.05	
F46	F46	7	18	7	38	7	24	15	17	52	1	16099	239.6	41.3	4.1	0.05	
F47	F47	7	20	7	39	7	24	15	17	53	1	6709	242.3	17.1	1.7	0.05	
F48	F48	7	22	7	39	7	24	15	17	53	1	3008	229.0	7.4	0.7	0.05	
F49	F49	7	24	7	40	7	24	15	17	55	1	1534	238.4	3.6	0.4	0.05	
F50	F50	7	26	7	40	7	24	15	17	55	1	2053	241.6	5.0	0.5	0.05	
F51	F51	7	28	7	41	7	24	15	17	56	1	3056	233.0	7.6	0.8	0.05	
F52	F52	7	30	7	41	7	24	15	17	56	1	3401	232.5	8.5	0.8	0.05	
F53	F53	7	32	7	42	7	24	15	17	58	1	2003	227.5	4.9	0.5	0.05	
F54	F54	7	34	7	42	7	24	15	17	58	1	2415	237.8	5.9	0.6	0.05	
F55	F55	7	36	7	43	7	24	15	18	0	2	1258	236.2	1.3	0.1	0.05	
F56	F56	7	38	7	43	7	24	15	18	0	1	2372	227.7	5.8	0.6	0.05	
F57	F57	7	40	7	44	7	24	15	18	2	1	8743	226.3	22.7	2.3	0.05	
F58	F58	7	42	7	44	7	24	15	18	2	1	4445	235.3	11.3	1.1	0.05	
F59	F59	7	44	7	45	7	24	15	18	3	1	4947	236.9	12.7	1.3	0.05	
F60	F60	7	46	7	45	7	24	15	18	3	1	2102	239.7	5.1	0.5	0.05	
F61	F61	7	52	7	51	7	24	15	18	5	1	1533	232.5	3.7	0.4	0.05	
F62	F62	7	54	7	51	7	24	15	18	5	1	1221	231.9	2.8	0.3	0.05	
F63	F63	7	56	7	52	7	24	15	18	6	1	1119	231.1	2.6	0.3	0.05	
F64	F64	7	58	7	52	7	24	15	18	6	1	8052	231.7	20.8	2.1	0.05	
F65	F65	8	0	7	53	7	24	15	18	8	1	7921	233.6	20.7	2.1	0.05	
F66	F66	8	2	7	53	7	24	15	18	8	1	11301	226.5	29.4	2.9	0.05	
F67	F67	8	4	7	54	7	24	15	18	9	1	9683	226.7	25.4	2.5	0.05	
F68	F68	8	6	7	54	7	24	15	18	10	2	1016	231.0	1.0	0.1	0.05	
F69	F69	8	8	7	55	7	24	15	18	12	1	1558	231.6	3.8	0.4	0.05	
F70	F70	8	10	7	55	7	24	15	18	12	1	1618	231.5	3.9	0.4	0.05	
F71	F71	8	12	7	56	7	24	15	18	14	1	7071	235.7	18.5	1.9	0.05	
F72	F72	8	14	7	56	7	24	15	18	14	1	5156	230.9	13.3	1.3	0.05	
F73	F73	8	16	7	57	7	24	15	18	15	1	4286	226.8	11.1	1.1	0.05	
F74	F74	8	16	7	57	7	24	15	18	15	1	8045	229.4	21.0	2.1	0.05	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 15004.03

PILE: 2 BATCH: F SURFACE: SOIL AIR TEMP MIN: 56°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 7 20 15 RETRIEVED: 7 21 15 CHARCOAL BKG: 141 cpm Wt. Out: 180.0 g.
FIELD TECHNICIANS: CE,DLC, WM, TE COUNTED BY: DLC DATA ENTRY BY: DLC TARE WEIGHT: 29.2 g.
COUNTING SYSTEM I.D.: M01/D21, M02/D20 CAL. DUE: 7/18/16

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
F75	F75	8	18	7	57	7	24	15	18	17	2	1730	231.0	1.9	0.2	0.05	
F76	F76	8	18	7	57	7	24	15	18	17	2	1755	229.0	2.0	0.2	0.05	
F77	F77	7	52	7	51	7	24	15	18	20	3	1217	232.6	0.7	0.1	0.05	
F78	F78	7	54	7	51	7	24	15	18	20	3	1194	232.4	0.7	0.1	0.05	
F79	F79	7	56	7	52	7	24	15	18	23	2	1494	239.1	1.6	0.2	0.05	
F80	F80	7	58	7	52	7	24	15	18	22	1	2844	233.7	7.1	0.7	0.05	
F81	F81	8	0	7	53	7	24	15	18	25	1	4726	236.6	12.2	1.2	0.05	
F82	F82	8	2	7	53	7	24	15	18	25	1	7426	238.9	19.2	1.9	0.05	
F83	F83	8	4	7	54	7	24	15	18	27	1	1700	237.1	4.2	0.4	0.05	
F84	F84	8	6	7	54	7	24	15	18	27	2	1660	236.8	1.8	0.2	0.05	
F85	F85	8	8	7	55	7	24	15	18	29	1	2369	232.5	6.0	0.6	0.05	
F86	F86	8	10	7	55	7	24	15	18	29	1	4368	231.1	11.2	1.1	0.05	
F87	F87	8	12	7	56	7	24	15	18	31	1	1499	235.1	3.6	0.4	0.05	
F88	F88	8	14	7	56	7	24	15	18	31	1	6570	231.3	17.1	1.7	0.05	
F89	F89	8	14	7	56	7	24	15	18	32	1	9252	229.4	24.4	2.4	0.05	
F90	F90	8	12	7	56	7	24	15	18	32	1	3578	226.7	9.1	0.9	0.05	
F91	F91	8	10	7	55	7	24	15	18	34	1	1083	227.7	2.5	0.3	0.05	
F92	F92	8	8	7	55	7	24	15	18	34	1	3838	228.8	9.8	1.0	0.05	
F93	F93	8	6	7	54	7	24	15	18	35	1	1533	237.3	3.7	0.4	0.05	
F94	F94	8	4	7	54	7	24	15	18	36	2	1017	239.3	1.0	0.1	0.05	
F95	F95	8	2	7	53	7	24	15	18	39	4	1148	230.7	0.4	0.1	0.05	
F96	F96	8	0	7	53	7	24	15	18	46	8	1001	27.5				SAMPLE LOST - CHARCOAL SPILLED
F97	F97	7	58	7	52	7	24	15	18	52	2	1976	232.2	2.3	0.2	0.05	
F98	F98	7	56	7	52	7	24	15	18	52	3	1002	235.9	0.5	0.1	0.05	
F99	F99	7	54	7	51	7	24	15	18	57	5	1005	234.6	0.2	0.0	0.05	
F100	F100	7	52	7	51	7	24	15	18	56	5	1327	232.5	0.3	0.0	0.05	

AVERAGE RADON FLUX RATE FOR THE CELL 2 COVER REGION: 9.5 pCi/m²s

0.1 MIN
59.6 MAX

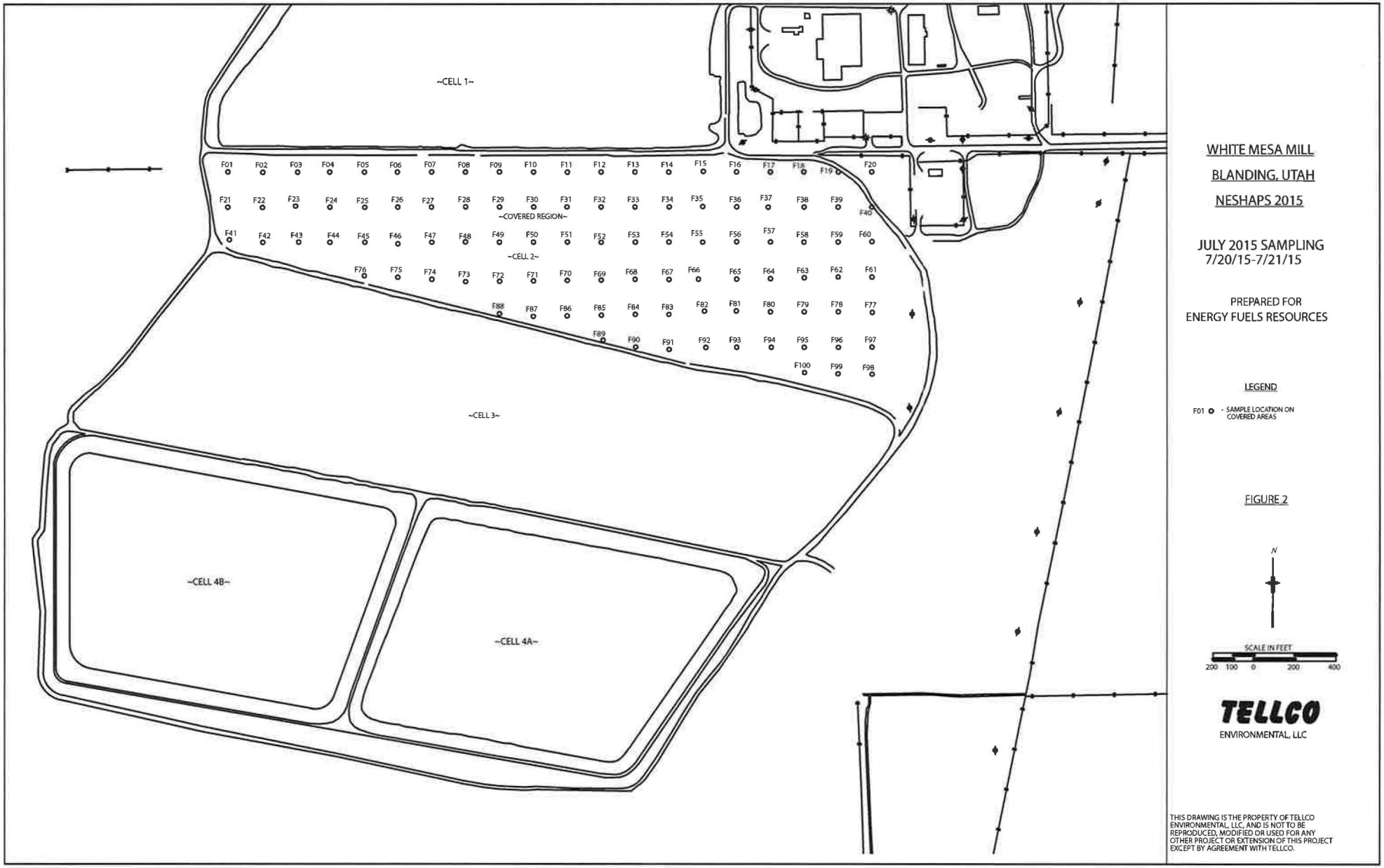
BLANK CANISTER ANALYSIS:

GRID LOCATION	SAMPLE I. D.	DEPLOY HR	DEPLOY MIN	RETRIV HR	RETRIV MIN	ANALYSIS MO	ANALYSIS DA	ANALYSIS YR	MID-TIME HR	MID-TIME MIN	CNT (MIN)	GROSS COUNTS	GROSS WT IN	RADON pCi/m²s	± pCi/m²s	LLD pCi/m²s	COMMENTS:
F BLANK 1	F BLANK 1	7	0	7	30	7	23	15	18	4	10	1547	211.3	0.03	0.03	0.04	CONTROL
F BLANK 2	F BLANK 2	7	0	7	30	7	23	15	18	4	10	1519	208.7	0.02	0.03	0.04	CONTROL
F BLANK 3	F BLANK 3	7	0	7	30	7	23	15	18	15	10	1509	209.5	0.02	0.03	0.04	CONTROL
F BLANK 4	F BLANK 4	7	0	7	30	7	23	15	18	15	10	1488	210.4	0.02	0.03	0.04	CONTROL
F BLANK 5	F BLANK 5	7	0	7	30	7	23	15	18	26	10	1562	211.1	0.03	0.03	0.04	CONTROL

AVERAGE BLANK CANISTER ANALYSIS FOR THE CELL 2 COVER REGION: 0.02 pCi/m²s

Appendix D

Sample Locations Map (Figure 2)



WHITE MESA MILL

BLANDING, UTAH

NESHAPS 2015

JULY 2015 SAMPLING
7/20/15-7/21/15

PREPARED FOR
ENERGY FUELS RESOURCES

LEGEND

F01 ○ - SAMPLE LOCATION ON COVERED AREAS

FIGURE 2

N

SCALE IN FEET
200 100 0 200 400

TELLCO
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