Energy Fuels Resources (USA) Inc.
225 Union Blvd. Suite 600
Lakewood, CO, US, 80228
303 974 2140
www.energyfuels.com

August 25, 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
January 1 through June 30, 2016

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 January 1 through June 30, 2016.

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
(January through June 2016)

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

Prepared by:

Energy Fuels Resources (USA) Inc.
225 Union Boulevard, Suite 600
Lakewood, CO 80228

August 25, 2016

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WHITE MESA URANIUM MILL
SEMI-ANNUAL EFFLUENT REPORT, JANUARY THROUGH JUNE 2016

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") 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. 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.

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 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

[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

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.

During the January through June reporting period, samples were collected on April 14, 2016 and June 14, 2016. The data from the April and June sampling are included in the in Attachment F.

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 2016 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 reporting period, 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 first quarter of 2016 or during the fourth quarter of 2015, and therefore, no sampling was completed. The actual analytical results reported by the laboratory for the reporting period (second quarter 2016) are provided in Attachment G to this report.

The south yellowcake dryer and yellowcake baghouse operated during the second quarter of 2016. 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 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 not sampled in the first or second quarter of 2016, because no water was present during this reporting period. Attempts to collect a surface water sample from Westwater Canyon will continue through the next reporting period. If no surface water is available, a sediment sample will be collected as required.

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 1st quarter, and was sampled for TDS, TSS, and the radionuclides during the 2nd 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

In accordance with the Mill's EPM and License, surface soils will be collected during the third quarter of 2016. The sampling results will be discussed in the July through

September Semi-Annual Effluent Report submitted to DWMRC on or before March 1, 2017.

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 January through June 2016. 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 March 2016 for the January through June 2016 reporting period. The March 2016 measurement was 4.1 pCi/(m^2-sec). The March measurement was below the 20.0 pCi/(m^2-sec) standard. The full data report for the March 2016 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 August 25, 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) 1st and 2nd Quarter 2016

Monitoring Station	1st Qtr.Result (uCi/ml)	2nd Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	2.00E-16	1.10E-16	9.00E-14	1.72E-01
BHV2	7.00E-16	2.00E-16	9.00E-14	5.00E-01
BHV4	5.00E-16	2.90E-15	9.00E-14	1.89E+00
BHV5	1.40E-15	3.90E-15	9.00E-14	2.94E+00
BHV6	7.00E-16	1.20E-14	9.00E-14	7.06E+00
BHV7	8.00E-16	1.50E-15	9.00E-14	1.28E+00
BHV8	2.00E-16	1.10E-15	9.00E-14	7.22E-01

Table 3 - Air Monitoring Station Results Th-230 (Comparison to Limits) 1st and 2nd Quarter 2016

Monitoring Station	1st Qtr.Result (uCi/ml)	2nd Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	3.00E-17	7.00E-17	2.00E-14	2.50E-01
BHV2	6.00E-18	3.00E-17	2.00E-14	9.00E-02
BHV4	2.00E-17	5.00E-17	2.00E-14	1.75E-01
BHV5	6.00E-16	4.00E-16	2.00E-14	2.50E+00
BHV6	1.00E-16	1.00E-16	2.00E-14	5.00E-01
BHV7	1.00E-16	9.00E-17	2.00E-14	4.75E-01
BHV8	2.00E-17	1.00E-16	2.00E-14	3.00E-01

Table 4 - Air Monitoring Station Results Ra-226 (Comparison to Limits) 1st and 2nd Quarter 2016

Monitoring Station	1st Qtr.Result (uCi/ml)	2nd Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	3.00E-16	9.00E-16	9.00E-13	6.67E-02
BHV2	8.00E-17	3.00E-16	9.00E-13	2.11E-02
BHV4	5.00E-17	4.00E-16	9.00E-13	2.50E-02
BHV5	6.20E-15	6.00E-16	9.00E-13	3.78E-01
BHV6	9.00E-16	6.00E-15	9.00E-13	3.83E-01
BHV7	1.00E-15	9.00E-16	9.00E-13	1.06E-01
BHV8	3.00E-16	1.90E-15	9.00E-13	1.22E-01

Table 5 - Air Monitoring Station Results Pb-210 (Comparison to Limits)
1st and 2nd Quarter 2016

Monitoring Station	1st Qtr.Result (uCi/ml)	2nd Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	1.40E-14	9.60E-15	6.00E-13	1.97E+00
BHV2	1.50E-14	1.30E-14	6.00E-13	2.33E+00
BHV4	1.70E-14	8.80E-15	6.00E-13	2.15E+00
BHV5	2.30E-14	1.50E-14	6.00E-13	3.17E+00
BHV6	1.70E-14	2.10E-14	6.00E-13	3.17E+00
BHV7	1.70E-14	1.50E-14	6.00E-13	2.67E+00
BHV8	1.60E-14	1.10E-14	6.00E-13	2.25E+00

Table 6 - Air Monitoring Station Results Th-232 (Comparison to Limits)
1st and 2nd Quarter 2016

Monitoring Station	1st Qtr.Result (uCi/ml)	2nd Qtr.Result (uCi/ml)	Effluent Concentration Limit (ECL) (uCI/ml)	Average Percent ECL
BHV1	2.00E-18	3.00E-18	4.00E-15	6.25E-02
BHV2	4.00E-18	4.00E-18	4.00E-15	1.00E-01
BHV4	2.00E-18	5.00E-18	4.00E-15	8.75E-02
BHV5	6.00E-17	3.00E-18	4.00E-15	7.88E-01
BHV6	1.00E-17	4.00E-18	4.00E-15	1.75E-01
BHV7	5.00E-18	3.00E-18	4.00E-15	1.00E-01
BHV8	2.00E-18	2.00E-18	4.00E-15	5.00E-02

Table 7 - Environmental Optically Stimulated Luminescence Dosimeter

Monitoring Station	1st Quarter Result (mrem)	2nd Quarter Result (mrem)	1st Quarter Result Less Background (mrem)	2nd Quarter Result Less Background (mrem)	Cumulative Semiannual Estimate (mrem)
BHV1	53.6	45.1	5.7	3.3	9
BHV2	47.8	43.7	0	1.9	1.9
BHV3	47.9	41.8	0	0	0
BHV4	46.7	37.9	0	0	0
BHV5	51.8	44.2	3.9	2.4	6.3
BHV6	48.9	36.8	1	0	1
BHV7	46.6	38.4	0	0	0
BHV8	46.2	42.8	0	1	1

Table 8 Stack Effluent Concentrations and Release Rates

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.

1st Qtr. 2016

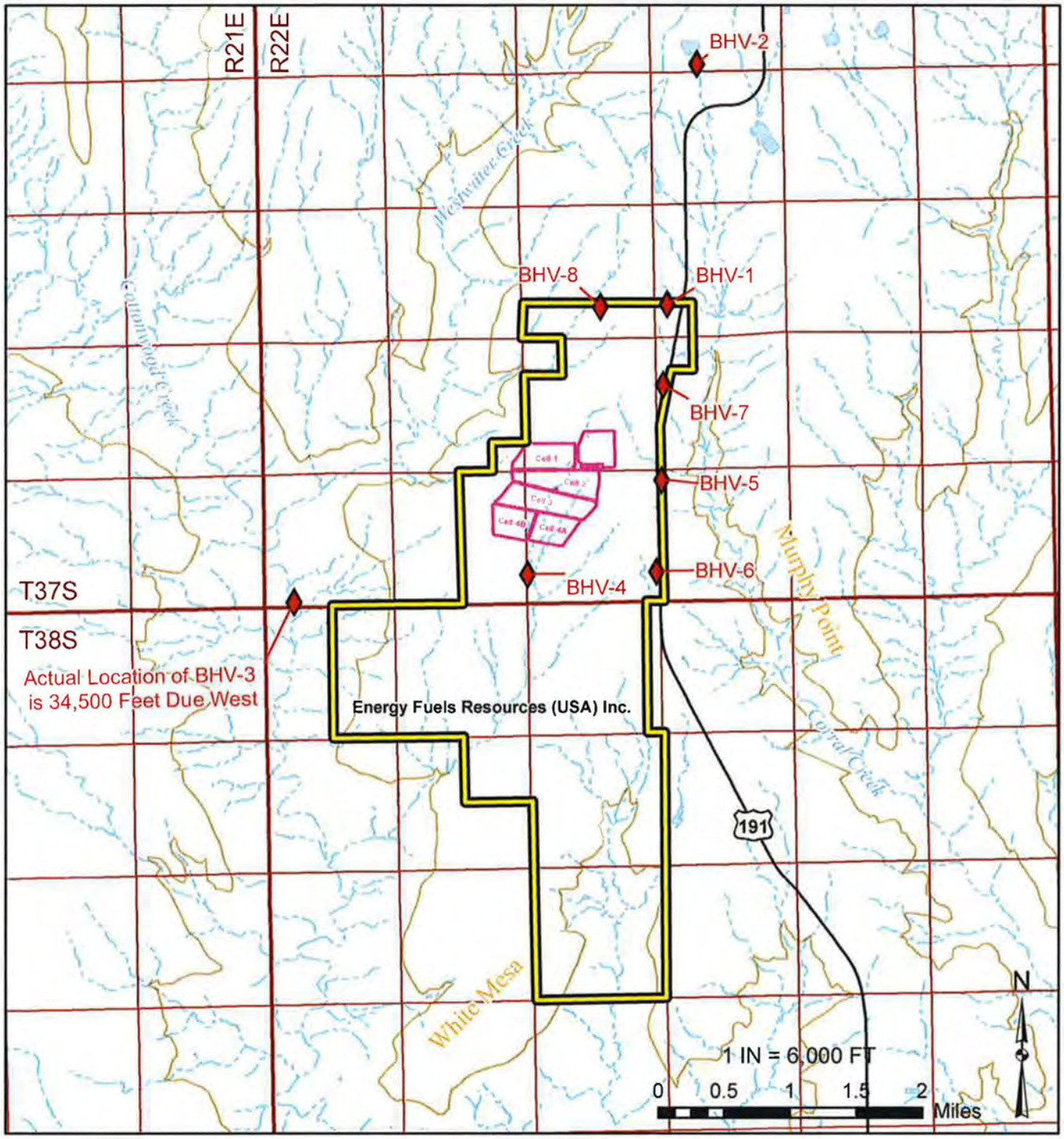
No stack sampling was conducted as the dryers did not run. No grinding or packaging was completed during the 1st quarter.

2nd Qtr. 2016

	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	1.05E-09	1.20E-04	1.09E-14	1.24E-09	2.56E-14	2.92E-09	1.50E-15	1.72E-10	8.24E-13	9.41E-08	1.58E-14	1.80E-09	4.67E-13	5.34E-08
SYC Dryer Scrubber 2	1.02E-09	1.13E-04	2.89E-15	3.19E-10	2.30E-14	2.54E-09	5.95E-16	6.55E-11	1.15E-12	1.26E-07	2.59E-14	2.85E-09	8.14E-13	8.97E-08
YC Packaging Baghouse	4.72E-10	1.18E-05	2.67E-15	6.69E-11	6.53E-14	1.64E-09	1.14E-15	2.85E-11	1.55E-13	3.89E-09	3.42E-14	8.56E-10	2.70E-12	6.77E-08

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:\Source\UT\WhiteMesaMill\MapsMill_PartMonitoring.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

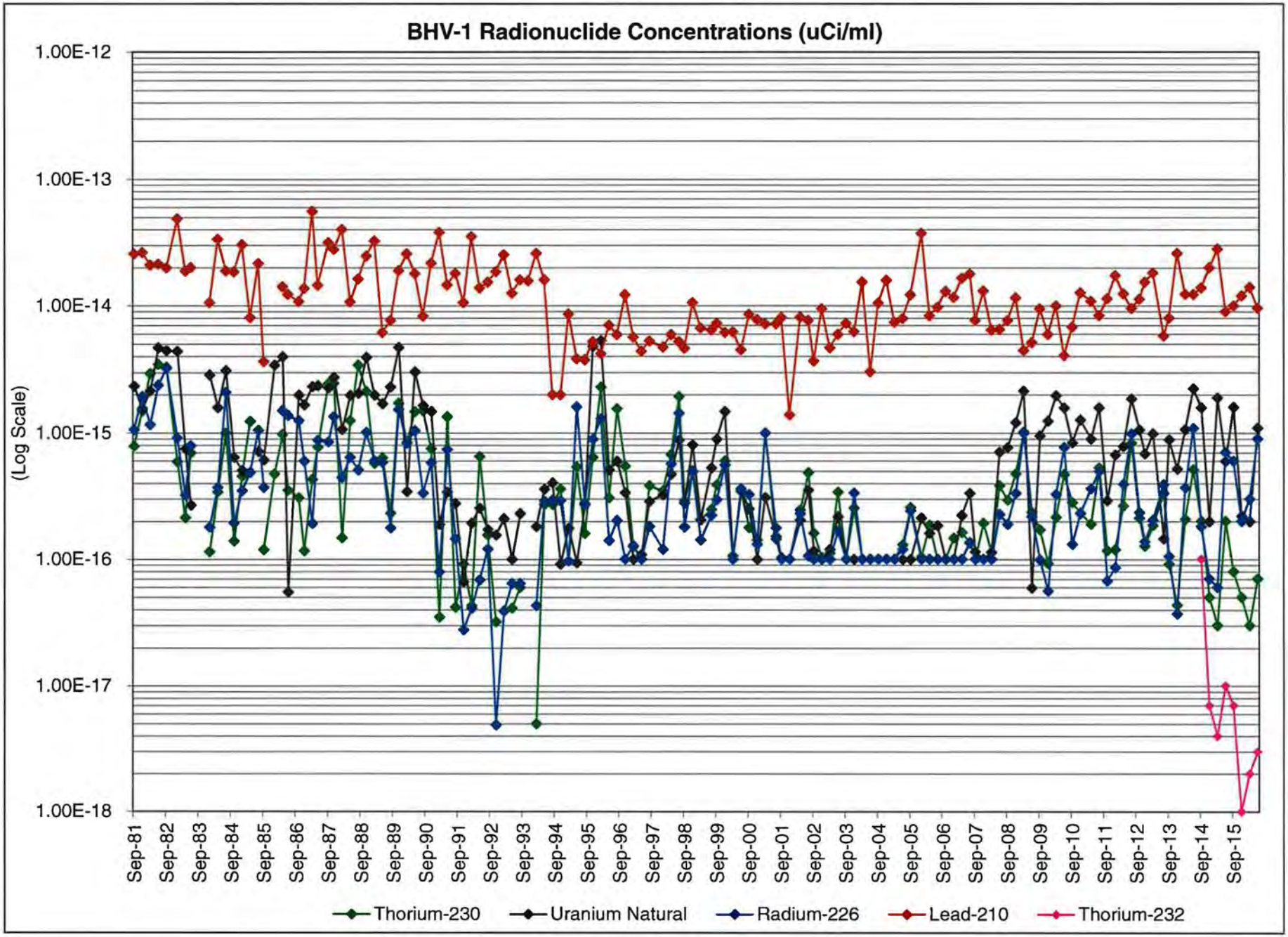
TAB 1

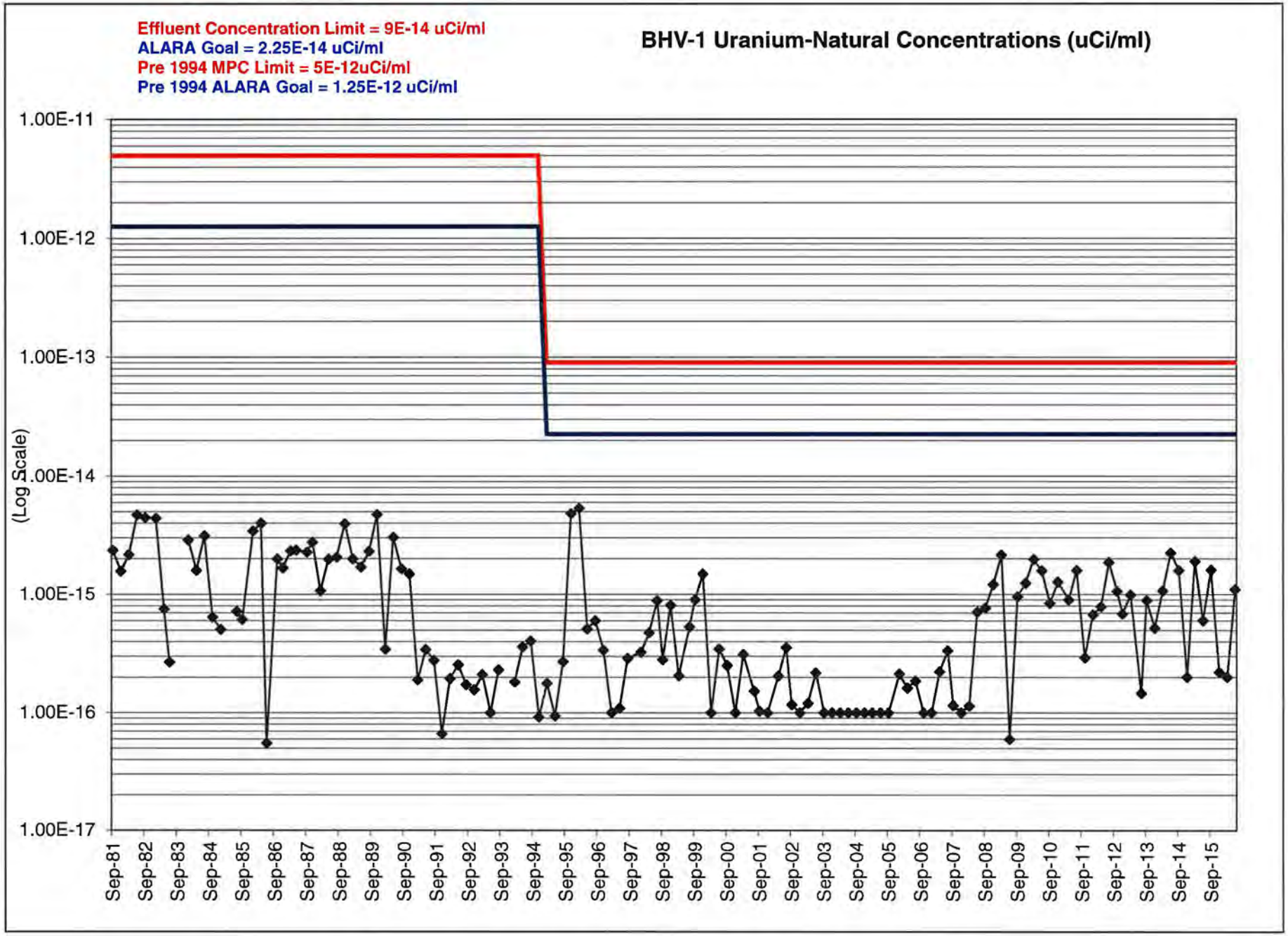
BHV-1 AIR SAMPLING GRAPHS AND DATA TABLE

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
3/28/2016	2.00E-16	9.00E-14	2.25E-14	3.00E-17	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	1.40E-14	6.00E-13	1.50E-13	2.00E-18	4.00E-15	1.00E-15
6/27/2016	1.10E-15	9.00E-14	2.25E-14	7.00E-17	2.00E-14	5.00E-15	9.00E-16	9.00E-13	2.25E-13	9.60E-15	6.00E-13	1.50E-13	3.00E-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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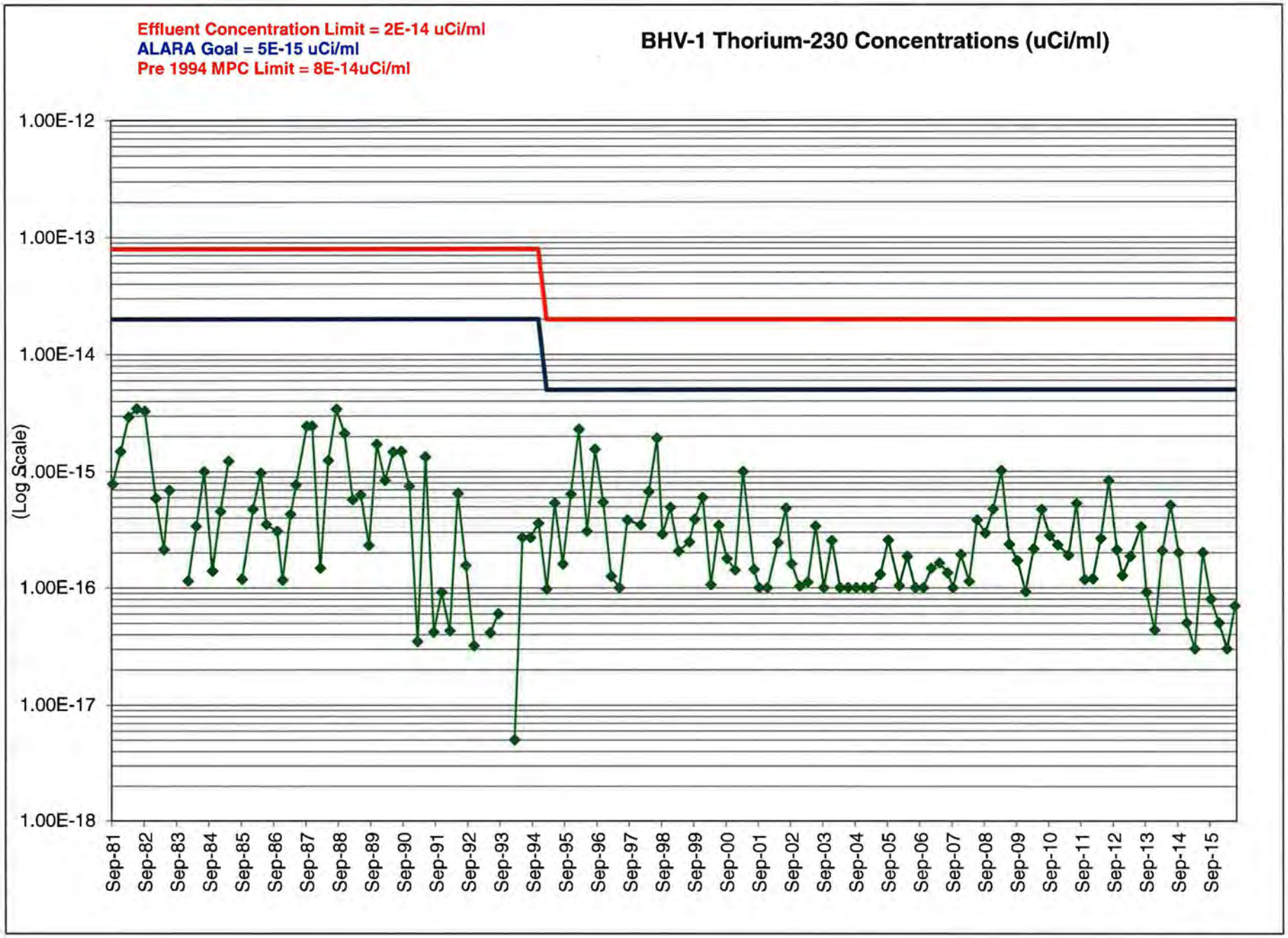
Sep-12
Sep-13
Sep-14
Sep-15


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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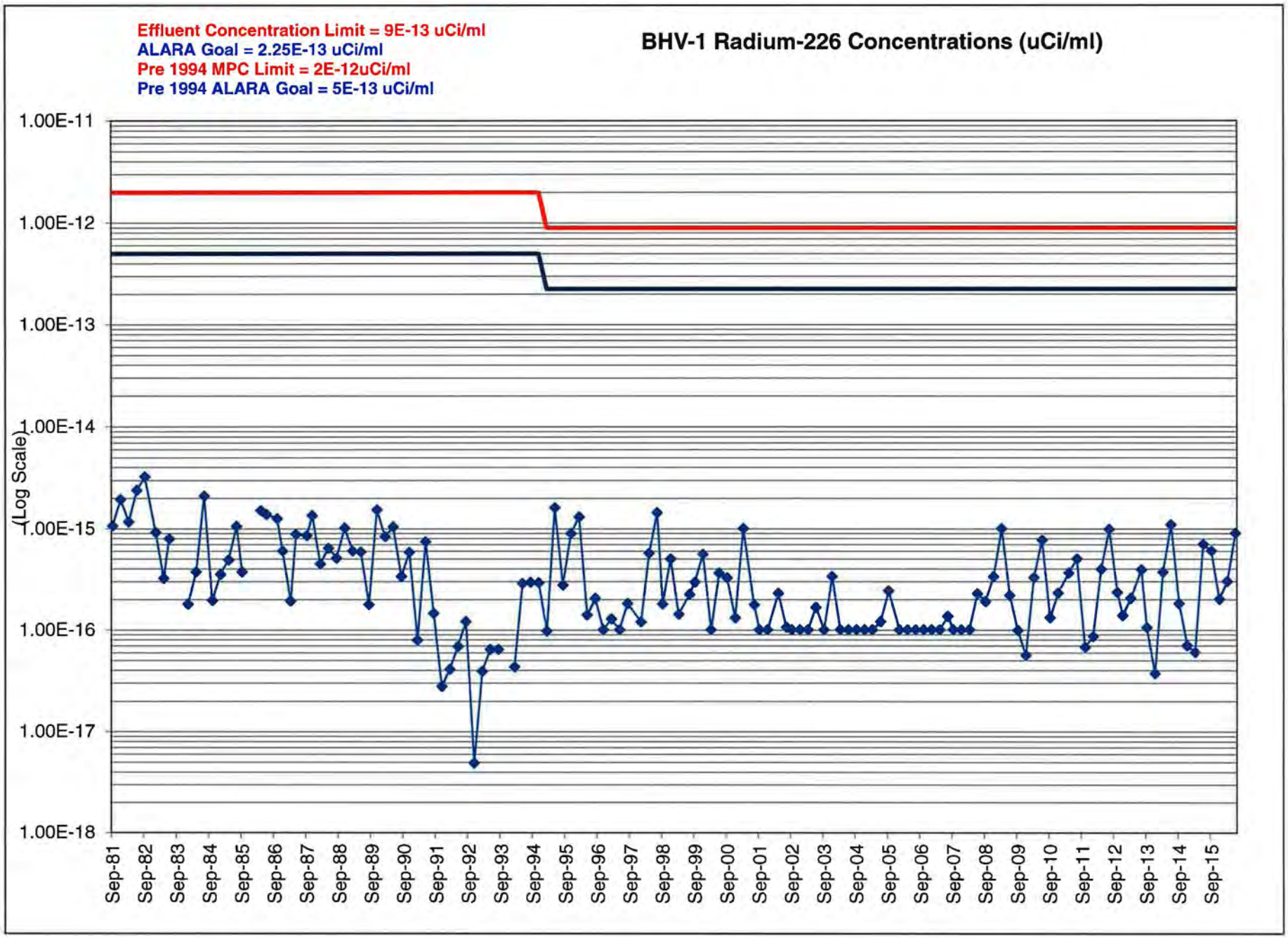
Sep-12
Sep-13
Sep-14
Sep-15


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-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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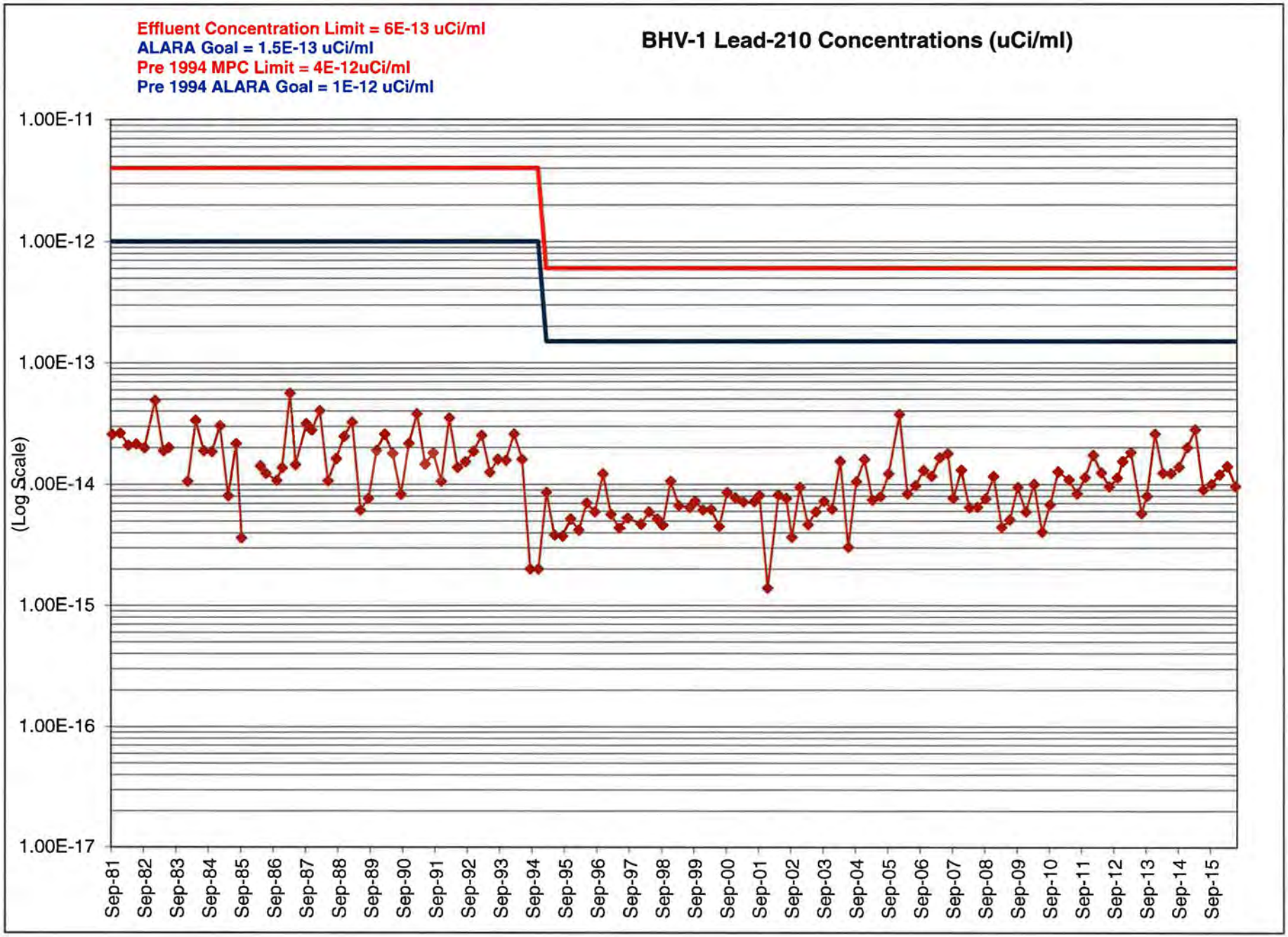
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15


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
Sep-02
Sep-03
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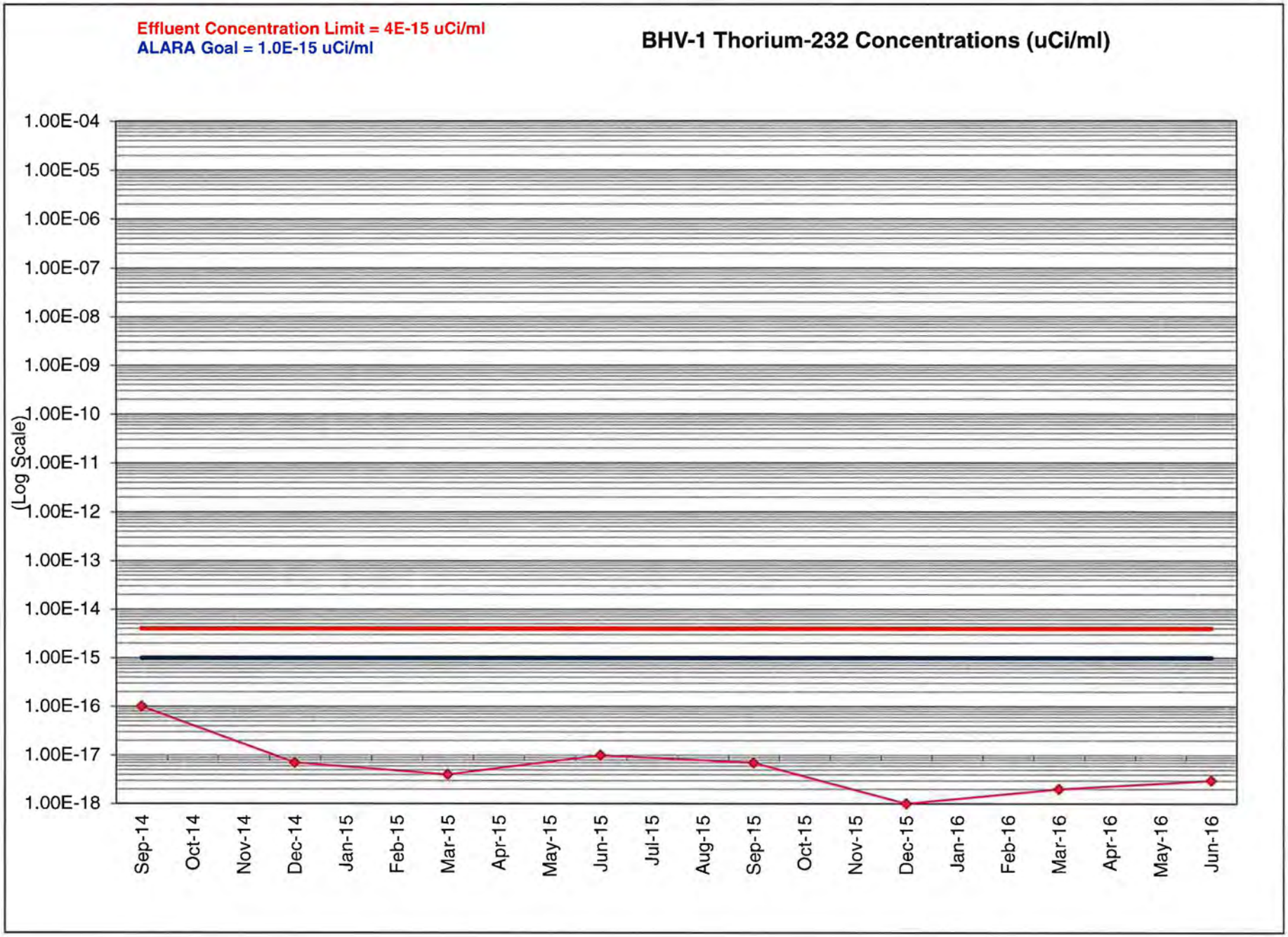
Sep-12
Sep-13
Sep-14
Sep-15


Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-1 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
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
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

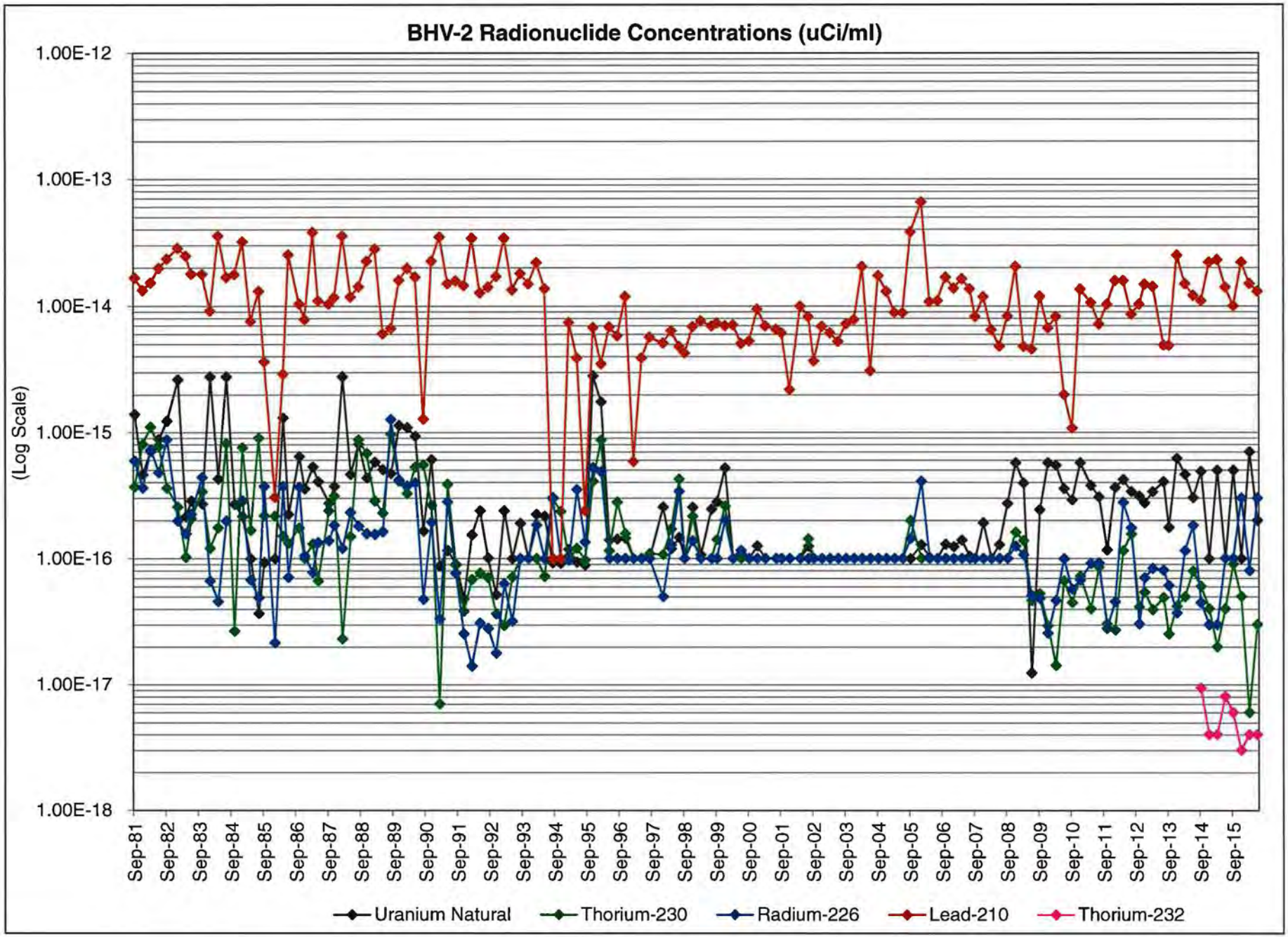
TAB 2

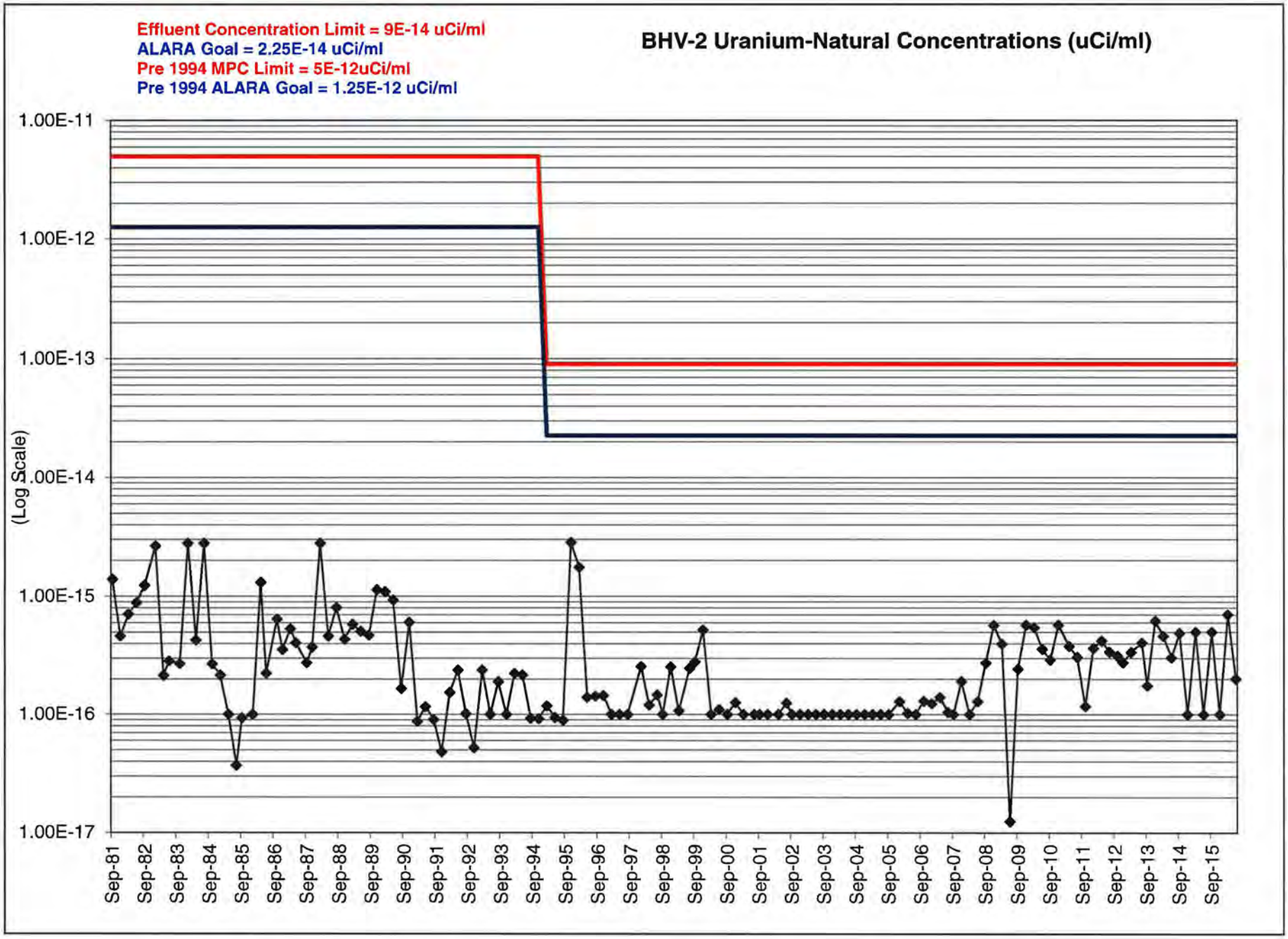
BHV-2 AIR SAMPLING GRAPHS AND DATA TABLE

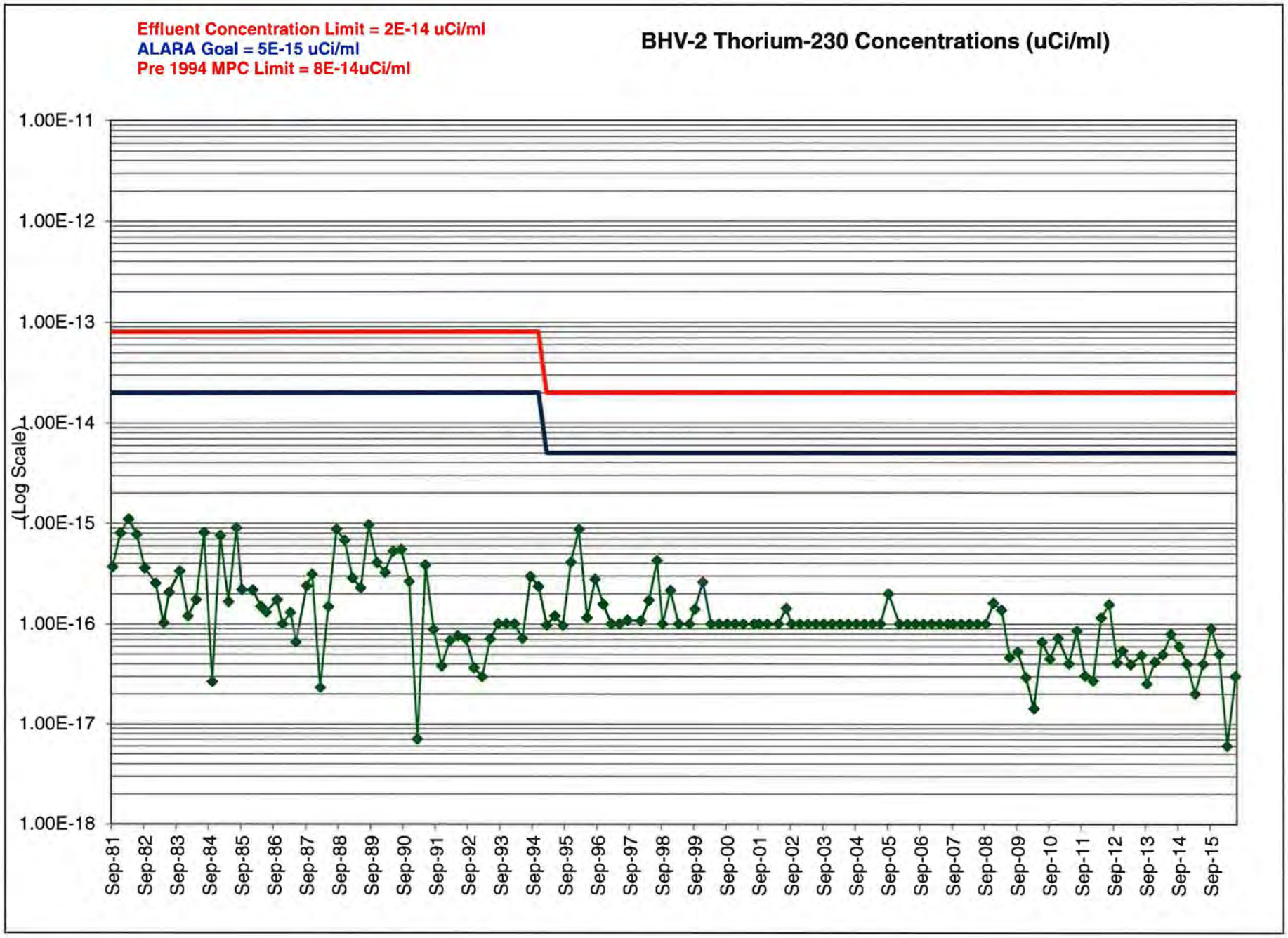
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-2U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-2T230	Effluent Concentration Limit =	9E-15 uCi/ml	BHV-2R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-2PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-2T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA 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
3/28/2016	7.00E-16	9.00E-14	2.25E-14	6.00E-18	2.00E-14	5.00E-15	8.00E-17	9.00E-13	2.25E-13	1.50E-14	6.00E-13	1.50E-13	4.00E-18	4.00E-15	1.00E-15
6/27/2016	2.00E-16	9.00E-14	2.25E-14	3.00E-17	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	1.30E-14	6.00E-13	1.50E-13	4.00E-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
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
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
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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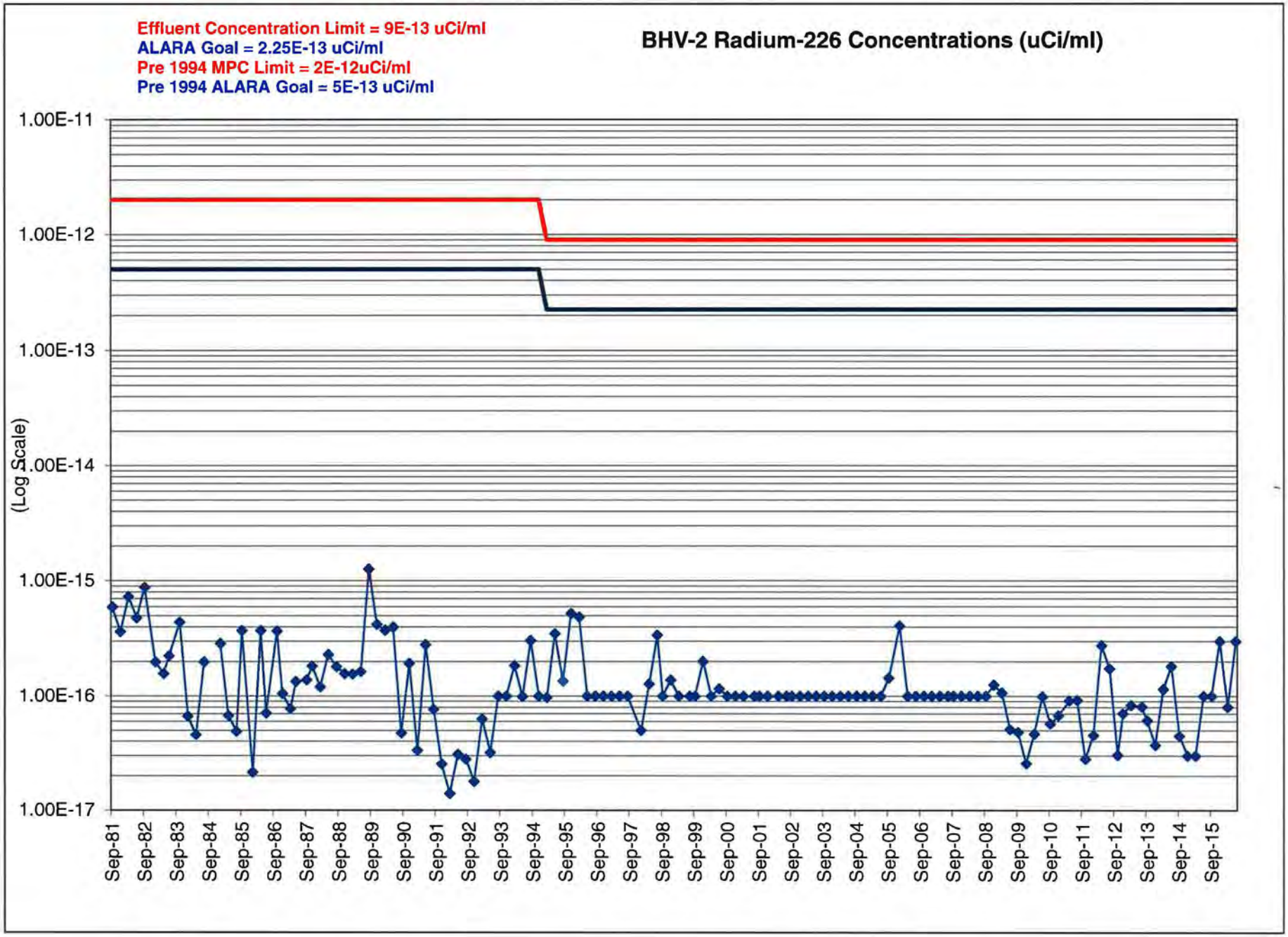
Sep-12
Sep-13
Sep-14
Sep-15


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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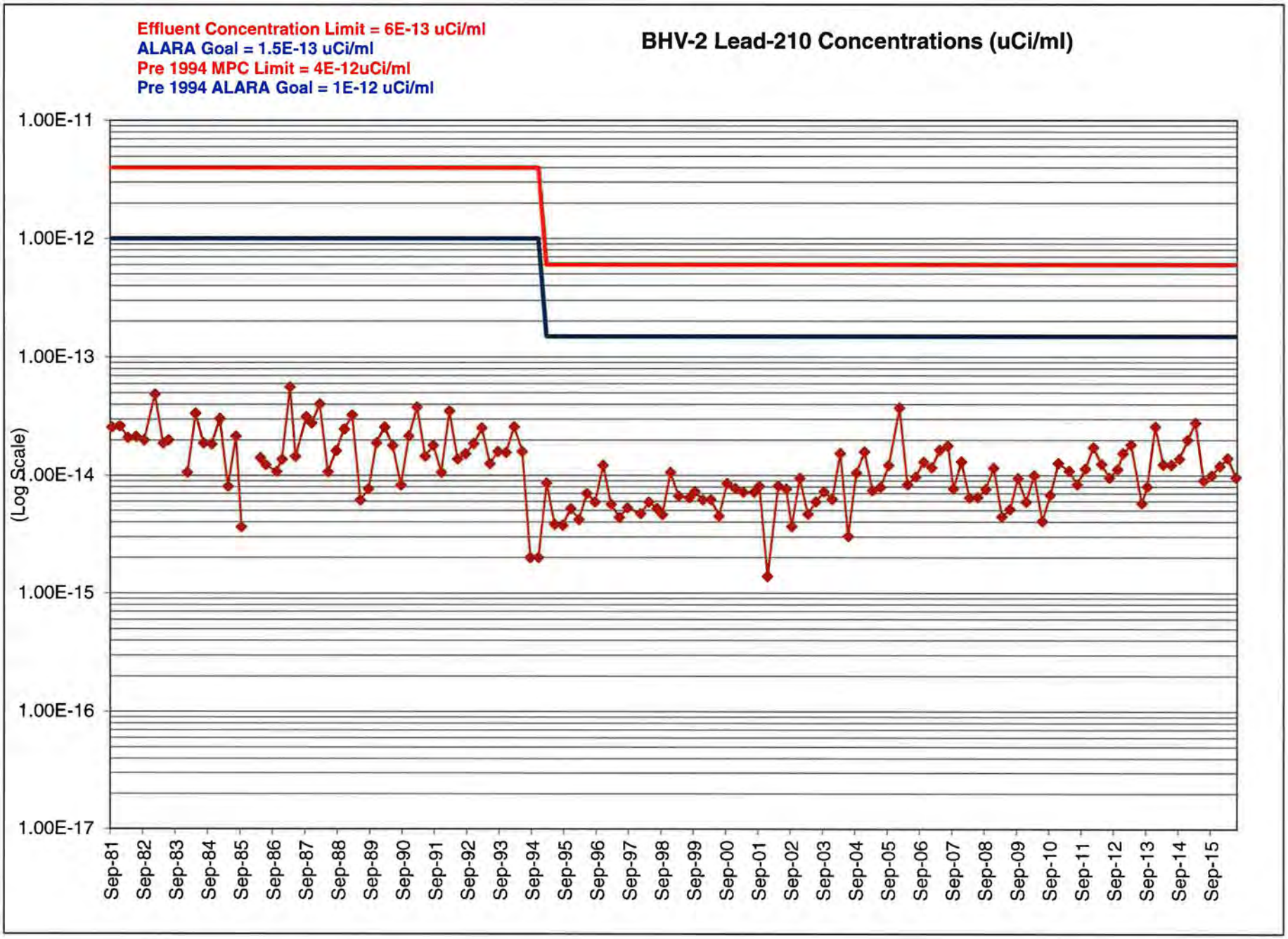
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Sep-15


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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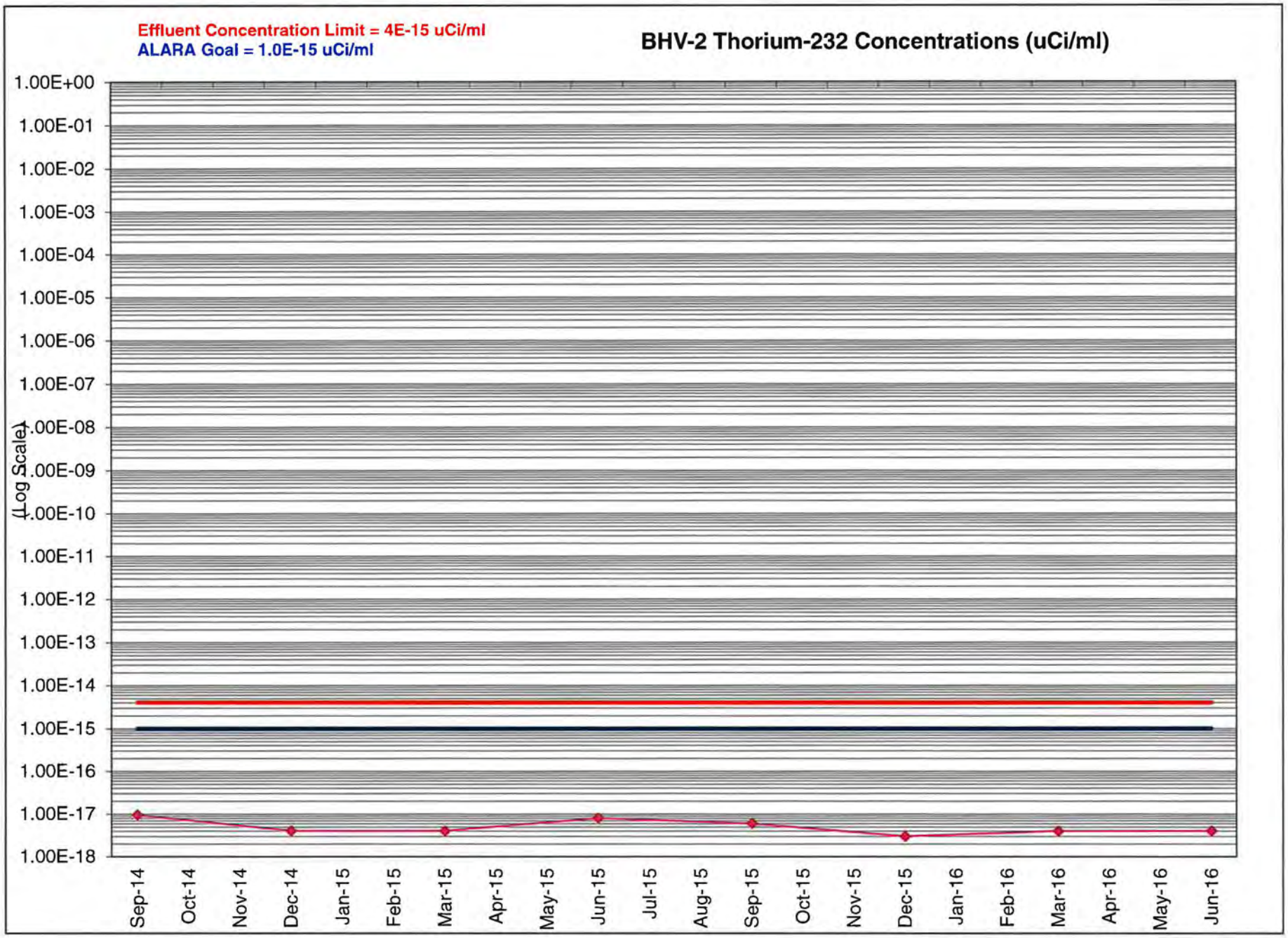
Sep-12
Sep-13
Sep-14
Sep-15


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
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

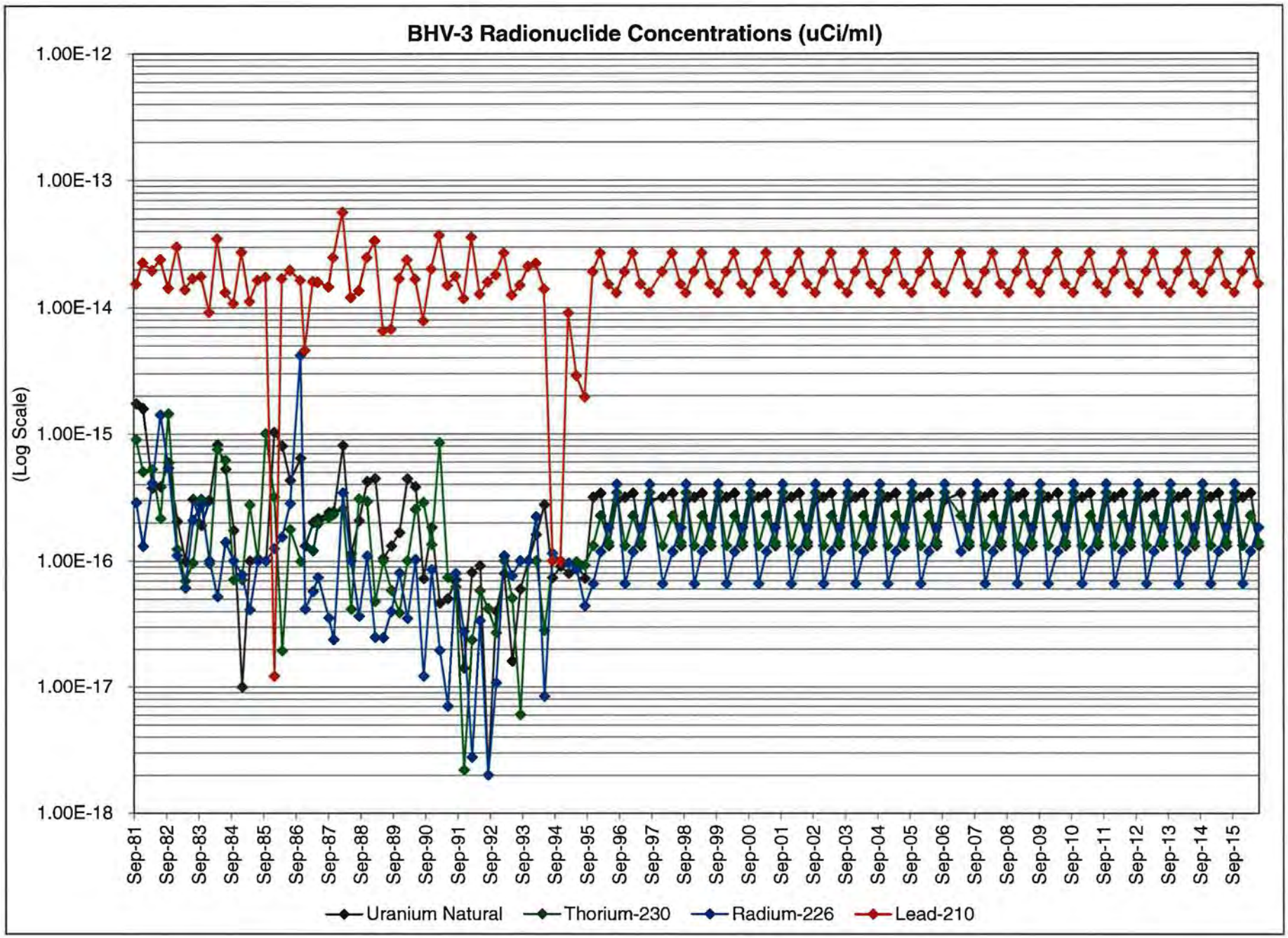
TAB 3

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
3/28/2016	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
6/27/2016	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


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
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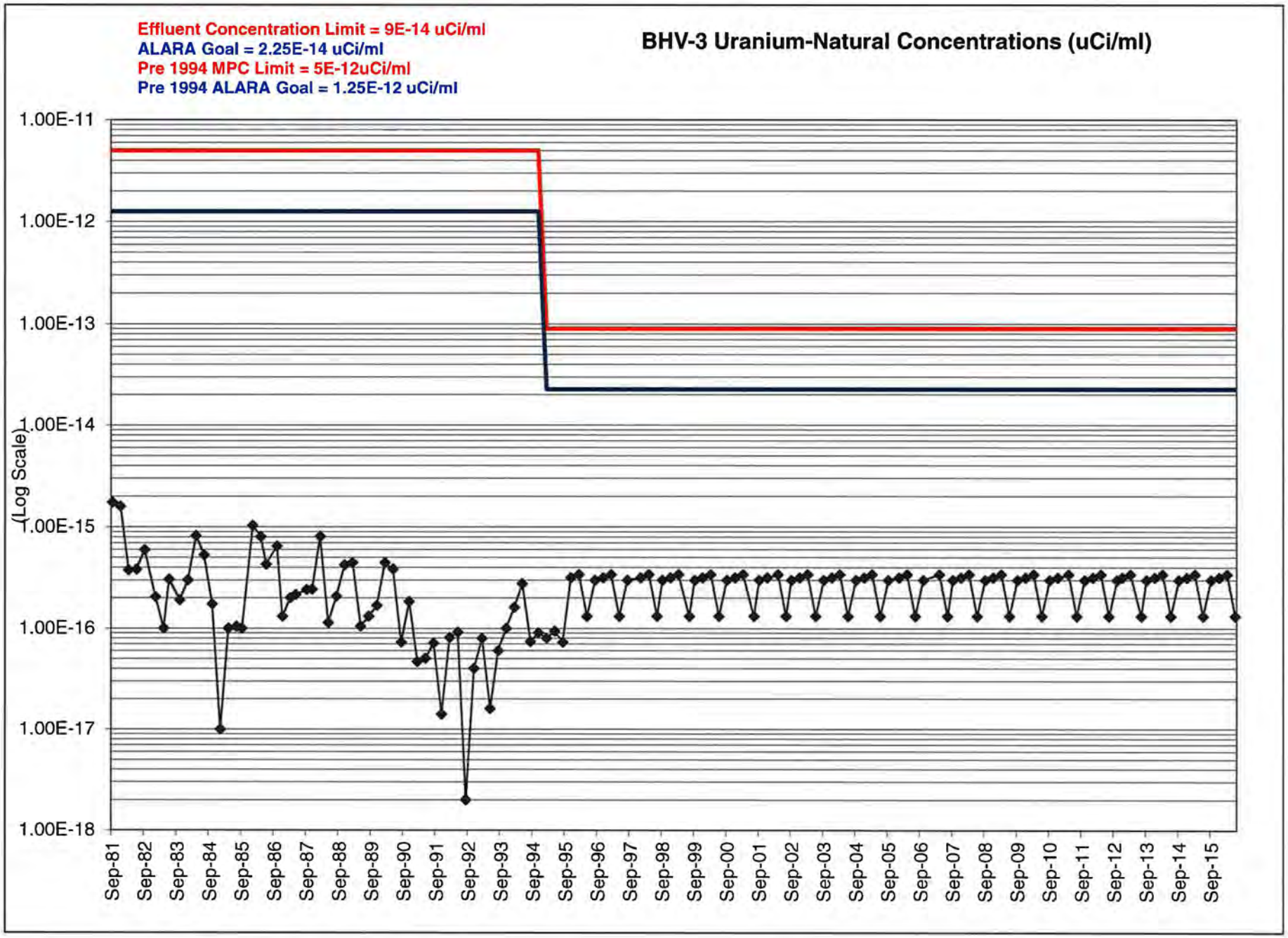
Sep-14
Sep-15
Uranium Natural
Thorium-230
Radium-226
Lead-210


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
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Sep-97
Sep-98
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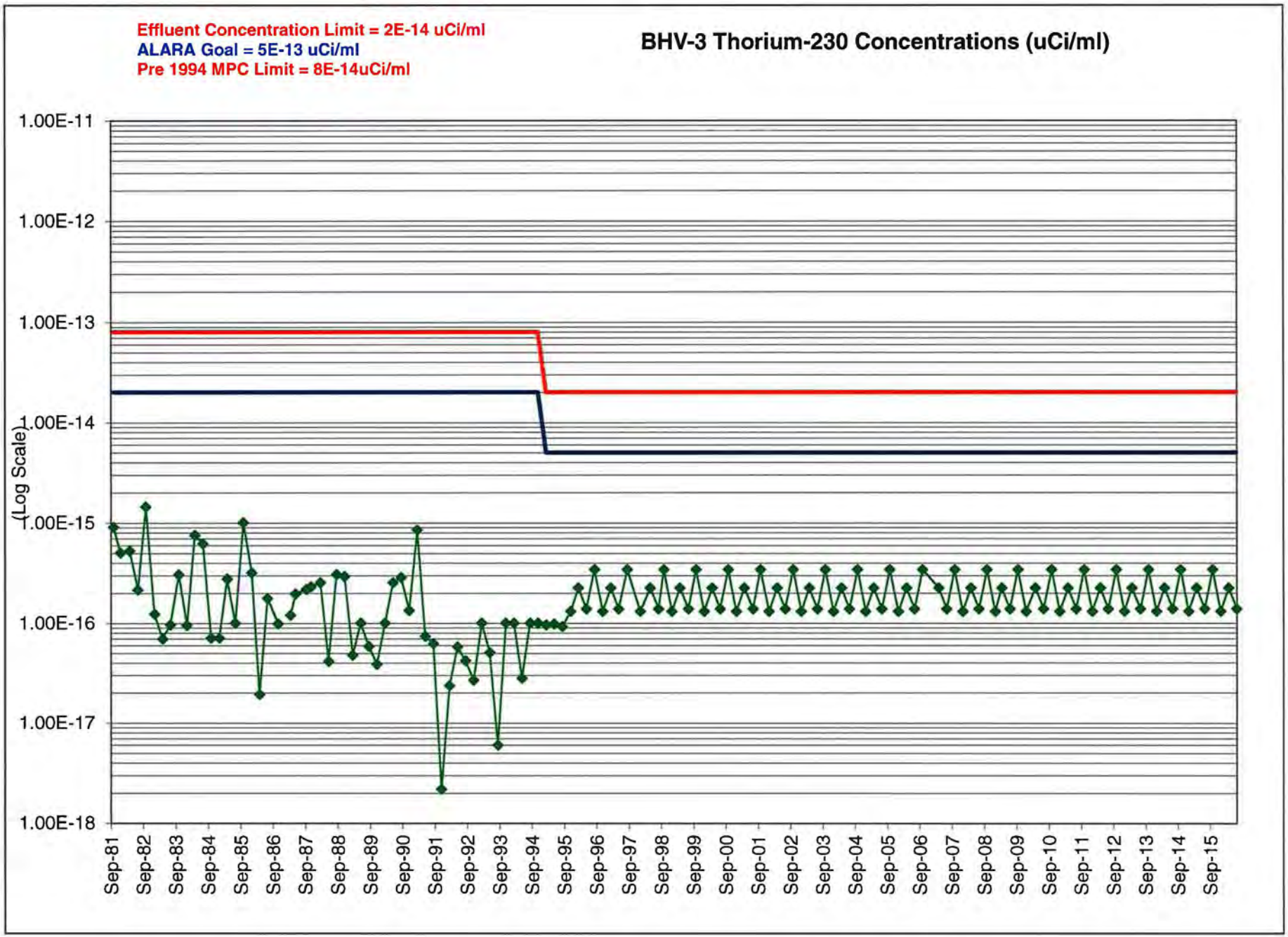
Sep-13
Sep-14
Sep-15


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
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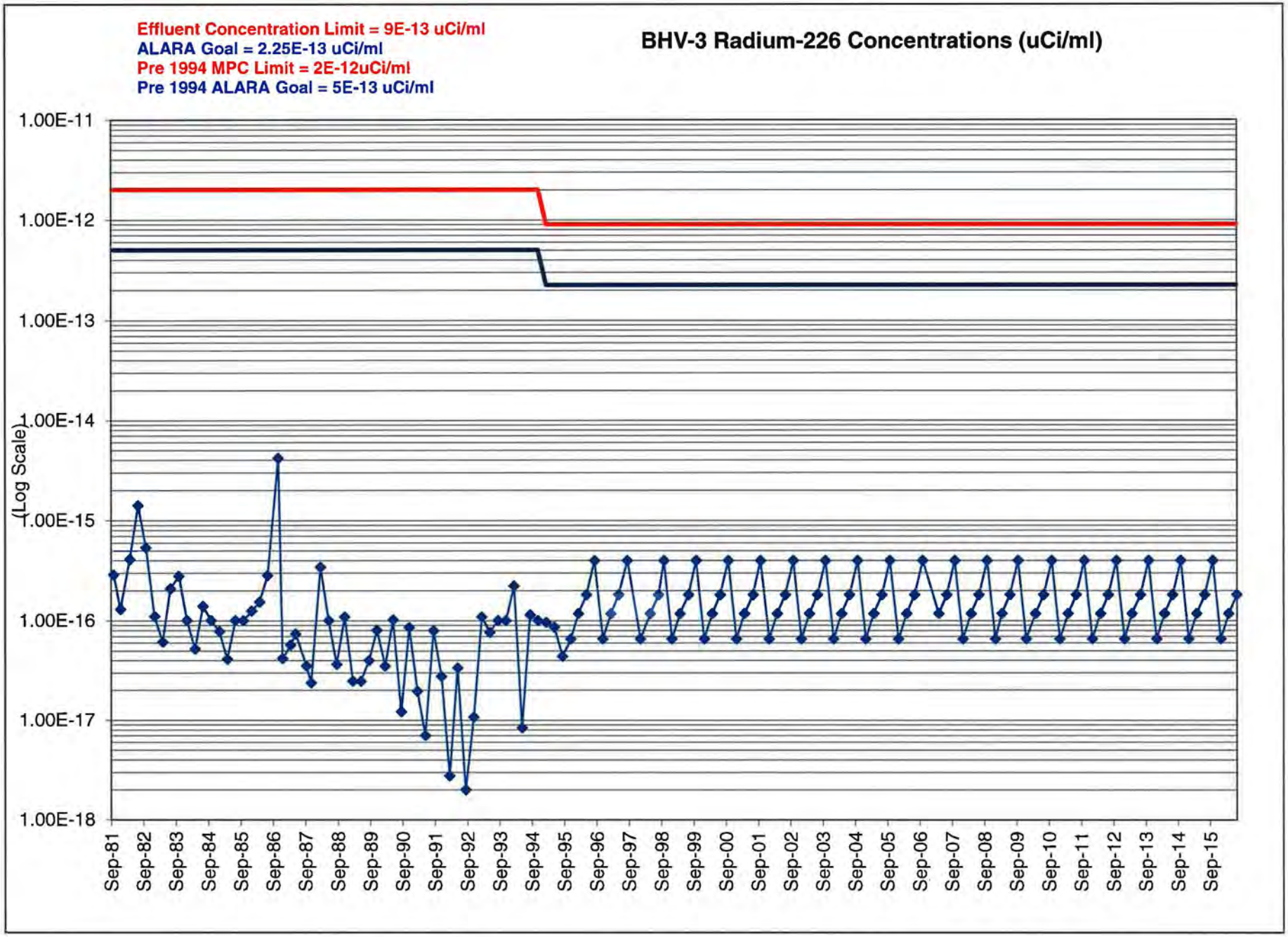
Sep-15


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
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Sep-86
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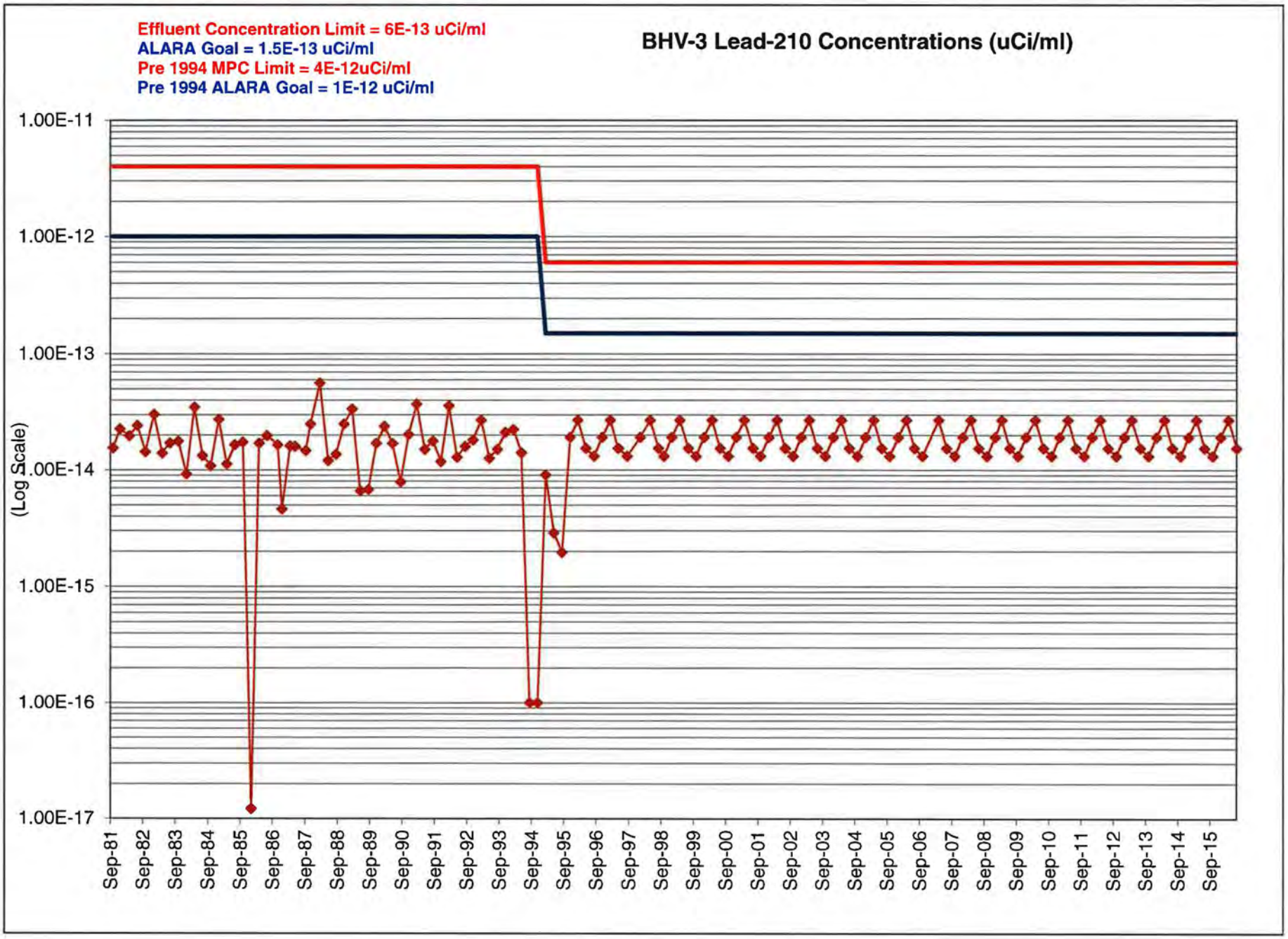
Sep-14
Sep-15


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
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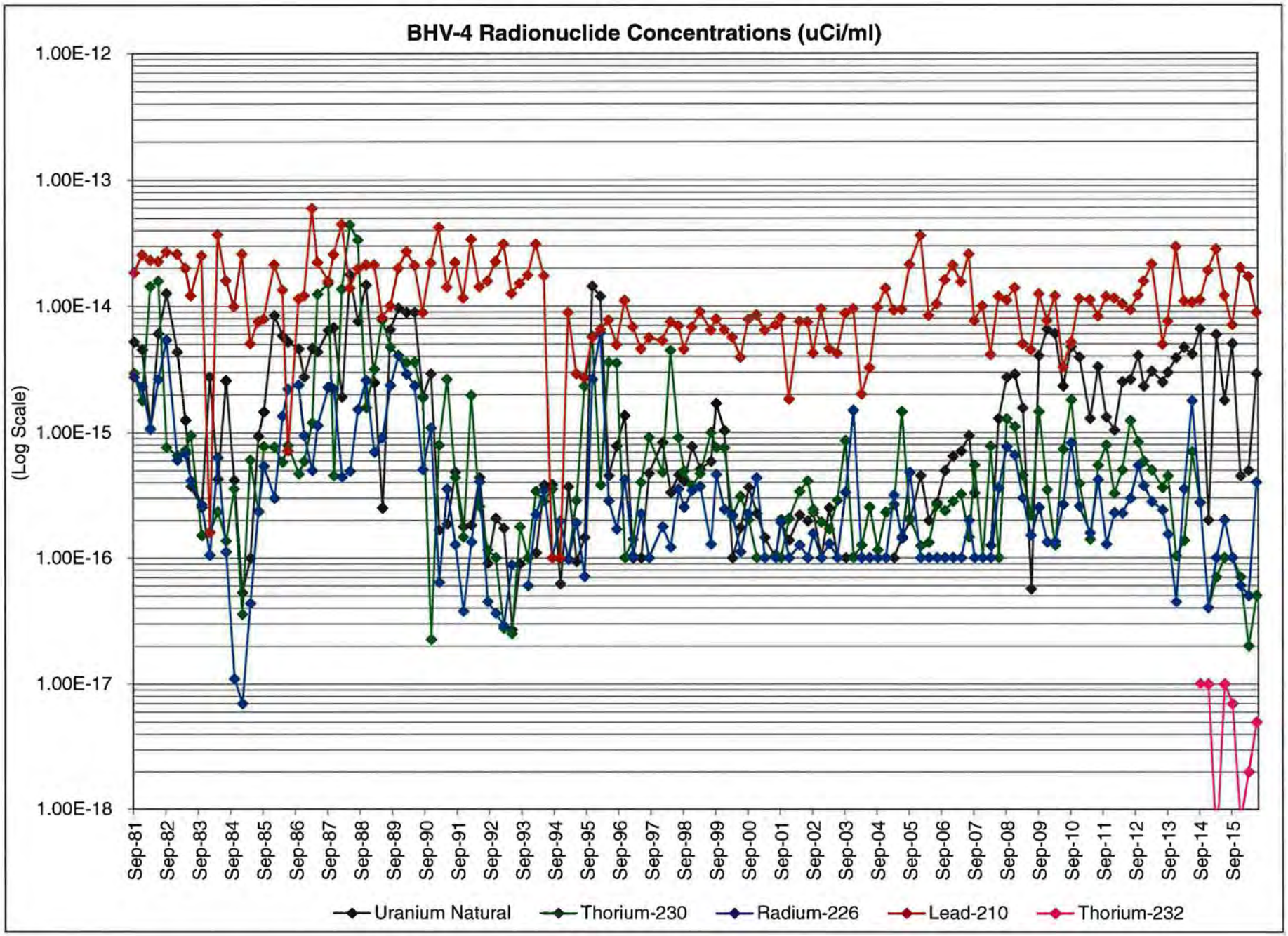
TAB 4

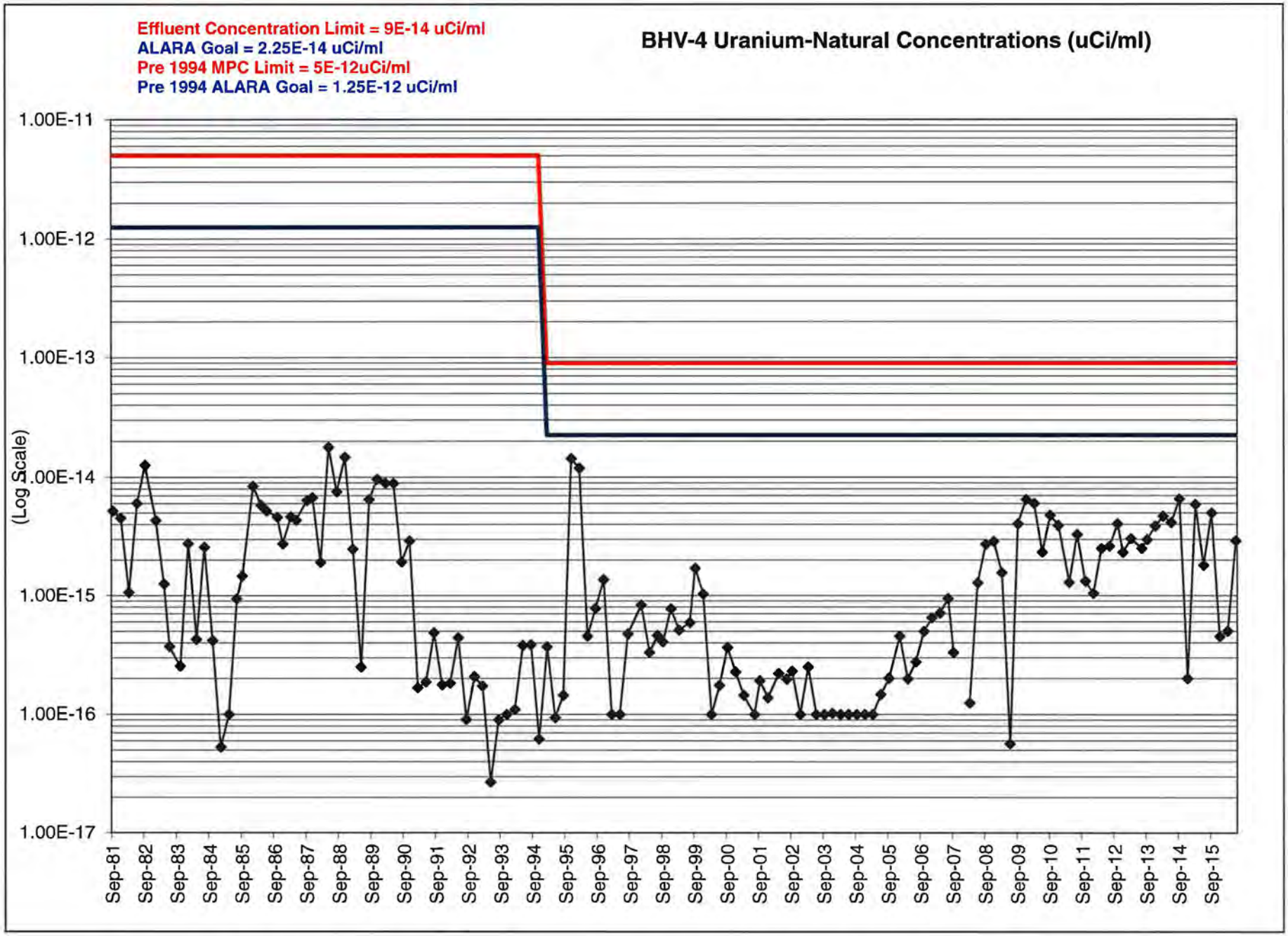
BHV-4 AIR SAMPLING GRAPHS AND DATA TABLE

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
3/28/2016	5.00E-16	9.00E-14	2.25E-14	2.00E-17	2.00E-14	5.00E-15	5.00E-17	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	2.00E-18	4.00E-15	1.00E-15
6/27/2016	2.90E-15	9.00E-14	2.25E-14	5.00E-17	2.00E-14	5.00E-15	4.00E-16	9.00E-13	2.25E-13	8.80E-15	6.00E-13	1.50E-13	5.00E-18	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
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-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
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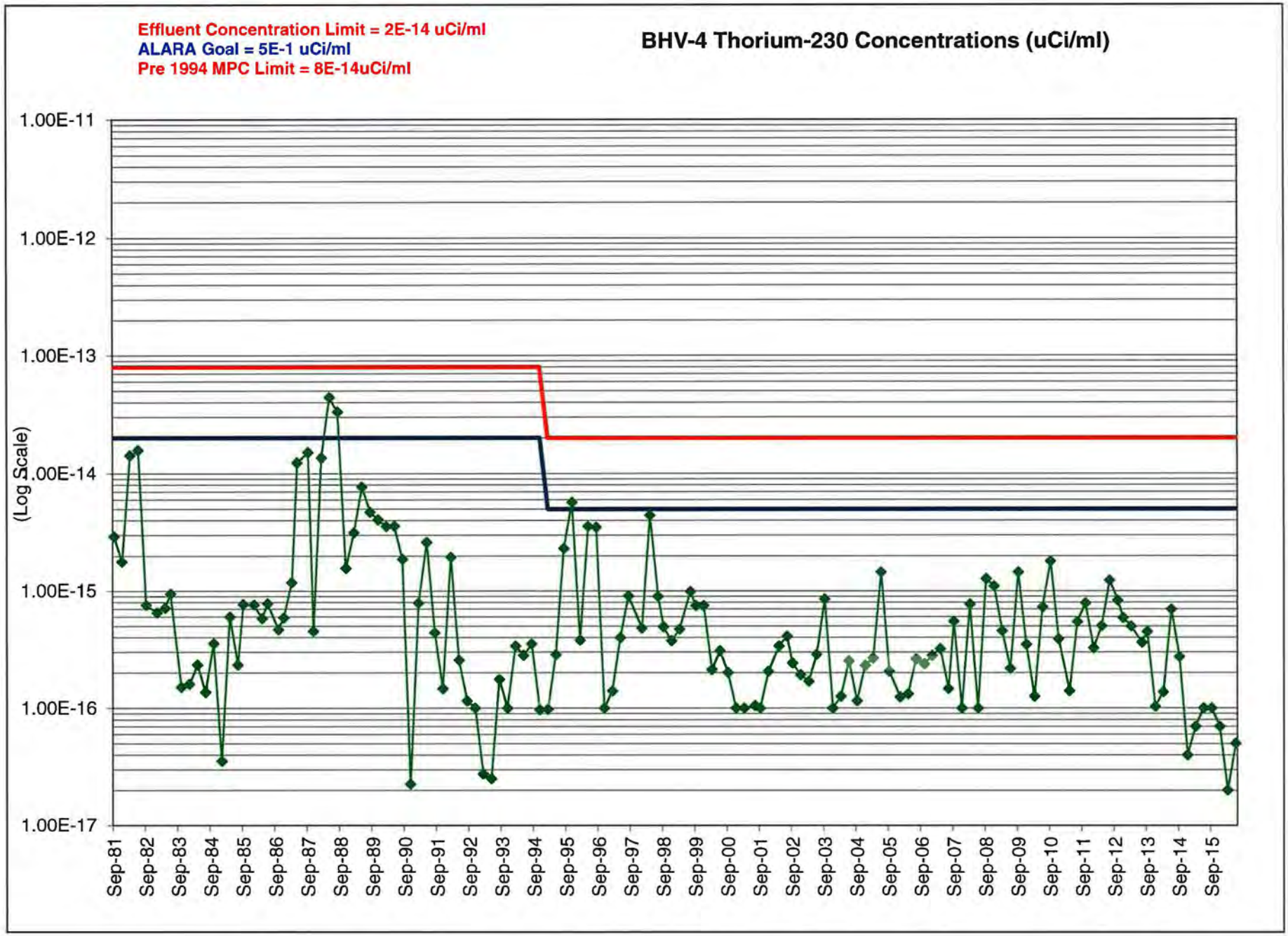
Effluent Concentration Limit = 2E-14 uCi/ml
ALARA Goal = 5E-1 uCi/ml
Pre 1994 MPC Limit = 8E-14uCi/ml
BHV-4 Thorium-230 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
Sep-89
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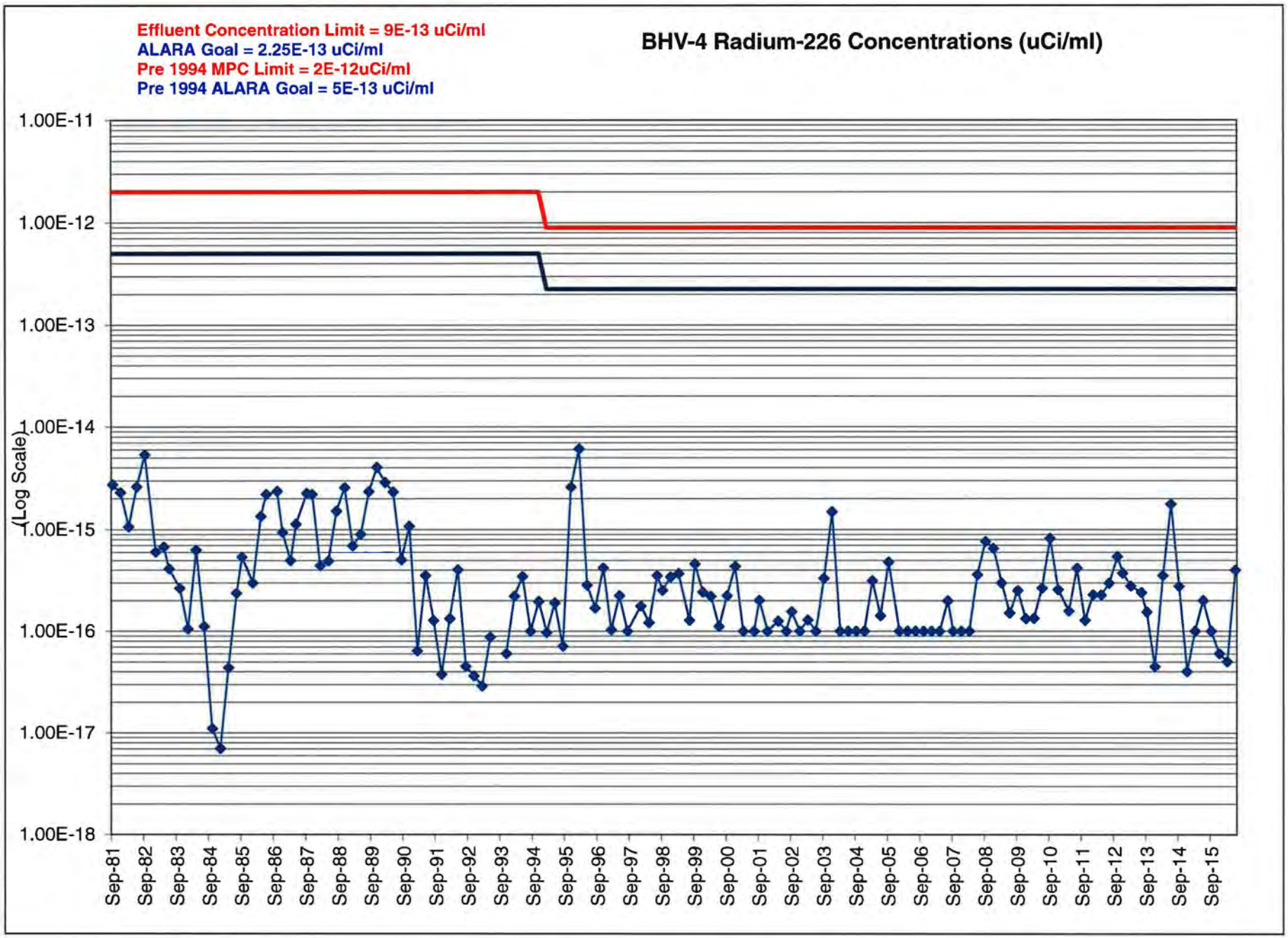
Effluent Concentration Limit = 9E-13 uCi/ml
ALARA Goal = 2.25E-13 uCi/ml
Pre 1994 MPC Limit = 2E-12uCi/ml
Pre 1994 ALARA Goal = 5E-13 uCi/ml
BHV-4 Radium-226 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-81
Sep-82
Sep-83
Sep-84
Sep-85
Sep-86
Sep-87
Sep-88
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Sep-97
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Sep-99
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Sep-01
Sep-02
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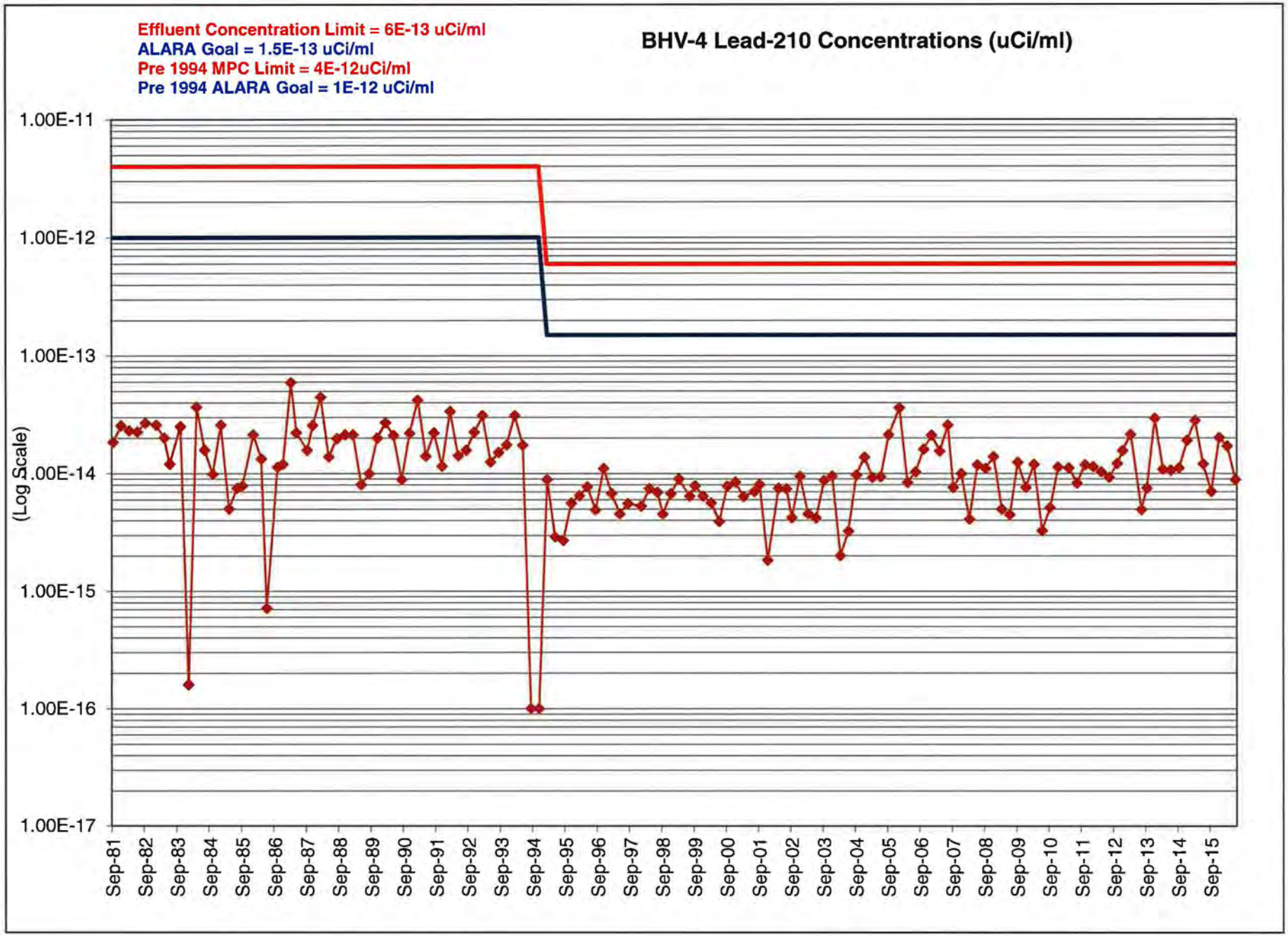
Sep-12
Sep-13
Sep-14
Sep-15


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-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
Sep-88
Sep-89
Sep-90
Sep-91
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Sep-01
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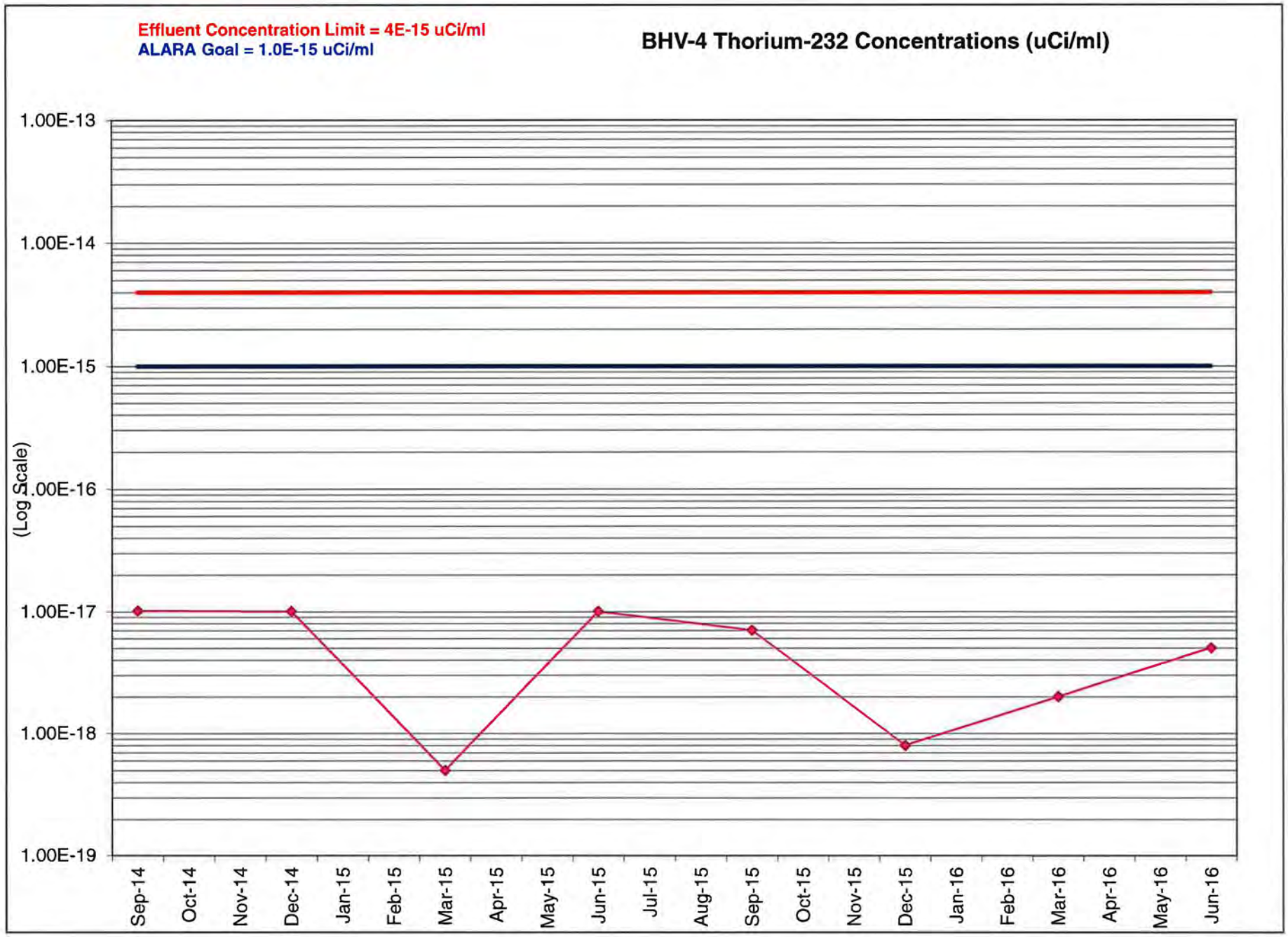
Sep-15


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
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

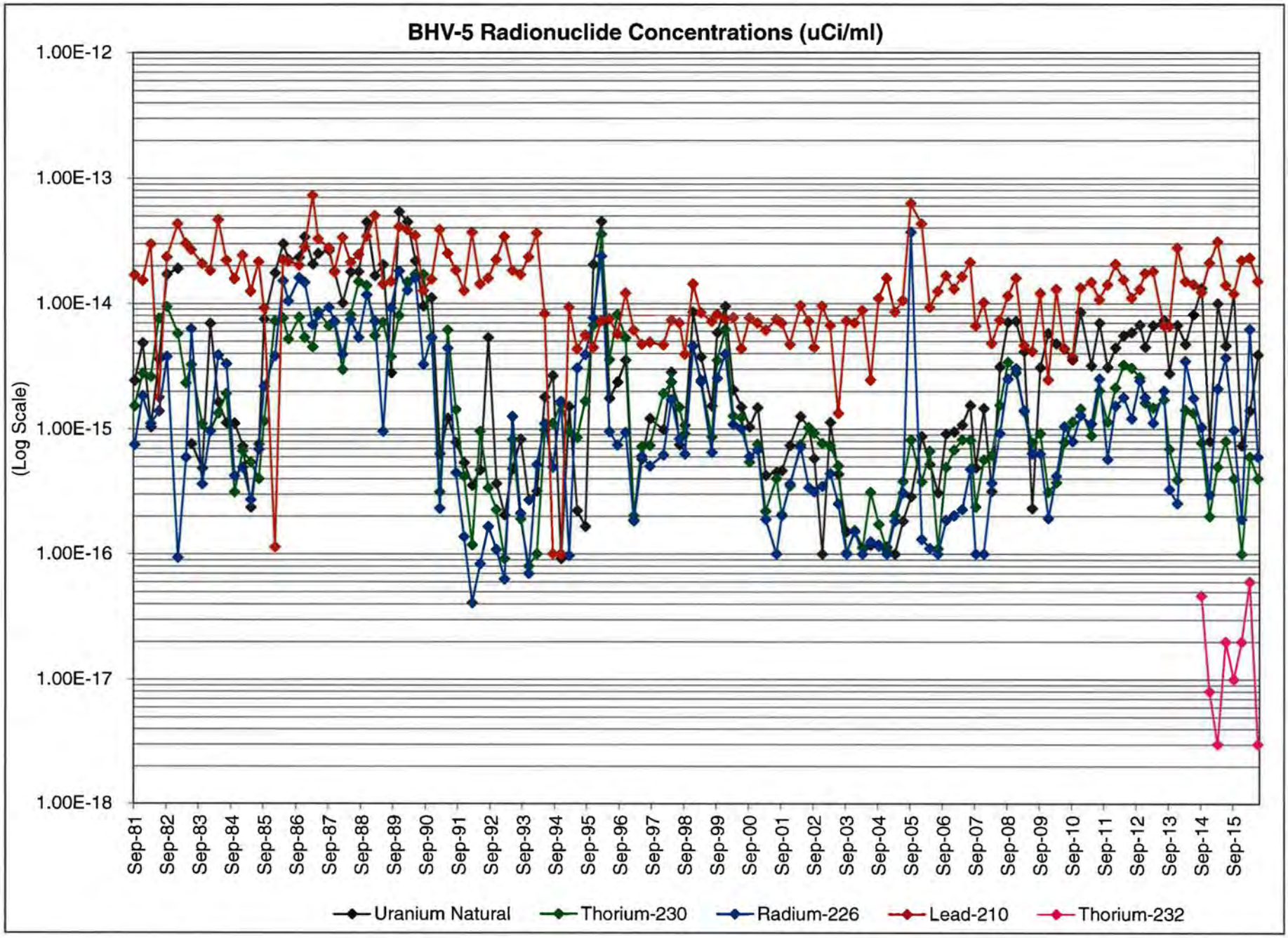
TAB 5

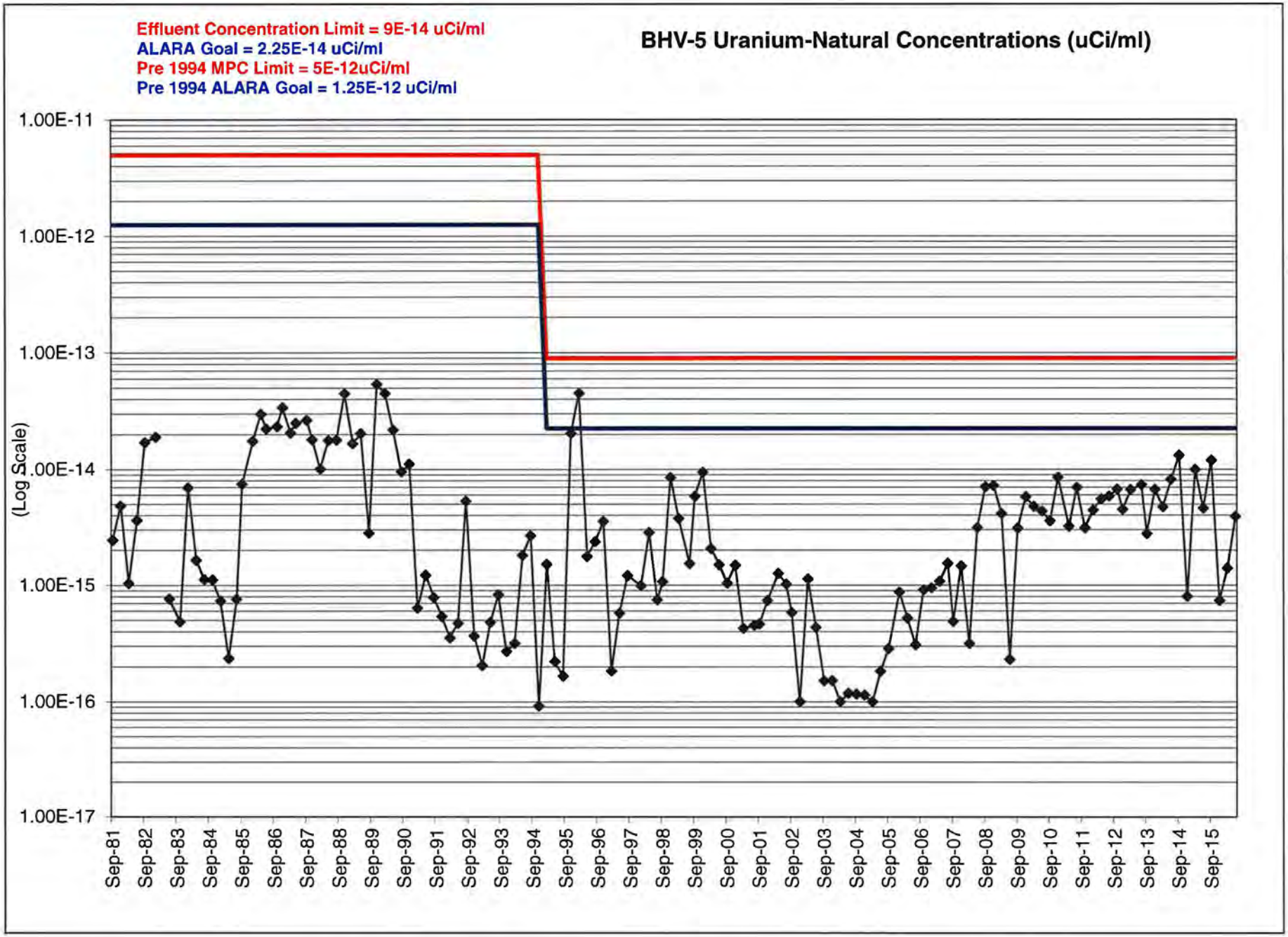
BHV-5 AIR SAMPLING GRAPHS AND DATA TABLE

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
3/28/2016	1.40E-15	9.00E-14	2.25E-14	6.00E-16	2.00E-14	5.00E-15	6.20E-15	9.00E-13	2.25E-13	2.30E-14	6.00E-13	1.50E-13	6.00E-17	4.00E-15	1.00E-15
6/27/2016	3.90E-15	9.00E-14	2.25E-14	4.00E-16	2.00E-14	5.00E-15	6.00E-16	9.00E-13	2.25E-13	1.50E-14	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15


BHV-5 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-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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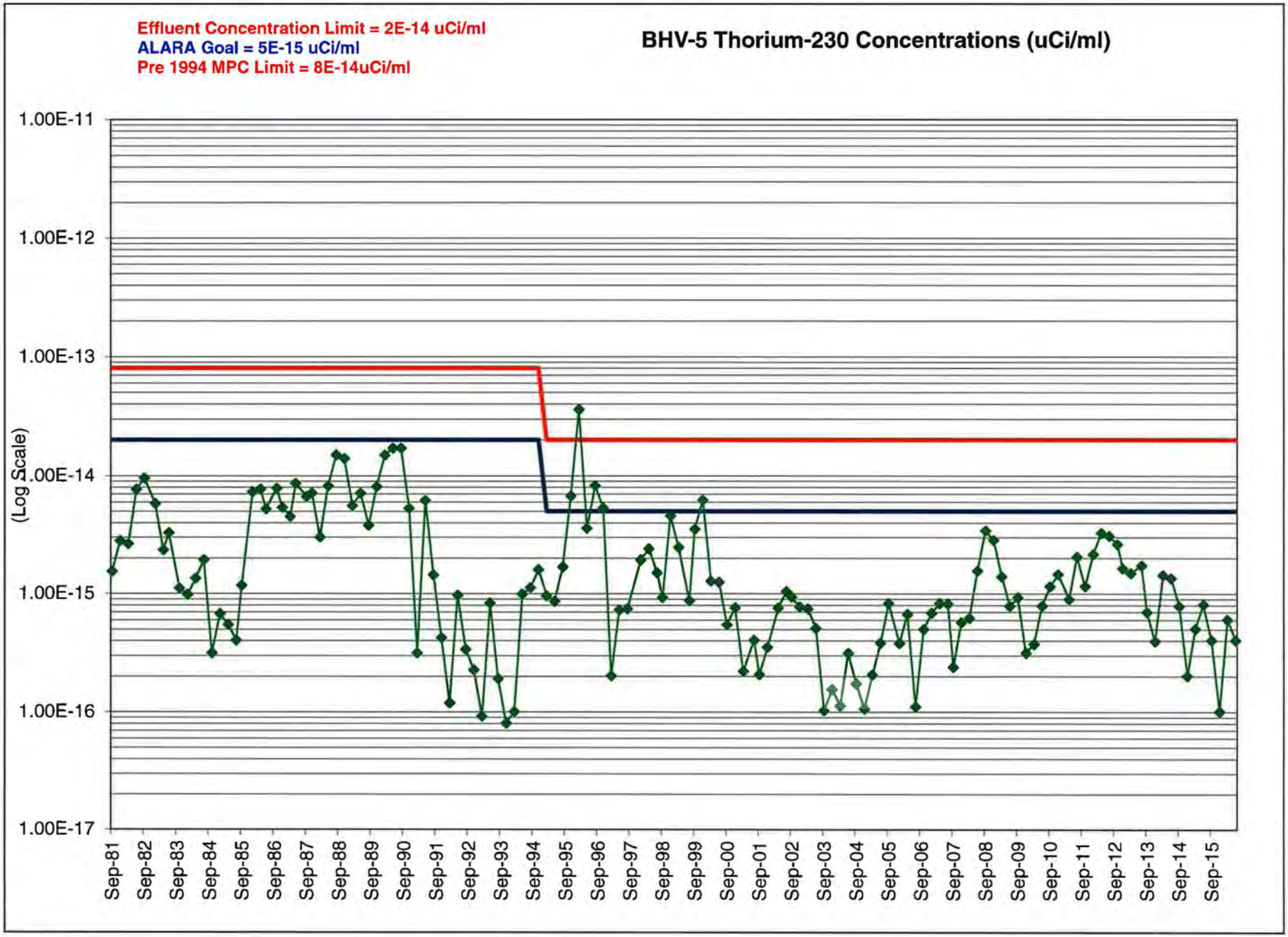
Sep-12
Sep-13
Sep-14
Sep-15


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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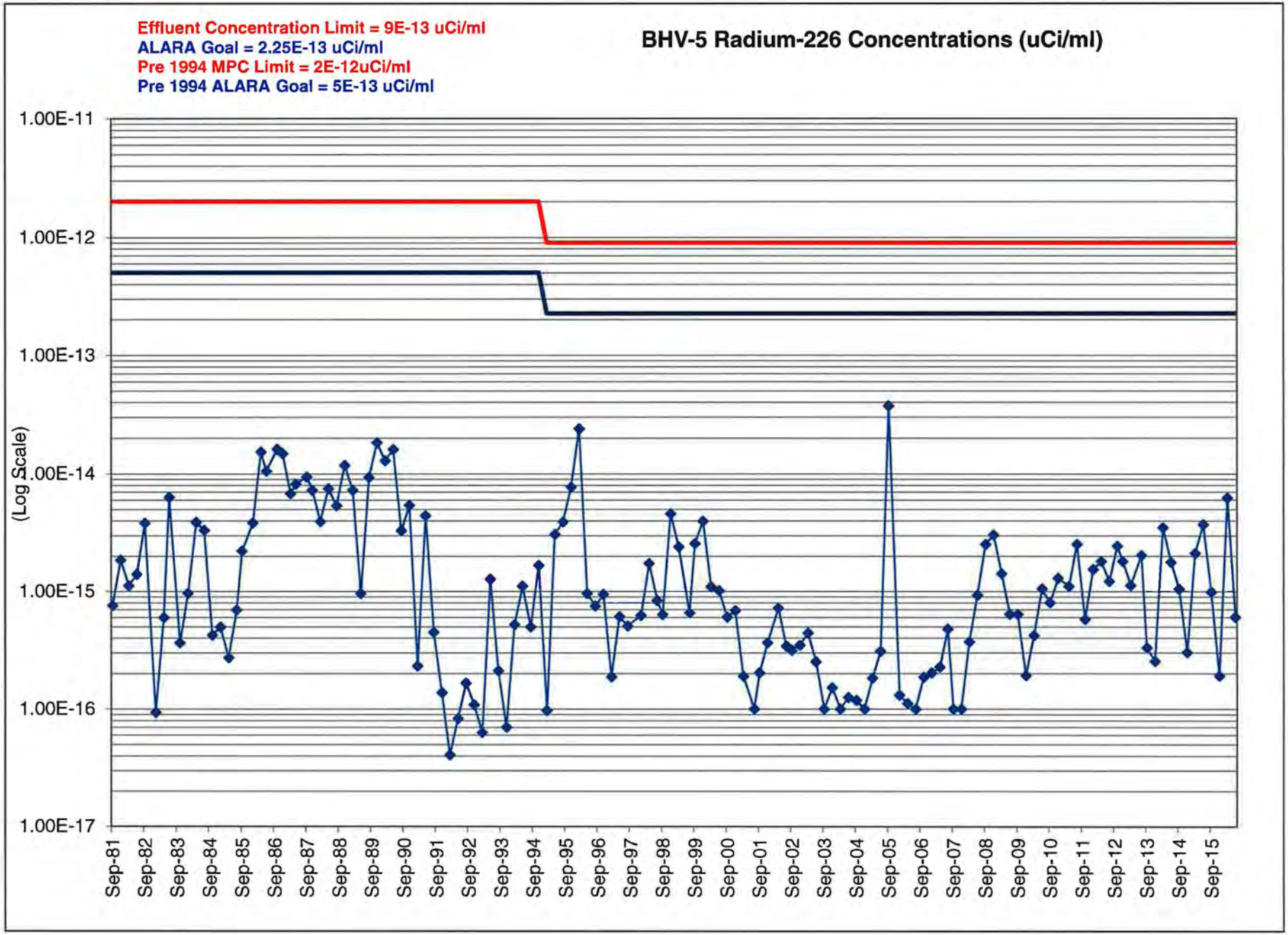
Sep-12
Sep-13
Sep-14
Sep-15


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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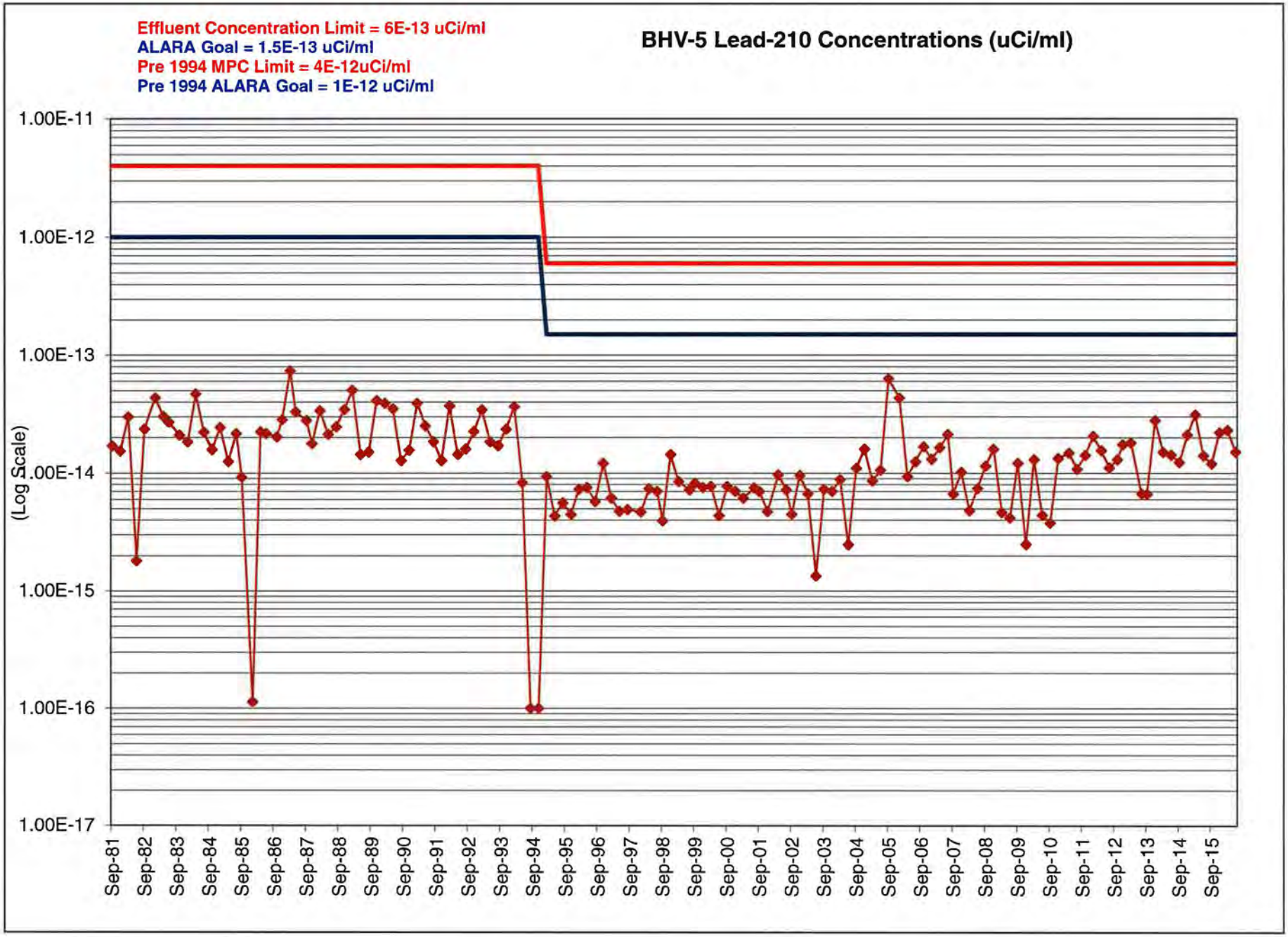
Sep-12
Sep-13
Sep-14
Sep-15


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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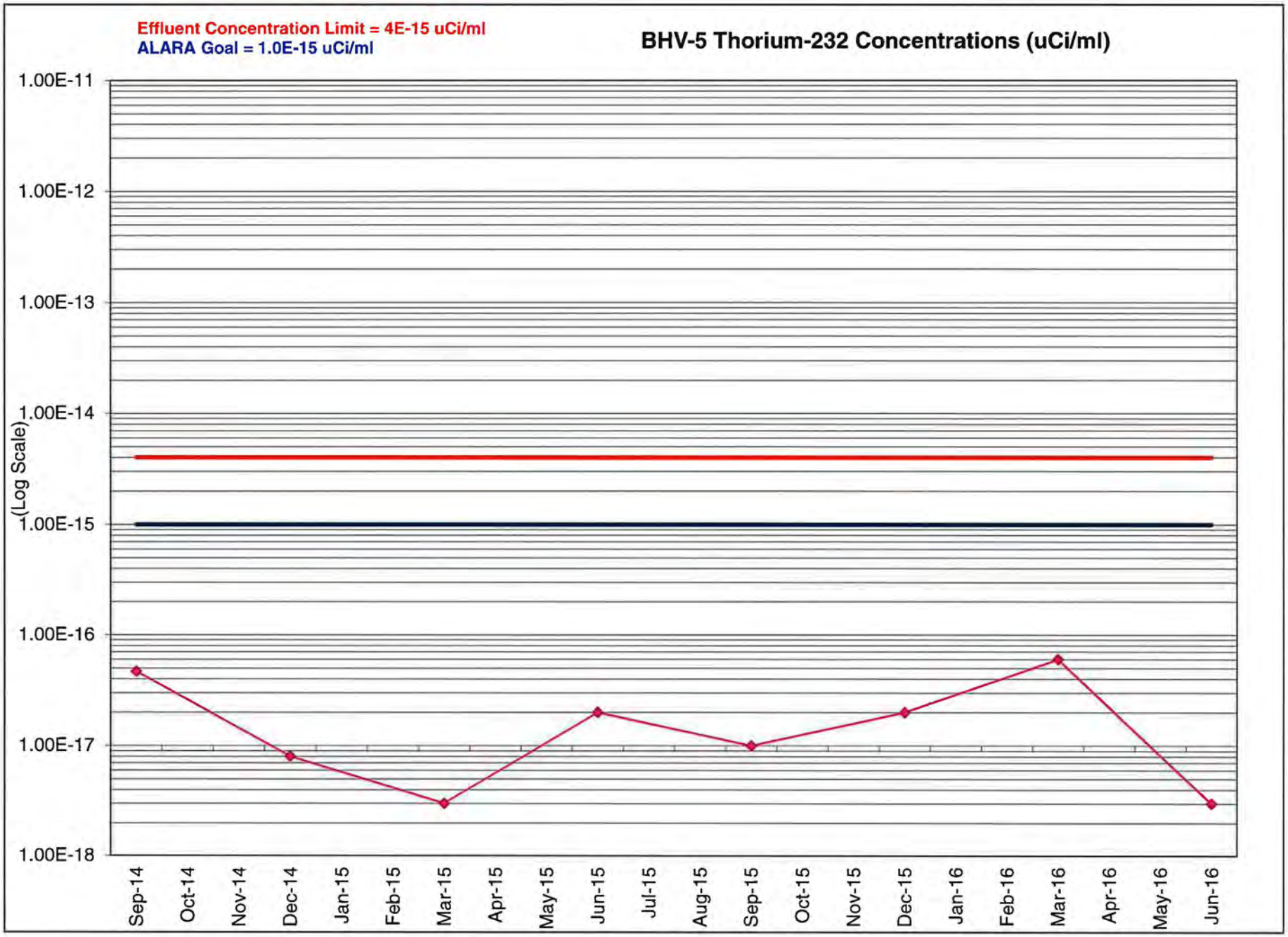
Sep-12
Sep-13
Sep-14
Sep-15


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
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16

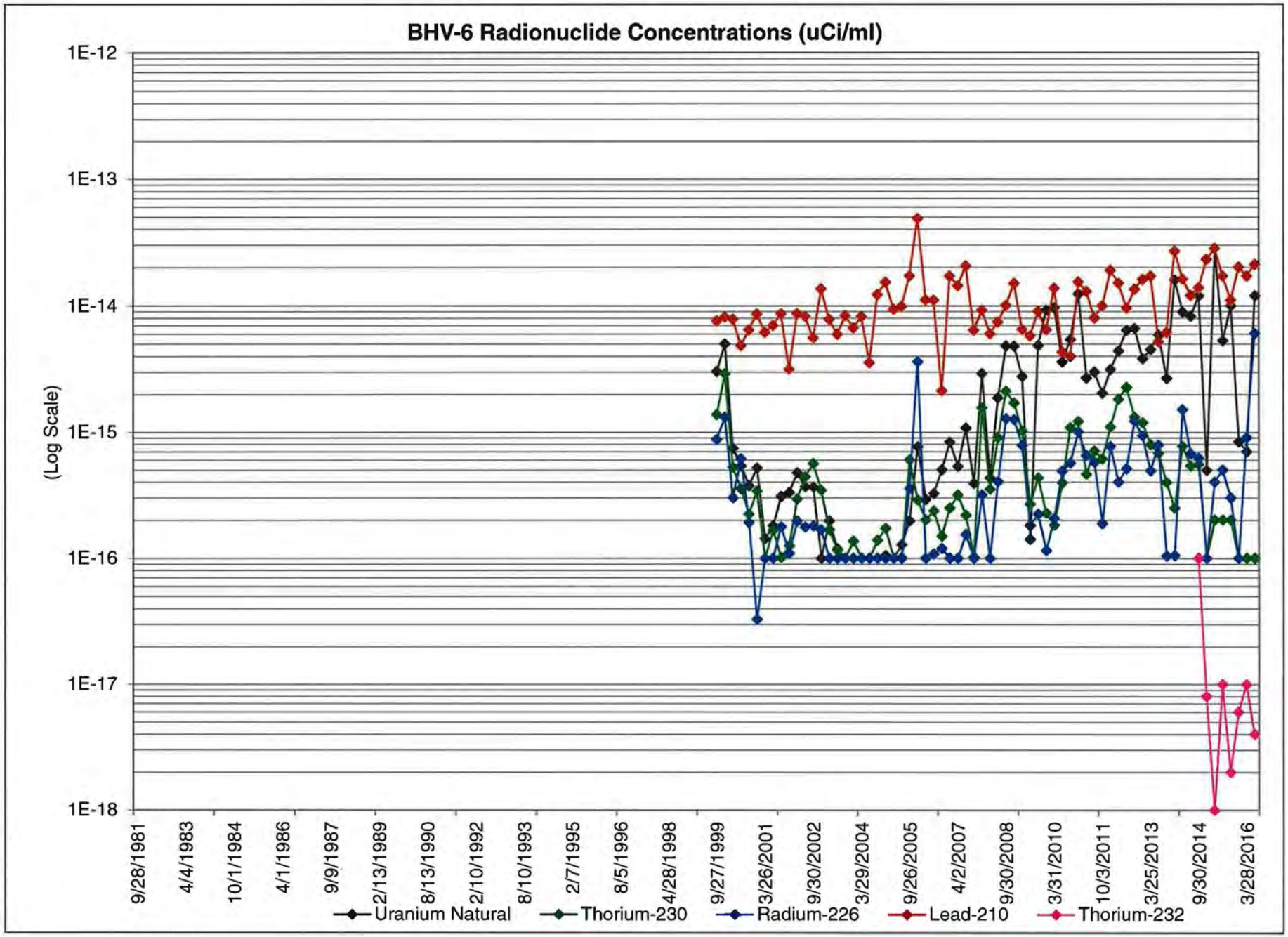
TAB 6

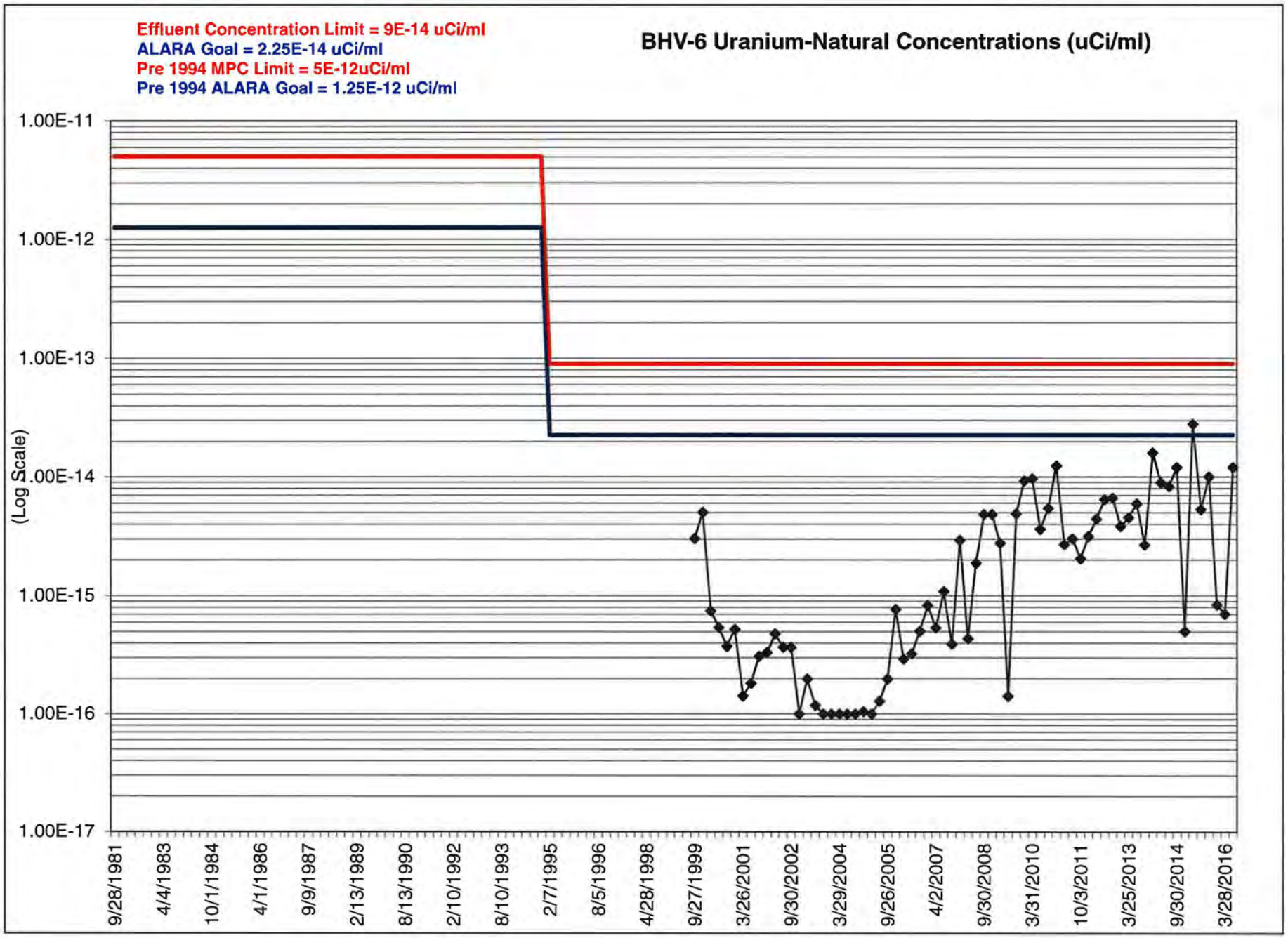
BHV-6 AIR SAMPLING GRAPHS AND DATA TABLE

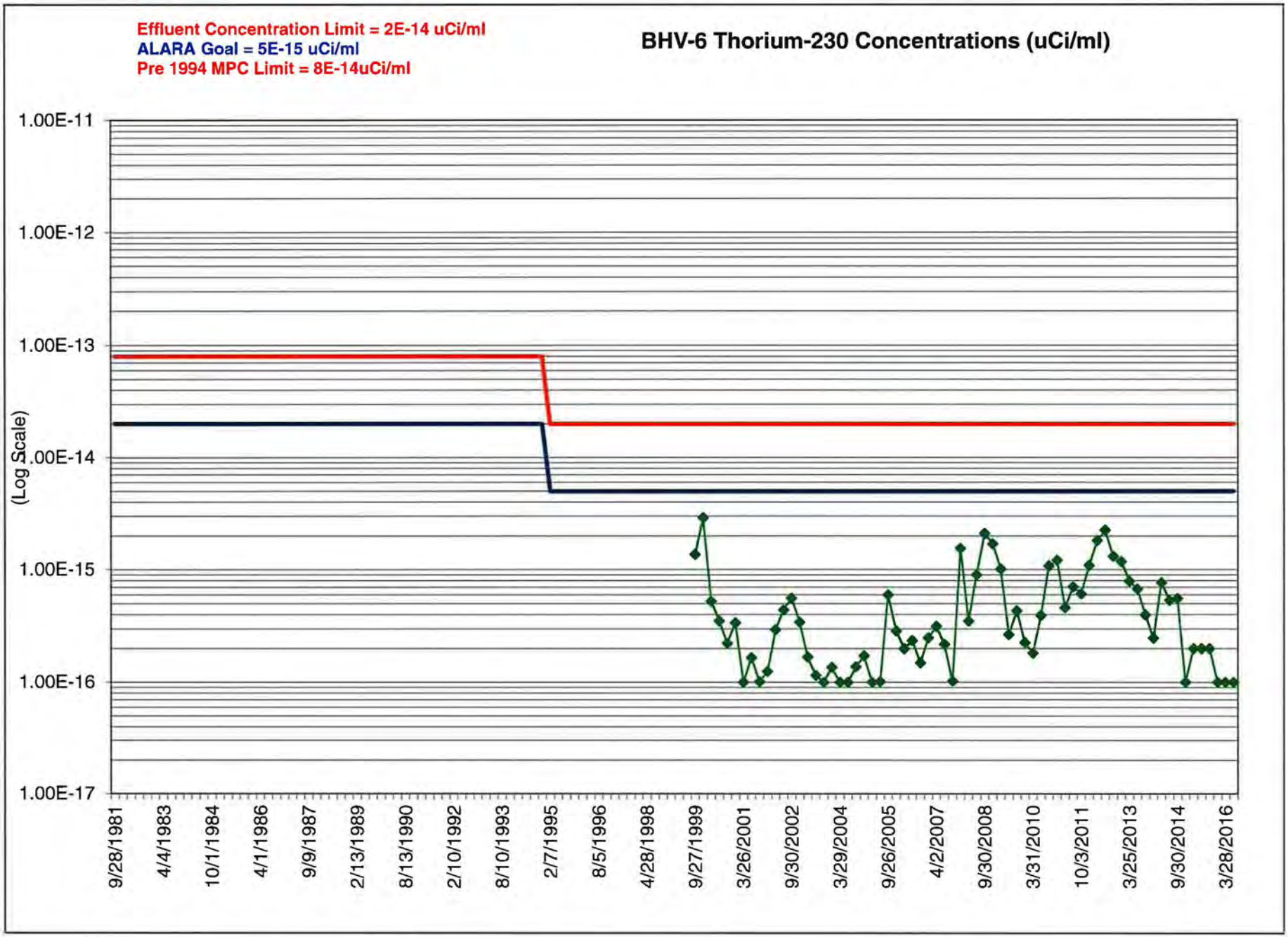
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-6U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-6T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-6R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-6PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-6T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA 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
3/28/2016	7.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	9.00E-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
6/27/2016	1.20E-14	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	6.00E-15	9.00E-13	2.25E-13	2.10E-14	6.00E-13	1.50E-13	4.00E-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
3/28/2016
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
3/28/2016


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)
(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
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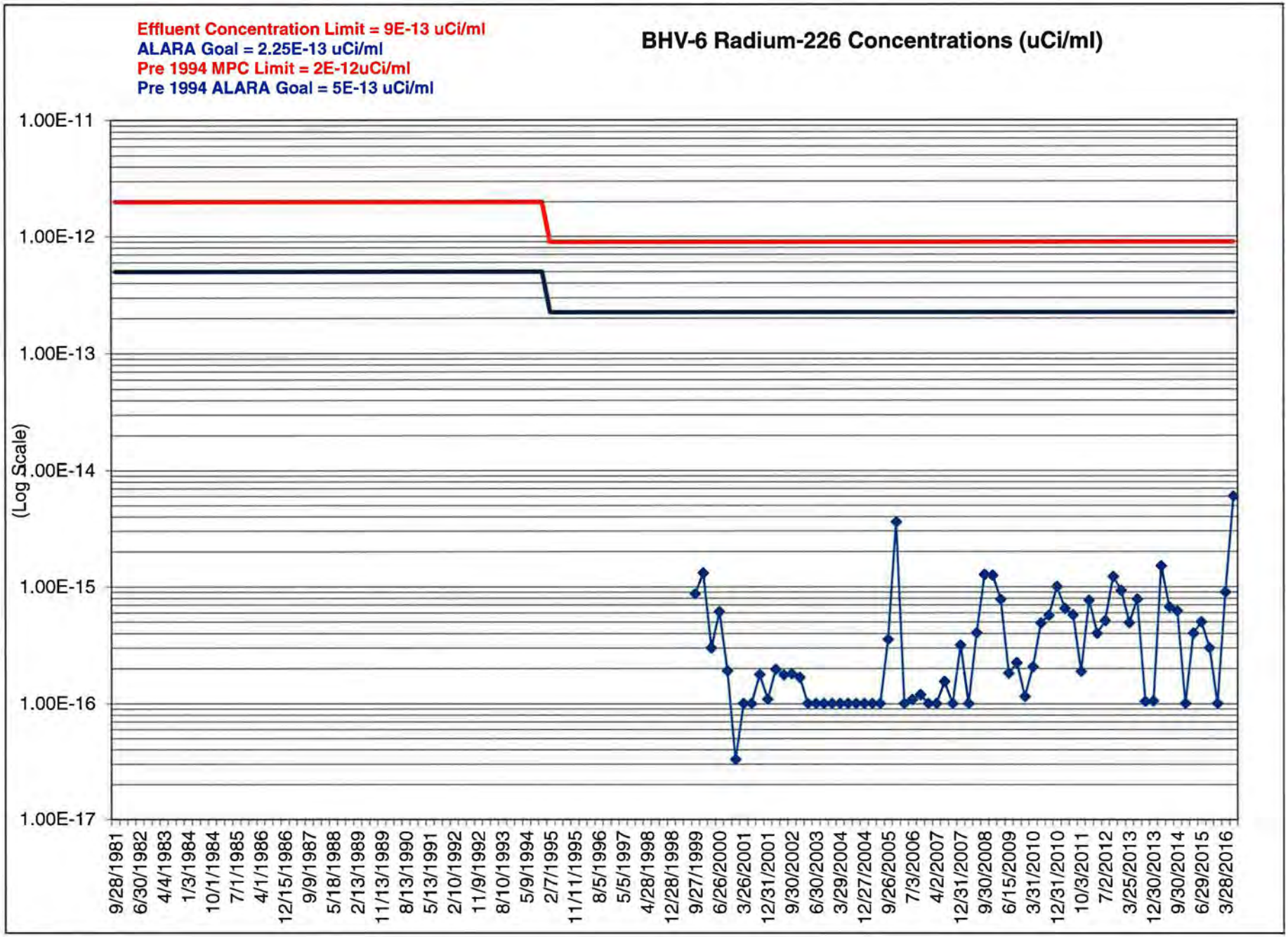
3/25/2013
9/30/2014
3/28/2016


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
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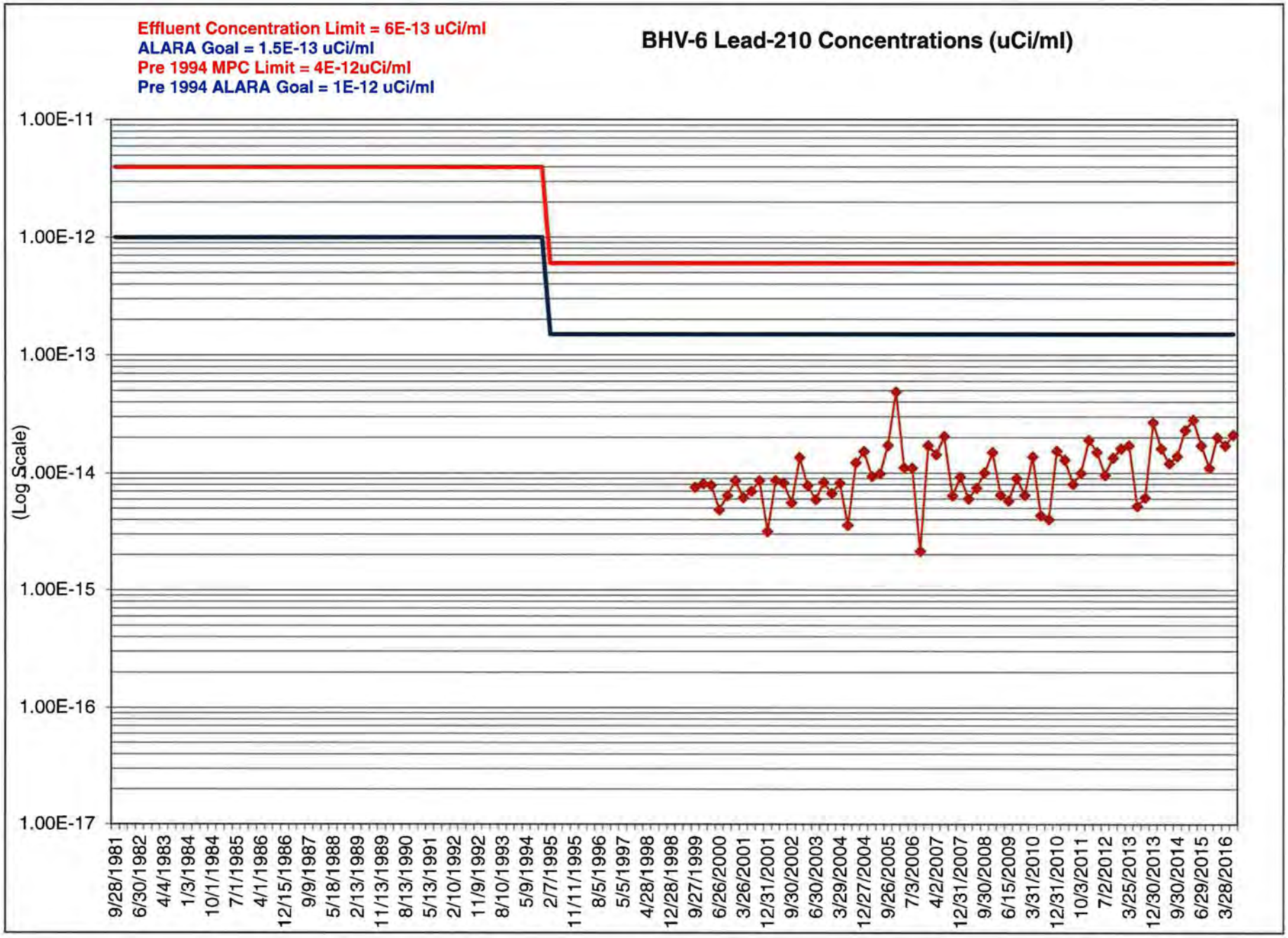
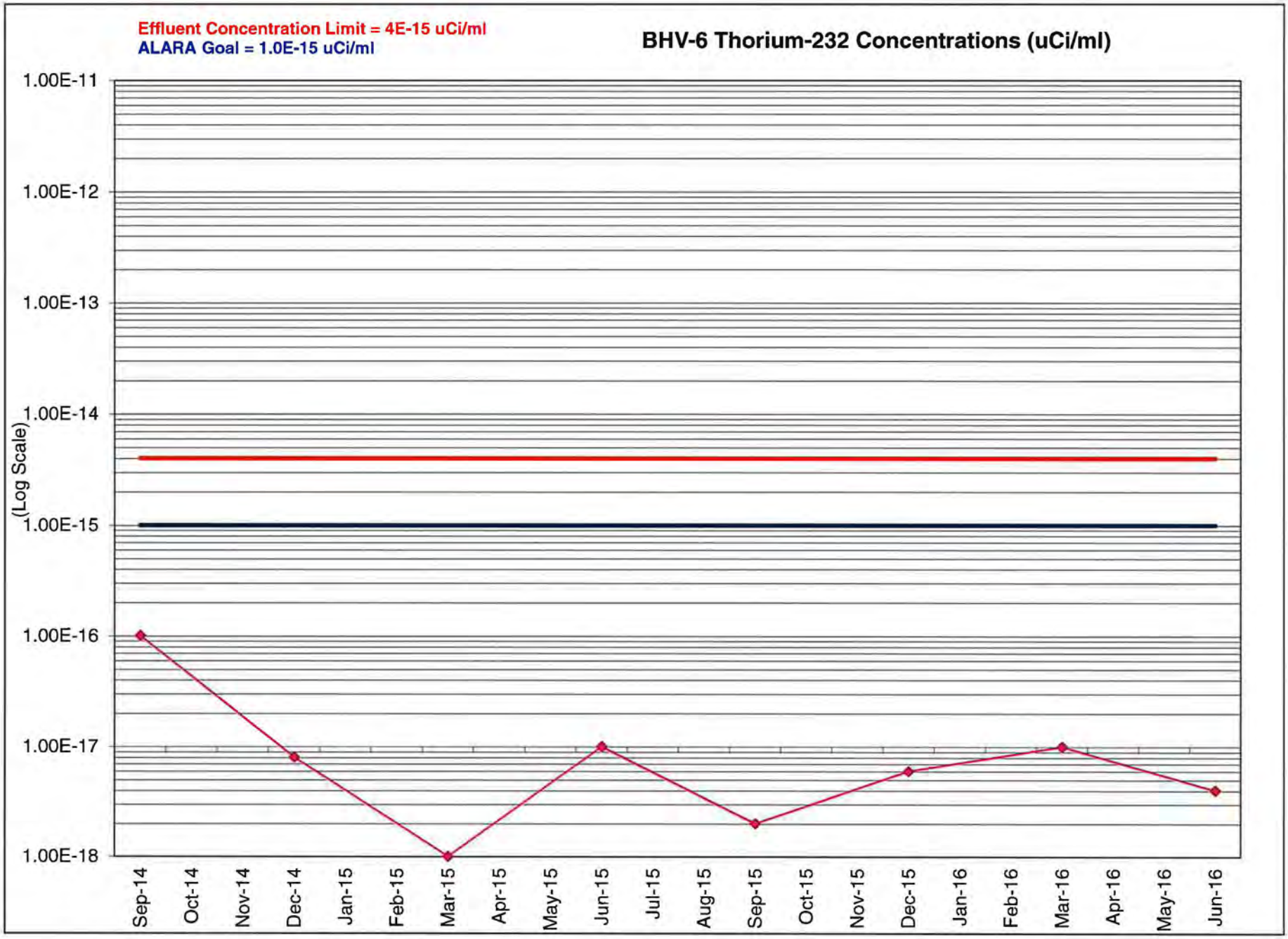
3/25/2013
12/30/2013
9/30/2014
6/29/2015
3/28/2016

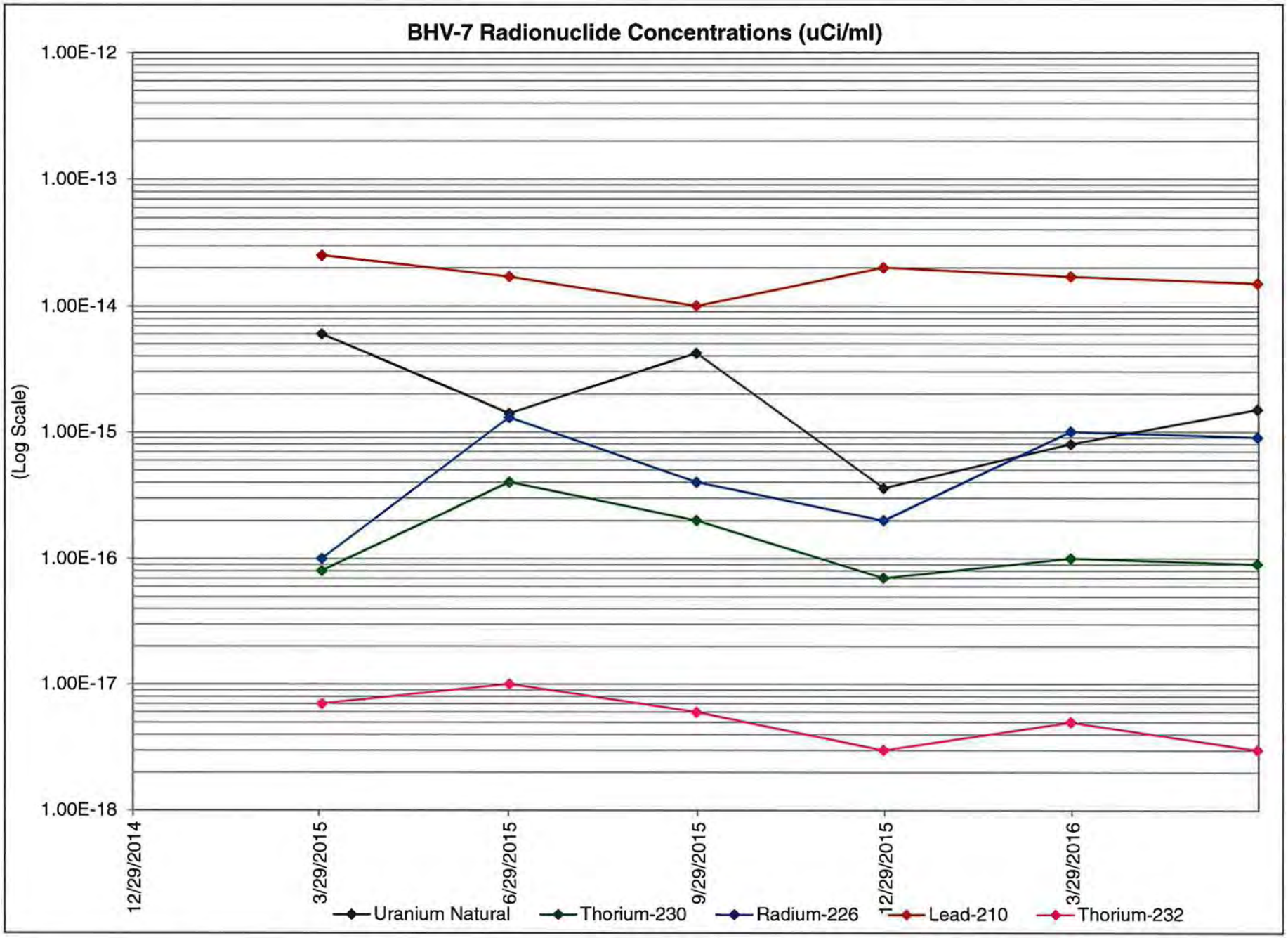

Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-6 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
9/28/1981
6/30/1982
4/4/1983
1/3/1984
10/1/1984
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
3/28/2016

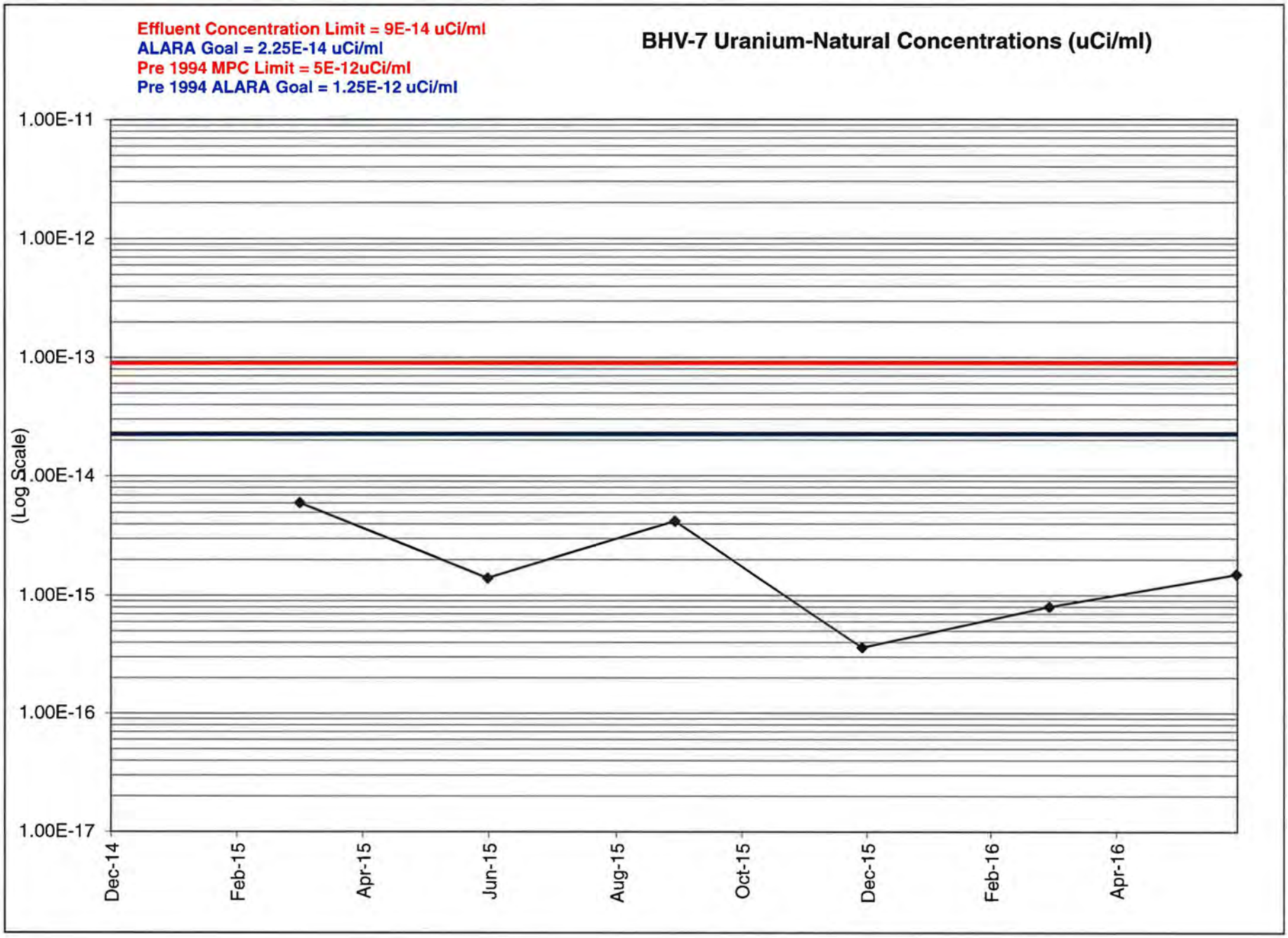

Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-6 Thorium-232 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15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

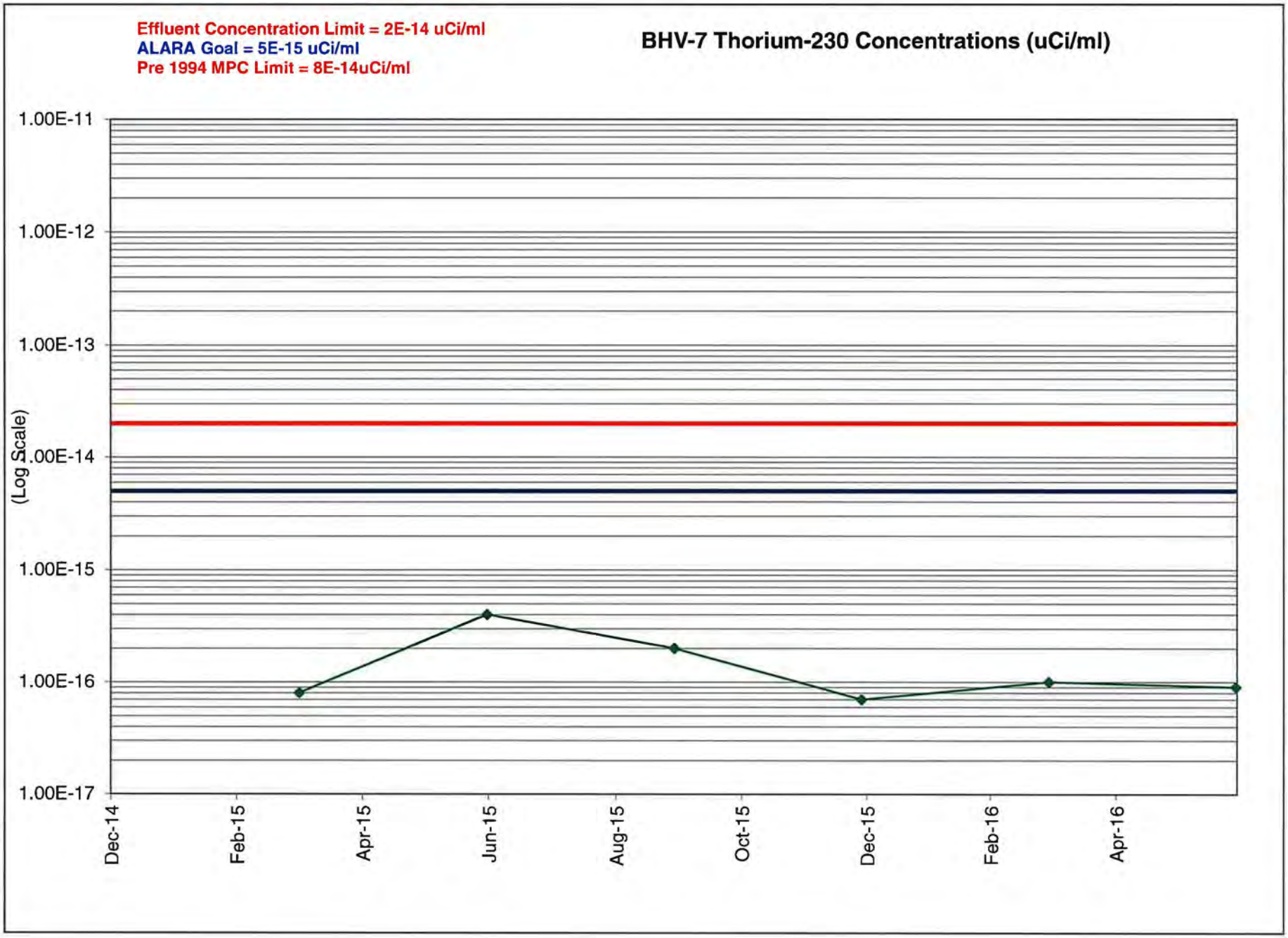
TAB 7

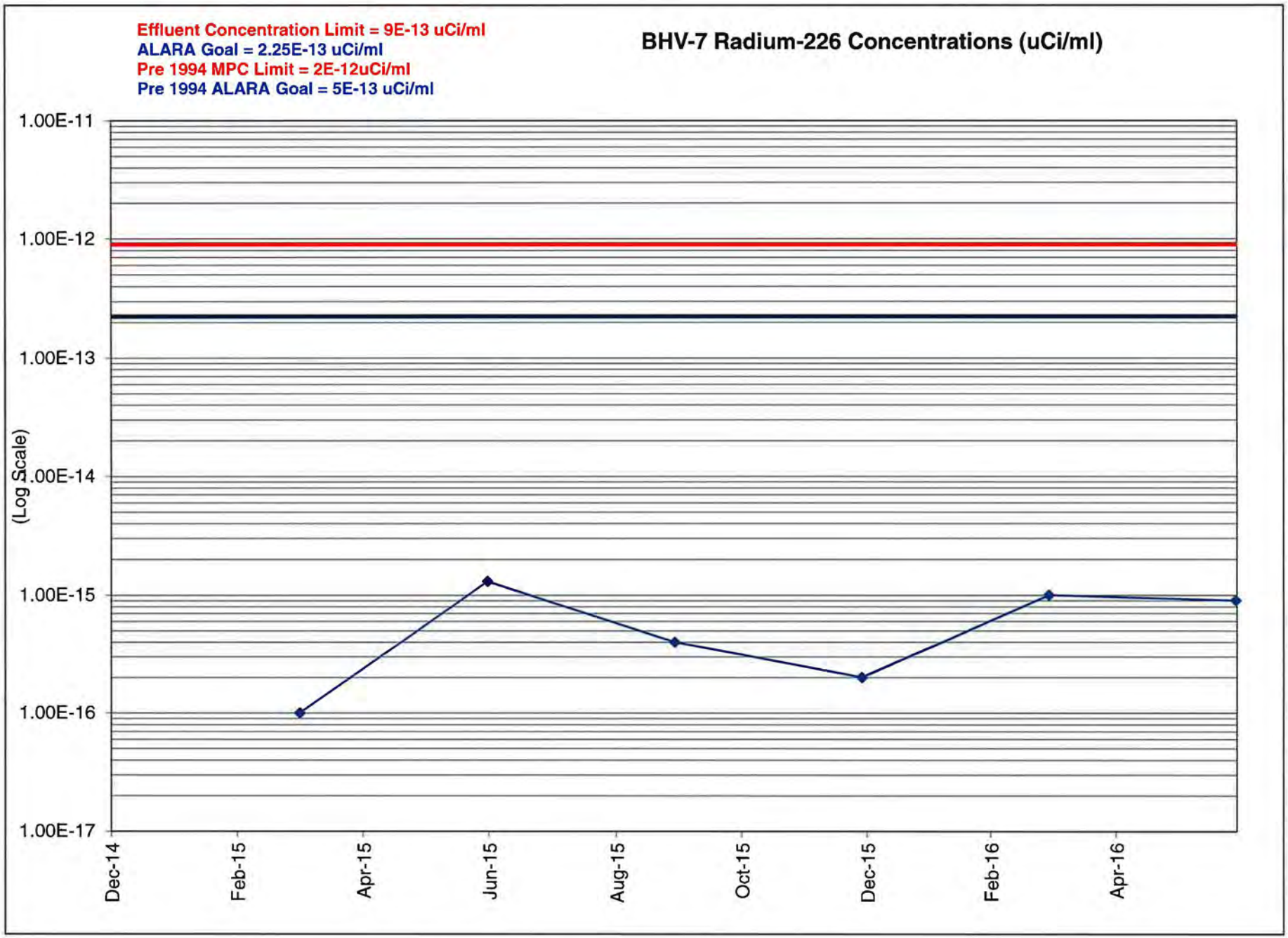
BHV-7 AIR SAMPLING GRAPHS AND DATA TABLE

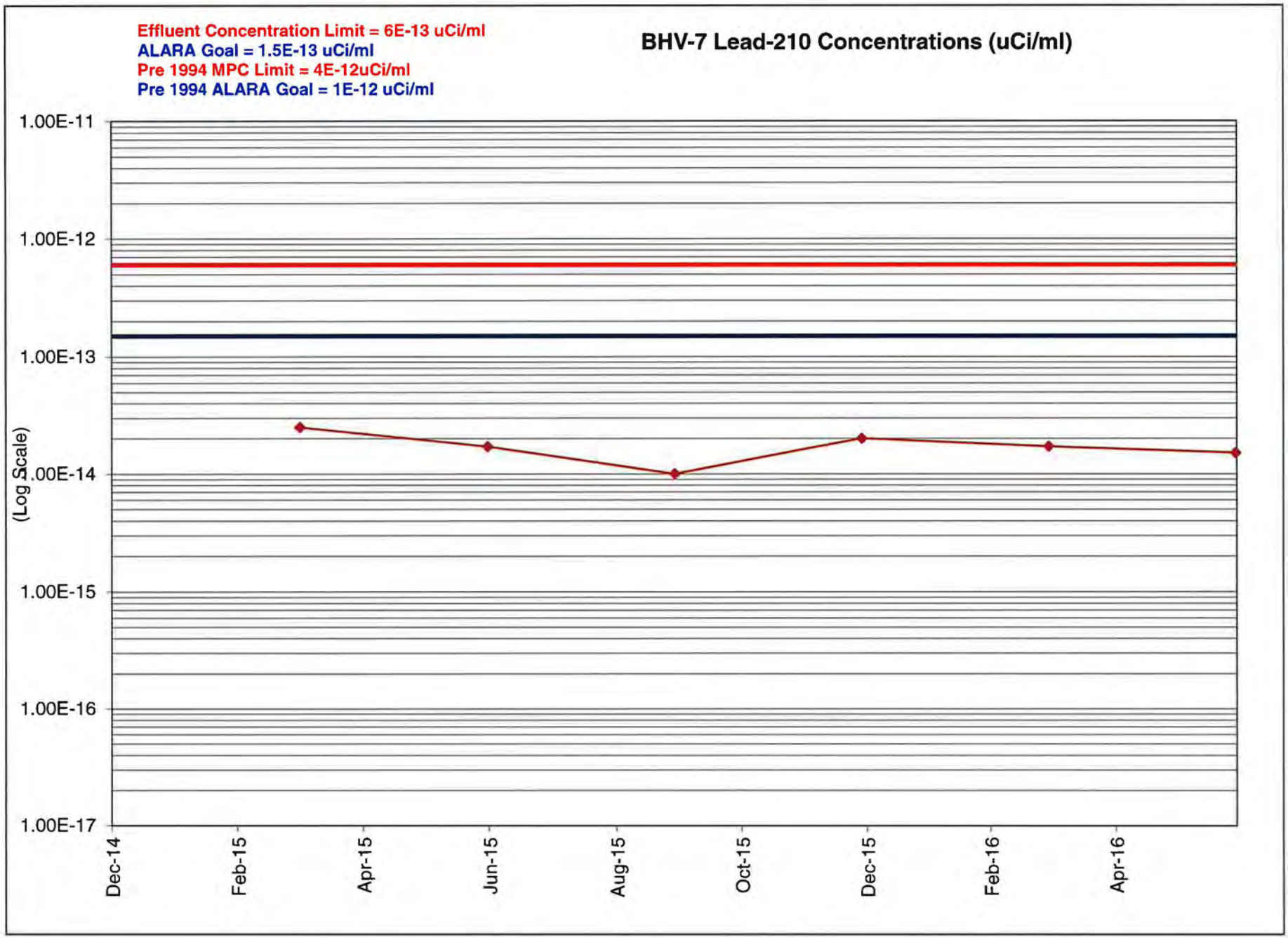
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-7U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-7T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-7R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-7PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-7T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA 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
3/28/2016	8.00E-16	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.00E-15	9.00E-13	2.25E-13	1.70E-14	6.00E-13	1.50E-13	5.00E-18	4.00E-15	1.00E-15
6/27/2016	1.50E-15	9.00E-14	2.25E-14	9.00E-17	2.00E-14	5.00E-15	9.00E-16	9.00E-13	2.25E-13	1.50E-14	6.00E-13	1.50E-13	3.00E-18	4.00E-15	1.00E-15

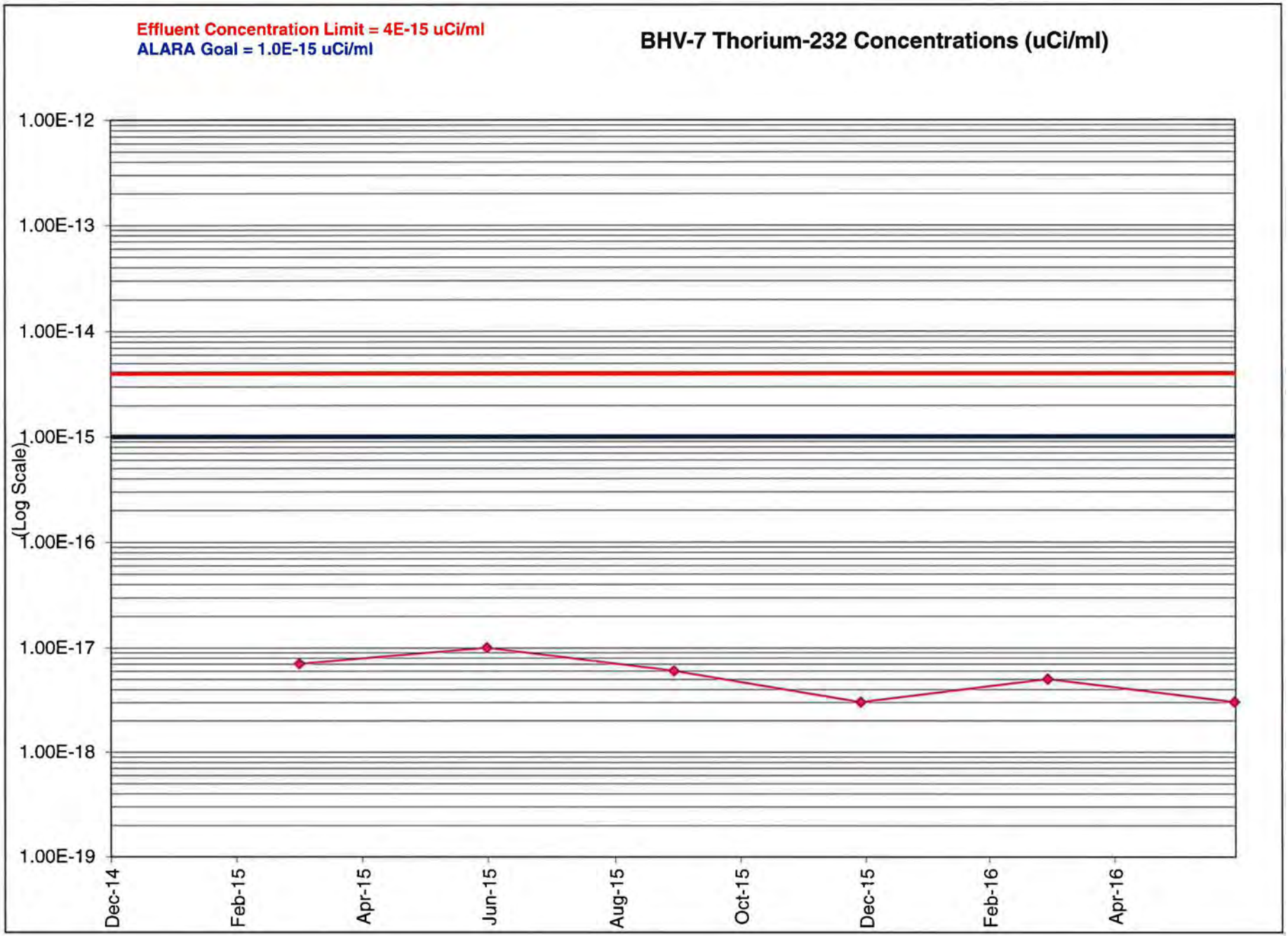

BHV-7 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
12/29/2014
3/29/2015
6/29/2015
9/29/2015
12/29/2015
3/29/2016
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16

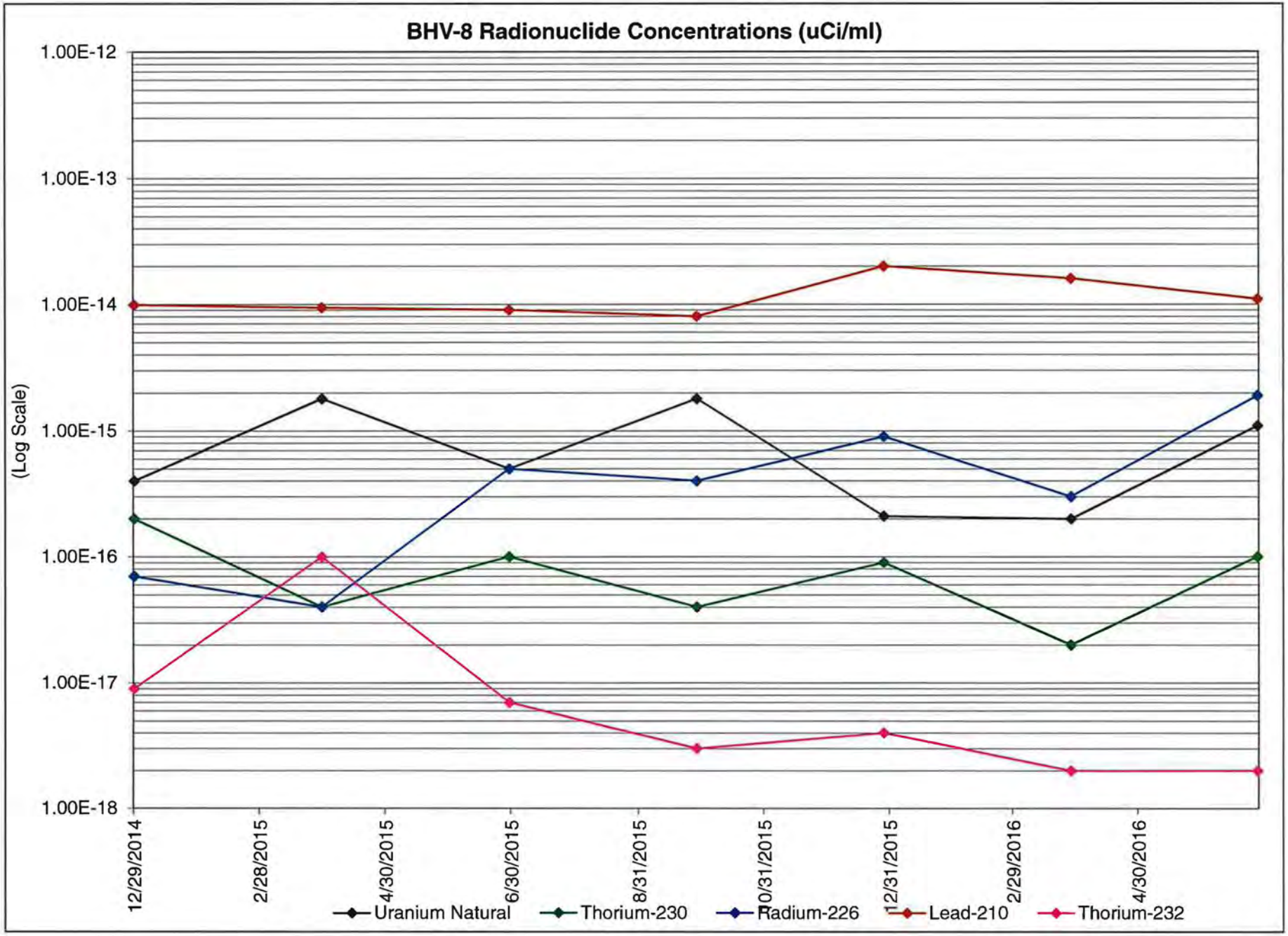

Effluent Concentration Limit = 6E-13 uCi/ml
ALARA Goal = 1.5E-13 uCi/ml
Pre 1994 MPC Limit = 4E-12uCi/ml
Pre 1994 ALARA Goal = 1E-12 uCi/ml
BHV-7 Lead-210 Concentrations (uCi/ml)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15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

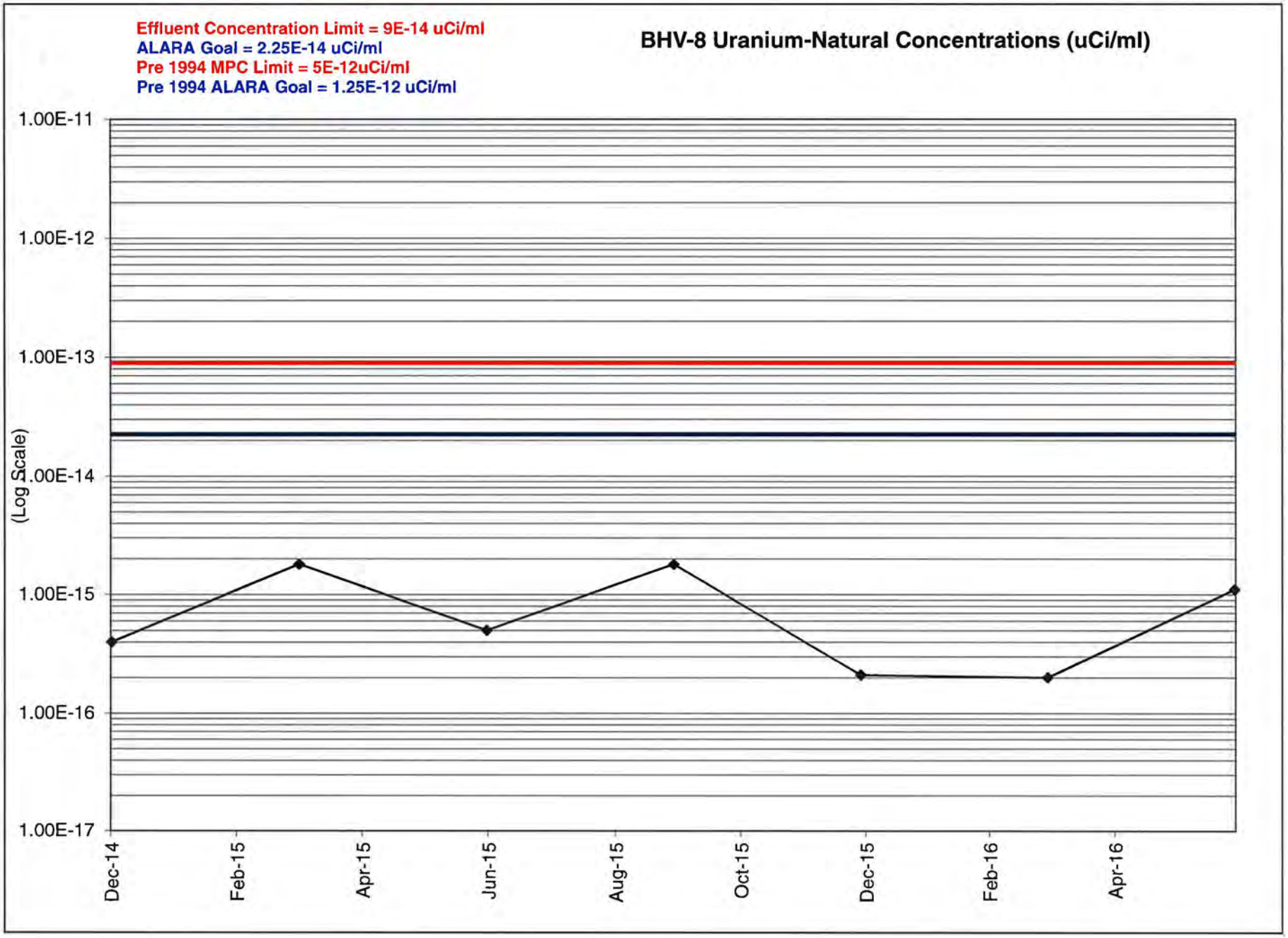

Effluent Concentration Limit = 4E-15 uCi/ml
ALARA Goal = 1.0E-15 uCi/ml
BHV-7 Thorium-232 Concentrations (uCi/ml)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
1.00E-19
(Log Scale)
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16

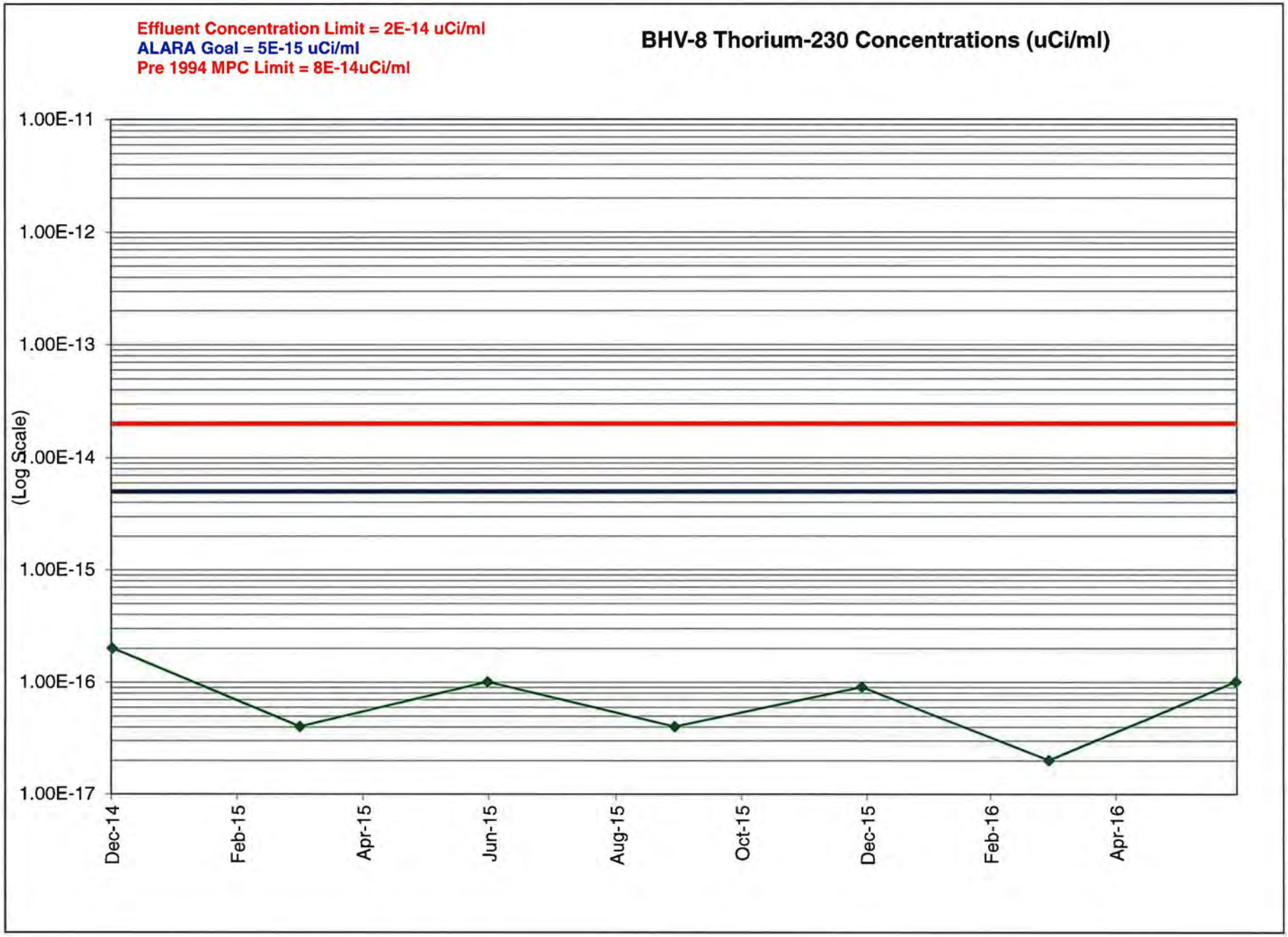
TAB 8

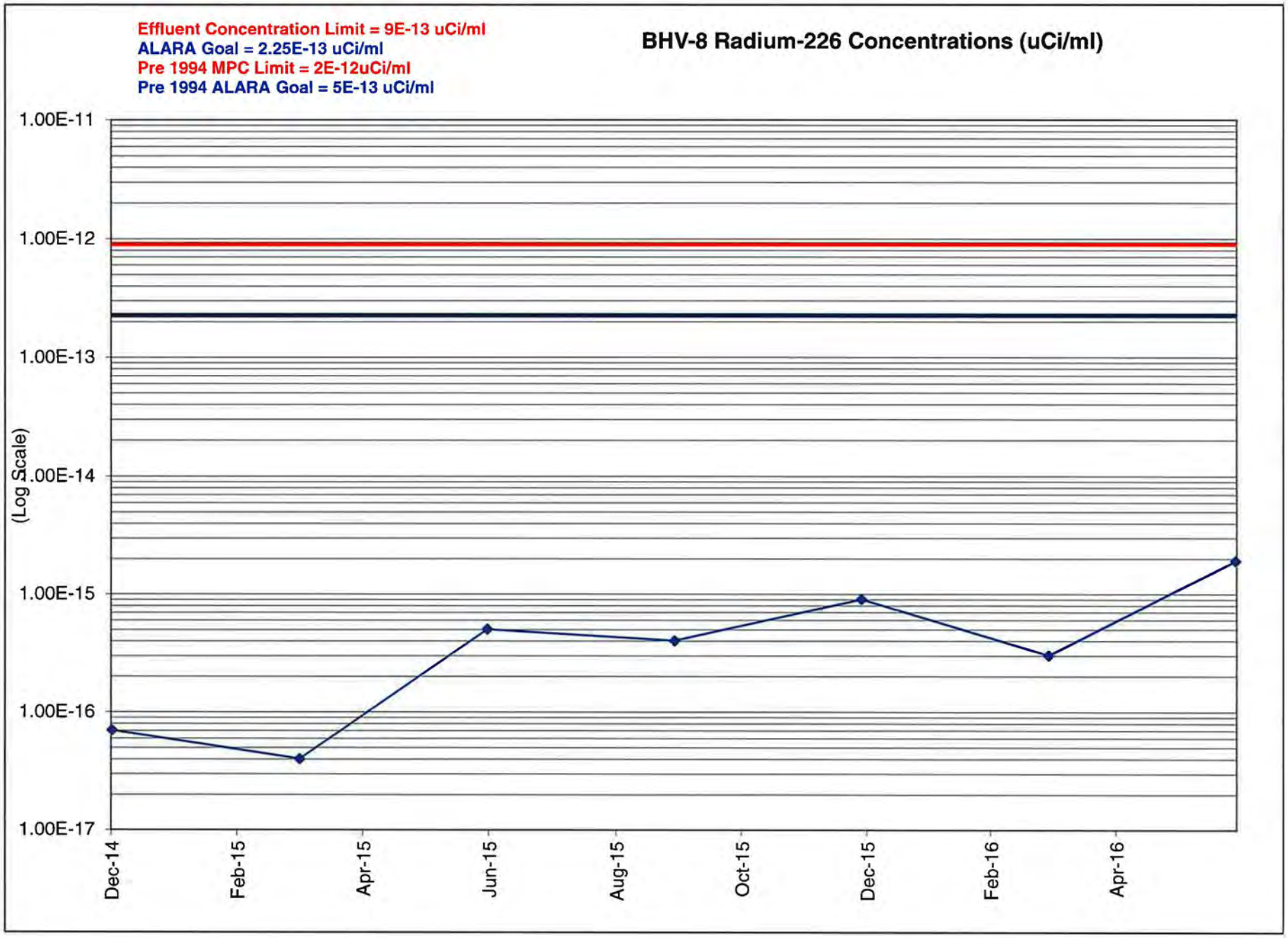
BHV-8 AIR SAMPLING GRAPHS AND DATA TABLE

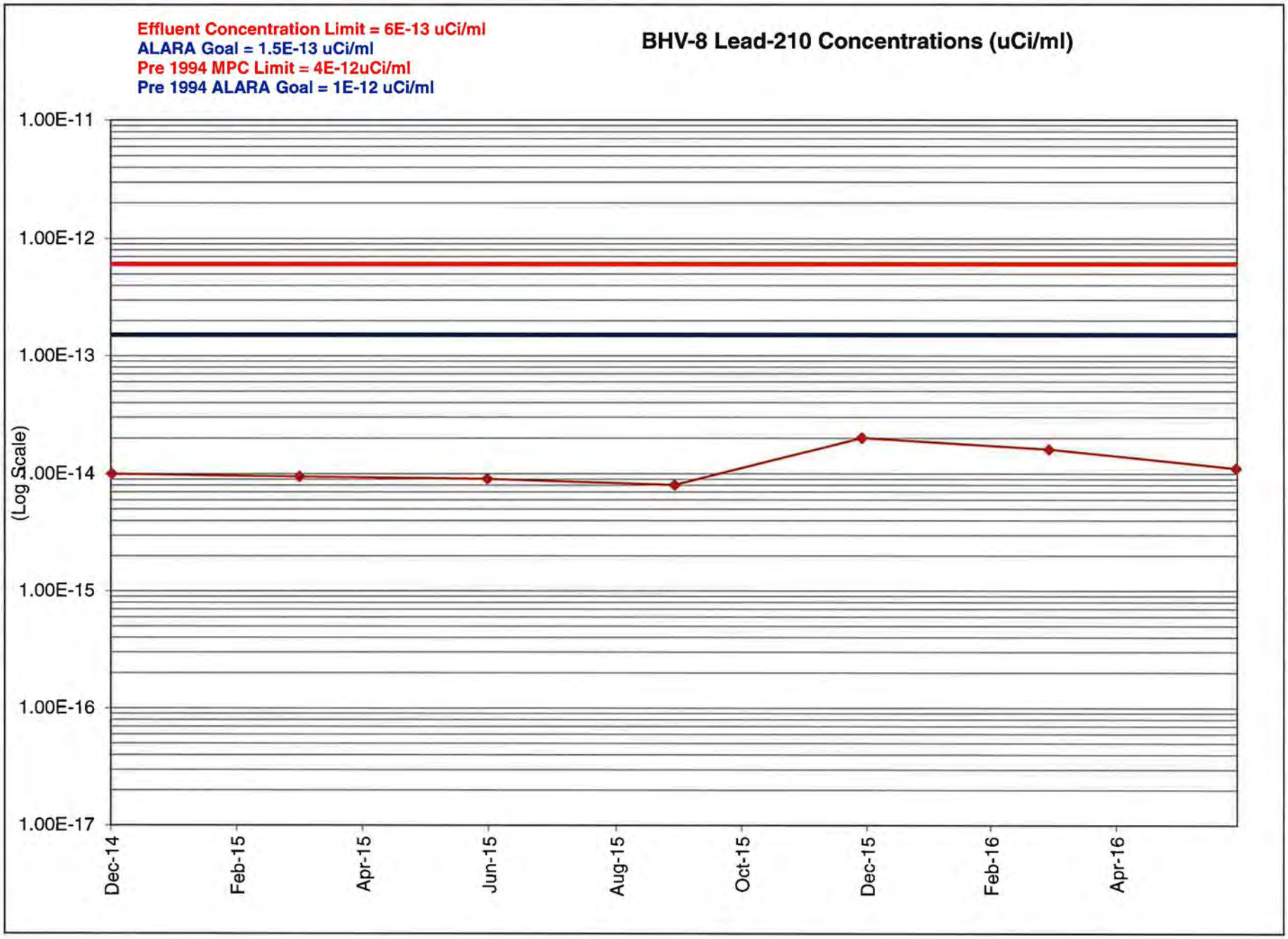
Date	Effluent Concentration Limit =	9E-14 uCi/ml	BHV-8U	Effluent Concentration Limit =	2E-14 uCi/ml	BHV-8T230	Effluent Concentration Limit =	9E-13 uCi/ml	BHV-8R	Effluent Concentration Limit =	6E-13 uCi/ml	BHV-8PB	Effluent Concentration Limit =	4e-15 uCi/ml	BHV-8T232
	ALARA Goal =	2.25E-14 uCi/ml		ALARA 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
3/28/2016	2.00E-16	9.00E-14	2.25E-14	2.00E-17	2.00E-14	5.00E-15	3.00E-16	9.00E-13	2.25E-13	1.60E-14	6.00E-13	1.50E-13	2.00E-18	4.00E-15	1.00E-15
6/27/2016	1.10E-15	9.00E-14	2.25E-14	1.00E-16	2.00E-14	5.00E-15	1.90E-15	9.00E-13	2.25E-13	1.10E-14	6.00E-13	1.50E-13	2.00E-18	4.00E-15	1.00E-15

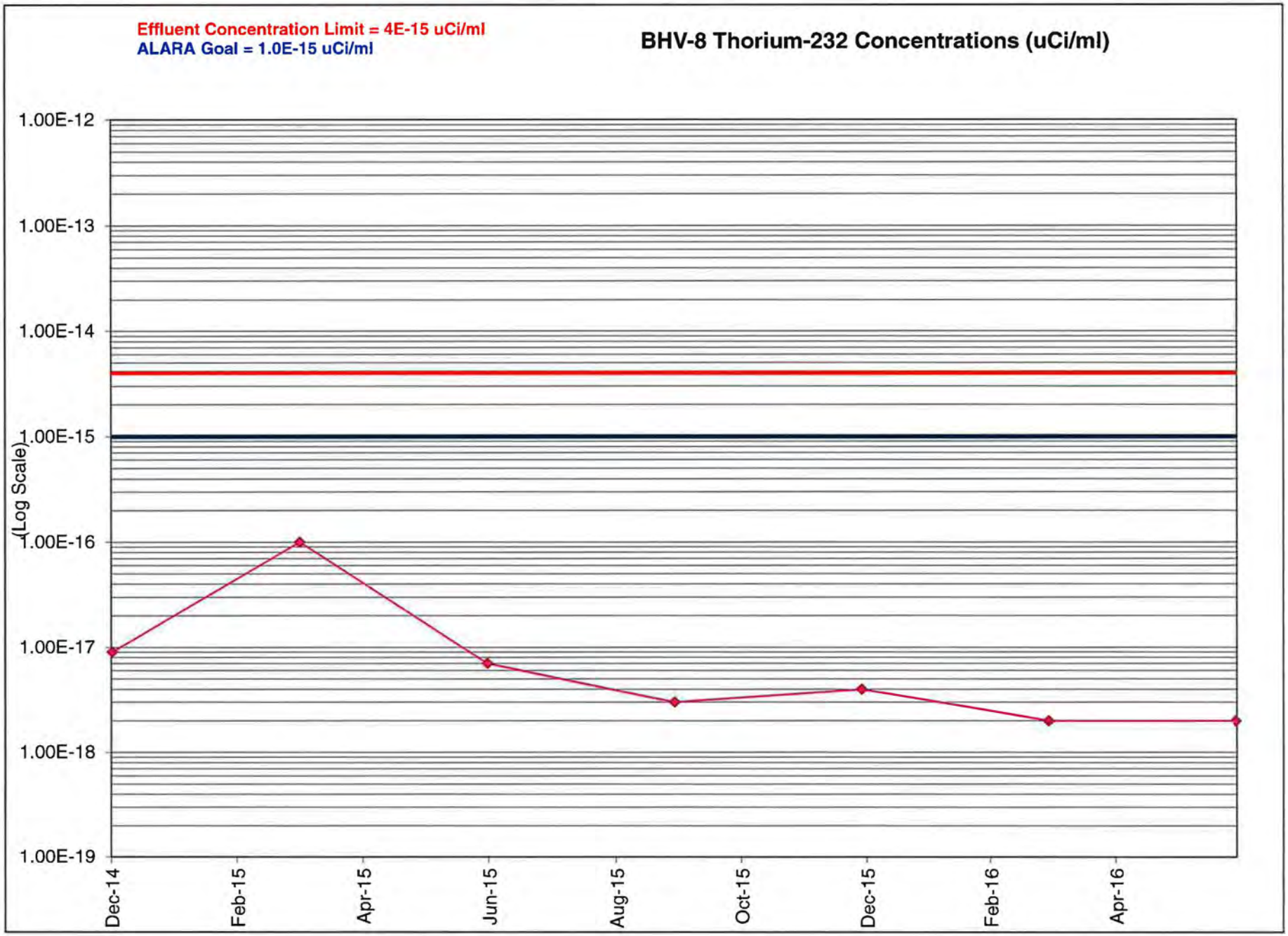

BHV-8 Radionuclide Concentrations (uCi/ml)
(Log Scale)
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
1.00E-18
12/29/2014
2/28/2015
4/30/2015
6/30/2015
8/31/2015
10/31/2015
12/31/2015
2/29/2016
4/30/2016
Uranium Natural
Thorium-230
Radium-226
Lead-210
Thorium-232


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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)
(Log Scale)
1.00E-11
1.00E-12
1.00E-13
1.00E-14
1.00E-15
1.00E-16
1.00E-17
Dec-14
Feb-15
Apr-15
Jun-15
Aug-15
Oct-15
Dec-15
Feb-16
Apr-16


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
Dec-15
Feb-16
Apr-16

ATTACHMENT C

BHV AIR SAMPLING LABORATORY RESULTS AND QA/QC

HIGH VOLUME AIR SAMPLING REPORT

CLIENT: Energy Fuels Resources (USA) Inc
REPORT DATE: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-001	^{nat}U	2E-16	N/A	N/A	1E-16	9E-14	2E-01
First Quarter 2016	^{230}Th	3E-17	5E-18	1E-17	1E-16	3E-14	9E-02
Air Volume in mLs	^{226}Ra	3E-16	7E-17	7E-18	1E-16	9E-13	4E-02
1.24E+11	^{210}Pb	1.4E-14	4E-15	2E-16	2E-15	6E-13	2.3E+00
	^{232}Th	2E-18	5E-18	1E-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: 1st Quarter Air 2016
Lab ID: C16040073-001
Client Sample ID: BHV-1

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	3.0E-10	mg/L		1.5E-10		SW6020	04/12/16 03:59 / sf
Uranium, Activity	2.1E-16	uCi/mL		1.0E-16		SW6020	04/12/16 03:59 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.4E-14	uCi/mL				E909.0	04/21/16 23:02 / eli-cs
Lead 210 precision (±)	4.2E-15	uCi/mL				E909.0	04/21/16 23:02 / eli-cs
Lead 210 MDC	2.1E-16	uCi/mL				E909.0	04/21/16 23:02 / eli-cs
Radium 226	3.4E-16	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	6.7E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.5E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	2.8E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	5.3E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	1.0E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	2.4E-18	uCi/mL	U			E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	5.1E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	1.0E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1740	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	520	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	26.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	42.6	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	8.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.81	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	3.5	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	0.66	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	1.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.30	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.64	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	1.2	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	25.6	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.3E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	4.0E-02	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	9.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	4.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-001
Client Sample ID: BHV-1

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	2.3E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124289700	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-001	^{nat}U	1.1E-15	N/A	N/A	1E-16	9E-14	1.2E+00
Second Quarter 2016	^{230}Th	7E-17	1E-17	3E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	9E-16	2E-16	1E-17	1E-16	9E-13	1E-01
1.21E+11	^{210}Pb	9.6E-15	3E-15	7E-17	2E-15	6E-13	1.6E+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: 2nd Quarter Air 2016
Lab ID: C16060975-001
Client Sample ID: BHV-1

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	1.6E-09	mg/L		1.5E-10		SW6020	07/08/16 03:30 / sf
Uranium, Activity	1.1E-06	pCi/L		1.0E-07		SW6020	07/08/16 03:30 / sf
RADIONUCLIDES - IN AIR							
Lead 210	9.6E-06	pCi/L				E909.0	07/15/16 01:59 / eli-cs
Lead 210 precision (±)	2.8E-06	pCi/L				E909.0	07/15/16 01:59 / eli-cs
Lead 210 MDC	6.8E-08	pCi/L				E909.0	07/15/16 01:59 / eli-cs
Radium 226	8.6E-07	pCi/L				E903.0	08/01/16 13:49 / dmf
Radium 226 precision (±)	1.7E-07	pCi/L				E903.0	08/01/16 13:49 / dmf
Radium 226 MDC	1.1E-08	pCi/L				E903.0	08/01/16 13:49 / dmf
Thorium 230	6.8E-08	pCi/L				E908.0	08/05/16 12:45 / cng
Thorium 230 precision (±)	1.3E-08	pCi/L				E908.0	08/05/16 12:45 / cng
Thorium 230 MDC	2.5E-09	pCi/L				E908.0	08/05/16 12:45 / cng
Thorium 232	3.1E-09	pCi/L				E908.0	08/05/16 12:45 / cng
Thorium 232 precision (±)	1.6E-09	pCi/L				E908.0	08/05/16 12:45 / cng
Thorium 232 MDC	1.5E-09	pCi/L				E908.0	08/05/16 12:45 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1170	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	345	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	105	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	20.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.3	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	1.6	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.31	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.38	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.19	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.18	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	129	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	1.6E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	1.0E-01	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	2.3E-01	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	5.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-001
Client Sample ID: BHV-1

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	1.2E+00	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	121409800	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-002	^{nat}U	7E-16	N/A	N/A	1E-16	9E-14	8E-01
First Quarter 2016	^{230}Th	6E-18	4E-18	5E-18	1E-16	3E-14	2E-02
Air Volume in mLs	^{226}Ra	8E-17	2E-17	7E-18	1E-16	9E-13	9E-03
1.24E+11	^{210}Pb	1.5E-14	4E-15	2E-16	2E-15	6E-13	2.5E+00
	^{232}Th	4E-18	2E-18	3E-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: 1st Quarter Air 2016
Lab ID: C16040073-002
Client Sample ID: BHV-2

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	04/12/16 04:04 / sf
Uranium, Activity	7.1E-16	uCi/mL		1.0E-16		SW6020	04/12/16 04:04 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.5E-14	uCi/mL				E909.0	04/21/16 23:47 / eli-cs
Lead 210 precision (±)	4.4E-15	uCi/mL				E909.0	04/21/16 23:47 / eli-cs
Lead 210 MDC	2.2E-16	uCi/mL				E909.0	04/21/16 23:47 / eli-cs
Radium 226	8.2E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	1.9E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.7E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	6.2E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	3.6E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	4.7E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	3.7E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	2.4E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	2.8E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1840	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	550	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	27.1	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	10.1	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	2.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.83	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	0.77	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	0.44	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	0.58	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.46	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.29	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	0.35	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	88.6	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.5E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	9.0E-03	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	2.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	6.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-002
Client Sample ID: BHV-2

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	7.9E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124143300	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-002	^{nat}U	2E-16	N/A	N/A	1E-16	9E-14	3E-01
Second Quarter 2016	^{230}Th	3E-17	5E-18	2E-18	1E-16	3E-14	9E-02
Air Volume in mLs	^{226}Ra	3E-16	5E-17	1E-17	1E-16	9E-13	3E-02
1.22E+11	^{210}Pb	1.3E-14	4E-15	7E-17	2E-15	6E-13	2.1E+00
	^{232}Th	4E-18	2E-18	2E-18	N/A	6E-15	7E-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: 2nd Quarter Air 2016
Lab ID: C16060975-002
Client Sample ID: BHV-2

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	3.4E-10	mg/L		1.5E-10		SW6020	07/08/16 04:00 / sf
Uranium, Activity	2.3E-07	pCi/L		1.0E-07		SW6020	07/08/16 04:00 / sf
RADIONUCLIDES - IN AIR							
Lead 210	0.000013	pCi/L				E909.0	07/15/16 07:05 / eli-cs
Lead 210 precision (±)	3.7E-06	pCi/L				E909.0	07/15/16 07:05 / eli-cs
Lead 210 MDC	6.7E-08	pCi/L				E909.0	07/15/16 07:05 / eli-cs
Radium 226	2.6E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	5.4E-08	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	9.7E-09	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	2.6E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 precision (±)	5.0E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 MDC	2.3E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232	4.2E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 precision (±)	2.1E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 MDC	2.3E-09	pCi/L				E908.0	08/05/16 13:00 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1530	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	450	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	31.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	6.6	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	3.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	0.61	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.28	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.51	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.25	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.28	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	28.3	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.1E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	3.0E-02	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	9.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	7.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-002
Client Sample ID: BHV-2

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	2.6E-01	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	122103500	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-003	^{nat}U	5E-16	N/A	N/A	1E-16	9E-14	5E-01
First Quarter 2016	^{230}Th	2E-17	4E-18	7E-18	1E-16	3E-14	7E-02
Air Volume in mLs	^{226}Ra	5E-17	1E-17	6E-18	1E-16	9E-13	6E-03
1.26E+11	^{210}Pb	1.7E-14	5E-15	2E-16	2E-15	6E-13	2.8E+00
	^{232}Th	2E-18	3E-18	6E-18	N/A	6E-15	3E-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: 1st Quarter Air 2016
Lab ID: C16040073-003
Client Sample ID: BHV-4

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	7.0E-10	mg/L		1.5E-10		SW6020	04/12/16 04:09 / sf
Uranium, Activity	4.7E-16	uCi/mL		1.0E-16		SW6020	04/12/16 04:09 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.7E-14	uCi/mL				E909.0	04/21/16 23:54 / eli-cs
Lead 210 precision (±)	5.0E-15	uCi/mL				E909.0	04/21/16 23:54 / eli-cs
Lead 210 MDC	2.3E-16	uCi/mL				E909.0	04/21/16 23:54 / eli-cs
Radium 226	5.5E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	1.3E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.4E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	2.1E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	4.1E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	7.2E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	1.7E-18	uCi/mL	U			E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	3.2E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	6.5E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2110	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	630	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	29.2	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	6.9	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	1.7	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.80	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	2.7	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	0.51	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	0.91	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.21	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.40	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	0.81	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	59.2	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.8E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	6.0E-03	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	7.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	3.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-003
Client Sample ID: BHV-4

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	5.2E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	125547500	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-003	^{nat}U	2.9E-15	N/A	N/A	1E-16	9E-14	3.3E+00
Second Quarter 2016	^{230}Th	5E-17	9E-18	3E-18	1E-16	3E-14	2E-01
Air Volume in mLs	^{226}Ra	4E-16	7E-17	1E-17	1E-16	9E-13	4E-02
1.21E+11	^{210}Pb	8.8E-15	3E-15	7E-17	2E-15	6E-13	1.5E+00
	^{232}Th	5E-18	2E-18	3E-18	N/A	6E-15	8E-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: 2nd Quarter Air 2016
Lab ID: C16060975-003
Client Sample ID: BHV-4

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	4.3E-09	mg/L		1.5E-10		SW6020	07/08/16 04:31 / sf
Uranium, Activity	2.9E-06	pCi/L		1.0E-07		SW6020	07/08/16 04:31 / sf
RADIONUCLIDES - IN AIR							
Lead 210	8.8E-06	pCi/L				E909.0	07/15/16 08:47 / eli-cs
Lead 210 precision (±)	2.6E-06	pCi/L				E909.0	07/15/16 08:47 / eli-cs
Lead 210 MDC	6.5E-08	pCi/L				E909.0	07/15/16 08:47 / eli-cs
Radium 226	3.6E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	7.3E-08	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	9.6E-09	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	5.0E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 precision (±)	9.5E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 MDC	3.0E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232	5.1E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 precision (±)	2.3E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 MDC	2.5E-09	pCi/L				E908.0	08/05/16 13:00 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1070	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	315	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	7.9	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	44.0	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	8.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	6.0	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	1.1	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.36	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.61	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.28	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.31	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	355	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	1.5E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	4.0E-02	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	1.7E-01	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	8.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-003
Client Sample ID: BHV-4

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	3.3E+00	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	120785700	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-004	^{nat}U	1.4E-15	N/A	N/A	1E-16	9E-14	1.5E+00
First Quarter 2016	^{230}Th	6E-16	1E-16	4E-17	1E-16	3E-14	2E+00
Air Volume in mLs	^{226}Ra	6.2E-15	1E-15	6E-18	1E-16	9E-13	6.8E-01
1.24E+11	^{210}Pb	2.3E-14	7E-15	3E-16	2E-15	6E-13	3.9E+00
	^{232}Th	6E-17	1E-17	2E-17	N/A	6E-15	1E+00

+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: 1st Quarter Air 2016
Lab ID: C16040073-004
Client Sample ID: BHV-5

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	2.0E-09	mg/L		1.5E-10		SW6020	04/12/16 04:15 / sf
Uranium, Activity	1.4E-15	uCi/mL		1.0E-16		SW6020	04/12/16 04:15 / sf
RADIONUCLIDES - IN AIR							
Lead 210	2.3E-14	uCi/mL				E909.0	04/21/16 23:59 / eli-cs
Lead 210 precision (±)	7.0E-15	uCi/mL				E909.0	04/21/16 23:59 / eli-cs
Lead 210 MDC	2.8E-16	uCi/mL				E909.0	04/21/16 23:59 / eli-cs
Radium 226	6.2E-15	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	1.2E-15	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.5E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	6.3E-16	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	1.2E-16	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	3.5E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	5.8E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	1.1E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	2.0E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2910	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	869	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	34.8	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	766	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	144	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.80	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	78.0	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	14.8	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	4.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	7.2	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	1.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	2.5	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	170	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.9E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	6.8E-01	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	2.1E+00	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	9.7E-01	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-004
Client Sample ID: BHV-5

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	1.5E+00	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124169200	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-004	^{nat}U	3.9E-15	N/A	N/A	1E-16	9E-14	4.4E+00
Second Quarter 2016	^{230}Th	4E-16	7E-17	4E-18	1E-16	3E-14	1E+00
Air Volume in mLs	^{226}Ra	6E-16	1E-16	1E-17	1E-16	9E-13	7E-02
1.22E+11	^{210}Pb	1.5E-14	4E-15	7E-17	2E-15	6E-13	2.5E+00
	^{232}Th	3E-18	2E-18	3E-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: 2nd Quarter Air 2016
Lab ID: C16060975-004
Client Sample ID: BHV-5

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	5.8E-09	mg/L		1.5E-10		SW6020	07/08/16 04:37 / sf
Uranium, Activity	3.9E-06	pCi/L		1.0E-07		SW6020	07/08/16 04:37 / sf
RADIONUCLIDES - IN AIR							
Lead 210	0.000015	pCi/L				E909.0	07/15/16 10:29 / eli-cs
Lead 210 precision (±)	4.4E-06	pCi/L				E909.0	07/15/16 10:29 / eli-cs
Lead 210 MDC	6.8E-08	pCi/L				E909.0	07/15/16 10:29 / eli-cs
Radium 226	6.2E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	1.2E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	9.9E-09	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	3.9E-07	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 precision (±)	7.5E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 MDC	3.6E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232	3.4E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 precision (±)	2.0E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 MDC	2.6E-09	pCi/L				E908.0	08/05/16 13:00 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1830	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	539	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	75.9	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	14.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	47.9	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	9.1	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.44	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.41	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.24	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.32	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	480	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.5E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	7.0E-02	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	1.3E+00	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	6.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-004
Client Sample ID: BHV-5

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	4.4E+00	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	121572200	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-005	^{nat}U	7E-16	N/A	N/A	1E-16	9E-14	8E-01
First Quarter 2016	^{230}Th	1E-16	3E-17	3E-17	1E-16	3E-14	5E-01
Air Volume in mLs	^{226}Ra	9E-16	2E-16	6E-18	1E-16	9E-13	1E-01
1.25E+11	^{210}Pb	1.7E-14	5E-15	2E-16	2E-15	6E-13	2.8E+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: 1st Quarter Air 2016
Lab ID: C16040073-005
Client Sample ID: BHV-6

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	04/12/16 04:20 / sf
Uranium, Activity	7.2E-16	uCi/mL		1.0E-16		SW6020	04/12/16 04:20 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.7E-14	uCi/mL				E909.0	04/22/16 00:04 / eli-cs
Lead 210 precision (±)	5.1E-15	uCi/mL				E909.0	04/22/16 00:04 / eli-cs
Lead 210 MDC	2.3E-16	uCi/mL				E909.0	04/22/16 00:04 / eli-cs
Radium 226	8.9E-16	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	1.7E-16	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.4E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	1.4E-16	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	2.6E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	2.7E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	1.3E-17	uCi/mL	U			E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	2.5E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	1.7E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2120	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	634	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	29.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	112	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	21.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.80	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	17.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	3.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	3.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	1.6	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.31	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	2.2	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	89.8	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.8E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	1.0E-01	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	4.6E-01	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	2.1E-01	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-005
Client Sample ID: BHV-6

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	8.0E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	125215600	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-005	^{nat}U	1.2E-14	N/A	N/A	1E-16	9E-14	1.4E+01
Second Quarter 2016	^{230}Th	1E-16	3E-17	4E-18	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	6E-15	1E-15	2E-17	1E-16	9E-13	7E-01
6.70E+10	^{210}Pb	2.1E-14	6E-15	1E-16	2E-15	6E-13	3.6E+00
	^{232}Th	4E-18	3E-18	4E-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: 2nd Quarter Air 2016
Lab ID: C16060975-005
Client Sample ID: BHV-6

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	1.8E-08	mg/L		1.5E-10		SW6020	07/08/16 04:43 / sf
Uranium, Activity	0.000012	pCi/L		1.0E-07		SW6020	07/08/16 04:43 / sf
RADIONUCLIDES - IN AIR							
Lead 210	0.000021	pCi/L				E909.0	07/15/16 12:11 / eli-cs
Lead 210 precision (±)	6.3E-06	pCi/L				E909.0	07/15/16 12:11 / eli-cs
Lead 210 MDC	1.2E-07	pCi/L				E909.0	07/15/16 12:11 / eli-cs
Radium 226	6.5E-06	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	1.2E-06	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	1.8E-08	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	1.3E-07	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 precision (±)	2.5E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 MDC	4.3E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232	3.6E-09	pCi/L	U			E908.0	08/05/16 13:00 / cng
Thorium 232 precision (±)	2.8E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 MDC	4.0E-09	pCi/L				E908.0	08/05/16 13:00 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1430	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	422	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	434	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	81.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	9.0	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	1.7	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.29	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.24	pCi/Filter	U			RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.19	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.27	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	825	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.6E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	7.2E-01	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	4.5E-01	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	6.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-005
Client Sample ID: BHV-6

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	1.4E+01	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	67042200	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-006	^{nat}U	8E-16	N/A	N/A	1E-16	9E-14	9E-01
First Quarter 2016	^{230}Th	1E-16	2E-17	3E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	1.0E-15	2E-16	7E-18	1E-16	9E-13	1.2E-01
1.25E+11	^{210}Pb	1.7E-14	5E-15	2E-16	2E-15	6E-13	2.8E+00
	^{232}Th	5E-18	2E-18	3E-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: 1st Quarter Air 2016
Lab ID: C16040073-006
Client Sample ID: BHV-7

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	04/12/16 04:25 / sf
Uranium, Activity	8.4E-16	uCi/mL		1.0E-16		SW6020	04/12/16 04:25 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.7E-14	uCi/mL				E909.0	04/22/16 00:09 / eli-cs
Lead 210 precision (±)	5.0E-15	uCi/mL				E909.0	04/22/16 00:09 / eli-cs
Lead 210 MDC	2.3E-16	uCi/mL				E909.0	04/22/16 00:09 / eli-cs
Radium 226	1.0E-15	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	2.0E-16	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.7E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	9.9E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	1.9E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	2.7E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	5.4E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	2.3E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	2.6E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2080	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	621	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	28.9	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	130	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	24.8	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.84	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	12.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	2.3	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	0.34	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.68	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.28	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	0.32	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	105	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.8E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	1.2E-01	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	3.3E-01	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	9.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-006
Client Sample ID: BHV-7

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	9.3E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	124590500	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-006	^{nat}U	1.5E-15	N/A	N/A	1E-16	9E-14	1.7E+00
Second Quarter 2016	^{230}Th	9E-17	2E-17	3E-18	1E-16	3E-14	3E-01
Air Volume in mLs	^{226}Ra	9E-16	2E-16	1E-17	1E-16	9E-13	1E-01
1.23E+11	^{210}Pb	1.5E-14	4E-15	7E-17	2E-15	6E-13	2.4E+00
	^{232}Th	3E-18	2E-18	3E-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: 2nd Quarter Air 2016
Lab ID: C16060975-006
Client Sample ID: BHV-7

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	2.2E-09	mg/L		1.5E-10		SW6020	07/08/16 04:49 / sf
Uranium, Activity	1.5E-06	pCi/L		1.0E-07		SW6020	07/08/16 04:49 / sf
RADIONUCLIDES - IN AIR							
Lead 210	0.000015	pCi/L				E909.0	07/15/16 13:53 / eli-cs
Lead 210 precision (±)	4.3E-06	pCi/L				E909.0	07/15/16 13:53 / eli-cs
Lead 210 MDC	6.7E-08	pCi/L				E909.0	07/15/16 13:53 / eli-cs
Radium 226	9.5E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	1.8E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	1.0E-08	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	8.7E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 precision (±)	1.6E-08	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 230 MDC	3.1E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232	2.9E-09	pCi/L	U			E908.0	08/05/16 13:00 / cng
Thorium 232 precision (±)	2.1E-09	pCi/L				E908.0	08/05/16 13:00 / cng
Thorium 232 MDC	3.0E-09	pCi/L				E908.0	08/05/16 13:00 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1780	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	525	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	116	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	22.4	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	10.6	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	2.0	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.39	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.36	pCi/Filter	U			RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.25	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.37	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	184	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.4E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	1.1E-01	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	2.9E-01	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	5.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-006
Client Sample ID: BHV-7

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	1.7E+00	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	122529400	L				FIELD	06/27/16 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-007	^{nat}U	2E-16	N/A	N/A	1E-16	9E-14	2E-01
First Quarter 2016	^{230}Th	2E-17	3E-18	3E-18	1E-16	3E-14	5E-02
Air Volume in mLs	^{226}Ra	3E-16	6E-17	6E-18	1E-16	9E-13	3E-02
1.25E+11	^{210}Pb	1.6E-14	5E-15	2E-16	2E-15	6E-13	2.6E+00
	^{232}Th	2E-18	1E-18	2E-18	N/A	6E-15	3E-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: 1st Quarter Air 2016
Lab ID: C16040073-007
Client Sample ID: BHV-8

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	2.9E-10	mg/L		1.5E-10		SW6020	04/12/16 04:51 / sf
Uranium, Activity	2.0E-16	uCi/mL		1.0E-16		SW6020	04/12/16 04:51 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.6E-14	uCi/mL				E909.0	04/22/16 00:15 / eli-cs
Lead 210 precision (±)	4.7E-15	uCi/mL				E909.0	04/22/16 00:15 / eli-cs
Lead 210 MDC	2.2E-16	uCi/mL				E909.0	04/22/16 00:15 / eli-cs
Radium 226	2.9E-16	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	5.7E-17	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	6.4E-18	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	1.6E-17	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 precision (±)	3.1E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 230 MDC	3.4E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232	1.8E-18	uCi/mL	U			E908.0	04/15/16 08:39 / cng
Thorium 232 precision (±)	1.5E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
Thorium 232 MDC	2.3E-18	uCi/mL				E908.0	04/15/16 08:39 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1970	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	587	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	28.0	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	36.4	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	7.2	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.80	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	2.0	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	0.39	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	0.42	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.22	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.19	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	0.28	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	24.5	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.6E+00	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	3.0E-02	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	5.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	3.0E-02	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-007
Client Sample ID: BHV-8

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	2.2E-01	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	125195700	L				FIELD	03/28/16 00:00 / sec

*** 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-007	^{nat}U	1.1E-15	N/A	N/A	1E-16	9E-14	1.2E+00
Second Quarter 2016	^{230}Th	1E-16	3E-17	2E-18	1E-16	3E-14	4E-01
Air Volume in mLs	^{226}Ra	1.9E-15	4E-16	1E-17	1E-16	9E-13	2.1E-01
1.22E+11	^{210}Pb	1.1E-14	3E-15	7E-17	2E-15	6E-13	1.8E+00
	^{232}Th	2E-18	1E-18	2E-18	N/A	6E-15	3E-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: 2nd Quarter Air 2016
Lab ID: C16060975-007
Client Sample ID: BHV-8

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	1.6E-09	mg/L		1.5E-10		SW6020	07/08/16 04:55 / sf
Uranium, Activity	1.1E-06	pCi/L		1.0E-07		SW6020	07/08/16 04:55 / sf
RADIONUCLIDES - IN AIR							
Lead 210	0.000011	pCi/L				E909.0	07/15/16 15:36 / eli-cs
Lead 210 precision (±)	3.3E-06	pCi/L				E909.0	07/15/16 15:36 / eli-cs
Lead 210 MDC	6.6E-08	pCi/L				E909.0	07/15/16 15:36 / eli-cs
Radium 226	1.9E-06	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	3.6E-07	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	9.7E-09	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	1.3E-07	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 230 precision (±)	2.5E-08	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 230 MDC	2.2E-09	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 232	1.8E-09	pCi/L	U			E908.0	08/05/16 13:01 / cng
Thorium 232 precision (±)	1.5E-09	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 232 MDC	2.2E-09	pCi/L				E908.0	08/05/16 13:01 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1350	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	398	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.1	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	231	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	43.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	16.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	3.1	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.27	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.22	pCi/Filter	U			RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.18	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.27	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	135	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	1.8E+00	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	2.1E-01	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	4.4E-01	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	3.0E-02	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-007
Client Sample ID: BHV-8

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	1.2E+00	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	122115000	L				FIELD	06/27/16 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.

ANALYTICAL SUMMARY REPORT

May 03, 2016

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

Work Order: C16040073

Project Name: 1st Quarter Air 2016

Energy Laboratories, Inc. Casper WY received the following 8 samples for Energy Fuels Resources (USA) Inc on 4/1/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16040073-001	BHV-1	03/28/16 00:00	04/01/16	Filter	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
C16040073-002	BHV-2	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-003	BHV-4	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-004	BHV-5	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-005	BHV-6	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-006	BHV-7	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-007	BHV-8	03/28/16 00:00	04/01/16	Filter	Same As Above
C16040073-008	Blanks	03/28/16 00:00	04/01/16	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:

Senior Project Specialist

Digitally signed by
Steve Carlston
Date: 2016.05.03 11:45:40 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 1st Quarter Air 2016
Work Order: C16040073

Report Date: 05/03/16

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 1st Quarter Air 2016
Lab ID: C16040073-008
Client Sample ID: Blanks

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
TRACE METALS - IN AIR							
Uranium	0.00095	mg/L		0.000043		SW6020	04/13/16 13:43 / sf
Uranium, Activity	6.4E-10	uCi/mL		2.9E-11		SW6020	04/13/16 13:43 / sf
RADIONUCLIDES - IN AIR							
Lead 210	2.1E-09	uCi/mL	U			E909.0	04/22/16 00:21 / eli-cs
Lead 210 precision (±)	3.7E-09	uCi/mL				E909.0	04/22/16 00:21 / eli-cs
Lead 210 MDC	6.0E-09	uCi/mL				E909.0	04/22/16 00:21 / eli-cs
Radium 226	2.6E-10	uCi/mL	U			E903.0	04/18/16 13:38 / dmf
Radium 226 precision (±)	5.1E-10	uCi/mL				E903.0	04/18/16 13:38 / dmf
Radium 226 MDC	8.2E-10	uCi/mL				E903.0	04/18/16 13:38 / dmf
Thorium 230	3.7E-10	uCi/mL				E908.0	04/18/16 09:24 / cng
Thorium 230 precision (±)	1.7E-10	uCi/mL				E908.0	04/18/16 09:24 / cng
Thorium 230 MDC	1.8E-10	uCi/mL				E908.0	04/18/16 09:24 / cng
Thorium 232	1.4E-10	uCi/mL	U			E908.0	04/18/16 09:24 / cng
Thorium 232 precision (±)	1.2E-10	uCi/mL				E908.0	04/18/16 09:24 / cng
Thorium 232 MDC	1.9E-10	uCi/mL				E908.0	04/18/16 09:24 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	2.1	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Lead 210 precision (±)	3.7	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Lead 210 MDC	6.0	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226	0.26	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Radium 226 precision (±)	0.51	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Radium 226 MDC	0.82	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230	0.37	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 precision (±)	0.17	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 230 MDC	0.18	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232	0.14	pCi/Filter	U			RADCALC	05/03/16 10:20 / sec
Thorium 232 precision (±)	0.12	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Thorium 232 MDC	0.19	pCi/Filter				RADCALC	05/03/16 10:20 / sec
Uranium, Activity	0.64	pCi/Filter		0.20		RADCALC	05/03/16 10:20 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	3.5E+05	%				RADCALC	05/03/16 10:29 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, % of EFF	2.9E+04	%				RADCALC	05/03/16 10:29 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	05/03/16 10:29 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 230, % of EFF	1.2E+06	%				RADCALC	05/03/16 10:29 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
Thorium 232, % of EFF	2.4E+06	%				RADCALC	05/03/16 10:29 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / 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: 1st Quarter Air 2016
Lab ID: C16040073-008
Client Sample ID: Blanks

Report Date: 05/03/16
Collection Date: 03/28/16
DateReceived: 04/01/16
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	05/03/16 10:29 / sec
Uranium Natural, % of EFF	7.1E+05	%				RADCALC	05/03/16 10:29 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	05/03/16 10:29 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	05/03/16 10:29 / sec
- Compliance data is based on a 1 L default volume.							
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	1	L				FIELD	03/28/16 00:00 / sec
*** 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: May 3, 2016
PROJECT: 1st Quarter Air 2016

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
C16040073-008	^{nat}U	5E-18	N/A	N/A	1E-16	9E-14	5E-03
First Quarter 2016	^{230}Th	3E-18	1E-18	1E-18	1E-16	3E-14	9E-03
Air Volume in mLs	^{226}Ra	2E-18	4E-18	6E-18	1E-16	9E-13	2E-04
1.36E+11	^{210}Pb	2E-17	3E-17	4E-17	2E-15	6E-13	3E-03
	^{232}Th	1E-18	9E-19	1E-18	N/A	6E-15	2E-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

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 1st Quarter Air 2016

Report Date: 05/03/16
Work Order: C16040073

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: R210958
Lab ID: C16040149-001AMS		Sample Matrix Spike				Run: BERTHOLD 770-2_160411A				04/18/16 11:15
Radium 226		1.72E-05	pCi/L		78	70	130			
Lab ID: C16040149-001AMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_160411A				04/18/16 11:15
Radium 226		1.56E-05	pCi/L		72	70	130	9.2	49	
Lab ID: LCS-47204		Laboratory Control Sample				Run: BERTHOLD 770-2_160411A				04/18/16 11:15
Radium 226		16.7	pCi/L		85	80	120			
Lab ID: MB-47204	3	Method Blank				Run: BERTHOLD 770-2_160411A				04/18/16 13:38
Radium 226		0.07	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 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: 05/03/16
Project: 1st Quarter Air 2016
Work Order: C16040073

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 47204
Lab ID: LCS-47204		Laboratory Control Sample				Run: EGG-ORTEC_160411B				04/14/16 14:11
Thorium 230		29.5	pCi/L		104	80	120			
Lab ID: C16030820-001AMS		Sample Matrix Spike				Run: EGG-ORTEC_160411B				04/14/16 14:11
Thorium 230		51.1	pCi/L		89	70	130			
Lab ID: C16030820-001AMSD		Sample Matrix Spike Duplicate				Run: EGG-ORTEC_160411B				04/15/16 08:39
Thorium 230		61.5	pCi/L		107	70	130	18	48	
Lab ID: MB-47204	6	Method Blank				Run: EGG-ORTEC_160411B				04/15/16 08:39
Thorium 230		0.5	pCi/L							
Thorium 230 precision (±)		0.3	pCi/L							
Thorium 230 MDC		0.4	pCi/L							
Thorium 232		0.2	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
Project: 1st Quarter Air 2016

Report Date: 05/03/16
Work Order: C16040073

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_25011
Lab ID: MB-25011	3	Method Blank				Run: SUB-T68078				04/21/16 19:36
Lead 210		2	pCi/L							U
Lead 210 precision (±)		4	pCi/L							
Lead 210 MDC		6	pCi/L							
Lab ID: LCS-25011		Laboratory Control Sample				Run: SUB-T68078				04/21/16 21:19
Lead 210		61.3	pCi/L		93	80	120			
Lab ID: C16040073-001A		Sample Matrix Spike				Run: SUB-T68078				04/21/16 23:08
Lead 210		1.56E-05	pCi/L		88	70	130			
Lab ID: C16040073-001A		Sample Matrix Spike Duplicate				Run: SUB-T68078				04/21/16 23:28
Lead 210		1.53E-05	pCi/L		73	70	130	1.8	69.8	

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: 1st Quarter Air 2016

Report Date: 05/03/16
Work Order: C16040073

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**									Analytical Run: ICPMS4-C_160411A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							04/11/16 12:40	
Uranium			0.049	mg/L	0.00030	97	90	110			
Lab ID:	**ICSA**		Interference Check Sample A							04/11/16 12:45	
Uranium			0.00032	mg/L	0.00030						
Lab ID:	**ICSAB**		Interference Check Sample AB							04/11/16 12:51	
Uranium			7.7E-06	mg/L	0.00030						
Method:	**SW6020**									Batch: 47208	
Lab ID:	**MB-47208**		Method Blank				Run: ICPMS4-C_160411A			04/12/16 03:43	
Uranium			0.0001	mg/L	3E-05						
Lab ID:	**LCS2-47208**		Laboratory Control Sample				Run: ICPMS4-C_160411A			04/12/16 03:49	
Uranium			0.0916	mg/L	4.3E-05	91	85	115			
Lab ID:	**C16040073-008AMS**		Sample Matrix Spike				Run: ICPMS4-C_160411A			04/12/16 05:07	
Uranium			0.259	mg/L	4.3E-05	103	75	125			
Lab ID:	**C16040073-008AMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160411A			04/12/16 05:12	
Uranium			0.264	mg/L	4.3E-05	105	75	125	2.1	20	
Method:	**SW6020**									Analytical Run: ICPMS4-C_160412A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							04/12/16 16:14	
Uranium			0.0501	mg/L	0.00030	100	90	110			
Lab ID:	**ICSA**		Interference Check Sample A							04/12/16 16:20	
Uranium			0.000306	mg/L	0.00030						
Lab ID:	**ICSAB**		Interference Check Sample AB							04/12/16 16:25	
Uranium			1.07E-05	mg/L	0.00030						
Method:	**SW6020**									Batch: 47208	
Lab ID:	**MB-47208**		Method Blank				Run: ICPMS4-C_160412A			04/13/16 13:06	
Uranium			0.0001	mg/L	3E-05						
Lab ID:	**LCS2-47208**		Laboratory Control Sample				Run: ICPMS4-C_160412A			04/13/16 13:32	
Uranium			0.0932	mg/L	4.3E-05	93	85	115			
Lab ID:	**C16040073-008ADIL**	2	Serial Dilution				Run: ICPMS4-C_160412A			04/13/16 13:48	
Uranium			ND	mg/L	0.00021					20	
Uranium, Activity			ND	pCi/L	0.14		0	0			
Lab ID:	**C16040073-008AMS**		Sample Matrix Spike				Run: ICPMS4-C_160412A			04/13/16 13:53	
Uranium			0.263	mg/L	4.3E-05	105	75	125			
Lab ID:	**C16040073-008AMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160412A			04/13/16 13:58	
Uranium			0.264	mg/L	4.3E-05	105	75	125	0.3	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

C16040073

Login completed by: Ralph Stanley
Reviewed by: BL2000\dblaida
Reviewed Date: 4/5/2016

Date Received: 4/1/2016
Received by: res
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 No 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:

None

Sheet 1 of 1

CHAIN OF CUSTODY

Samples Shipped to: Energy Laboraties
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
1st Quarter Air 2016	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
BHV-1	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-2	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-4	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-5	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-6	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-7	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
BHV-8	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
Blanks	12/28/15 - 3/28/16	NA	U-NAT, TH-230, Ra-226, Pb-210, TH-232
			C16040073

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

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	3/29/16 1230		
Relinquished By:(Signature)	**Date/Time**	**Received By:(Signature)**	**Date/Time**
		Ralph Stanley	4/1/16 11:08

Temp = NA
Seals cooler only
UPS-NDA
RS-N

BHV-1

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - , 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)		Ta Wkly. Avg. Temp. (°C)		Pa Wkly. Avg. Pressure (mmHg)									
1	9218807	12/28/2015	1/4/2016	69560.33	69727.25	10015.2	4.0	4.0	4.0	-5.4	267.8	620.5	1.06	0.97	34.12	9675.0	4.3173	4.3949	77.6	0.0080	99.4
2	9218804	1/4/2016	1/12/2016	69727.25	69924.33	11824.8	4.0	4.0	4.0	-3.1	270.1	616.2	1.07	0.96	33.85	11333.6	4.3952	4.4329	37.7	0.0033	117.3
3	9217691	1/12/2016	1/18/2016	69924.33	70062.36	8281.8	4.0	4.0	4.0	-7.1	266.1	620.3	1.06	0.97	34.22	8025.1	4.3242	4.3880	63.8	0.0080	82.2
4	9217688	1/18/2016	1/25/2016	70062.36	70232.47	10206.6	4.0	4.0	4.0	-1.5	271.7	620.8	1.07	0.96	33.88	9790.6	4.3191	4.3701	51.0	0.0052	101.3
5	9217675	1/25/2016	2/1/2016	70232.47	70398.33	9951.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9526.5	4.3926	4.4811	88.5	0.0093	98.7
6	9217672	2/1/2016	2/8/2016	70398.33	70568.04	10182.6	4.0	3.5	3.8	-6.2	267.0	622.80	1.03	0.94	33.16	9561.3	4.3703	4.4149	44.6	0.0047	101.0
7	9217659	2/8/2016	2/15/2016	70568.04	70735.78	10064.4	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9603.8	4.3169	4.3842	67.3	0.0070	99.8
8	9217656	2/15/2016	2/22/2016	70735.78	70902.54	10005.6	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9457.6	4.3132	4.4662	153.0	0.0162	99.3
9	9217649	2/22/2016	2/29/2016	70902.54	71070.66	10087.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9564.8	4.3942	4.4645	70.3	0.0073	100.1
10	9217640	2/29/2016	3/7/2016	71070.66	71238.1	10046.4	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9437.7	4.3481	4.4951	147.0	0.0156	99.7
11	9217627	3/7/2016	3/14/2016	71238.1	71405.1	10020.0	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9437.3	4.3950	4.4814	86.4	0.0092	99.4
12	9217624	3/14/2016	3/21/2016	71405.1	71572.21	10026.6	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9442.5	4.3759	4.5314	155.5	0.0165	99.5
13	9217611	3/21/2016	3/28/2016	71572.21	71740.73	10111.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9433.8	4.3146	4.4823	167.7	0.0178	100.3
					Totals	130824.0							13.98	12.35	436.24	124289.7	56.577	57.787	1210.4	0.1280	
					Averages	10063.4	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.56	9560.7	4.352	4.445	93.1	0.0098	99.8

Comments:
Insert weekly flow check values in yellow columns.

Green columns are calculated averages from the met station.

BHV-2

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - , 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	[redacted]	ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
1	9218808	12/28/2015	1/4/2016	80170.84	80338.57	10063.8	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9721.9	4.3222	4.4299	107.7	0.0111	99.8
2	9218803	1/4/2016	1/12/2016	80338.57	80536.28	11862.6	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11369.9	4.3777	4.4306	52.9	0.0047	117.7
3	9217692	1/12/2016	1/18/2016	80536.28	80672.14	8151.6	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7898.9	4.3479	4.4226	74.7	0.0095	80.9
4	9217687	1/18/2016	1/25/2016	80672.14	80841.36	10153.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9739.3	4.3190	4.3801	61.1	0.0063	100.7
5	9217676	1/25/2016	2/1/2016	80841.36	81007.95	9995.4	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9568.5	4.3930	4.4716	78.6	0.0082	99.2
6	9217671	2/1/2016	2/8/2016	81007.95	81181.09	10388.4	4.0	3.5	3.8	-6.2	267.0	622.80	1.03	0.94	33.16	9754.6	4.3519	4.4158	63.9	0.0066	103.1
7	9217660	2/8/2016	2/15/2016	81181.09	81346.26	9910.2	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9456.7	4.3308	4.4275	96.7	0.0102	98.3
8	9217655	2/15/2016	2/22/2016	81346.26	81511.69	9925.8	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9382.2	4.3959	4.5890	193.1	0.0206	98.5
9	9217644	2/22/2016	2/29/2016	81511.69	81680.67	10138.8	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9613.7	4.3662	4.5542	188.0	0.0196	100.6
10	9217639	2/29/2016	3/7/2016	81680.67	81846.89	9973.2	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9368.9	4.3457	4.6356	289.9	0.0309	98.9
11	9217628	3/7/2016	3/14/2016	81846.89	82013.62	10003.8	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9422.0	4.3867	4.5605	173.8	0.0184	99.2
12	9217623	3/14/2016	3/21/2016	82013.62	82180.75	10027.8	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9443.6	4.3616	4.6421	280.5	0.0297	99.5
13	9217612	3/21/2016	3/28/2016	82180.75	82348.72	10078.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9403.0	7.3067	4.5677	-2739.0	-0.2913	100.0
					Totals	130672.8							13.98	12.35	436.24	124143.3	59.605	58.527	-1078.1	-0.1156	
					Averages	10051.8	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.56	9549.5	4.585	4.502	-82.9	-0.0089	99.7

Comments:
Insert weekly flow check values in yellow columns.

[redacted]

BHV-4

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)		Pa Wkly. Avg. Temp. (°C)		Pa Wkly. Avg. Pressure (mmHg)									
1	9218809	12/28/2015	1/4/2016	55359.15	55526.04	10013.4	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9673.2	4.3667	4.4366	69.9	0.0072	99.3
2	9218802	1/4/2016	1/12/2016	55526.04	55721.27	11713.8	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11227.2	4.2840	4.3175	33.5	0.0030	116.2
3	9217693	1/12/2016	1/18/2016	55721.27	55866.02	8685	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	8415.8	4.3455	4.4106	65.1	0.0077	86.2
4	9217686	1/18/2016	1/25/2016	55866.02	56032.66	9998.4	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9590.8	4.3252	4.3690	43.8	0.0046	99.2
5	9217677	1/25/2016	2/1/2016	56032.66	56196.51	9831	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9411.1	4.3723	4.4199	47.6	0.0051	97.5
6	9217670	2/1/2016	2/8/2016	56196.51	56369.98	10408.2	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	10088.9	4.3546	4.3883	33.7	0.0033	103.3
7	9217661	2/8/2016	2/15/2016	56369.98	56535.71	9943.8	4.0	3.5	3.8	3.0	276.2	624.58	1.04	0.92	32.64	9191.8	4.3225	4.3759	53.4	0.0058	98.6
8	9217654	2/15/2016	2/22/2016	56535.71	56698.65	9776.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9241.0	4.3941	4.5462	152.1	0.0165	97.0
9	9217645	2/22/2016	2/29/2016	56698.65	56868.6	10197	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9668.9	4.3642	4.4308	66.6	0.0069	101.2
10	9217638	2/29/2016	3/7/2016	56868.6	57036.28	10060.8	4.0	6.5	5.3	9.1	282.3	618.99	1.25	1.07	37.94	10808.2	4.3309	4.4779	147.0	0.0136	99.8
11	9217629	3/7/2016	3/14/2016	57036.28	57202.08	9948	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9369.5	4.3868	4.4862	99.4	0.0106	98.7
12	9217622	3/14/2016	3/21/2016	57202.08	57370.08	10080	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9492.8	4.3480	4.4767	128.7	0.0136	100.0
13	9217613	3/21/2016	3/28/2016	57370.08	57537.43	10041	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9368.3	4.3390	4.4762	137.2	0.0146	99.6
					Totals	130696.8							14.14	12.49	441.02	125547.5	56.534	57.612	1078.0	0.1125	
					Averages	10053.6	4.0	4.2	4.1	1.8	275.0	619.52	1.09	0.96	33.92	9657.5	4.349	4.432	82.9	0.0087	99.7

Comments:
Insert weekly flow check values in yellow columns.

Green columns are calculated averages from the met station.

BHV-5

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 -th, 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)				Pa Wkly. Avg. Pressure (mmHg)									
1	9218810	12/28/2015	1/4/2016	78884.55	79051.56	10020.6	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.96	33.92	9625.0	4.3850	4.4888	103.8	0.0108	99.4
2	9218801	1/4/2016	1/12/2016	79051.56	79246	11666.4	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.95	33.66	11118.7	4.4133	4.3279	-85.4	-0.0077	115.7
3	9217694	1/12/2016	1/18/2016	79246	79391.64	8738.4	4.0	4.0	4.0	-7.1	266.1	620.26	1.05	0.96	34.02	8419.0	4.3350	4.4170	82.0	0.0097	86.7
4	9217685	1/18/2016	1/25/2016	79391.64	79558.17	9991.8	4.0	4.0	4.0	-1.5	271.7	620.77	1.06	0.95	33.68	9530.4	4.3043	4.3711	66.8	0.0070	99.1
5	9217678	1/25/2016	2/1/2016	79558.17	79718.18	9600.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.95	33.62	9138.8	4.3733	4.4289	55.6	0.0061	95.2
6	9217669	2/1/2016	2/8/2016	79718.18	79890.73	10353	4.0	4.0	4.0	-6.2	267.0	622.80	1.05	0.96	34.04	9977.8	4.3559	4.4084	52.5	0.0053	102.7
7	9217662	2/8/2016	2/15/2016	79890.73	80057.48	10005	4.0	4.0	4.0	3.0	276.2	624.58	1.07	0.95	33.51	9493.6	4.3368	4.4191	82.3	0.0087	99.3
8	9217653	2/15/2016	2/22/2016	80057.48	80220.7	9793.2	4.0	4.0	4.0	6.2	279.3	620.01	1.08	0.94	33.20	9205.7	4.3956	4.5531	157.5	0.0171	97.2
9	9217646	2/22/2016	2/29/2016	80220.77	80391.04	10216.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.94	33.30	9633.3	4.3606	4.4451	84.5	0.0088	101.4
10	9217637	2/29/2016	3/7/2016	80391.04	80558.48	10046.4	4.0	5.0	4.5	9.1	282.3	618.99	1.15	0.99	34.98	9951.9	4.3342	4.5076	173.4	0.0174	99.7
11	9217630	3/7/2016	3/14/2016	80558.48	80723.94	9927.6	4.0	4.0	4.0	6.8	279.9	616.96	1.08	0.94	33.08	9298.9	4.3848	4.4873	102.5	0.0110	98.5
12	9217621	3/14/2016	3/21/2016	80723.94	80891.94	10080	4.0	4.0	4.0	7.7	280.9	618.99	1.08	0.94	33.07	9440.6	4.3420	4.6155	273.5	0.0290	100.0
13	9217614	3/21/2016	3/28/2016	80891.94	81059.61	10060.2	4.0	4.0	4.0	10.5	283.6	613.66	1.09	0.93	32.77	9335.3	4.3276	4.5635	235.9	0.0253	99.8
					Totals	130499.4							14.00	12.37	436.85	124169.2	56.648	58.033	1384.9	0.1484	
					Averages	10038.4	4.0	4.1	4.0	1.8	275.0	619.52	1.08	0.95	33.60	9551.5	4.358	4.464	106.5	0.0114	99.6

Comments:
Insert weekly flow check values in yellow columns.

Green columns are calculated averages from the met station.

BHV-6

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)				Pa Wkly. Avg. Pressure (mmHg)									
1	9218811	12/28/2015	1/4/2016	2856.32	3023.27	10017	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9676.7	4.4076	4.5186	111.0	0.0115	99.4
2	9217700	1/4/2016	1/12/2016	3023.27	3218.09	11689.2	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11203.7	4.3861	4.4394	53.3	0.0048	116.0
3	9217695	1/12/2016	1/18/2016	3218.09	3363.39	8718	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	8447.8	4.3439	4.4206	76.7	0.0091	86.5
4	9217684	1/18/2016	1/25/2016	3363.39	3525.91	9751.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9353.7	4.3023	4.3649	62.6	0.0067	96.7
5	9217679	1/25/2016	2/1/2016	3525.91	3693.36	10047	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9617.9	4.3772	4.4404	63.2	0.0066	99.7
6	9217668	2/1/2016	2/8/2016	3693.36	3865.92	10353.6	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	10035.9	4.3526	4.3990	46.4	0.0046	102.7
7	9217663	2/8/2016	2/16/2016	3865.92	4032.99	10024.2	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9565.4	4.3291	4.4028	73.7	0.0077	99.4
8	9217652	2/16/2016	2/22/2016	4032.99	4195.59	9756	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9221.7	4.4080	4.5650	157.0	0.0170	96.8
9	9217647	2/22/2016	2/29/2016	4195.59	4365.99	10224	4.0	3.0	3.5	4.9	278.0	621.03	1.01	0.89	31.35	9077.4	4.3629	4.4145	51.6	0.0057	101.4
10	9217636	2/29/2016	3/7/2016	4365.99	4532.22	9973.8	4.0	6.5	5.3	9.1	282.3	618.99	1.25	1.07	37.94	10714.7	4.3152	4.5023	187.1	0.0175	98.9
11	9217631	3/7/2016	3/14/2016	4532.22	4699.25	10021.8	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9439.0	4.3945	4.4652	70.7	0.0075	99.4
12	9217620	3/14/2016	3/21/2016	4699.25	4867.26	10080.6	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9493.4	4.3501	4.5390	188.9	0.0199	100.0
13	9217615	3/21/2016	3/28/2016	4867.26	5034.61	10041	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9368.3	4.3369	4.5406	203.7	0.0217	99.6
					Totals	130697.4							14.10	12.46	439.94	125215.6	56.666	58.012	1345.9	0.1402	
					Averages	10053.6	4.0	4.1	4.1	1.8	275.0	619.52	1.08	0.96	33.84	9632.0	4.359	4.462	103.5	0.0108	99.7

Comments:
Insert weekly flow check values in yellow columns.

Green columns are calculated averages from the met station.

BHV-7

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)		[redacted]		[redacted]									
1	9218812	12/28/2015	1/4/2016	7550.35	7716.33	9958.8	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9620.5	4.4040	4.5121	108.1	0.0112	98.8
2	9217699	1/4/2016	1/12/2016	7716.33	7914.99	11919.6	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11424.5	4.3991	4.4562	57.1	0.0050	118.3
3	9217696	1/12/2016	1/18/2016	7914.99	8052.01	8221.2	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7966.4	4.3420	4.4233	81.3	0.0102	81.6
4	9217683	1/18/2016	1/25/2016	8052.01	8222.13	10207.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9791.1	4.3233	4.3940	70.7	0.0072	101.3
5	9217680	1/25/2016	2/1/2016	8222.13	8388.17	9962.4	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9536.9	4.3810	4.4412	60.2	0.0063	98.8
6	9217667	2/1/2016	2/8/2016	8388.17	8558.35	10210.8	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	9897.5	4.3364	4.3968	60.4	0.0061	101.3
7	9217664	2/8/2016	2/15/2016	8558.35	8725.59	10034.4	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9575.2	4.3225	4.4013	78.8	0.0082	99.5
8	9217651	2/15/2016	2/22/2016	8725.59	8892.13	9992.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9445.2	4.3819	4.5604	178.5	0.0189	99.1
9	9217648	2/22/2016	2/29/2016	8892.13	9060.86	10123.8	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9599.5	4.3859	4.4708	84.9	0.0088	100.4
10	9217635	2/29/2016	3/7/2016	9060.86	9228.46	10056	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9446.7	4.3366	4.4875	150.9	0.0160	99.8
11	9217632	3/7/2016	3/14/2016	9228.46	9395.03	9994.2	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9413.0	4.3794	4.5085	129.1	0.0137	99.1
12	9217619	3/14/2016	3/21/2016	9395.03	9562.1	10024.2	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9440.3	4.3489	4.5247	175.8	0.0186	99.4
13	9217616	3/21/2016	3/28/2016	9562.1	9730.62	10111.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9433.8	4.3299	4.5685	238.6	0.0253	100.3
					Totals	130816.2							14.01	12.38	437.31	124590.5	56.671	58.145	1474.4	0.1557	
					Averages	10062.8	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.64	9583.9	4.359	4.473	113.4	0.0120	99.8

Comments:
Insert weekly flow check values in yellow columns.

[redacted]

BHV-8

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - 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		ΔH Starting Manometer (in. H_2O)	ΔH Stopping Manometer (in. H_2O)		Ts Wkly. Avg. Temp. (°C)		Ps Wkly. Avg. Pressure (mmHg)									
1	9218813	12/28/2015	1/4/2016	8018.24	8185.24	10020	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9679.6	4.4186	4.4999	81.3	0.0084	99.4
2	9217698	1/4/2016	1/12/2016	8185.24	8383.06	11869.2	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11376.2	4.3704	4.4092	38.8	0.0034	117.8
3	9217697	1/12/2016	1/18/2016	8383.06	8520.4	8240.4	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7985.0	4.3583	4.4266	68.3	0.0086	81.8
4	9217682	1/18/2016	1/25/2016	8520.4	8690.5	10206	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9790.0	4.3116	4.3565	44.9	0.0046	101.3
5	9217681	1/25/2016	2/1/2016	8690.5	8856.56	9963.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9538.0	4.3073	4.3621	54.8	0.0057	98.8
6	9217666	2/1/2016	2/8/2016	8856.56	9026.18	10177.2	4.0	5.5	4.8	-6.2	267.0	622.80	1.15	1.06	37.26	10737.1	4.3480	4.3809	32.9	0.0031	101.0
7	9217665	2/8/2016	2/15/2016	9026.18	9193.96	10066.8	4.0	4.0	4.0	3.0	276.2	624.80	1.08	0.95	33.70	9607.8	4.3283	4.3777	49.4	0.0051	99.9
8	9217650	2/15/2016	2/22/2016	9193.96	9360.5	9992.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9445.2	4.4092	4.5415	132.3	0.0140	99.1
9	9217643	2/22/2016	2/29/2016	9360.5	9528.77	10096.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9573.3	4.3381	4.3929	54.8	0.0057	100.2
10	9217634	2/29/2016	3/7/2016	9528.77	9696.36	10055.4	4.0	3.5	3.8	9.1	282.3	618.99	1.06	0.91	32.14	9150.4	4.3402	4.4531	112.9	0.0123	99.8
11	9217633	3/7/2016	3/14/2016	9696.36	9863.36	10020	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9437.3	4.3537	4.4575	103.8	0.0110	99.4
12	9217918	3/14/2016	3/21/2016	9863.36	10030.45	10025.4	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9441.4	4.3505	4.4969	146.4	0.0155	99.5
13	9217617	3/21/2016	3/28/2016	10030.45	10198.98	10111.8	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9434.4	4.3299	4.4586	128.7	0.0136	100.3
					Totals	130844.4							14.07	12.44	439.30	125195.7	56.564	57.613	1049.3	0.1111	
					Averages	10065.0	4.0	4.1	4.0	1.8	275.0	619.53692	1.08	0.96	33.79	9630.4	4.351	4.432	80.7	0.0085	99.9

Comments:

Insert weekly flow check values in yellow columns.

Green columns are calculated averages from the met station.

Blanks		Period: December 28th, 2015 - th, 2015		
Week #	Filter Number	Start Date	Stop Date	Net
1	9218805	28-Dec-15	04-Jan-16	4.3140
2	9217690	04-Jan-16	12-Jan-16	4.3145
3	9217689	12-Jan-16	18-Jan-16	4.3305
4	9217674	18-Jan-16	25-Jan-16	4.3967
5	9217673	25-Jan-16	01-Feb-16	4.3689
6	9217658	01-Feb-16	08-Feb-16	4.3228
7	9217657	08-Feb-16	15-Feb-16	4.3220
8	9217642	15-Feb-16	22-Feb-16	4.3463
9	9217641	22-Feb-16	29-Feb-16	4.3642
10	9217626	29-Feb-16	07-Mar-16	4.3840
11	9217625	07-Mar-16	14-Mar-16	4.3770
12	9217610	14-Mar-16	21-Mar-16	4.3238
13	9217609	21-Mar-16	28-Mar-16	4.3314
	Totals			

ANALYTICAL SUMMARY REPORT

August 11, 2016

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

Work Order: C16060975

Project Name: 2nd Quarter Air 2016

Energy Laboratories, Inc. Casper WY received the following 8 samples for Energy Fuels Resources (USA) Inc on 6/29/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16060975-001	BHV-1	06/27/16 00:00	06/29/16	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
C16060975-002	BHV-2	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-003	BHV-4	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-004	BHV-5	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-005	BHV-6	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-006	BHV-7	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-007	BHV-8	06/27/16 00:00	06/29/16	Filter	Same As Above
C16060975-008	Blanks	06/27/16 00:00	06/29/16	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:

Senior Project Specialist

Digitally signed by
Steve Carlston
Date: 2016.08.11 18:20:51 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Air 2016
Work Order: C16060975

Report Date: 08/11/16

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Air 2016
Lab ID: C16060975-008
Client Sample ID: Blanks

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
Matrix: Filter

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - IN AIR							
Uranium	0.0030	mg/L	D	8.5E-06		SW6020	07/08/16 05:01 / sf
Uranium, Activity	2.1	pCi/L	D	0.0058		SW6020	07/08/16 05:01 / sf
RADIONUCLIDES - IN AIR							
Lead 210	1.2	pCi/L	U			E909.0	07/15/16 17:18 / eli-cs
Lead 210 precision (±)	4.9	pCi/L				E909.0	07/15/16 17:18 / eli-cs
Lead 210 MDC	8.2	pCi/L				E909.0	07/15/16 17:18 / eli-cs
Radium 226	1.8	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 precision (±)	1.3	pCi/L				E903.0	08/01/16 13:50 / dmf
Radium 226 MDC	1.4	pCi/L				E903.0	08/01/16 13:50 / dmf
Thorium 230	0.41	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 230 precision (±)	0.25	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 230 MDC	0.34	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 232	0.060	pCi/L	U			E908.0	08/05/16 13:01 / cng
Thorium 232 precision (±)	0.16	pCi/L				E908.0	08/05/16 13:01 / cng
Thorium 232 MDC	0.31	pCi/L				E908.0	08/05/16 13:01 / cng
RADIONUCLIDES - IN AIR - PER FILTER							
Lead 210	1.2	pCi/Filter	U			RADCALC	08/11/16 17:58 / sec
Lead 210 precision (±)	4.9	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Lead 210 MDC	8.2	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226	1.8	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 precision (±)	1.3	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Radium 226 MDC	1.4	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230	0.41	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 precision (±)	0.25	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 230 MDC	0.34	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232	0.060	pCi/Filter	U			RADCALC	08/11/16 17:58 / sec
Thorium 232 precision (±)	0.16	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Thorium 232 MDC	0.31	pCi/Filter				RADCALC	08/11/16 17:58 / sec
Uranium, Activity	2.1	pCi/Filter		0.20		RADCALC	08/11/16 17:58 / sec
RADIOCHEMISTRY AIR FILTER COMPLIANCE							
Lead 210, % of EFF	2.0E+05	%				RADCALC	08/11/16 17:59 / sec
Lead 210, EFF Day	6.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Lead 210, LLD	2.0E-15	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, % of EFF	2.0E+05	%				RADCALC	08/11/16 17:59 / sec
Radium 226, EFF Week	9.0E-13	uCi/mL				RADCALC	08/11/16 17:59 / sec
Radium 226, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, % of EFF	1.4E+06	%				RADCALC	08/11/16 17:59 / sec
Thorium 230, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 230, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
Thorium 232, % of EFF	1.0E+06	%				RADCALC	08/11/16 17:59 / sec
Thorium 232, EFF Year	3.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / 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: 2nd Quarter Air 2016
Lab ID: C16060975-008
Client Sample ID: Blanks

Report Date: 08/11/16
Collection Date: 06/27/16
DateReceived: 06/29/16
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	08/11/16 17:59 / sec
Uranium Natural, % of EFF	2.3E+06	%				RADCALC	08/11/16 17:59 / sec
Uranium Natural, EFF Year	9.0E-14	uCi/mL				RADCALC	08/11/16 17:59 / sec
Uranium Natural, LLD	1.0E-16	uCi/mL				RADCALC	08/11/16 17:59 / sec
CLIENT PROVIDED FIELD PARAMETERS							
Air Filtering Volume	1	L				FIELD	06/27/16 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: August 11, 2016
PROJECT: 2nd Quarter Air 2016

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
C16060975-008	^{nat}U	2E-17	N/A	N/A	1E-16	9E-14	2E-02
Second Quarter 2016	^{230}Th	3E-18	2E-18	3E-18	1E-16	3E-14	1E-02
Air Volume in mLs	^{226}Ra	1E-17	1E-17	1E-17	1E-16	9E-13	1E-03
1.36E+11	^{210}Pb	9E-18	4E-17	6E-17	2E-15	6E-13	1E-03
	^{232}Th	4E-19	1E-18	2E-18	N/A	6E-15	7E-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

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Air 2016

Report Date: 08/11/16
Work Order: C16060975

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 47802
Lab ID: LCS-47802		Laboratory Control Sample				Run: G542M_160722A				08/01/16 13:49
Radium 226		19.3	pCi/L		97	80	120			
Lab ID: MB-47802	3	Method Blank				Run: G542M_160722A				08/01/16 13:49
Radium 226		0.3	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: C16070071-001AMS		Sample Matrix Spike				Run: G542M_160722A				08/01/16 15:45
Radium 226		140	pCi/L		98	70	130			
Lab ID: C16070071-001AMSD		Sample Matrix Spike Duplicate				Run: G542M_160722A				08/01/16 15:45
Radium 226		130	pCi/L		90	70	130	7.4	49.5	

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: 2nd Quarter Air 2016

Report Date: 08/11/16
Work Order: C16060975

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 47802
Lab ID: LCS-47802		Laboratory Control Sample				Run: EGG-ORTEC_160720A				08/05/16 12:45
Thorium 230		25.1	pCi/L		99	80	120			
Lab ID: C16060975-001AMS		Sample Matrix Spike				Run: EGG-ORTEC_160720A				08/05/16 12:45
Thorium 230		4.54E-08	pCi/L		96	70	130			
Lab ID: C16060975-001AMSD		Sample Matrix Spike Duplicate				Run: EGG-ORTEC_160720A				08/05/16 12:45
Thorium 230		5.56E-08	pCi/L		122	70	130	20	48	
Lab ID: MB-47802	6	Method Blank				Run: EGG-ORTEC_160720A				08/08/16 10:14
Thorium 230		1	pCi/L							
Thorium 230 precision (±)		0.3	pCi/L							
Thorium 230 MDC		1	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: 08/11/16
Project: 2nd Quarter Air 2016
Work Order: C16060975

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E909.0										Batch: T_25285
Lab ID: MB-25285	3	Method Blank				Run: SUB-T68939				07/14/16 22:34
Lead 210		-2	pCi/L							U
Lead 210 precision (±)		5	pCi/L							
Lead 210 MDC		8	pCi/L							
Lab ID: LCS-25285		Laboratory Control Sample				Run: SUB-T68939				07/15/16 00:16
Lead 210		65.0	pCi/L		115	80	120			
Lab ID: T16070017-001AMS		Sample Matrix Spike				Run: SUB-T68939				07/15/16 03:41
Lead 210		1.36E-06	pCi/L		209	70	130			S
- Sample activity for this radionuclide is much larger than the spike activity added. Therefore the matrix spike recovery could not be calculated. The LCS and the RPD of the MS/MSD pair are acceptable; this batch is approved.										
Lab ID: T16070017-001AMSD		Sample Matrix Spike Duplicate				Run: SUB-T68939				07/15/16 05:23
Lead 210		1.41E-06	pCi/L		224	70	130	3.3	69.2	S

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: 2nd Quarter Air 2016

Report Date: 08/11/16
Work Order: C16060975

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6020**									Analytical Run: ICPMS4-C_160707A	
Lab ID:	**ICV**		Initial Calibration Verification Standard								07/07/16 15:51
Uranium			0.0472	mg/L	0.00030	94	90	110			
Lab ID:	**ICSA**		Interference Check Sample A								07/07/16 15:58
Uranium			0.000184	mg/L	0.00030						
Lab ID:	**ICSAB**		Interference Check Sample AB								07/07/16 16:04
Uranium			-3.20E-06	mg/L	0.00030						
Method:	**SW6020**										Batch: 47802
Lab ID:	**MB-47802**		Method Blank				Run: ICPMS4-C_160707A				07/08/16 03:11
Uranium			6E-05	mg/L	3E-05						
Lab ID:	**LCS2-47802**		Laboratory Control Sample				Run: ICPMS4-C_160707A				07/08/16 03:17
Uranium			0.0964	mg/L	8.5E-06	96	85	115			
Lab ID:	**C16060975-001ADIL**		Serial Dilution				Run: ICPMS4-C_160707A				07/08/16 03:36
Uranium			1.54E-10	mg/L	1.5E-10				2.2	20	
Lab ID:	**C16060975-001AMS**		Sample Matrix Spike				Run: ICPMS4-C_160707A				07/08/16 03:42
Uranium			2.00E-10	mg/L	1.5E-10	105	75	125			
Lab ID:	**C16060975-001AMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160707A				07/08/16 03:48
Uranium			1.98E-10	mg/L	1.5E-10	99	75	125	1.1	20	
Lab ID:	**C16070026-003AMS**		Sample Matrix Spike				Run: ICPMS4-C_160707A				07/08/16 05:51
Uranium			6.51E-06	mg/L	7.8E-10	101	75	125			
Lab ID:	**C16070026-003AMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160707A				07/08/16 05:58
Uranium			6.55E-06	mg/L	7.8E-10	102	75	125	0.6	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 C16060975

Login completed by: Ralph Stanley
Reviewed by: Tessa Parke
Reviewed Date: 6/30/2016

Date Received: 6/29/2016
Received by: res
Carrier name: FedEx

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 No 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.

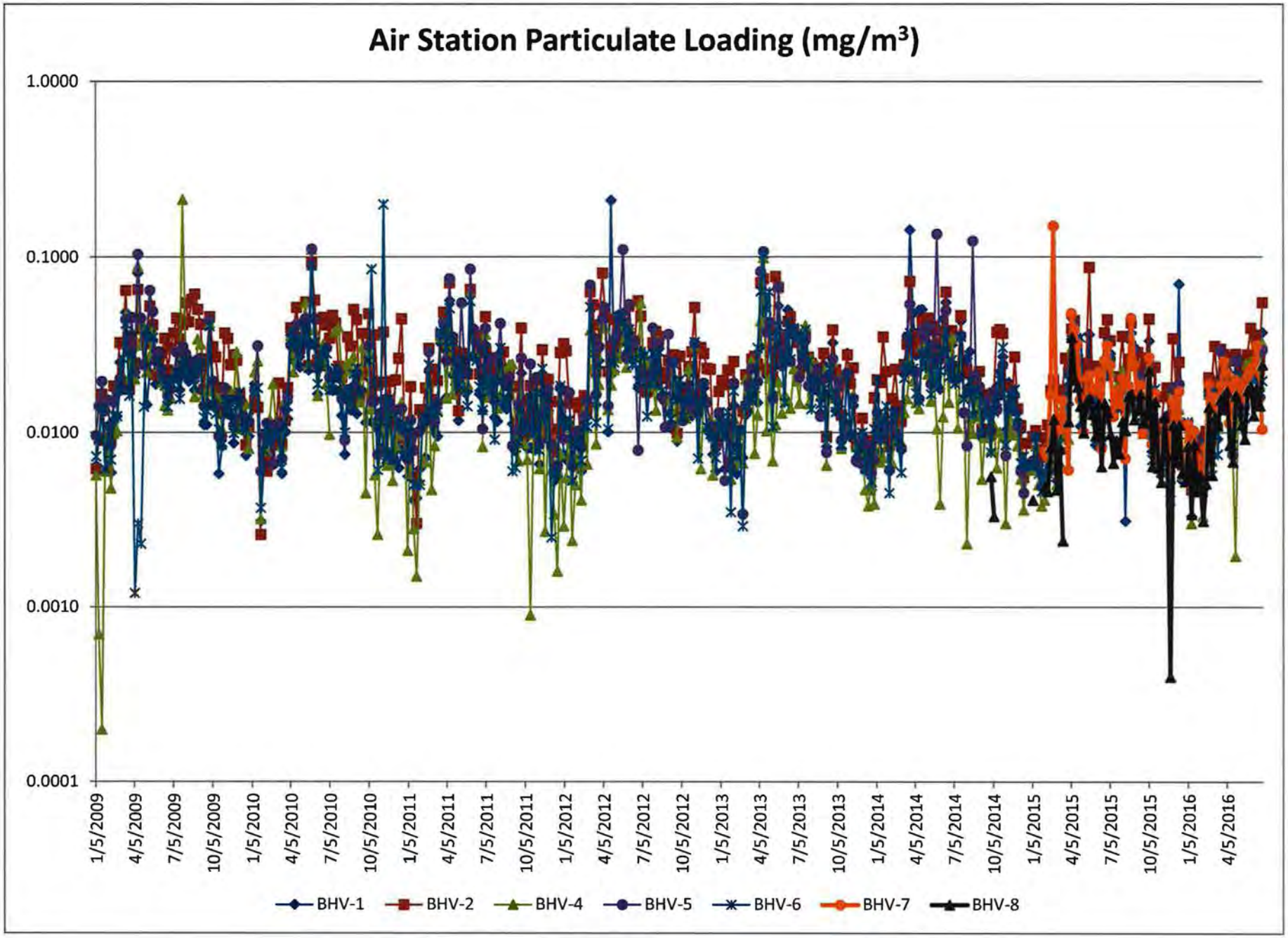
Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ATTACHMENT D

AIR PARTICULATE LOADING GRAPHS AND SUPPORTING DATA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0.0001
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7/5/2009
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7/5/2010
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1/5/2011
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7/5/2011
10/5/2011
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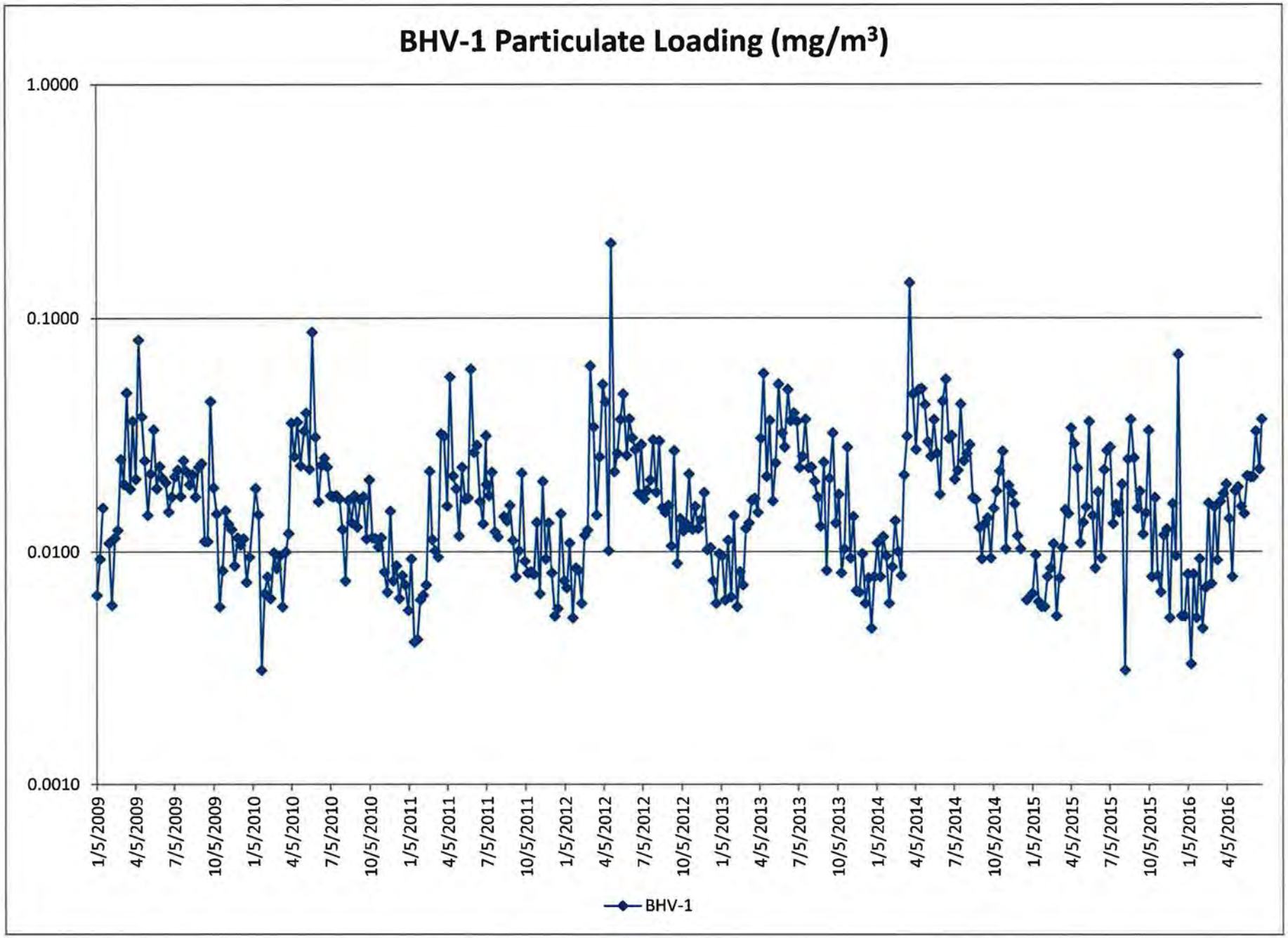
BHV-6
BHV-7
BHV-8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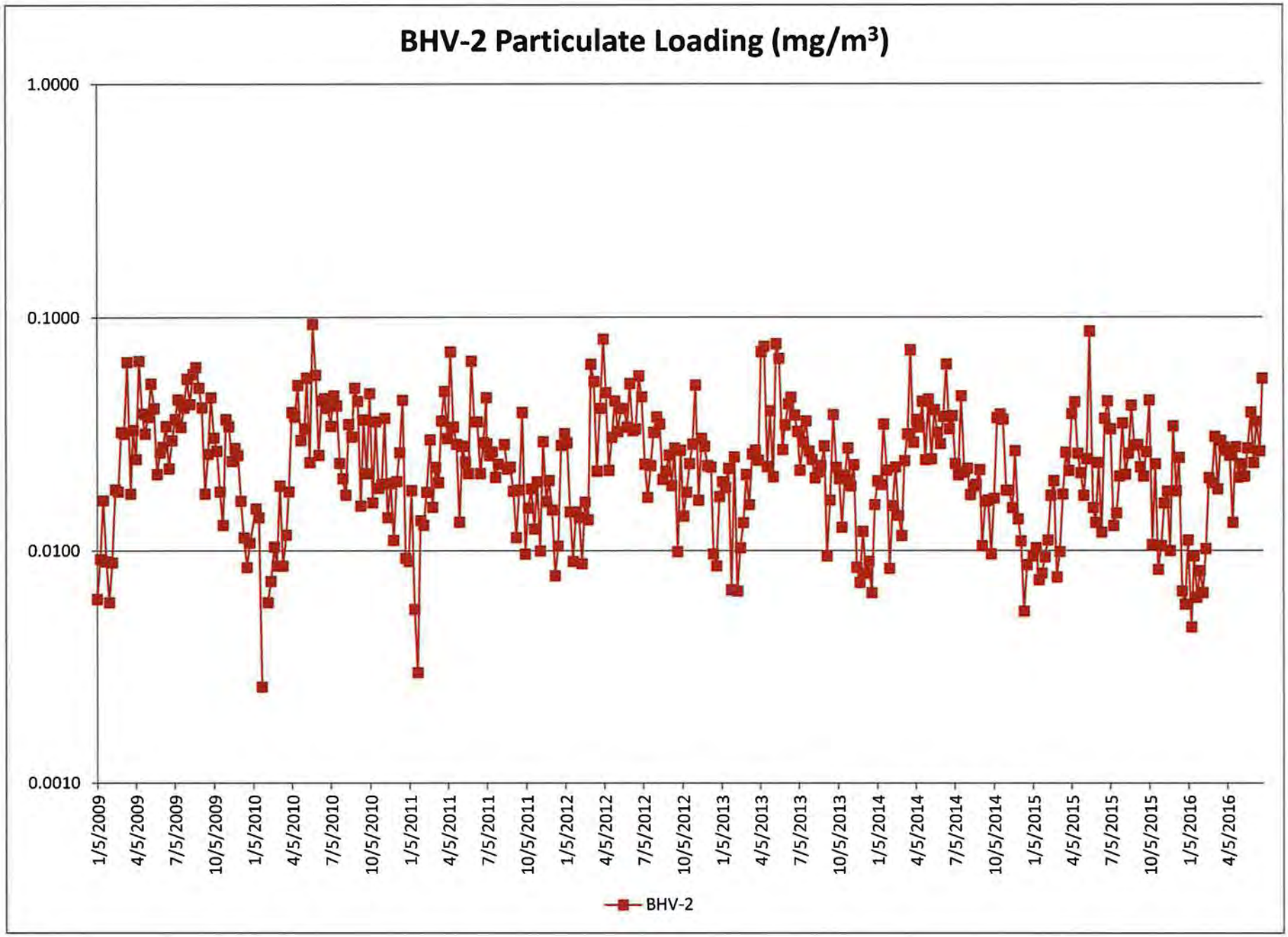
1/5/2016
4/5/2016
BHV-1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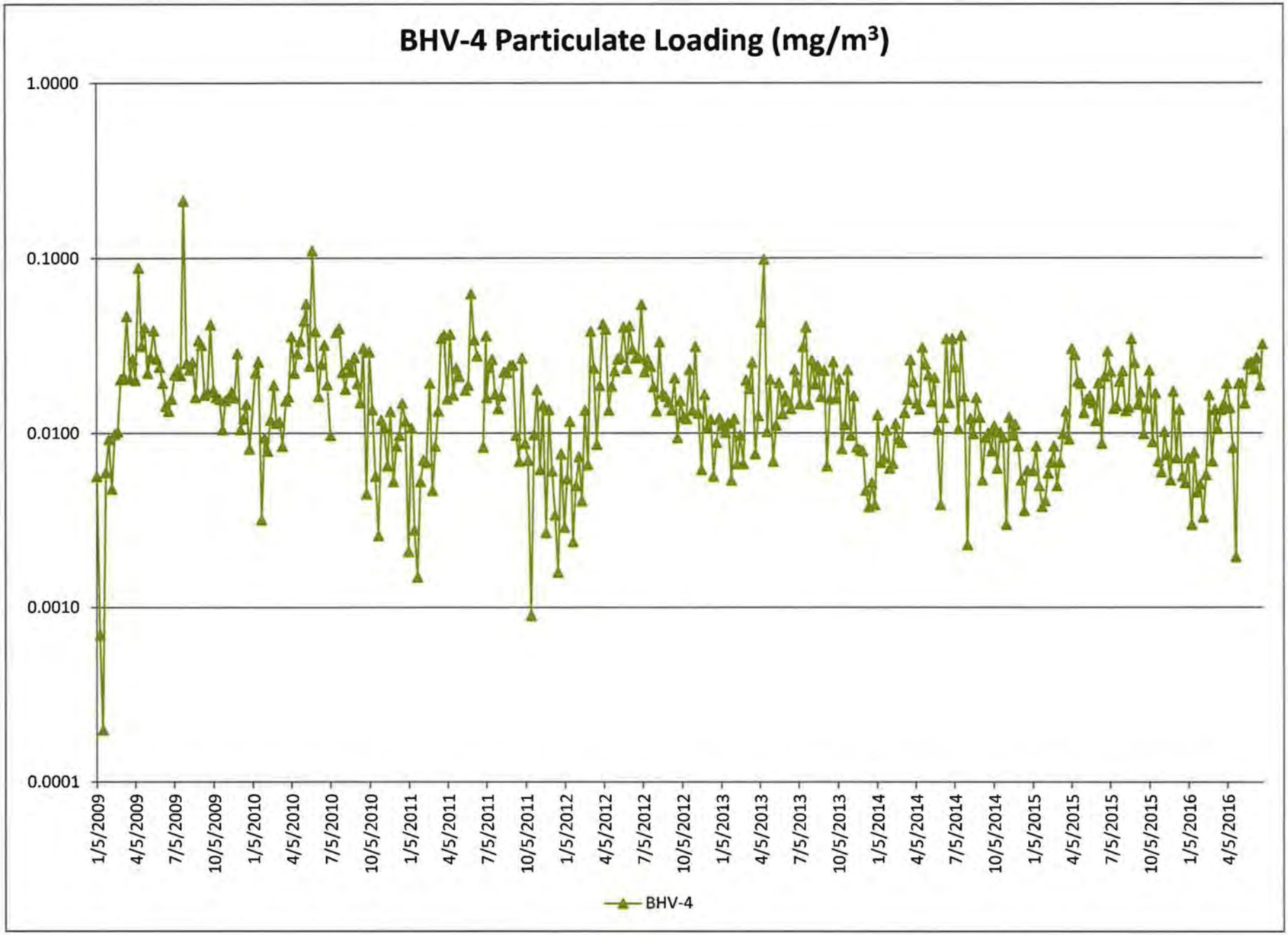
4/5/2016
BHV-2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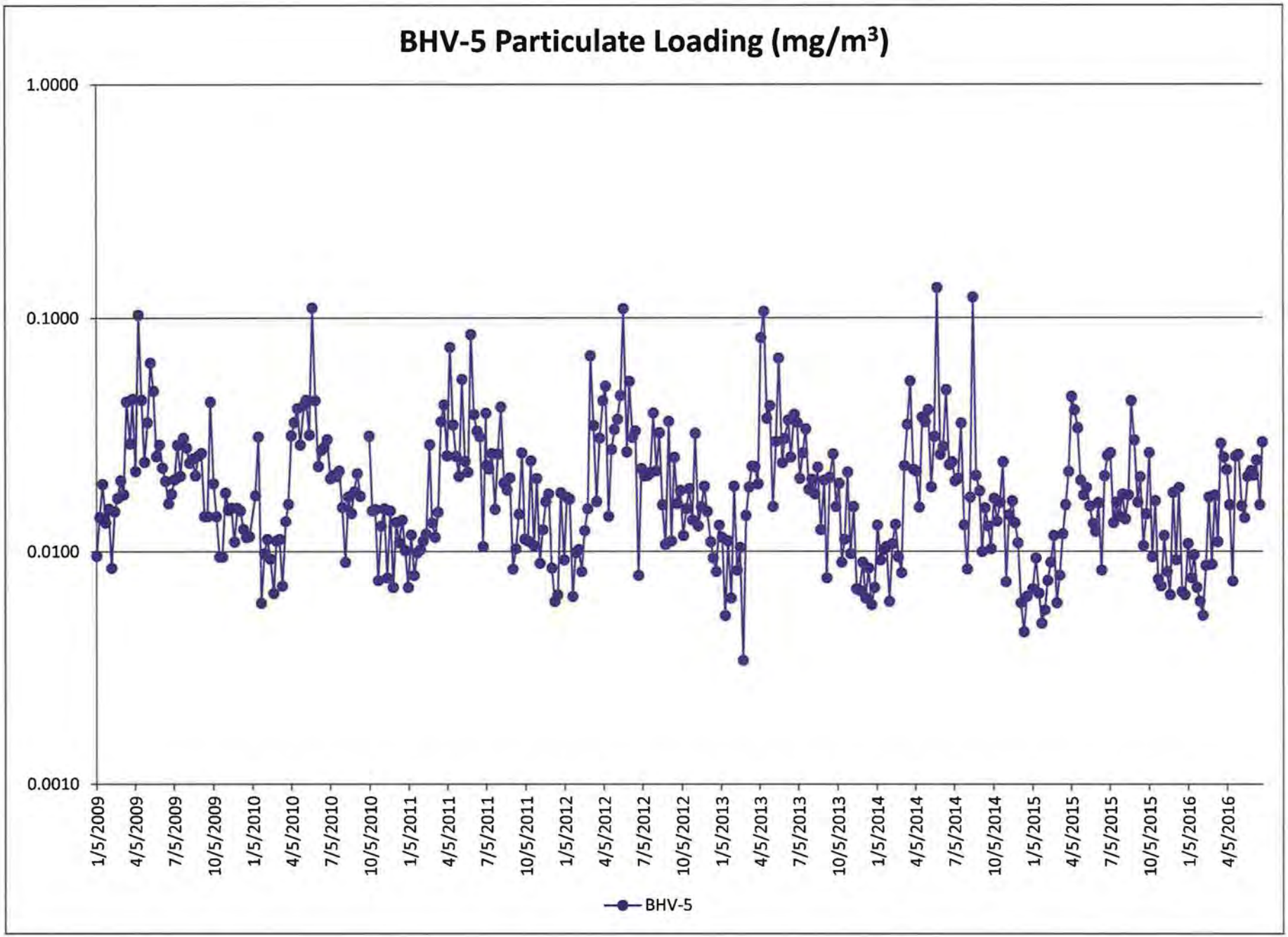
4/5/2016
BHV-4


BHV-5 Particulate Loading (mg/m³)
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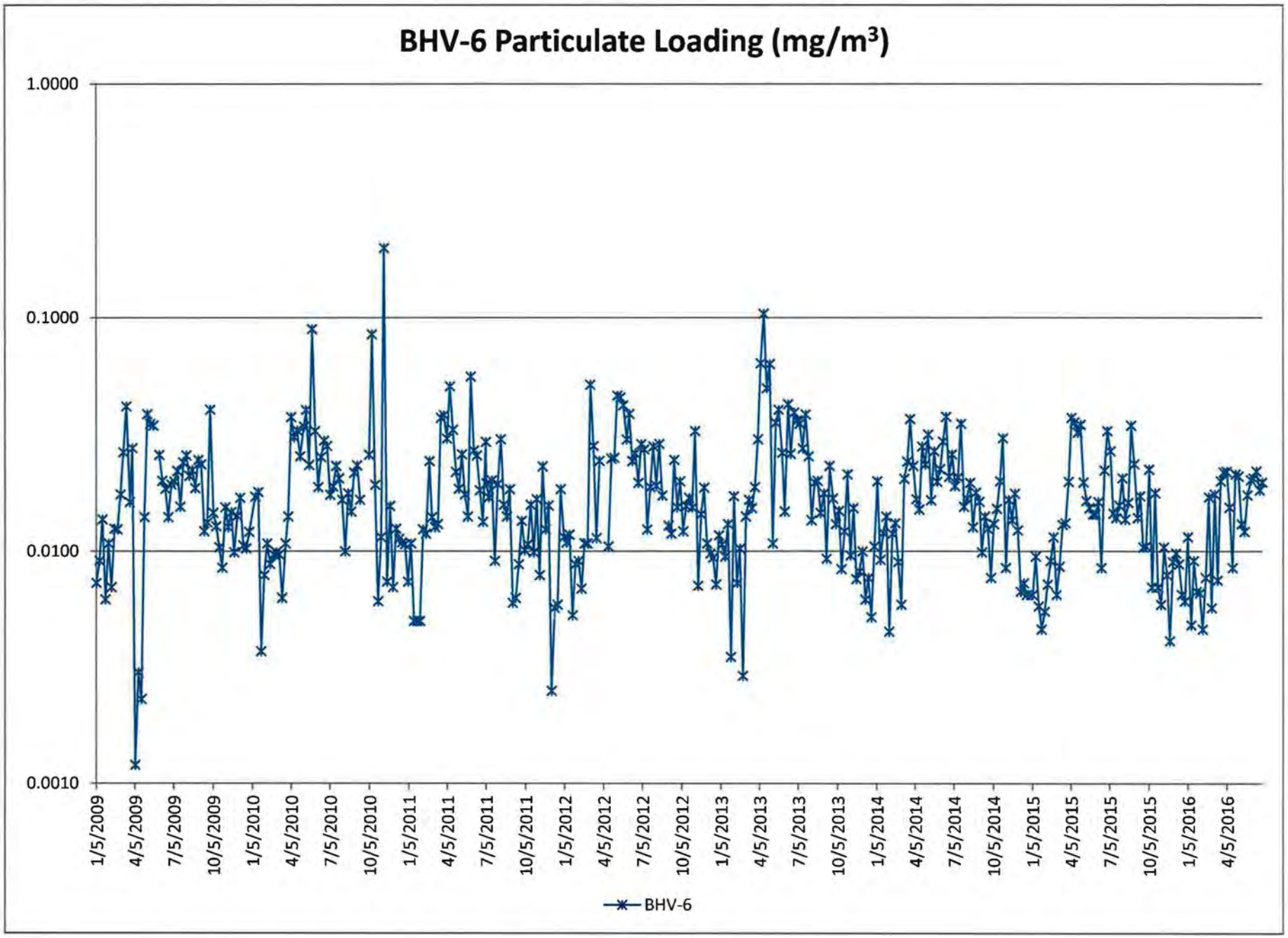
4/5/2015
7/5/2015
10/5/2015
1/5/2016
4/5/2016
BHV-5


BHV-6 Particulate Loading (mg/m³)
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0.0100
0.0010
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7/5/2009
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4/5/2010
7/5/2010
10/5/2010
1/5/2011
4/5/2011
7/5/2011
10/5/2011
1/5/2012
4/5/2012
7/5/2012
10/5/2012
1/5/2013
4/5/2013
7/5/2013
10/5/2013
1/5/2014
4/5/2014
7/5/2014
10/5/2014
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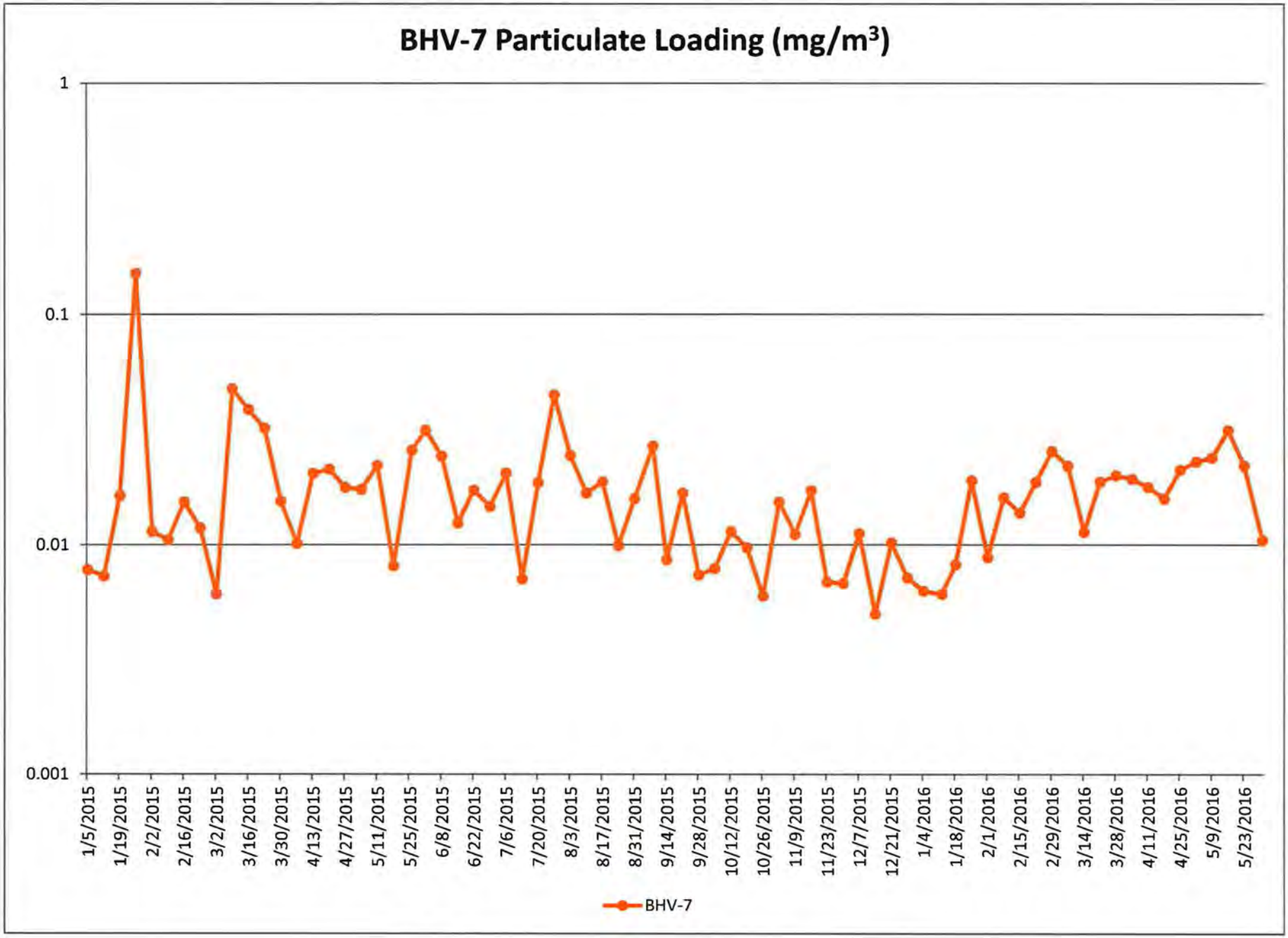
4/5/2015
7/5/2015
10/5/2015
1/5/2016
4/5/2016
BHV-6


BHV-7 Particulate Loading (mg/m3)
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0.01
0.001
1/5/2015
1/19/2015
2/2/2015
2/16/2015
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3/16/2015
3/30/2015
4/13/2015
4/27/2015
5/11/2015
5/25/2015
6/8/2015
6/22/2015
7/6/2015
7/20/2015
8/3/2015
8/17/2015
8/31/2015
9/14/2015
9/28/2015
10/12/2015
10/26/2015
11/9/2015
11/23/2015
12/7/2015
12/21/2015
1/4/2016
1/18/2016
2/1/2016
2/15/2016
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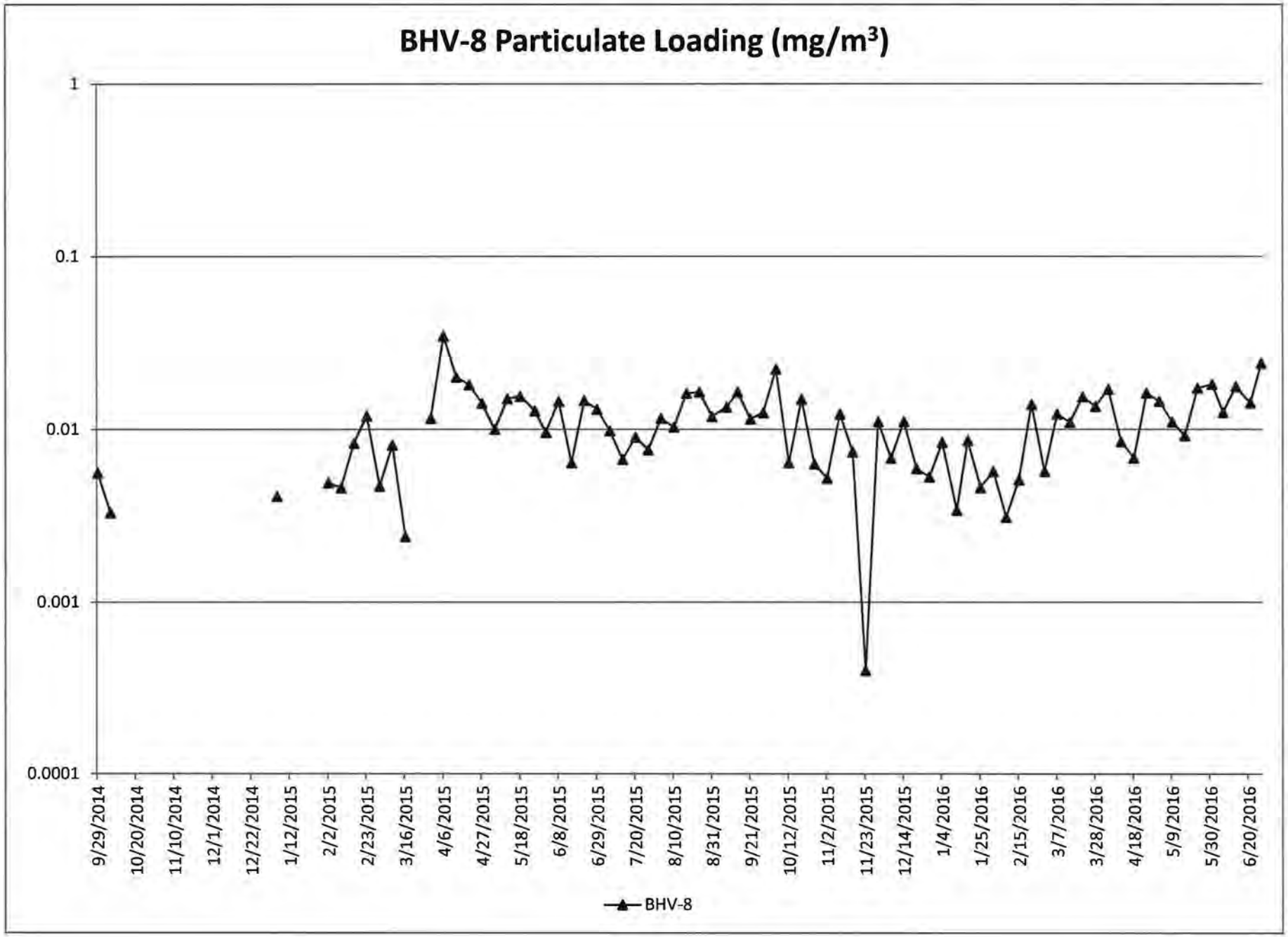
4/11/2016
4/25/2016
5/9/2016
5/23/2016
BHV-7


BHV-8 Particulate Loading (mg/m³)
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2/2/2015
2/23/2015
3/16/2015
4/6/2015
4/27/2015
5/18/2015
6/8/2015
6/29/2015
7/20/2015
8/10/2015
8/31/2015
9/21/2015
10/12/2015
11/2/2015
11/23/2015
12/14/2015
1/4/2016
1/25/2016
2/15/2016
3/7/2016
3/28/2016
4/18/2016
5/9/2016
5/30/2016
6/20/2016
BHV-8

BHV-1

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218807	12/28/2015	1/4/2016	69560.33	69727.25	10015.2	4.0	4.0	4.0	-5.4	267.8	620.5	1.06	0.97	34.12	9675.0	4.3173	4.3949	77.6	0.0080	99.4
2	9218804	1/4/2016	1/12/2016	69727.25	69924.33	11824.8	4.0	4.0	4.0	-3.1	270.1	616.2	1.07	0.96	33.85	11333.6	4.3952	4.4329	37.7	0.0033	117.3
3	9217691	1/12/2016	1/18/2016	69924.33	70062.36	8281.8	4.0	4.0	4.0	-7.1	266.1	620.3	1.06	0.97	34.22	8025.1	4.3242	4.3880	63.8	0.0080	82.2
4	9217688	1/18/2016	1/25/2016	70062.36	70232.47	10206.6	4.0	4.0	4.0	-1.5	271.7	620.8	1.07	0.96	33.88	9790.6	4.3191	4.3701	51.0	0.0052	101.3
5	9217675	1/25/2016	2/1/2016	70232.47	70398.33	9951.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9526.5	4.3926	4.4811	88.5	0.0093	98.7
6	9217672	2/1/2016	2/8/2016	70398.33	70568.04	10182.6	4.0	3.5	3.8	-6.2	267.0	622.80	1.03	0.94	33.16	9561.3	4.3703	4.4149	44.6	0.0047	101.0
7	9217659	2/8/2016	2/15/2016	70568.04	70735.78	10064.4	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9603.8	4.3169	4.3842	67.3	0.0070	99.8
8	9217656	2/15/2016	2/22/2016	70735.78	70902.54	10005.6	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9457.6	4.3132	4.4662	153.0	0.0162	99.3
9	9217649	2/22/2016	2/29/2016	70902.54	71070.66	10087.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9564.8	4.3942	4.4645	70.3	0.0073	100.1
10	9217640	2/29/2016	3/7/2016	71070.66	71238.1	10046.4	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9437.7	4.3481	4.4951	147.0	0.0156	99.7
11	9217627	3/7/2016	3/14/2016	71238.1	71405.1	10020.0	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9437.3	4.3950	4.4814	86.4	0.0092	99.4
12	9217624	3/14/2016	3/21/2016	71405.1	71572.21	10026.6	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9442.5	4.3759	4.5314	155.5	0.0165	99.5
13	9217611	3/21/2016	3/28/2016	71572.21	71740.73	10111.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9433.8	4.3146	4.4823	167.7	0.0178	100.3
					Totals	130824.0							13.98	12.35	436.24	124289.7	56.577	57.787	1210.4	0.1280	
					Averages	10063.4	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.56	9560.7	4.352	4.445	93.1	0.0098	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: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218808	12/28/2015	1/4/2016	80170.84	80338.57	10063.8	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9721.9	4.3222	4.4299	107.7	0.0111	99.8
2	9218803	1/4/2016	1/12/2016	80338.57	80536.28	11862.6	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11369.9	4.3777	4.4306	52.9	0.0047	117.7
3	9217692	1/12/2016	1/18/2016	80536.28	80672.14	8151.6	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7898.9	4.3479	4.4226	74.7	0.0095	80.9
4	9217687	1/18/2016	1/25/2016	80672.14	80841.36	10153.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9739.3	4.3190	4.3801	61.1	0.0063	100.7
5	9217676	1/25/2016	2/1/2016	80841.36	81007.95	9995.4	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9568.5	4.3930	4.4716	78.6	0.0082	99.2
6	9217671	2/1/2016	2/8/2016	81007.95	81181.09	10388.4	4.0	3.5	3.8	-6.2	267.0	622.80	1.03	0.94	33.16	9754.6	4.3519	4.4158	63.9	0.0066	103.1
7	9217660	2/8/2016	2/15/2016	81181.09	81346.26	9910.2	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9456.7	4.3308	4.4275	96.7	0.0102	98.3
8	9217655	2/15/2016	2/22/2016	81346.26	81511.69	9925.8	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9382.2	4.3959	4.5890	193.1	0.0206	98.5
9	9217644	2/22/2016	2/29/2016	81511.69	81680.67	10138.8	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9613.7	4.3662	4.5542	188.0	0.0196	100.6
10	9217639	2/29/2016	3/7/2016	81680.67	81846.89	9973.2	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9368.9	4.3457	4.6356	289.9	0.0309	98.9
11	9217628	3/7/2016	3/14/2016	81846.89	82013.62	10003.8	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9422.0	4.3867	4.5605	173.8	0.0184	99.2
12	9217623	3/14/2016	3/21/2016	82013.62	82180.75	10027.8	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9443.6	4.3616	4.6421	280.5	0.0297	99.5
13	9217612	3/21/2016	3/28/2016	82180.75	82348.72	10078.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9403.0	4.3067	4.5677	261.0	0.0278	100.0
					Totals	130672.8							13.98	12.35	436.24	124143.3	56.605	58.527	1921.9	0.2034	
					Averages	10051.8	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.56	9549.5	4.354	4.502	147.8	0.0156	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: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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 Outstream (%)
1	9218809	12/28/2015	1/4/2016	55359.15	55526.04	10013.4	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9673.2	4.3667	4.4366	69.9	0.0072	99.3
2	9218802	1/4/2016	1/12/2016	55526.04	55721.27	11713.8	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11227.2	4.2840	4.3175	33.5	0.0030	116.2
3	9217693	1/12/2016	1/18/2016	55721.27	55866.02	8685	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	8415.8	4.3455	4.4106	65.1	0.0077	86.2
4	9217686	1/18/2016	1/25/2016	55866.02	56032.66	9998.4	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9590.8	4.3252	4.3690	43.8	0.0046	99.2
5	9217677	1/25/2016	2/1/2016	56032.66	56196.51	9831	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9411.1	4.3723	4.4199	47.6	0.0051	97.5
6	9217670	2/1/2016	2/8/2016	56196.51	56369.98	10408.2	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	10088.9	4.3546	4.3883	33.7	0.0033	103.3
7	9217661	2/8/2016	2/15/2016	56369.98	56535.71	9943.8	4.0	3.5	3.8	3.0	276.2	624.58	1.04	0.92	32.64	9191.8	4.3225	4.3759	53.4	0.0058	98.6
8	9217654	2/15/2016	2/22/2016	56535.71	56698.65	9776.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9241.0	4.3941	4.5462	152.1	0.0165	97.0
9	9217645	2/22/2016	2/29/2016	56698.65	56868.6	10197	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9668.9	4.3642	4.4308	66.6	0.0069	101.2
10	9217638	2/29/2016	3/7/2016	56868.6	57036.28	10060.8	4.0	6.5	5.3	9.1	282.3	618.99	1.25	1.07	37.94	10808.2	4.3309	4.4779	147.0	0.0136	99.8
11	9217629	3/7/2016	3/14/2016	57036.28	57202.08	9948	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9369.5	4.3868	4.4862	99.4	0.0106	98.7
12	9217622	3/14/2016	3/21/2016	57202.08	57370.08	10080	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9492.8	4.3480	4.4767	128.7	0.0136	100.0
13	9217613	3/21/2016	3/28/2016	57370.08	57537.43	10041	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9368.3	4.3390	4.4762	137.2	0.0146	99.6
					Totals	130696.8							14.14	12.49	441.02	125547.5	56.534	57.612	1078.0	0.1125	
					Averages	10053.6	4.0	4.2	4.1	1.8	275.0	619.52	1.09	0.96	33.92	9657.5	4.349	4.432	82.9	0.0087	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-5

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218810	12/28/2015	1/4/2016	78884.55	79051.56	10020.6	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.96	33.92	9625.0	4.3850	4.4888	103.8	0.0108	99.4
2	9218801	1/4/2016	1/12/2016	79051.56	79246	11666.4	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.95	33.66	11118.7	4.3279	4.4133	85.4	0.0077	115.7
3	9217694	1/12/2016	1/18/2016	79246	79391.64	8738.4	4.0	4.0	4.0	-7.1	266.1	620.26	1.05	0.96	34.02	8419.0	4.3350	4.4170	82.0	0.0097	86.7
4	9217685	1/18/2016	1/25/2016	79391.64	79558.17	9991.8	4.0	4.0	4.0	-1.5	271.7	620.77	1.06	0.95	33.68	9530.4	4.3043	4.3711	66.8	0.0070	99.1
5	9217678	1/25/2016	2/1/2016	79558.17	79718.18	9600.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.95	33.62	9138.8	4.3733	4.4289	55.6	0.0061	95.2
6	9217669	2/1/2016	2/8/2016	79718.18	79890.73	10353	4.0	4.0	4.0	-6.2	267.0	622.80	1.05	0.96	34.04	9977.8	4.3559	4.4084	52.5	0.0053	102.7
7	9217662	2/8/2016	2/15/2016	79890.73	80057.48	10005	4.0	4.0	4.0	3.0	276.2	624.58	1.07	0.95	33.51	9493.6	4.3368	4.4191	82.3	0.0087	99.3
8	9217653	2/15/2016	2/22/2016	80057.48	80220.7	9793.2	4.0	4.0	4.0	6.2	279.3	620.01	1.08	0.94	33.20	9205.7	4.3956	4.5531	157.5	0.0171	97.2
9	9217646	2/22/2016	2/29/2016	80220.77	80391.04	10216.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.94	33.30	9633.3	4.3606	4.4451	84.5	0.0088	101.4
10	9217637	2/29/2016	3/7/2016	80391.04	80558.48	10046.4	4.0	5.0	4.5	9.1	282.3	618.99	1.15	0.99	34.98	9951.9	4.3342	4.5076	173.4	0.0174	99.7
11	9217630	3/7/2016	3/14/2016	80558.48	80723.94	9927.6	4.0	4.0	4.0	6.8	279.9	616.96	1.08	0.94	33.08	9298.9	4.3848	4.4873	102.5	0.0110	98.5
12	9217621	3/14/2016	3/21/2016	80723.94	80891.94	10080	4.0	4.0	4.0	7.7	280.9	618.99	1.08	0.94	33.07	9440.6	4.3420	4.6155	273.5	0.0290	100.0
13	9217614	3/21/2016	3/28/2016	80891.94	81059.61	10060.2	4.0	4.0	4.0	10.5	283.6	613.66	1.09	0.93	32.77	9335.3	4.3276	4.5635	235.9	0.0253	99.8
					Totals	130499.4							14.00	12.37	436.85	124169.2	56.563	58.119	1555.7	0.1638	
					Averages	10038.4	4.0	4.1	4.0	1.8	275.0	619.52	1.08	0.95	33.60	9551.5	4.351	4.471	119.7	0.0126	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: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218811	12/28/2015	1/4/2016	2856.32	3023.27	10017	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9676.7	4.4076	4.5186	111.0	0.0115	99.4
2	9217700	1/4/2016	1/12/2016	3023.27	3218.09	11689.2	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11203.7	4.3861	4.4394	53.3	0.0048	116.0
3	9217695	1/12/2016	1/18/2016	3218.09	3363.39	8718	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	8447.8	4.3439	4.4206	76.7	0.0091	86.5
4	9217684	1/18/2016	1/25/2016	3363.39	3525.91	9751.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9353.7	4.3023	4.3649	62.6	0.0067	96.7
5	9217679	1/25/2016	2/1/2016	3525.91	3693.36	10047	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9617.9	4.3772	4.4404	63.2	0.0066	99.7
6	9217668	2/1/2016	2/8/2016	3693.36	3865.92	10353.6	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	10035.9	4.3526	4.3990	46.4	0.0046	102.7
7	9217663	2/8/2016	2/16/2016	3865.92	4032.99	10024.2	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9565.4	4.3291	4.4028	73.7	0.0077	99.4
8	9217652	2/16/2016	2/22/2016	4032.99	4195.59	9756	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9221.7	4.4080	4.5650	157.0	0.0170	96.8
9	9217647	2/22/2016	2/29/2016	4195.59	4365.99	10224	4.0	3.0	3.5	4.9	278.0	621.03	1.01	0.89	31.35	9077.4	4.3629	4.4145	51.6	0.0057	101.4
10	9217636	2/29/2016	3/7/2016	4365.99	4532.22	9973.8	4.0	6.5	5.3	9.1	282.3	618.99	1.25	1.07	37.94	10714.7	4.3152	4.5023	187.1	0.0175	98.9
11	9217631	3/7/2016	3/14/2016	4532.22	4699.25	10021.8	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9439.0	4.3945	4.4652	70.7	0.0075	99.4
12	9217620	3/14/2016	3/21/2016	4699.25	4867.26	10080.6	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9493.4	4.3501	4.5390	188.9	0.0199	100.0
13	9217615	3/21/2016	3/28/2016	4867.26	5034.61	10041	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9368.3	4.3369	4.5406	203.7	0.0217	99.6
					Totals	130697.4							14.10	12.46	439.94	125215.6	56.666	58.012	1345.9	0.1402	
					Averages	10053.6	4.0	4.1	4.1	1.8	275.0	619.52	1.08	0.96	33.84	9632.0	4.359	4.462	103.5	0.0108	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-7

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218812	12/28/2015	1/4/2016	7550.35	7716.33	9958.8	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9620.5	4.4040	4.5121	108.1	0.0112	98.8
2	9217699	1/4/2016	1/12/2016	7716.33	7914.99	11919.6	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11424.5	4.3991	4.4562	57.1	0.0050	118.3
3	9217696	1/12/2016	1/18/2016	7914.99	8052.01	8221.2	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7966.4	4.3420	4.4233	81.3	0.0102	81.6
4	9217683	1/18/2016	1/25/2016	8052.01	8222.13	10207.2	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9791.1	4.3233	4.3940	70.7	0.0072	101.3
5	9217680	1/25/2016	2/1/2016	8222.13	8388.17	9962.4	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9536.9	4.3810	4.4412	60.2	0.0063	98.8
6	9217667	2/1/2016	2/8/2016	8388.17	8558.35	10210.8	4.0	4.0	4.0	-6.2	267.0	622.80	1.06	0.97	34.23	9897.5	4.3364	4.3968	60.4	0.0061	101.3
7	9217664	2/8/2016	2/15/2016	8558.35	8725.59	10034.4	4.0	4.0	4.0	3.0	276.2	624.58	1.08	0.95	33.70	9575.2	4.3225	4.4013	78.8	0.0082	99.5
8	9217651	2/15/2016	2/22/2016	8725.59	8892.13	9992.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9445.2	4.3819	4.5604	178.5	0.0189	99.1
9	9217648	2/22/2016	2/29/2016	8892.13	9060.86	10123.8	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9599.5	4.3859	4.4708	84.9	0.0088	100.4
10	9217635	2/29/2016	3/7/2016	9060.86	9228.46	10056	4.0	4.0	4.0	9.1	282.3	618.99	1.09	0.94	33.18	9446.7	4.3366	4.4875	150.9	0.0160	99.8
11	9217632	3/7/2016	3/14/2016	9228.46	9395.03	9994.2	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9413.0	4.3794	4.5085	129.1	0.0137	99.1
12	9217619	3/14/2016	3/21/2016	9395.03	9562.1	10024.2	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9440.3	4.3489	4.5247	175.8	0.0186	99.4
13	9217616	3/21/2016	3/28/2016	9562.1	9730.62	10111.2	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9433.8	4.3299	4.5685	238.6	0.0253	100.3
					Totals	130816.2							14.01	12.38	437.31	124590.5	56.671	58.145	1474.4	0.1557	
					Averages	10062.8	4.0	4.0	4.0	1.8	275.0	619.52	1.08	0.95	33.64	9583.9	4.359	4.473	113.4	0.0120	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-8

Energey Fuels Resources - White Mesa Mill
Period: December 28th, 2015 - March 28th, 2016

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

First Monitoring Quarter 2016
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	9218813	12/28/2015	1/4/2016	8018.24	8185.24	10020	4.0	4.0	4.0	-5.4	267.8	620.52	1.06	0.97	34.12	9679.6	4.4186	4.4999	81.3	0.0084	99.4
2	9217698	1/4/2016	1/12/2016	8185.24	8383.06	11869.2	4.0	4.0	4.0	-3.1	270.1	616.20	1.07	0.96	33.85	11376.2	4.3704	4.4092	38.8	0.0034	117.8
3	9217697	1/12/2016	1/18/2016	8383.06	8520.4	8240.4	4.0	4.0	4.0	-7.1	266.1	620.26	1.06	0.97	34.22	7985.0	4.3583	4.4266	68.3	0.0086	81.8
4	9217682	1/18/2016	1/25/2016	8520.4	8690.5	10206	4.0	4.0	4.0	-1.5	271.7	620.77	1.07	0.96	33.88	9790.0	4.3116	4.3565	44.9	0.0046	101.3
5	9217681	1/25/2016	2/1/2016	8690.5	8856.56	9963.6	4.0	4.0	4.0	-1.2	272.0	619.0	1.07	0.96	33.81	9538.0	4.3073	4.3621	54.8	0.0057	98.8
6	9217666	2/1/2016	2/8/2016	8856.56	9026.18	10177.2	4.0	5.5	4.8	-6.2	267.0	622.80	1.15	1.06	37.26	10737.1	4.3480	4.3809	32.9	0.0031	101.0
7	9217665	2/8/2016	2/15/2016	9026.18	9193.96	10066.8	4.0	4.0	4.0	3.0	276.2	624.80	1.08	0.95	33.70	9607.8	4.3283	4.3777	49.4	0.0051	99.9
8	9217650	2/15/2016	2/22/2016	9193.96	9360.5	9992.4	4.0	4.0	4.0	6.2	279.3	620.01	1.09	0.95	33.38	9445.2	4.4092	4.5415	132.3	0.0140	99.1
9	9217643	2/22/2016	2/29/2016	9360.5	9528.77	10096.2	4.0	4.0	4.0	4.9	278.0	621.03	1.08	0.95	33.49	9573.3	4.3381	4.3929	54.8	0.0057	100.2
10	9217634	2/29/2016	3/7/2016	9528.77	9696.36	10055.4	4.0	3.5	3.8	9.1	282.3	618.99	1.06	0.91	32.14	9150.4	4.3402	4.4531	112.9	0.0123	99.8
11	9217633	3/7/2016	3/14/2016	9696.36	9863.36	10020	4.0	4.0	4.0	6.8	279.9	616.96	1.09	0.94	33.26	9437.3	4.3537	4.4575	103.8	0.0110	99.4
12	9217918	3/14/2016	3/21/2016	9863.36	10030.45	10025.4	4.0	4.0	4.0	7.7	280.9	618.99	1.09	0.94	33.26	9441.4	4.3505	4.4969	146.4	0.0155	99.5
13	9217617	3/21/2016	3/28/2016	10030.45	10198.98	10111.8	4.0	4.0	4.0	10.5	283.6	613.66	1.10	0.93	32.95	9434.4	4.3299	4.4586	128.7	0.0136	100.3
					Totals	130844.4							14.07	12.44	439.30	125195.7	56.564	57.613	1049.3	0.1111	
					Averages	10065.0	4.0	4.1	4.0	1.8	275.0	619.53692	1.08	0.96	33.79	9630.4	4.351	4.432	80.7	0.0085	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-1

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217608	3/28/2016	4/4/2016	71740.73	71914.19	10407.6	4.0	4.0	4.0	6.7	279.8	617.5	1.09	0.94	33.28	9807.5	4.3409	4.5318	190.9	0.0195	103.3
2	9221300	4/4/2016	4/11/2016	71914.19	72077.99	9828.0	4.0	4.0	4.0	11.5	284.6	620.0	1.10	0.94	33.06	9201.3	4.3464	4.4746	128.2	0.0139	97.5
3	9221293	4/11/2016	4/18/2016	72077.99	72244.91	10015.2	4.0	4.0	4.0	9.4	282.5	617.2	1.09	0.94	33.11	9390.3	4.3824	4.4555	73.1	0.0078	99.4
4	9221278	4/18/2016	4/25/2016	72244.91	72412.3	10043.4	4.0	4.0	4.0	12.1	285.3	618.0	1.10	0.93	32.97	9376.5	4.3501	4.5216	171.5	0.0183	99.6
5	9221277	4/25/2016	5/2/2016	72412.3	72586.06	10425.6	4.0	4.0	4.0	7.0	280.1	614.4	1.09	0.94	33.18	9795.1	4.3600	4.5461	186.1	0.0190	103.4
6	9221262	5/2/2016	5/9/2016	72586.08	72750.11	9841.8	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9171.3	4.3571	4.5009	143.8	0.0157	97.6
7	9221261	5/9/2016	5/16/2016	72750.11	72916.24	9967.8	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9253.9	4.3564	4.4912	134.8	0.0146	98.9
8	9221246	5/16/2016	5/23/2016	72916.24	73085.43	10151.4	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9438.1	4.3401	4.5406	200.5	0.0212	100.7
9	9221245	5/23/2016	5/31/2016	73085.43	73278.21	11566.8	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10727.5	4.3774	4.6027	225.3	0.0210	114.8
10	9221230	5/31/2016	6/6/2016	73278.21	73420.45	8534.4	4.0	3.5	3.8	22.5	295.7	620.01	1.08	0.89	31.42	7592.1	4.3679	4.5277	159.8	0.0210	84.7
11	9221229	6/6/2016	6/13/2016	73420.45	73588.59	10088.4	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9222.3	4.3501	4.6535	303.4	0.0329	100.1
12	9221214	6/13/2016	6/21/2016	73588.59	73783	11664.6	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10708.5	4.3826	4.6254	242.8	0.0227	115.7
13	9221213	6/21/2016	6/27/2016	73783	73924.31	8478.6	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7725.5	4.3782	4.6639	285.7	0.0370	84.1
					Totals	131013.6							14.33	12.04	425.18	121409.8	56.690	59.136	2445.9	0.2646	
					Averages	10078.0	4.0	4.0	4.0	15.6	288.7	618.32923	1.10	0.93	32.71	9339.2	4.361	4.549	188.1	0.0204	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: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217607	3/28/2016	4/4/2016	82348.72	82519.63	10254.6	4.0	3.5	3.8	6.7	279.8	617.47	1.06	0.91	32.24	9360.9	4.4170	4.6693	252.3	0.0270	101.7
2	9221299	4/4/2016	4/11/2016	82519.63	82685.7	9964.2	4.0	4.0	4.0	11.5	284.6	620.01	1.10	0.94	33.06	9328.8	4.3363	4.5756	239.3	0.0257	98.9
3	9221292	4/11/2016	4/18/2016	82685.7	82853.65	10077	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.94	33.11	9448.3	4.3420	4.4668	124.8	0.0132	100.0
4	9221279	4/18/2016	4/25/2016	82853.65	83020.29	9998.4	4.0	4.0	4.0	12.1	285.3	617.98	1.10	0.93	32.97	9334.5	4.3570	4.6170	260.0	0.0279	99.2
5	9221276	4/25/2016	5/2/2016	83020.29	83194.65	10461.6	4.0	4.5	4.3	7.0	280.1	614.4	1.13	0.97	34.19	10127.1	4.3717	4.5813	209.6	0.0207	103.8
6	9221263	5/2/2016	5/9/2016	83194.65	83357.72	9784.2	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9117.6	4.3539	4.5688	214.9	0.0236	97.1
7	9221260	5/9/2016	5/16/2016	83357.72	83524.97	10035	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9316.3	4.3640	4.5583	194.3	0.0209	99.6
8	9221247	5/16/2016	5/23/2016	83524.97	83692.72	10065	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9357.7	4.3659	4.6239	258.0	0.0276	99.9
9	9221244	5/23/2016	5/31/2016	83692.72	83887.07	11661	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10814.8	4.3793	4.8037	424.4	0.0392	115.7
10	9221231	5/31/2016	6/6/2016	83887.07	84028.15	8464.8	4.0	5.0	4.5	22.5	295.7	620.01	1.18	0.97	34.37	8238.6	4.3824	4.5787	196.3	0.0238	84.0
11	9221228	6/6/2016	6/13/2016	84028.15	84197.1	10137	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9266.7	4.3631	4.6947	331.6	0.0358	100.6
12	9221215	6/13/2016	6/21/2016	84197.1	84393.66	11793.6	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10826.9	4.3752	4.6649	289.7	0.0268	117.0
13	9221212	6/21/2016	6/27/2016	84393.66	84532.04	8302.8	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7565.3	4.3743	4.7889	414.6	0.0548	82.4
					Totals	130999.2							14.43	12.12	428.10	122103.5	56.782	60.192	3409.8	0.3668	
					Averages	10076.9	4.0	4.1	4.0	15.6	288.7	618.32923	1.11	0.93	32.93	9392.6	4.368	4.630	262.3	0.0282	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-4

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217606	3/28/2016	4/4/2016	57537.43	57710.62	10391.4	4.0	4.0	4.0	6.7	279.8	617.47	1.09	0.94	33.28	9792.3	4.4018	4.5898	188.0	0.0192	103.1
2	9221298	4/4/2016	4/11/2016	57710.62	57875.69	9904.2	4.0	4.0	4.0	11.5	284.6	620.01	1.10	0.94	33.06	9272.6	4.3554	4.4846	129.2	0.0139	98.3
3	9221291	4/11/2016	4/18/2016	57875.69	58041.97	9976.8	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.94	33.11	9354.3	4.3660	4.4431	77.1	0.0082	99.0
4	9221280	4/18/2016	4/25/2016	58041.97	58209.95	10078.8	4.0	4.0	4.0	12.1	285.3	617.98	1.10	0.93	32.97	9409.5	4.3657	4.3841	18.4	0.0020	100.0
5	9221275	4/25/2016	5/2/2016	58209.95	58375.26	9918.6	4.0	3.0	3.5	7.0	280.1	614.4	1.02	0.88	31.07	8725.4	4.3360	4.5036	167.6	0.0192	98.4
6	9221264	5/2/2016	5/9/2016	58375.26	58544.85	10175.4	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9482.2	4.3494	4.5320	182.6	0.0193	100.9
7	9221259	5/9/2016	5/16/2016	58544.85	58710.4	9933	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9221.6	4.3329	4.4693	136.4	0.0148	98.5
8	9221248	5/16/2016	5/23/2016	58710.4	58879.42	10141.2	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9428.6	4.3700	4.6030	233.0	0.0247	100.6
9	9221243	5/23/2016	5/31/2016	58879.42	59073.51	11645.4	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10800.4	4.3885	4.6638	275.3	0.0255	115.5
10	9221232	5/31/2016	6/6/2016	59073.51	59215.19	8500.8	4.0	4.0	4.0	22.5	295.7	620.01	1.12	0.92	32.43	7806.6	4.3922	4.5736	181.4	0.0232	84.3
11	9221227	6/6/2016	6/13/2016	59215.19	59382.58	10043.4	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9181.2	4.3528	4.6000	247.2	0.0269	99.6
12	9221216	6/13/2016	6/21/2016	59382.58	59573.11	11431.8	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10494.7	4.3787	4.5757	197.0	0.0188	113.4
13	9221211	6/21/2016	6/27/2016	59576.11	59719.08	8578.2	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7816.3	4.3410	4.5933	252.3	0.0323	85.1
					Totals	130719.0							14.30	12.01	424.08	120785.7	56.730	59.016	2285.5	0.2480	
					Averages	10055.3	4.0	3.9	4.0	15.6	288.7	618.32923	1.10	0.92	32.62	9291.2	4.364	4.540	175.8	0.0191	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-5

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217605	3/28/2016	4/4/2016	81059.61	81232.98	10402.2	4.0	3.5	3.8	6.7	279.8	617.47	1.05	0.91	32.05	9440.8	4.3834	4.5950	211.6	0.0224	103.2
2	9221297	4/4/2016	4/11/2016	81232.98	81397.89	9894.6	4.0	4.0	4.0	11.5	284.6	620.01	1.09	0.93	32.88	9213.2	4.3619	4.5079	146.0	0.0158	98.2
3	9221290	4/11/2016	4/18/2016	81397.89	81563.83	9956.4	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.93	32.93	9284.2	4.3552	4.4243	69.1	0.0074	98.8
4	9221281	4/18/2016	4/25/2016	81563.83	81732.17	10100.4	4.0	4.0	4.0	12.1	285.3	617.98	1.09	0.93	32.79	9378.5	4.3531	4.5928	239.7	0.0256	100.2
5	9221274	4/25/2016	5/2/2016	81732.17	81904.95	10366.8	4.0	5.0	4.5	7.0	280.1	614.4	1.15	0.99	34.99	10270.6	4.3350	4.6020	267.0	0.0260	102.8
6	9221265	5/2/2016	5/9/2016	81904.95	82069.96	9900.6	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.73	9176.2	4.3398	4.4841	144.3	0.0157	98.2
7	9221258	5/9/2016	5/16/2016	82069.96	82235.52	9933.6	4.0	4.0	4.0	15.8	288.9	618.99	1.10	0.92	32.61	9172.5	4.3409	4.4690	128.1	0.0140	98.5
8	9221249	5/16/2016	5/23/2016	82235.52	82404.19	10120.2	4.0	4..0	4.0	14.0	287.1	616.96	1.10	0.92	32.66	9358.3	4.3372	4.5335	196.3	0.0210	100.4
9	9221242	5/23/2016	5/31/2016	82404.19	82598.63	11666.4	4.0	4.0	4.0	15.6	288.8	617.47	1.10	0.92	32.58	10761.7	4.3729	4.6115	238.6	0.0222	115.7
10	9221233	5/31/2016	6/6/2016	82598.63	82740.48	8511	4.0	4.5	4.3	22.5	295.7	620.01	1.14	0.94	33.25	8012.5	4.3908	4.5610	170.2	0.0212	84.4
11	9221226	6/6/2016	6/13/2016	82740.48	82907.36	10012.8	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.11	9105.0	4.3469	4.5710	224.1	0.0246	99.3
12	9221217	6/13/2016	6/21/2016	82907.36	83101.27	11634.6	4.0	4.0	4.0	23.1	296.2	620.77	1.11	0.91	32.25	10624.4	4.3700	4.5386	168.6	0.0159	115.4
13	9221210	6/21/2016	6/27/2016	83101.27	83244.22	8577	4.0	4.0	4.0	27.4	300.5	620.52	1.12	0.91	32.01	7774.3	4.3295	4.5579	228.4	0.0294	85.1
					Totals	131076.6							14.36	12.06	425.83	121572.2	56.617	59.049	2432.0	0.2612	
					Averages	10082.8	4.0	4.1	4.0	15.6	288.7	618.32923	1.10	0.93	32.76	9351.7	4.355	4.542	187.1	0.0201	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-6

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217604	3/28/2016	4/4/2016	5034.61	5207.89	10396.8	4.0	5.0	4.5	6.7	279.8	617.47	1.15	1.00	35.27	10383.2	4.3896	4.6160	226.4	0.0218	103.1
2	9221296	4/4/2016	4/11/2016	5207.89	5372.89	9900	4.0	4.0	4.0	11.5	284.6	620.01	1.10	0.94	33.06	9268.7	4.3571	4.4997	142.6	0.0154	98.2
3	9221289	4/11/2016	4/18/2016	5372.89	5539.17	9976.8	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.94	33.11	9354.3	4.3404	4.4199	79.5	0.0085	99.0
4	9221282	4/18/2016	4/25/2016	5539.17	5707.18	10080.6	4.0	4.0	4.0	12.1	285.3	617.98	1.10	0.93	32.97	9411.2	4.3428	4.5433	200.5	0.0213	100.0
5	9221273	4/25/2016	5/2/2016	5707.18	5875.43	10095	4.0	4.0	4.0	7.0	280.1	614.4	1.09	0.94	33.18	9484.5	4.3479	4.5456	197.7	0.0208	100.1
6	9221266	5/2/2016	5/9/2016	5875.43	6044.97	10172.4	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9479.4	4.3506	4.4748	124.2	0.0131	100.9
7	9221257	5/9/2016	5/16/2016	6044.97	6210.52	9933	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9221.6	4.3253	4.4372	111.9	0.0121	98.5
8	9221250	5/16/2016	5/23/2016	6210.57	6379.54	10138.2	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9425.8	4.3466	4.5099	163.3	0.0173	100.6
9	9221241	5/23/2016	5/31/2016	6379.54	6570.79	11475	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10642.3	4.3907	4.6048	214.1	0.0201	113.8
10	9221234	5/31/2016	6/6/2016	6570.79	6712.56	8506.2	4.0	3.5	3.8	22.5	295.7	620.01	1.08	0.89	31.42	7567.0	4.3730	4.5278	154.8	0.0205	84.4
11	9221225	6/6/2016	6/13/2016	6712.56	6879.88	10039.2	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9177.3	4.3638	4.5649	201.1	0.0219	99.6
12	9221218	6/13/2016	6/21/2016	6879.88	7073.42	11612.4	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10660.5	4.3955	4.5898	194.3	0.0182	115.2
13	9221209	6/21/2016	6/27/2016	7073.42	7216.37	8577	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7815.2	4.3650	4.5187	153.7	0.0197	85.1
					Totals	130902.6							14.40	12.10	427.17	121891.0	56.688	58.852	2164.1	0.2308	
					Averages	10069.4	4.0	4.0	4.0	15.6	288.7	618.32923	1.11	0.93	32.86	9376.2	4.361	4.527	166.5	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-7

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217603	3/28/2016	4/4/2016	9730.62	9903.87	10395	4.0	5.0	4.5	6.7	279.8	617.47	1.15	1.00	35.27	10381.4	4.4104	4.6372	226.8	0.0218	103.1
2	9221295	4/4/2016	4/11/2016	9903.87	10067.78	9834.6	4.0	4.0	4.0	11.5	284.6	620.01	1.10	0.94	33.06	9207.5	4.3528	4.4572	104.4	0.0113	97.6
3	9221288	4/11/2016	4/18/2016	10067.78	10234.9	10027.2	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.94	33.11	9401.6	4.3695	4.5449	175.4	0.0187	99.5
4	9221283	4/18/2016	4/25/2016	10234.9	10402.13	10033.8	4.0	4.0	4.0	12.1	285.3	617.98	1.10	0.93	32.97	9367.5	4.3369	4.5234	186.5	0.0199	99.5
5	9221272	4/25/2016	5/2/2016	10402.13	10575.81	10420.8	4.0	4.5	4.3	7.0	280.1	614.4	1.13	0.97	34.19	10087.6	4.3581	4.5517	193.6	0.0192	103.4
6	9221267	5/2/2009	5/9/2016	10575.81	10739.57	9825.6	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9156.2	4.3448	4.5069	162.1	0.0177	97.5
7	9221256	5/9/2016	5/16/2016	10739.57	10906.29	10003.2	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9286.8	4.3380	4.4846	146.6	0.0158	99.2
8	9221251	5/16/2016	5/23/2016	10906.29	11075.26	10138.2	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9425.8	4.3468	4.5449	198.1	0.0210	100.6
9	9221240	5/23/2016	5/31/2016	11075.26	11267.95	11561.4	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10722.5	4.4065	4.6510	244.5	0.0228	114.7
10	9221235	5/31/2016	6/6/2016	11267.95	11410	8523	4.0	4.0	4.0	22.5	295.7	620.01	1.12	0.92	32.43	7827.0	4.3887	4.5744	185.7	0.0237	84.6
11	9221224	6/6/2016	6/13/2016	11410	11578.33	10099.8	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9232.7	4.3465	4.6343	287.8	0.0312	100.2
12	9221219	6/13/2016	6/21/2016	11578.33	11772.77	11666.4	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10710.1	4.3789	4.6136	234.7	0.0219	115.7
13	9221208	6/21/2016	6/27/2016	11772.77	11914.03	8475.6	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7722.8	4.4230	4.5037	80.7	0.0104	84.1
					Totals	131004.6							14.47	12.15	429.19	122529.4	56.801	59.228	2426.9	0.2555	
					Averages	10077.3	4.0	4.1	4.1	15.6	288.7	618.32923	1.11	0.93	33.01	9425.3	4.369	4.556	186.7	0.0197	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-8

Energey Fuels Resources - White Mesa Mill
Period: March 28th, 2016 - June 27th, 2016

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

Second Monitoring Quarter 2016
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	9217602	3/28/2016	4/4/2016	10198.98	10372.37	10403.4	4.0	4.5	4.3	6.7	279.8	617.47	1.12	0.97	34.29	10101.0	4.4091	4.5825	173.4	0.0172	103.2
2	9221294	4/4/2016	4/11/2016	10372.37	10536.18	9828.6	4.0	4.0	4.0	11.5	284.6	620.01	1.10	0.94	33.06	9201.9	4.3631	4.4412	78.1	0.0085	97.5
3	9221287	4/11/2016	4/18/2016	10536.18	10703.51	10039.8	4.0	4.0	4.0	9.4	282.5	617.22	1.09	0.94	33.11	9413.4	4.3585	4.4227	64.2	0.0068	99.6
4	9221284	4/18/2016	4/25/2016	10703.51	10870.57	10023.6	4.0	4.0	4.0	12.1	285.3	617.98	1.10	0.93	32.97	9358.0	4.3414	4.4940	152.6	0.0163	99.4
5	9221271	4/25/2016	5/2/2016	10870.57	11044.31	10424.4	4.0	4.5	4.3	7.0	280.1	614.4	1.13	0.97	34.19	10091.1	4.3604	4.5077	147.3	0.0146	103.4
6	9221268	5/2/2016	5/9/2016	11044.31	11208.44	9847.8	4.0	4.0	4.0	13.0	286.2	617.72	1.10	0.93	32.91	9176.9	4.3575	4.4591	101.6	0.0111	97.7
7	9221255	5/9/2016	5/16/2016	11208.44	11372.27	9829.8	4.0	4.0	4.0	15.8	288.9	618.99	1.11	0.93	32.79	9125.8	4.3475	4.4315	84.0	0.0092	97.5
8	9221252	5/16/2016	5/23/2016	11372.27	11541.27	10140	4.0	4.0	4.0	14.0	287.1	616.96	1.10	0.93	32.83	9427.5	4.3486	4.5128	164.2	0.0174	100.6
9	9221239	5/23/2016	5/31/2016	11541.27	11733.97	11562	4.0	4.0	4.0	15.6	288.8	617.47	1.11	0.93	32.75	10723.0	4.3911	4.5879	196.8	0.0184	114.7
10	9221236	5/31/2016	6/6/2016	11733.97	11876.15	8530.8	4.0	4.0	4.0	22.5	295.7	620.01	1.12	0.92	32.43	7834.2	4.3937	4.4923	98.6	0.0126	84.6
11	9221223	6/6/2016	6/13/2016	11876.15	12044.37	10093.2	4.0	4.0	4.0	24.6	297.7	618.74	1.12	0.91	32.28	9226.7	4.3637	4.5279	164.2	0.0178	100.1
12	9221220	6/13/2016	6/21/2016	12044.37	12238.82	11667	4.0	4.0	4.0	23.1	296.2	620.77	1.12	0.92	32.42	10710.7	4.3766	4.5295	152.9	0.0143	115.7
13	9221207	6/21/2016	6/27/2016	12238.82	12380.12	8478	4.0	4.0	4.0	27.4	300.5	620.52	1.13	0.91	32.18	7725.0	4.2727	4.4610	188.3	0.0244	84.1
					Totals	130868.4							14.43	12.13	428.21	122115.0	56.684	58.450	1766.2	0.1885	
					Averages	10066.8	4.0	4.1	4.0	15.6	288.7	618.32923	1.11	0.93	32.94	9393.5	4.360	4.496	135.9	0.0145	99.9

Comments:

Insert weekly flow check values in yellow columns.

Blue column values are calculated.

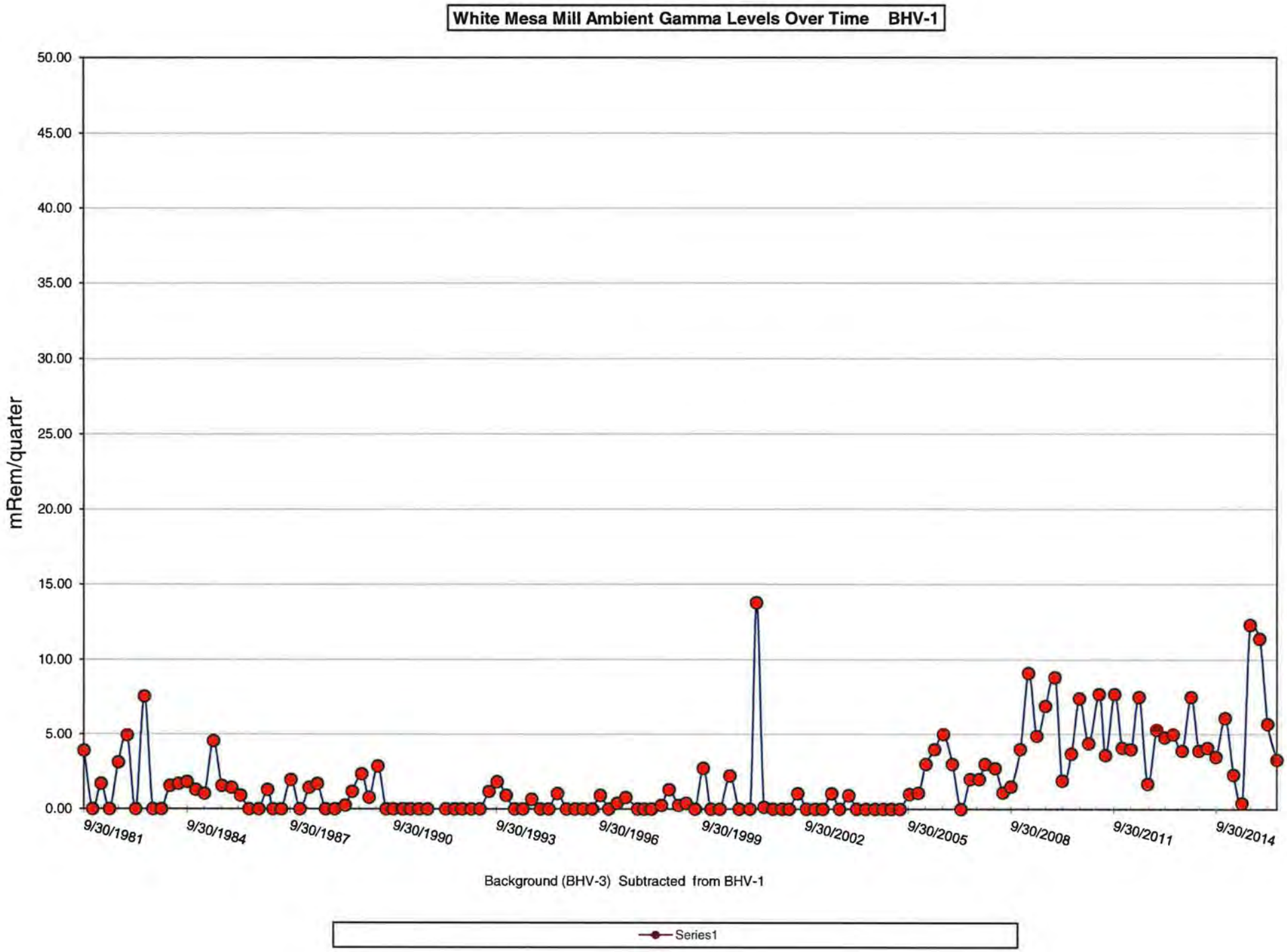
Green columns are calculated averages from the met station.

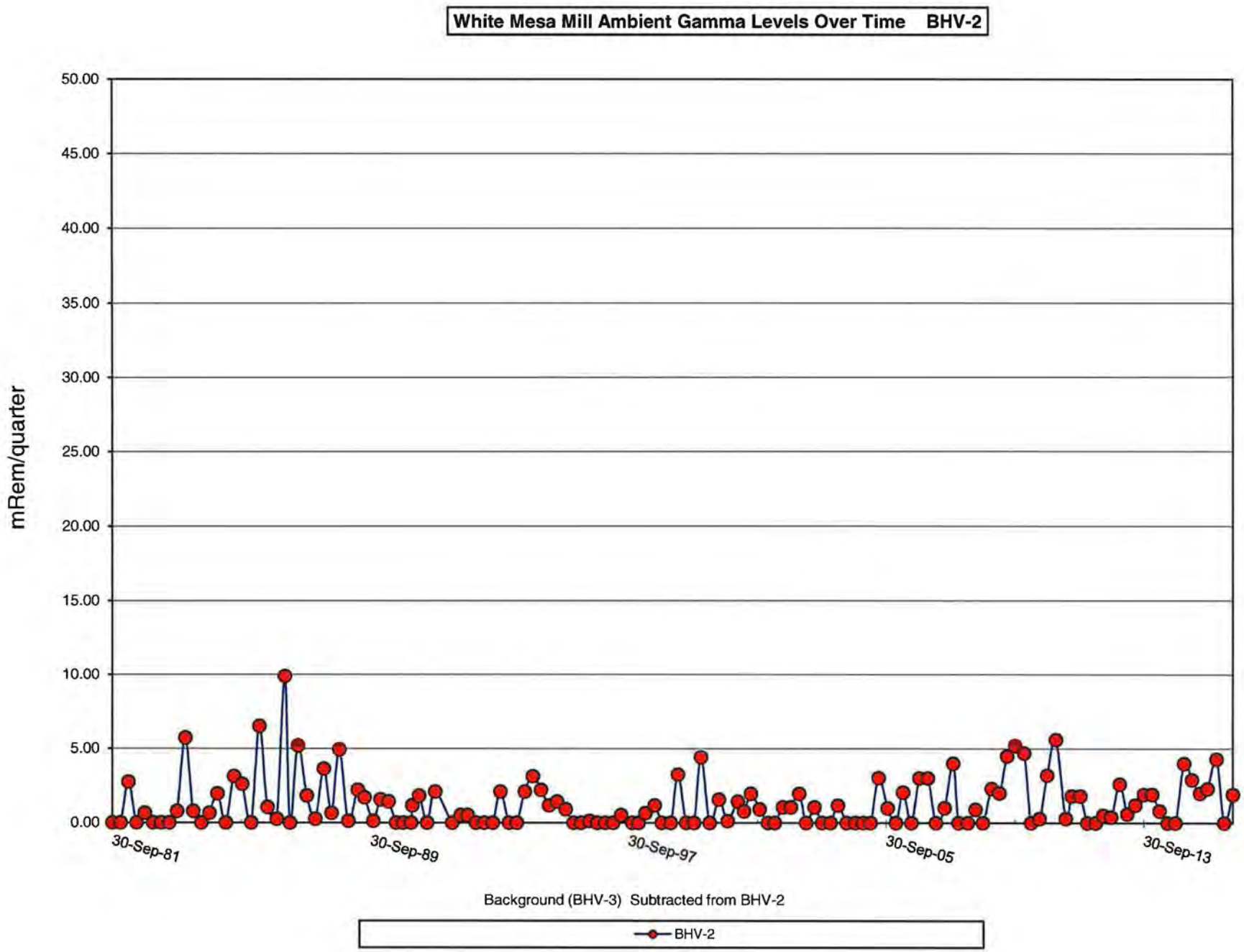
Insert filter weight values into orange columns.

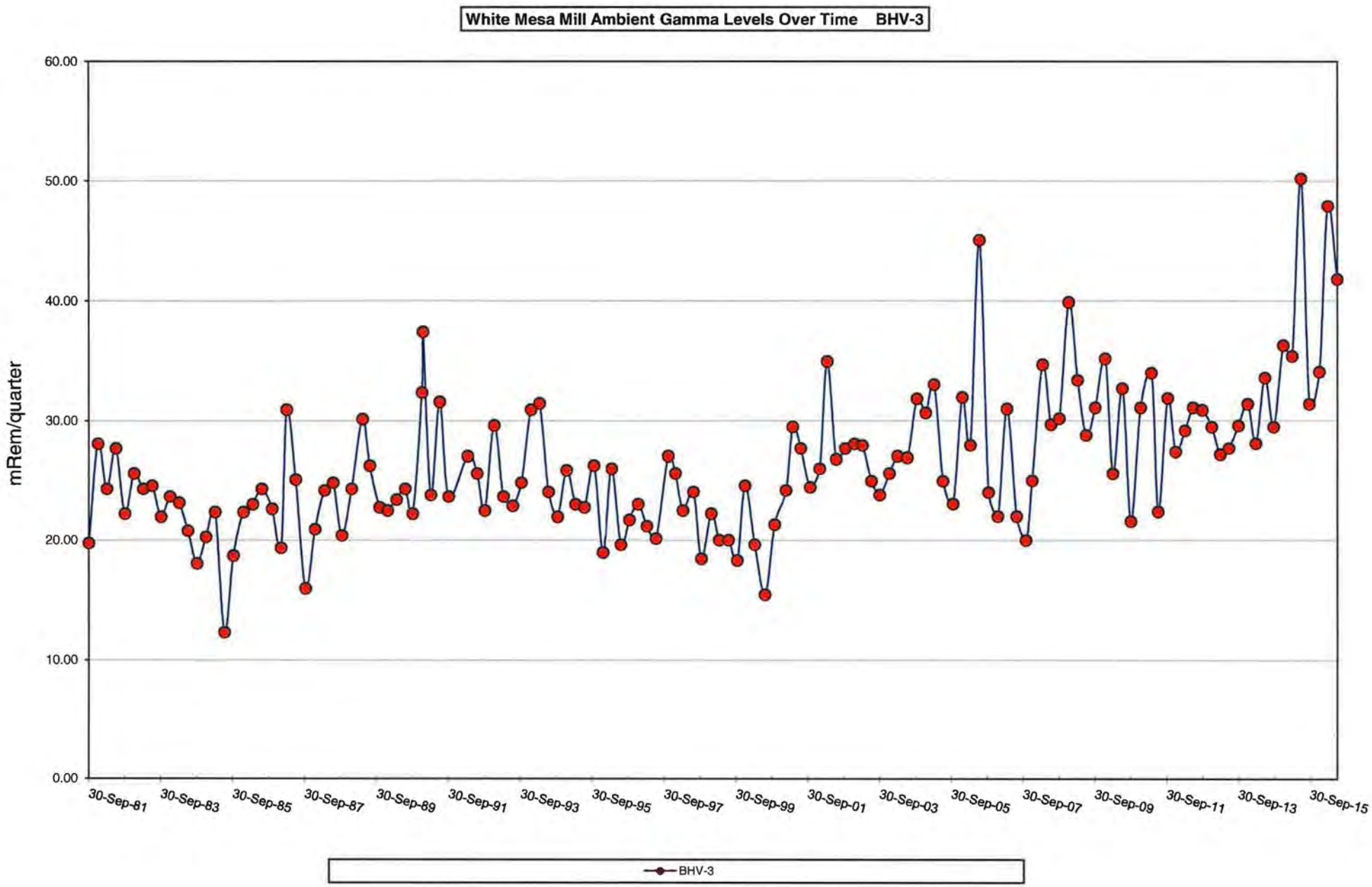
Blanks		Period: March 28th, 2016 - June 27th, 2016		
Week #	Filter Number	Start Date	Stop Date	Net
1	9217601	28-Mar-16	04-Apr-16	4.3890
2	9221286	04-Apr-16	11-Apr-16	4.3725
3	9221285	11-Apr-16	18-Apr-16	4.3591
4	9221270	18-Apr-16	25-Apr-16	4.3637
5	9221269	25-Apr-16	02-May-16	4.3689
6	9221254	02-May-16	09-May-16	4.3225
7	9221253	09-May-16	16-May-16	4.3535
8	9221238	16-May-16	23-May-16	4.3789
9	9221237	23-May-16	31-May-16	4.4022
10	9221222	31-May-16	06-Jun-16	4.3665
11	9221221	06-Jun-16	13-Jun-16	4.3799
12	9221206	13-Jun-16	21-Jun-16	4.2599
13	9221205	21-Jun-16	27-Jun-16	4.2576
	Totals			

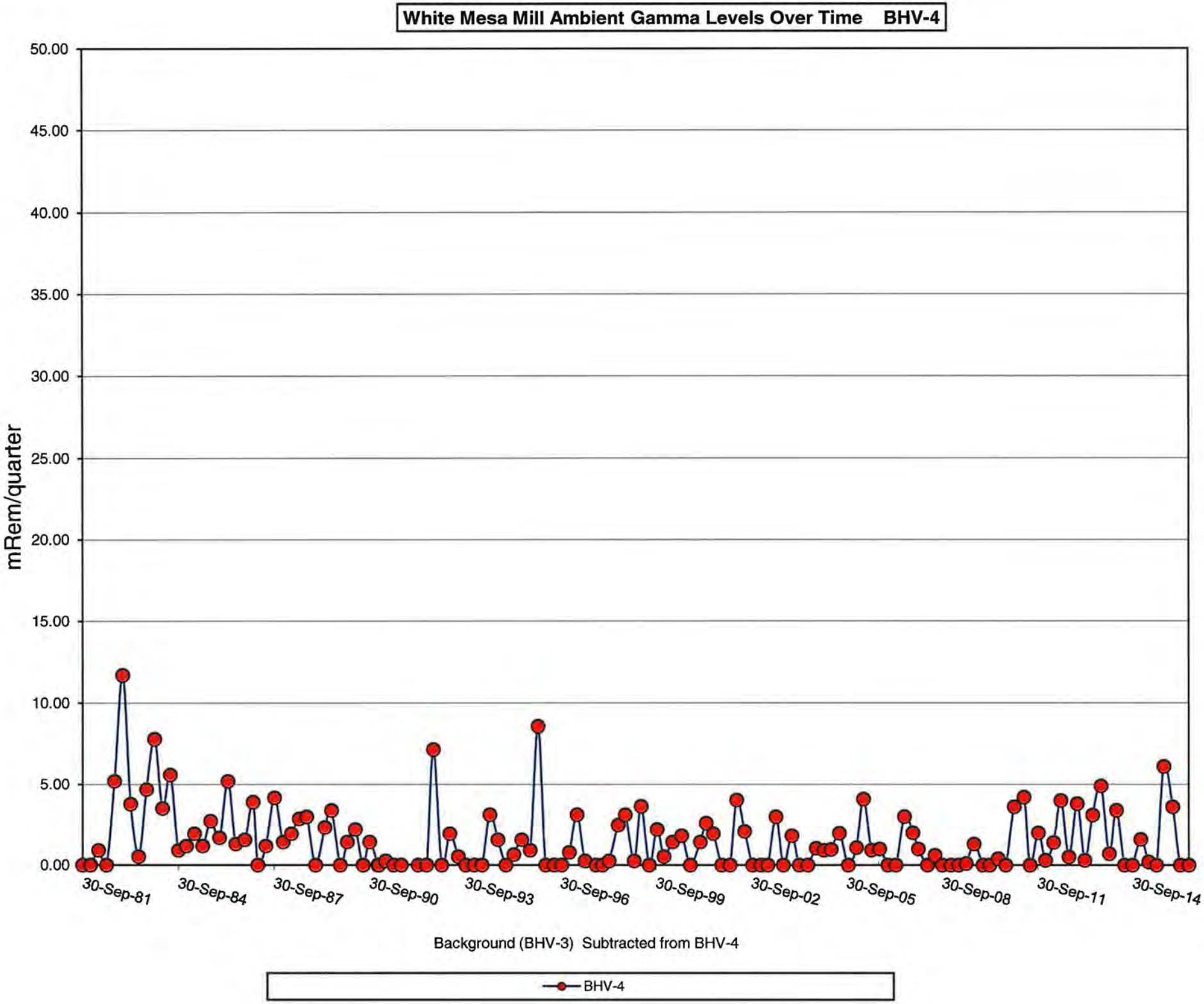
ATTACHMENT E

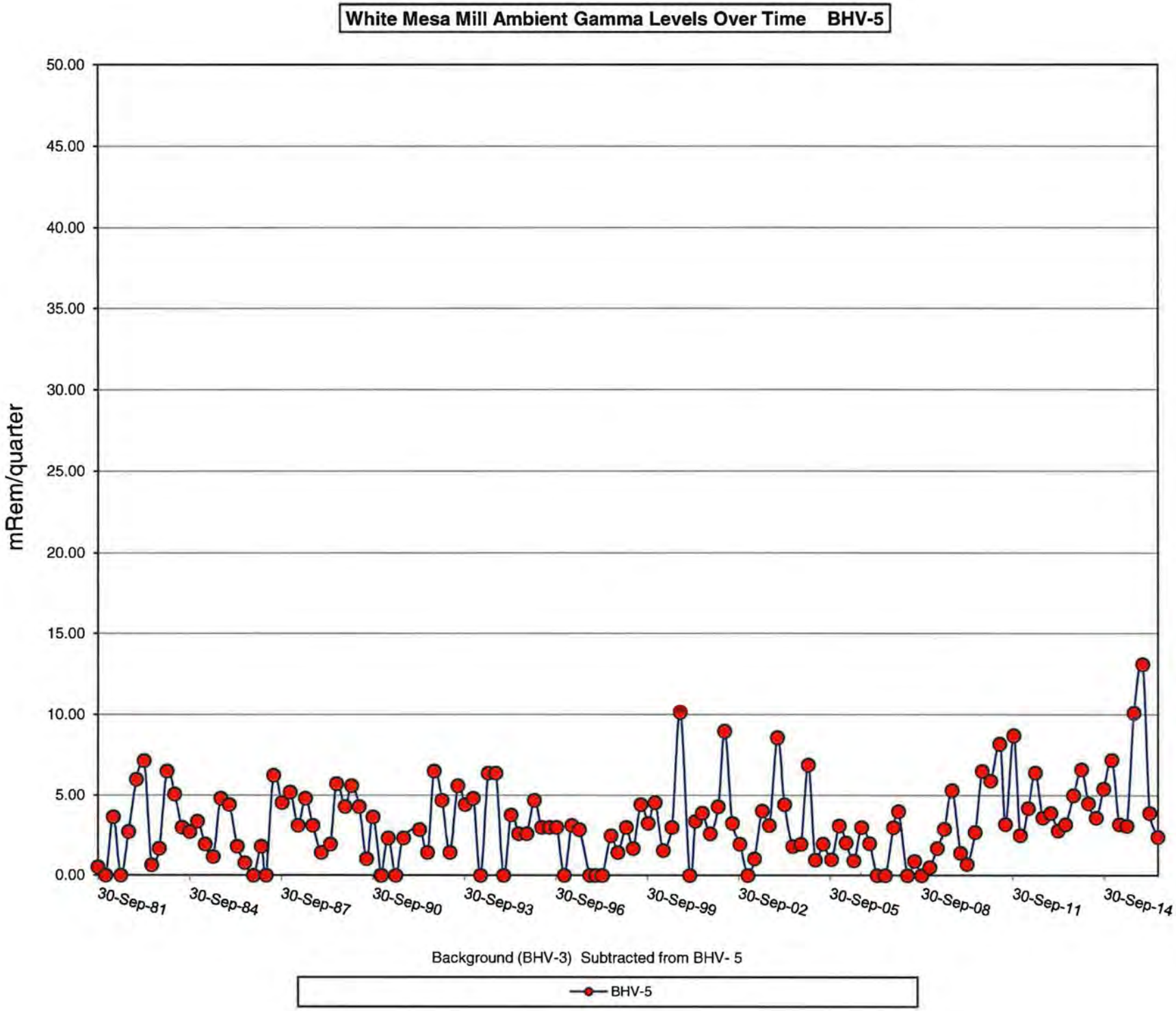
ENVIRONMENTAL GAMMA GRAPHS AND SUPPORTING DATA

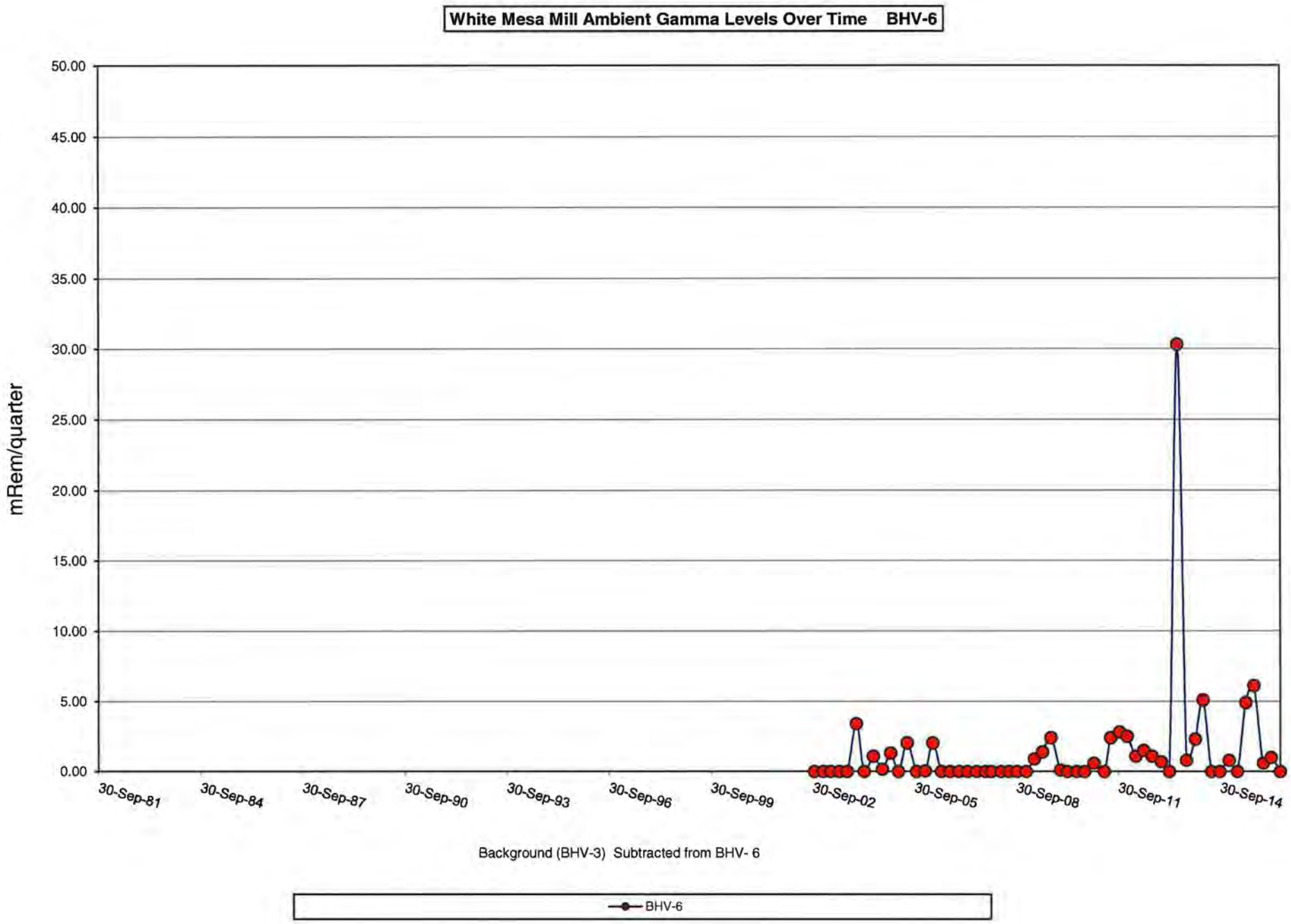

White Mesa Mill Ambient Gamma Levels Over Time BHV-1
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
9/30/1981
9/30/1984
9/30/1987
9/30/1990
9/30/1993
9/30/1996
9/30/1999
9/30/2002
9/30/2005
9/30/2008
9/30/2011
9/30/2014
Background (BHV-3) Subtracted from BHV-1
Series1

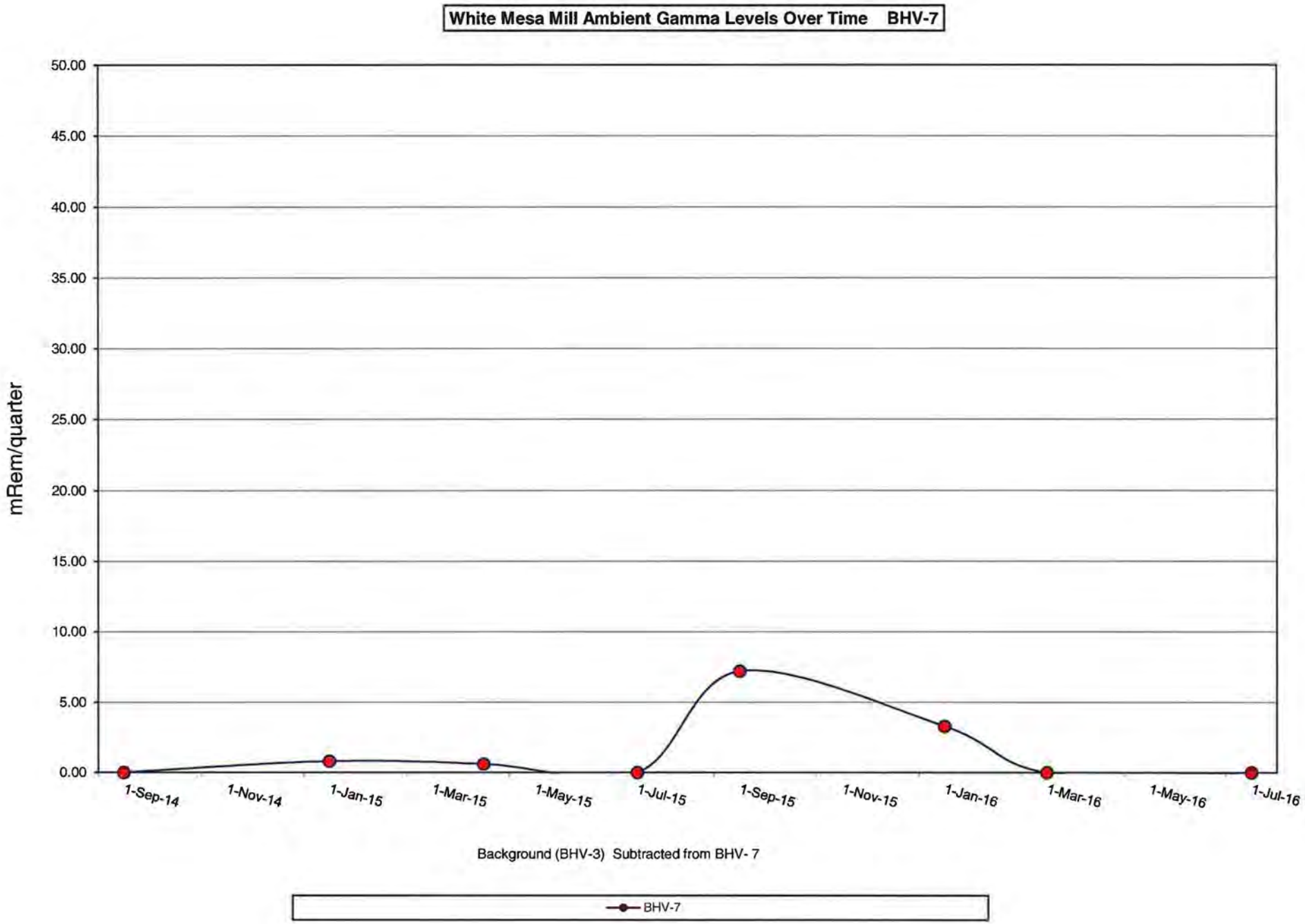

White Mesa Mill Ambient Gamma Levels Over Time BHV-2
mRem/quarter
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
30-Sep-81
30-Sep-89
30-Sep-97
30-Sep-05
30-Sep-13
Background (BHV-3) Subtracted from BHV-2
BHV-2

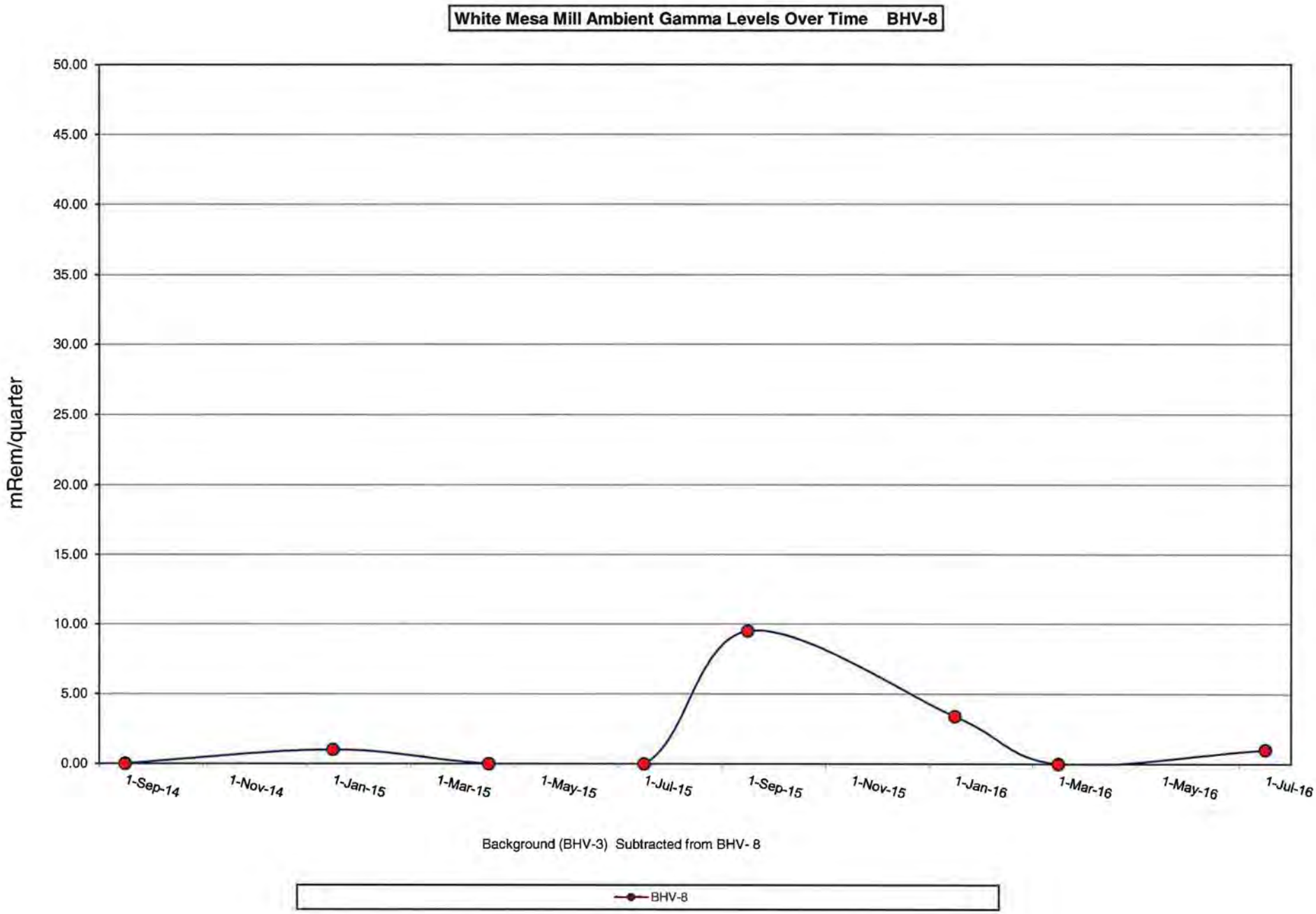

White Mesa Mill Ambient Gamma Levels Over Time BHV-3
mRem/quarter
60.00
50.00
40.00
30.00
20.00
10.00
0.00
30-Sep-81
30-Sep-83
30-Sep-85
30-Sep-87
30-Sep-89
30-Sep-91
30-Sep-93
30-Sep-95
30-Sep-97
30-Sep-99
30-Sep-01
30-Sep-03
30-Sep-05
30-Sep-07
30-Sep-09
30-Sep-11
30-Sep-13
30-Sep-15
BHV-3


White Mesa Mill Ambient Gamma Levels Over Time BHV-4
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-4
BHV-4


White Mesa Mill Ambient Gamma Levels Over Time BHV-5
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- 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
1-Mar-16
1-May-16
1-Jul-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-Nov-14
1-Jan-15
1-Mar-15
1-May-15
1-Jul-15
1-Sep-15
1-Nov-15
1-Jan-16
1-Mar-16
1-May-16
1-Jul-16
Background (BHV-3) Subtracted from BHV- 8
BHV-8

White Mesa Mill First Quarter 2016 Environmental Spherical Gamma Monitor Results

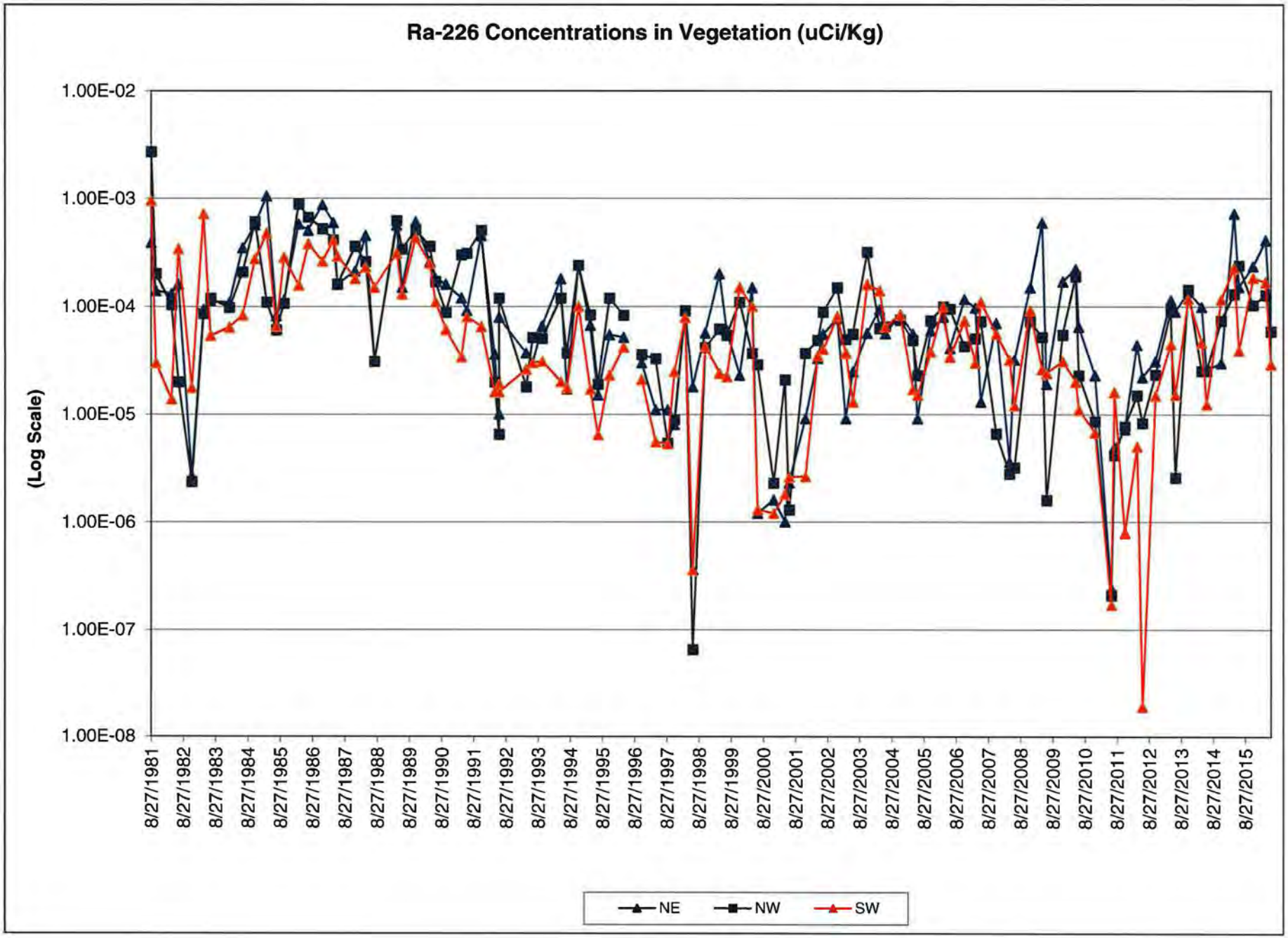
Badge Number	Location	Date Issued	Date Returned	Total Days Badge at WMM	Mean Ambient Dose Equivalent	mRem / hour	mRem / Day	mRem / Week
Control	Administration Vault	1/5/2016	3/31/2016	86	47.6	0.02	0.553	3.87
1	V2O5 Control Room	1/5/2016	3/31/2016	86	57	0.03	0.663	4.64
2	BHV-6	1/5/2016	3/31/2016	86	48.9	0.02	0.569	3.98
3	Ore Stor. - Barrel Area	1/5/2016	3/31/2016	86	337.7	0.16	3.927	27.49
4	Vanadium Precip.Area	1/5/2016	3/31/2016	86	126.3	0.06	1.469	10.28
5	Yellowcake Drying Area	1/5/2016	3/31/2016	86	324.4	0.16	3.772	26.40
6	Leach	1/5/2016	3/31/2016	86	105.6	0.05	1.228	8.60
7	SAG Mill Control Room	1/5/2016	3/31/2016	86	232.6	0.11	2.705	18.93
8	Yellowcake Precip.	1/5/2016	3/31/2016	86	212.1	0.10	2.466	17.26
9	Central Control Room	1/5/2016	3/31/2016	86	101.8	0.05	1.184	8.29
10	Ore pad - decontamination pac	1/5/2016	3/31/2016	86	129.7	0.06	1.508	10.56
11	North East Corner Ore Pad	1/5/2016	3/31/2016	86	270.7	0.13	3.148	22.03
12	Met. Lab	1/5/2016	3/31/2016	86	88.9	0.04	1.034	7.24
13	Filter Press Room	1/5/2016	3/31/2016	86	114.9	0.06	1.336	9.35
14	BHV-1	1/5/2016	3/31/2016	86	53.6	0.03	0.623	4.36
15	BHV-2	1/5/2016	3/31/2016	86	47.8	0.02	0.556	3.89
16	BHV-3	1/5/2016	3/31/2016	86	47.9	0.02	0.557	3.90
17	BHV-4	1/5/2016	3/31/2016	86	46.7	0.02	0.543	3.80
18	BHV-5	1/5/2016	3/31/2016	86	51.8	0.03	0.602	4.22
19	SAG Mill	1/5/2016	3/31/2016	86	269.4	0.13	3.133	21.93
20	Tails	1/5/2016	3/31/2016	86	64.2	0.03	0.747	5.23
21	CCD	1/5/2016	3/31/2016	86	86.3	0.04	1.003	7.02
22	North SX	1/5/2016	3/31/2016	86	84.4	0.04	0.981	6.87
23	Administration Building	1/5/2016	3/31/2016	86	55.2	0.03	0.642	4.49
24	Admin Parking Lot	1/5/2016	3/31/2016	86	84.1	0.04	0.978	6.85
25	Yellowcake Packaging	1/5/2016	3/31/2016	86	248.8	0.12	2.893	20.25
26	Yellowcake Storage	1/5/2016	3/31/2016	86	873.2	0.42	10.153	71.07
27	Bucking Room	1/5/2016	3/31/2016	86	100.5	0.05	1.169	8.18
28	Mill Lunch Room	1/5/2016	3/31/2016	86	67.2	0.03	0.781	5.47
29	South SX	1/5/2016	3/31/2016	86	144.7	0.07	1.683	11.78
30	Mtce. Super.'s Office	1/5/2016	3/31/2016	86	61	0.03	0.709	4.97
31	Ore Feed Grizzly	1/5/2016	3/31/2016	86	300.7	0.15	3.497	24.48
32	Scalehouse	1/5/2016	3/31/2016	86	208.4	0.10	2.423	16.96
33	Sample Plant (OBS)	1/5/2016	3/31/2016	86	206.4	0.10	2.400	16.80
34	Front Gate	1/5/2016	3/31/2016	86	165.6	0.08	1.926	13.48
45	AF - Barrel Dump Station	1/5/2016	3/31/2016	86	112.6	0.05	1.309	9.17
46	AF Circuit - South	1/5/2016	3/31/2016	86	82.9	0.04	0.964	6.75
47	AF Circuit - North	1/5/2016	3/31/2016	86	59.1	0.03	0.687	4.81
51	North Control # 1	1/5/2016	3/31/2016	86	50.3	0.02	0.585	4.09
52	North Control # 2	1/5/2016	3/31/2016	86	42.9	0.02	0.499	3.49
53	CaF2 Barrel Dump Station - Operator Station	1/5/2016	3/31/2016	86	98.7	0.05	1.148	8.03
64	KF Barrel Dump Station	1/5/2016	3/31/2016	86	246.8	0.12	2.870	20.09
70	BHV-7	1/5/2016	3/31/2016	86	46.6	0.02	0.542	3.79
71	BHV-8	1/5/2016	3/31/2016	86	46.2	0.02	0.537	3.76

White Mesa Mill Second Quarter 2016 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	3/31/2016	7/7/2016	98	46.6	0.02	0.476	3.33
1	V2O5 Control Room	3/31/2016	7/7/2016	98	57.1	0.02	0.583	4.08
2	BHV-6	3/31/2016	7/7/2016	98	36.8	0.02	0.376	2.63
3	Ore Stor. - Barrel Area	3/31/2016	7/7/2016	98	413.6	0.18	4.220	29.54
4	Vanadium Precip.Area	3/31/2016	7/7/2016	98	112.7	0.05	1.150	8.05
5	Yellowcake Drying Area	3/31/2016	7/7/2016	98	406.6	0.17	4.149	29.04
6	Leach	3/31/2016	7/7/2016	98			Lost	
7	SAG Mill Control Room	3/31/2016	7/7/2016	98	284.3	0.12	2.901	20.31
8	Yellowcake Precip.	3/31/2016	7/7/2016	98	223.1	0.09	2.277	15.94
9	Central Control Room	3/31/2016	7/7/2016	98	76.7	0.03	0.783	5.48
10	Ore pad - decontamination pad	3/31/2016	7/7/2016	98	142.4	0.06	1.453	10.17
11	North East Corner Ore Pad	3/31/2016	7/7/2016	98	318.4	0.14	3.249	22.74
12	Met. Lab	3/31/2016	7/7/2016	98	92.2	0.04	0.941	6.59
13	Filter Press Room	3/31/2016	7/7/2016	98	161.4	0.07	1.647	11.53
14	BHV-1	3/31/2016	7/7/2016	98	45.1	0.02	0.460	3.22
15	BHV-2	3/31/2016	7/7/2016	98	43.7	0.02	0.446	3.12
16	BHV-3	3/31/2016	7/7/2016	98	41.8	0.02	0.427	2.99
17	BHV-4	3/31/2016	7/7/2016	98	37.9	0.02	0.387	2.71
18	BHV-5	3/31/2016	7/7/2016	98	44.2	0.02	0.451	3.16
19	SAG Mill	3/31/2016	7/7/2016	98	320.1	0.14	3.266	22.86
20	Tails	3/31/2016	7/7/2016	98	77.4	0.03	0.790	5.53
21	CCD	3/31/2016	7/7/2016	98	77.6	0.03	0.792	5.54
22	North SX	3/31/2016	7/7/2016	98	73.2	0.03	0.747	5.23
23	Administration Building	3/31/2016	7/7/2016	98	47.4	0.02	0.484	3.39
24	Admin Parking Lot	3/31/2016	7/7/2016	98	96.7	0.04	0.987	6.91
25	Yellowcake Packaging	3/31/2016	7/7/2016	98	373.9	0.16	3.815	26.71
26	Yellowcake Storage	3/31/2016	7/7/2016	98	897.9	0.38	9.162	64.14
27	Bucking Room	3/31/2016	7/7/2016	98	195.1	0.08	1.991	13.94
28	Mill Lunch Room	3/31/2016	7/7/2016	98	62.4	0.03	0.637	4.46
29	South SX	3/31/2016	7/7/2016	98	138.4	0.06	1.412	9.89
30	Mtce. Super.'s Office	3/31/2016	7/7/2016	98	55.6	0.02	0.567	3.97
31	Ore Feed Grizzly	3/31/2016	7/7/2016	98	420.3	0.18	4.289	30.02
32	Scalehouse	3/31/2016	7/7/2016	98	246.9	0.10	2.519	17.64
33	Sample Plant (OBS)	3/31/2016	7/7/2016	98	259.6	0.11	2.649	18.54
34	Front Gate	3/31/2016	7/7/2016	98	203.6	0.09	2.078	14.54
45	AF - Barrel Dump Station	3/31/2016	7/7/2016	98	211.2	0.09	2.155	15.09
46	AF Circuit - South	3/31/2016	7/7/2016	98			Lost	
47	AF Circuit - North	3/31/2016	7/7/2016	98	88.3	0.04	0.901	6.31
51	North Control # 1	3/31/2016	7/7/2016	98	46.5	0.02	0.474	3.32
52	North Control # 2	3/31/2016	7/7/2016	98	39.7	0.02	0.405	2.84
53	CaF2 Barrel Dump Station - Operator Station	3/31/2016	7/7/2016	98	133.1	0.06	1.358	9.51
64	KF Barrel Dump Station	3/31/2016	7/7/2016	98	311.2	0.13	3.176	22.23
70	BHV-7	3/31/2016	7/7/2016	98	38.4	0.02	0.392	2.74
71	BHV-8	3/31/2016	7/7/2016	98	42.8	0.02	0.437	3.06

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
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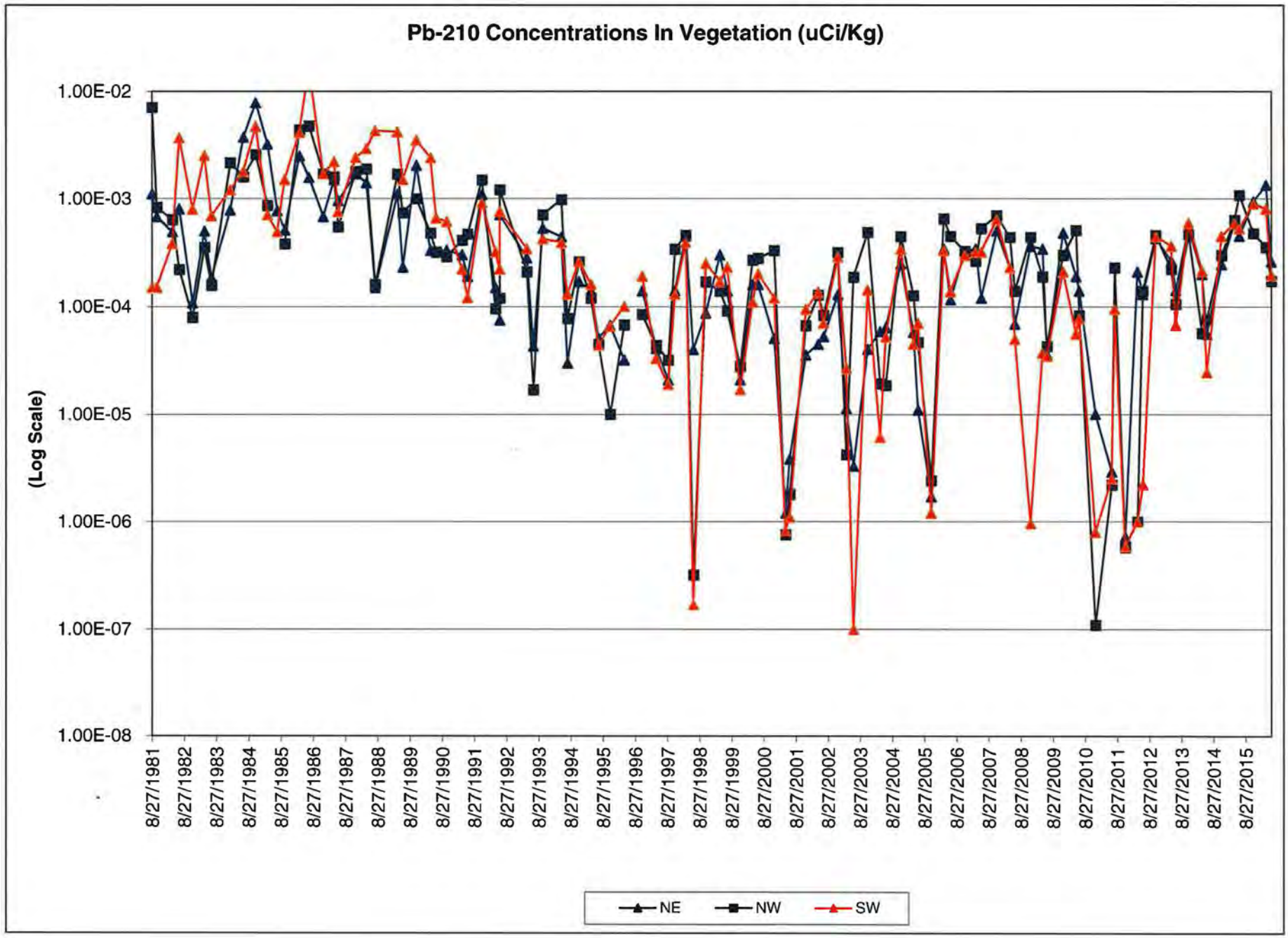
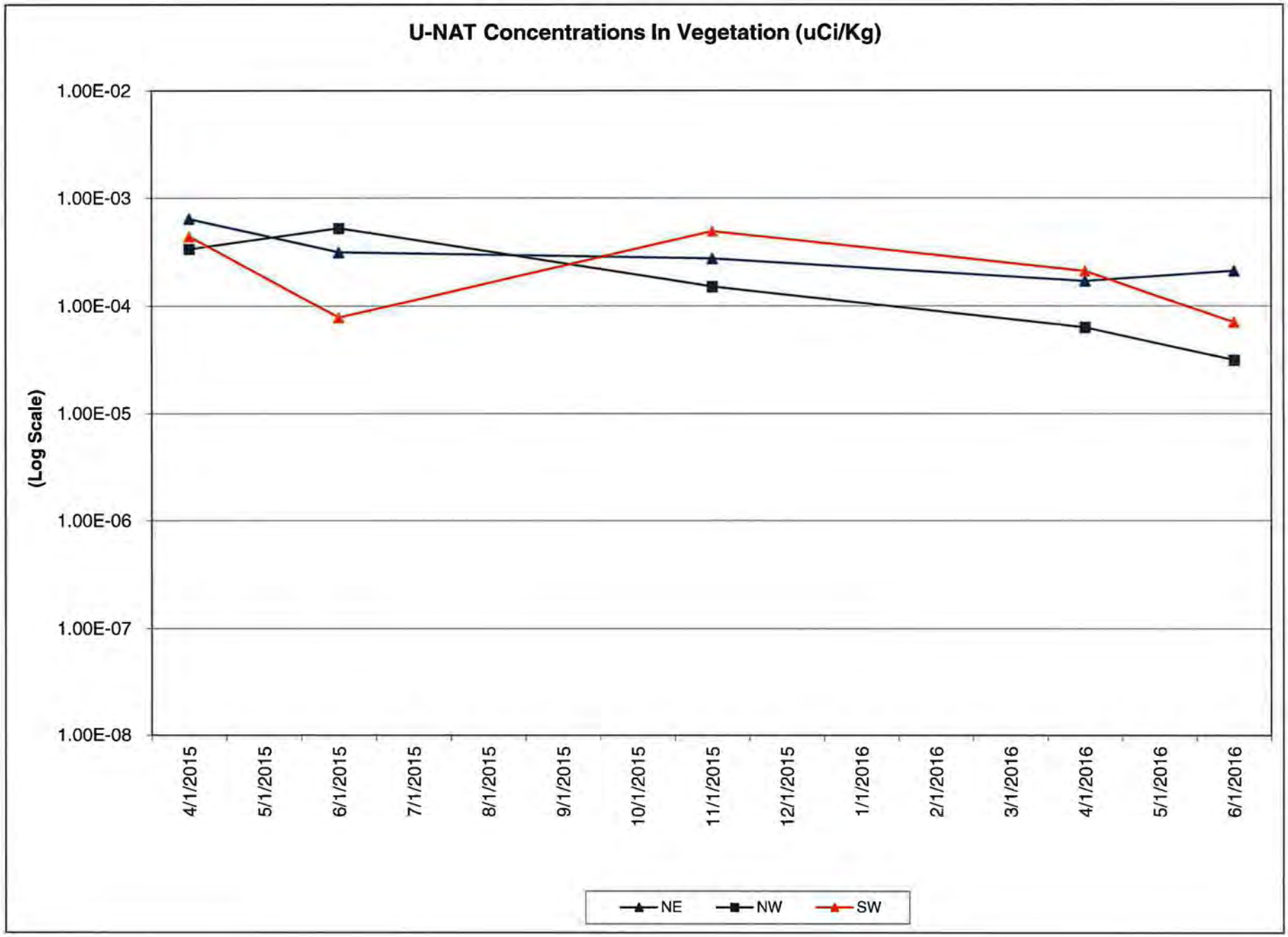
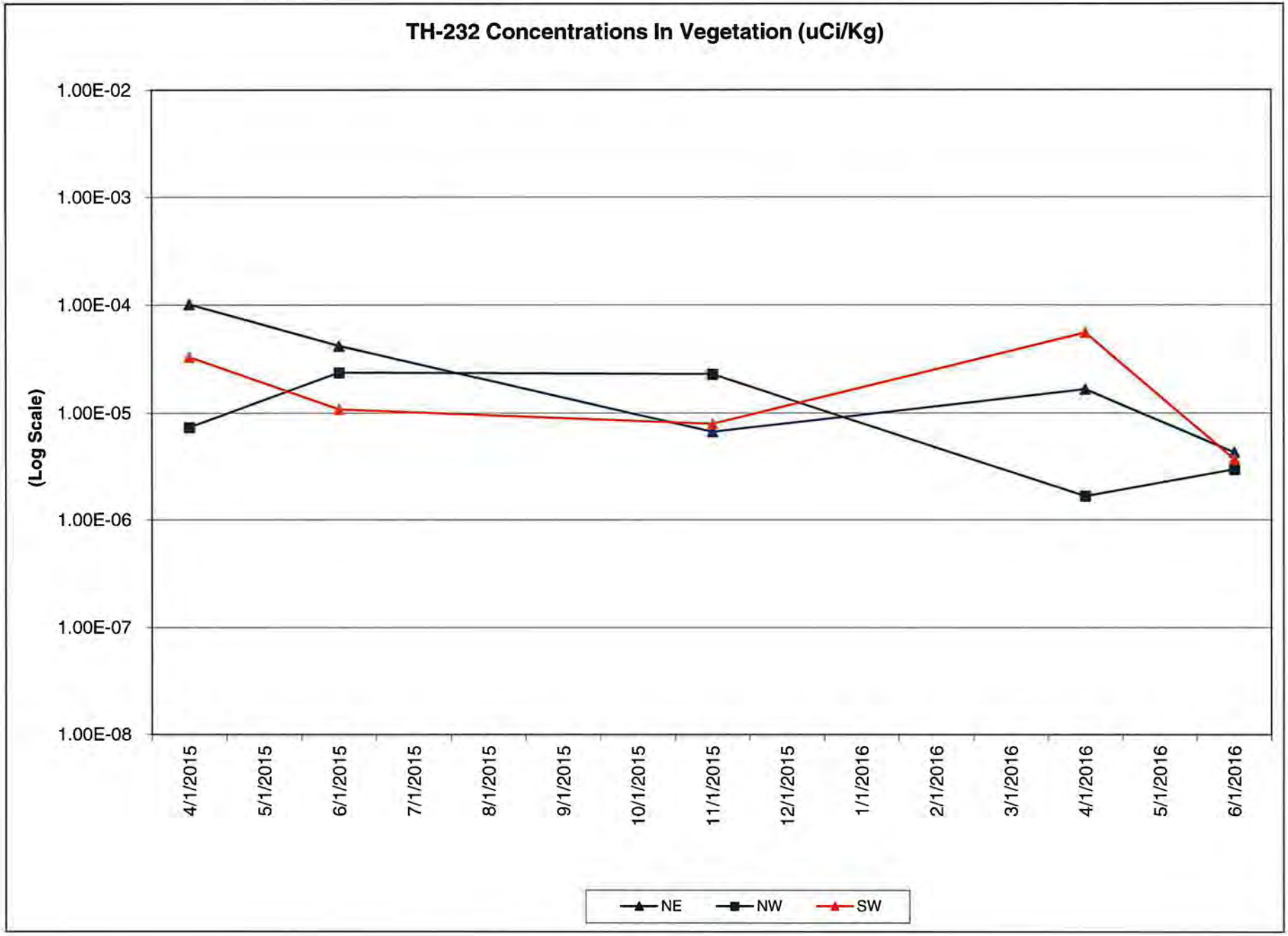
8/27/1996
8/27/1997
8/27/1998
8/27/1999
8/27/2000
8/27/2001
8/27/2002
8/27/2003
8/27/2004
8/27/2005
8/27/2006
8/27/2007
8/27/2008
8/27/2009
8/27/2010
8/27/2011
8/27/2012
8/27/2013
8/27/2014
8/27/2015
NE
NW
SW


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
8/27/1994
8/27/1995
8/27/1996
8/27/1997
8/27/1998
8/27/1999
8/27/2000
8/27/2001
8/27/2002
8/27/2003
8/27/2004
8/27/2005
8/27/2006
8/27/2007
8/27/2008
8/27/2009
8/27/2010
8/27/2011
8/27/2012
8/27/2013
8/27/2014
8/27/2015
NE
NW
SW


U-NAT 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
4/1/2015
5/1/2015
6/1/2015
7/1/2015
8/1/2015
9/1/2015
10/1/2015
11/1/2015
12/1/2015
1/1/2016
2/1/2016
3/1/2016
4/1/2016
5/1/2016
6/1/2016
NE
NW
SW


TH-232 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
4/1/2015
5/1/2015
6/1/2015
7/1/2015
8/1/2015
9/1/2015
10/1/2015
11/1/2015
12/1/2015
1/1/2016
2/1/2016
3/1/2016
4/1/2016
5/1/2016
6/1/2016
NE
NW
SW

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

WHITE MESA MILL
FORAGE RADIONUCLIDE DATA
NORTHEAST OF MILL

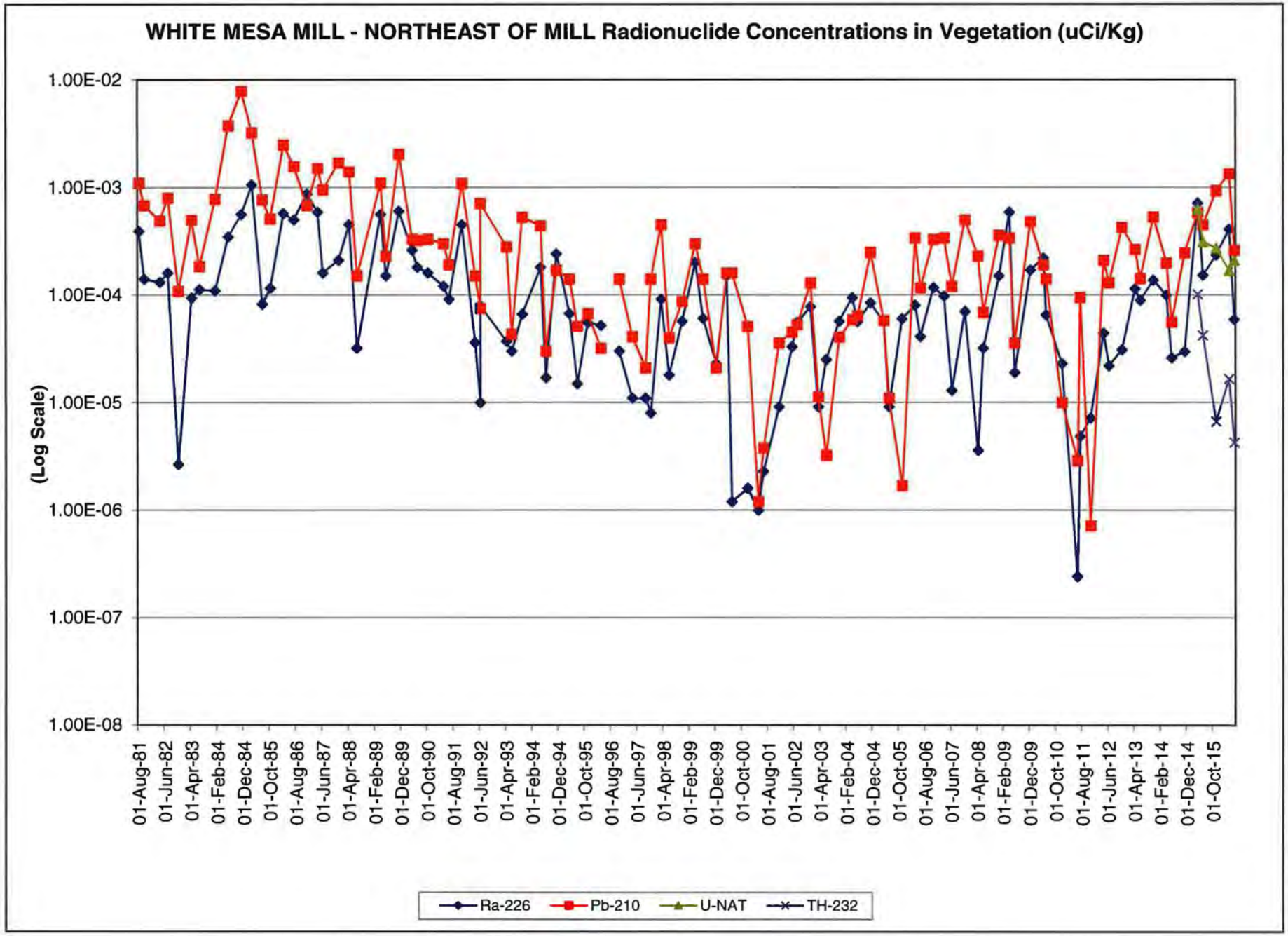
SAMPLED QTR.	SAMPLED DATE	Ra-226	Ra-226	LLD	Pb-210	Pb-210	LLD	U-NAT	U-NAT	LLD	Th-232	Th-232	LLD
		VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (5.0E-08)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (1.0E-06)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)†
1st '03	21-Mar-03	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 '16	14-Apr-16	4.08E-04	7.26E-06	5.42E-06	1.34E-03	2.16E-05	2.93E-05	1.69E-04	1.29E-05	5.76E-06	1.66E-05	1.28E-06	7.67E-07
2nd '16	14-Jun-16	5.92E-05	2.70E-06	4.00E-06	2.61E-04	2.09E-05	4.92E-05	2.10E-04	5.52E-06	1.70E-06	4.27E-06	8.10E-07	9.31E-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 - 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
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

WHITE MESA MILL
FORAGE RADIONUCLIDE DATA
NORTHWEST OF MILL

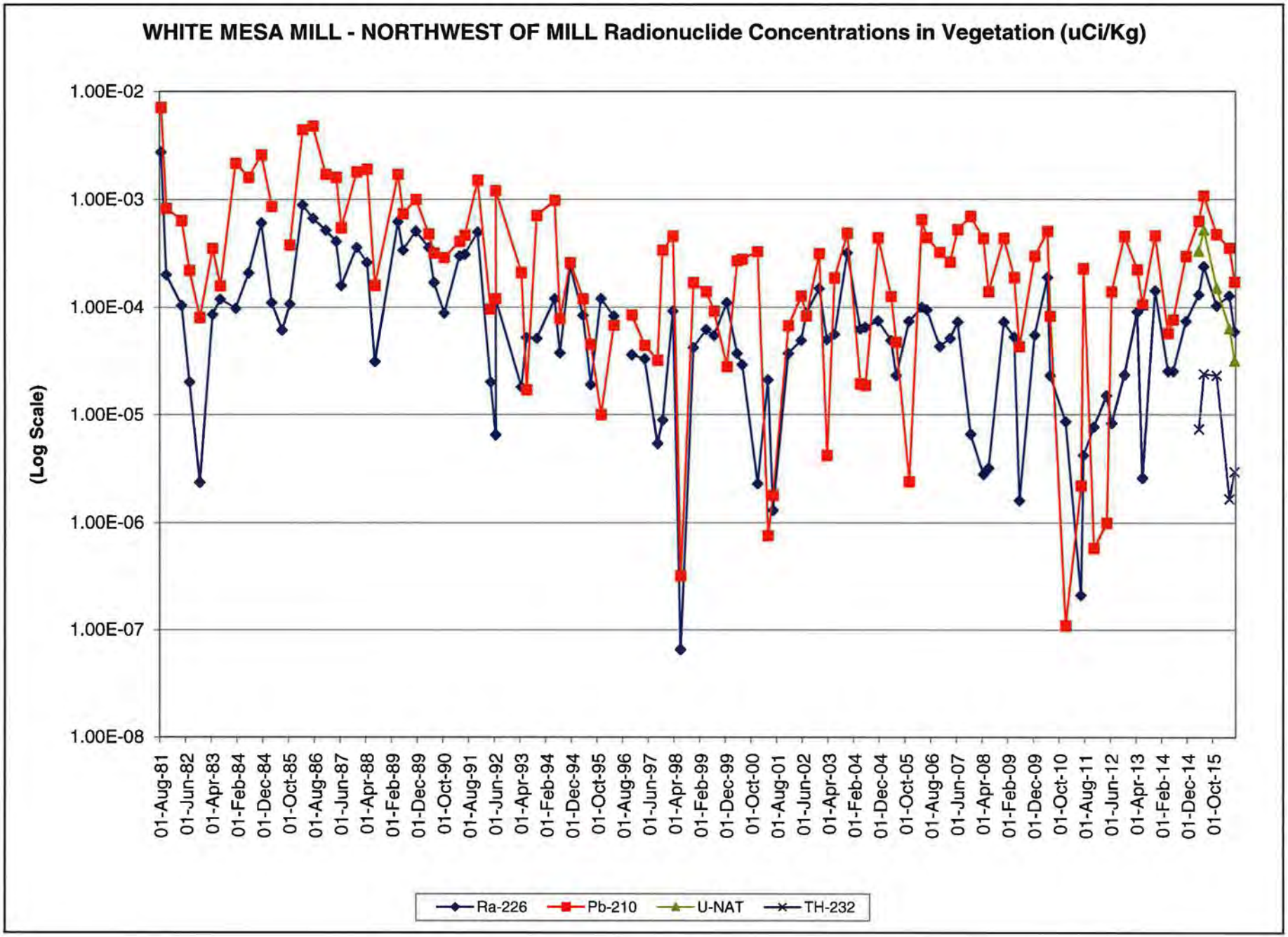
SAMPLED QTR.	SAMPLED DATE	Ra-226	Ra-226	LLD	Pb-210	Pb-210	LLD	U-NAT	U-NAT	LLD	Th-232	Th-232	LLD
		VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (5.0E-08)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (1.0E-06)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)	VALUE (uCi/Kg)	ERROR (uCi/Kg)	uCi/Kg (2.0E-07)†
4th '02	15-Dec-02	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 '16	14-Apr-16	1.28E-04	4.20E-06	5.79E-06	3.56E-04	1.14E-05	1.86E-05	6.33E-05	8.20E-06	5.95E-06	1.66E-06	4.81E-07	5.40E-07
2nd '16	14-Jun-16	5.91E-05	3.97E-06	6.94E-06	1.73E-04	2.02E-05	5.42E-05	3.15E-05	1.90E-06	1.54E-06	2.95E-06	8.26E-07	1.47E-06

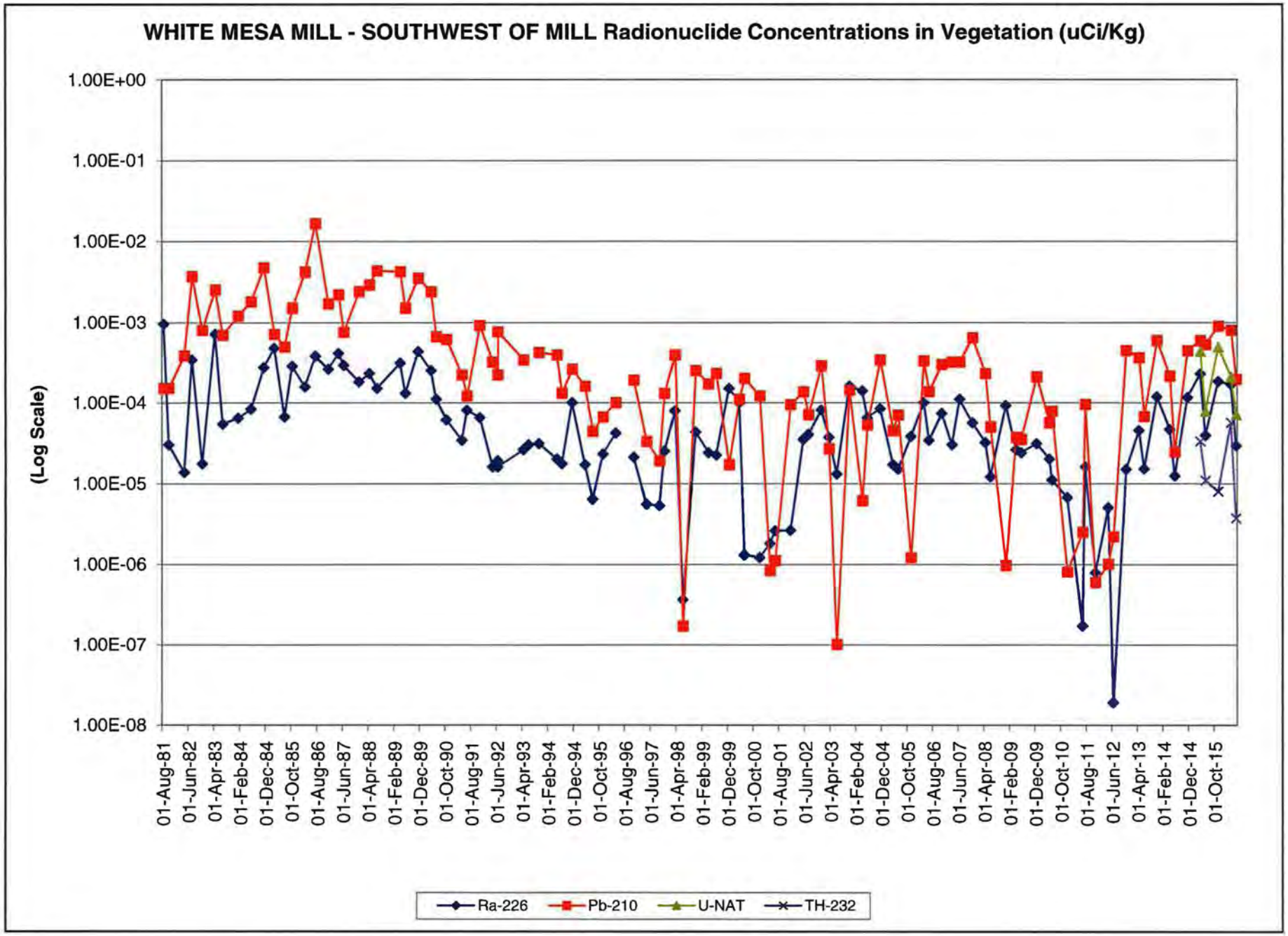
*2nd quarter of 1996 San Juan County, Utah, was declared a disaster area due to drought, no samples were collected during this period

† 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 - 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

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)†
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 '16	14-Apr-16	1.67E-04	4.10E-06	3.65E-06	7.99E-04	2.08E-05	4.12E-05	2.10E-04	2.24E-05	1.39E-05	5.58E-05	5.42E-06	2.10E-06
2nd '16	14-Jun-16	2.90E-05	1.88E-06	3.85E-06	1.95E-04	2.18E-05	5.93E-05	7.04E-05	3.17E-06	1.92E-06	3.70E-06	8.08E-07	1.04E-06

*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: May 20, 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	Project:	DNMI00101
Sample ID:	395689001	Client ID:	DNMI001
Matrix:	SOLID		
Collect Date:	14-APR-16 09:00		
Receive Date:	20-APR-16		
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		1.66E-05	+/-1.28E-06	7.67E-07	2.00E-07	uCi/kg		HAKB	05/12/16	1453	1562087	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		7.85E-05	+/-5.45E-06	2.29E-06	2.00E-07	uCi/kg		HAKB	05/18/16	1405	1562085	2
Uranium-235/236		6.96E-06	+/-1.86E-06	1.39E-06	2.00E-07	uCi/kg						
Uranium-238		8.39E-05	+/-5.63E-06	2.08E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.00134	+/-2.16E-05	2.93E-05	1.00E-06	uCi/kg		KSD1	05/18/16	1857	1562442	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000408	+/-7.26E-06	5.42E-06	5.00E-08	uCi/kg		KSD1	05/17/16	1936	1562441	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	04/21/16	1358	1561750

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	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"			101	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			94.1	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			78	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			76.2	(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: July 14, 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	Project:	DNMI00101
Sample ID:	399287001	Client ID:	DNMI001
Matrix:	Vegetation		
Collect Date:	09-JUN-16 07:00		
Receive Date:	14-JUN-16		
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		4.27E-06	+/-8.10E-07	9.31E-07	2.00E-07	uCi/kg		HAKB	07/13/16	2218	1580263	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		9.89E-05	+/-2.37E-06	5.41E-07	2.00E-07	uCi/kg		HAKB	07/11/16	1200	1574791	2
Uranium-235/236		7.13E-06	+/-7.19E-07	5.35E-07	2.00E-07	uCi/kg						
Uranium-238		0.000104	+/-2.43E-06	6.25E-07	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000261	+/-2.09E-05	4.92E-05	1.00E-06	uCi/kg		KSD1	07/13/16	0650	1577439	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		5.92E-05	+/-2.70E-06	4.00E-06	5.00E-08	uCi/kg		KSD1	07/11/16	1717	1577438	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	06/14/16	1329	1574432

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"			93.1	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			56.2	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			79.3	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			115	(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: May 20, 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:	395689002	Client ID:	DNMI001
Matrix:	SOLID		
Collect Date:	14-APR-16 09:30		
Receive Date:	20-APR-16		
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		1.66E-06	+/-4.81E-07	5.40E-07	2.00E-07	uCi/kg		HAKB	05/12/16	1453	1562087	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		3.21E-05	+/-3.56E-06	2.69E-06	2.00E-07	uCi/kg		HAKB	05/18/16	1405	1562085	2
Uranium-235/236		3.31E-06	+/-1.34E-06	1.42E-06	2.00E-07	uCi/kg						
Uranium-238		2.79E-05	+/-3.30E-06	1.84E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000356	+/-1.14E-05	1.86E-05	1.00E-06	uCi/kg		KSD1	05/18/16	1857	1562442	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000128	+/-4.20E-06	5.79E-06	5.00E-08	uCi/kg		KSD1	05/17/16	1936	1562441	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	04/21/16	1358	1561750

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	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"			84.4	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			92	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			84.1	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			93.9	(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: July 14, 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
Sample ID: 399287002
Matrix: Vegetation
Collect Date: 09-JUN-16 07:30
Receive Date: 14-JUN-16
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		2.95E-06	+/-8.26E-07	1.47E-06	2.00E-07	uCi/kg		HAKB	07/13/16	2218	1580263	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		1.56E-05	+/-8.31E-07	7.14E-07	2.00E-07	uCi/kg		HAKB	07/11/16	1200	1574791	2
Uranium-235/236		1.30E-06	+/-2.80E-07	3.98E-07	2.00E-07	uCi/kg						
Uranium-238		1.46E-05	+/-7.91E-07	4.03E-07	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000173	+/-2.02E-05	5.42E-05	1.00E-06	uCi/kg		KSD1	07/13/16	0650	1577439	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		5.91E-05	+/-3.97E-06	6.94E-06	5.00E-08	uCi/kg		KSD1	07/11/16	1717	1577438	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	06/14/16	1329	1574432

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	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"			71.3	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			81.4	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			74.6	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			111	(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: May 20, 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	Project:	DNMI00101
Sample ID:	395689003	Client ID:	DNMI001
Matrix:	SOLID		
Collect Date:	14-APR-16 08:30		
Receive Date:	20-APR-16		
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		5.58E-05	+/-5.42E-06	2.10E-06	2.00E-07	uCi/kg		HAKB	05/17/16	2152	1562087	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		9.80E-05	+/-9.33E-06	5.33E-06	2.00E-07	uCi/kg		HAKB	05/18/16	1405	1562085	2
Uranium-235/236		1.08E-05	+/-3.59E-06	3.24E-06	2.00E-07	uCi/kg						
Uranium-238		0.000101	+/-9.49E-06	5.33E-06	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000799	+/-2.08E-05	4.12E-05	1.00E-06	uCi/kg		KSD1	05/18/16	1857	1562442	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		0.000167	+/-4.10E-06	3.65E-06	5.00E-08	uCi/kg		KSD1	05/18/16	1920	1562441	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	04/21/16	1358	1561750

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	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"			45.8	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			99.1	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			63.1	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			100	(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: July 14, 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	Project:	DNMI00101
Sample ID:	399287003	Client ID:	DNMI001
Matrix:	Vegetation		
Collect Date:	09-JUN-16 08:00		
Receive Date:	14-JUN-16		
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		3.70E-06	+/-8.08E-07	1.04E-06	2.00E-07	uCi/kg		HAKB	07/13/16	2218	1580263	1
Alphaspec U, Solid "Dry Weight Corrected"												
Uranium-233/234		3.33E-05	+/-1.36E-06	7.84E-07	2.00E-07	uCi/kg		HAKB	07/11/16	1200	1574791	2
Uranium-235/236		2.29E-06	+/-4.26E-07	6.45E-07	2.00E-07	uCi/kg						
Uranium-238		3.48E-05	+/-1.38E-06	5.22E-07	2.00E-07	uCi/kg						
Rad Gas Flow Proportional Counting												
GFPC, Pb210, Solid "Dry Weight Corrected"												
Lead-210		0.000195	+/-2.18E-05	5.93E-05	1.00E-06	uCi/kg		KSD1	07/13/16	0650	1577439	3
GFPC, Total Alpha Radium, solid "Dry Weight Corrected"												
Total Radium		2.90E-05	+/-1.88E-06	3.85E-06	5.00E-08	uCi/kg		KSD1	07/12/16	1626	1577438	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	06/14/16	1329	1574432

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"			85.7	(15%-125%)
Uranium-232 Tracer	Alphaspec U, Solid "Dry Weight Corrected"			62.2	(15%-125%)
Lead Carrier	GFPC, Pb210, Solid "Dry Weight Corrected"			80.7	(25%-125%)
Barium Carrier	GFPC, Total Alpha Radium, solid "Dry Weight Corrected"			117	(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

May 20, 2016

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

Re: Vegetation Analysis
Work Order: 395689

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on April 20, 2016. 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,

Julie Robinson

Julie Robinson
Project Manager

Purchase Order: DW16138
Enclosures

Energy Fuels Resources (USA), Inc.
Vegetation Analysis
SDG: 395689

Case Narrative

Receipt Narrative
for
Energy Fuels Resources (USA), Inc.
SDG: 395689

May 20, 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 April 20, 2016 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
395689001	North East
395689002	North West
395689003	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.

Julie Robinson

Julie Robinson
Project Manager

Chain of Custody and Supporting Documentation

395689

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
Early Spring Vegetation 2016	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
North East	4/14/2016	900	Ra 226, U-Nat, Th-232,PB 210
North West	4/14/2016	930	Ra 226, U-Nat, Th-232,PB 210
South West	4/14/2016	830	Ra 226, U-Nat, Th-232,PB 210
			Weights:
			North East: 3800 Grams
			North West: 4300 Grams
			South West: 4000 Grams
			* Please use caution when handling samples. Cactus and Yucca plants are included the samples.

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

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	4/14/16 1230	[illegible]	4/20/16 0930
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DNMI	SDG/AR/COC/Work Order: 395689
Received By: Sam Tilall	Date Received: 4/20/16

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): Opm
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 23°C
2a	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462962
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: time noted on North East is 0830
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 9093 0017 1Z 187 Y4Y 03 9075 1621

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JTR Date 4-20-16 Page 1 of 1

GL-CHL-SP-001 Rev. 0

GEL Laboratories LLC - Login Review Report

GEL Work Order/SDG:	**395689**	**Early Spring Vegetation 2016**	**Work Order Due Date:**	**20-MAY-16**	**Collector: C**
Client SDG:	**395689**		**Package Due Date:**	**18-MAY-16**	**Prelogin #: 20160443172**
Project Manager:	**Julie Robinson**		**EDD Due Date:**	**19-MAY-16**	**Project Workdef ID: 1310529**
Project Name:	**DNMI00101 Vegetation Analysis**		**Due Date:**	**20-MAY-16**	**SDG Status: Closed**
Purchase Order:	**DW16138**		**JAR1**		**Logged by:**
Package Level:	**LEVEL3**				
EDD Format:	**EIM_DNMI**				

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
395689001	North East		14-APR-16 09:00	20-APR-16 09:30	-2	1	VEGETATION		30		1		
395689002	North West		14-APR-16 09:30	20-APR-16 09:30	-2	1	VEGETATION		30		1		
395689003	South West		14-APR-16 08:30	20-APR-16 09:30	-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			Cooler Seal Undisturbed	Y	
	REVW	GFPC, Total Alpha Radium, solid	Ra226			Safety Issue	**Use caution - Cactus and Yucca plants included**	
	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			Cooler Seal Undisturbed	Y	
	REVW	GFPC, Total Alpha Radium, solid	Ra226			Safety Issue	**Use caution - Cactus and Yucca plants included**	
	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			Cooler Seal Undisturbed	Y	
	REVW	GFPC, Total Alpha Radium, solid	Ra226			Safety Issue	**Use caution - Cactus and Yucca plants included**	
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite - Dry prep instructions						

GEL Laboratories LLC - Login Review Report

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: Ra226
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 20 May 2016

State	Certification
Alaska	UST-0110
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
Delaware	SC00012
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
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	LA160006
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122016-1
New Hampshire NELAP	205415
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	T104704235-16-11
Utah NELAP	SC000122016-20
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404

Radiochemistry
Technical Case Narrative
Energy Fuels Resources (DNMI)
SDG #: 395689

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:	1562085
Prep Batch Number:	1561750

Sample ID	Client ID
395689001	North East
395689002	North West
395689003	South West
1203534426	Method Blank (MB)
1203534428	Laboratory Control Sample (LCS)
1203534427	395689001(North East) Sample Duplicate (DUP)

The samples in this SDG were analyzed on a "dry weight" 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 volumes in this batch.

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: The blank, 1203534426 (MB), did not meet the U-233/234, U-235/236, and U-238 detection limits 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: 395689001 (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
The batch was recounted due to a blank hit. The recount is reported for sample 1203534428. Sample 395689002(North West) was recounted again due to a peak shift and the third count is reported. Samples 395689001(North East), 395689003(South West), 1203534426, and 1203534427(North East) were recounted again due to a blank result greater than the RDL and the third counts 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
Additional comments were not required for this sample set.

Qualifier Information

Manual qualifiers were not required.

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:	1562087
Prep Batch Number:	1561750

Sample ID	Client ID
395689001	North East
395689002	North West
395689003	South West
1203534435	Method Blank (MB)
1203534437	Laboratory Control Sample (LCS)
1203534436	395689001(North East) Sample Duplicate (DUP)

The samples in this SDG were analyzed on a "dry weight" 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# 17.

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, 1203534435 (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: 395689001 (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
Sample 1203534437 (LCS) was recounted due to detector error. The recount is reported. Sample 395689003 (South West) was recounted and then given additional clean-up steps and recounted again in order to improve the resolution. The third count is 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
Additional comments were not required for this sample set.

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:	1562441
Prep Batch Number:	1561750

Sample ID	Client ID
395689001	North East
395689002	North West
395689003	South West
1203535480	Method Blank (MB)
1203535483	Laboratory Control Sample (LCS)
1203535481	395689003(South West) Sample Duplicate (DUP)
1203535482	395689003(South West) Matrix Spike (MS)

The samples in this SDG were analyzed on a "dry weight" 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, 1203535480 (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: 395689003 (South 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 1203535482 (South WestMS) and 1203535483 (LCS) were recounted due to high recovery. The recounts are reported. Sample 395689003 (South West) was recounted to verify sample result. The second count is 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.

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

Additional Comments
The matrix spike, 1203535482 (South WestMS), aliquot was reduced to conserve sample volume.

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:	1562442
Prep Batch Number:	1561750

Sample ID	Client ID
395689001	North East
395689002	North West
395689003	South West
1203535484	Method Blank (MB)
1203535487	Laboratory Control Sample (LCS)
1203535485	395689003(South West) Sample Duplicate (DUP)
1203535486	395689003(South West) Matrix Spike (MS)

The samples in this SDG were analyzed on a "dry weight" 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, 1203535484 (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: 395689003 (South 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
Sample 1203535486 (South WestMS) was recounted due to high recovery. The recount is 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, 1203535486 (South 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: 395689 GEL Work Order: 395689

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: Heather McCarty **Name: Heather McCarty**

Date: 20 MAY 2016 **Title: Analyst II**

GEL LABORATORIES LLC

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

QC Summary

Report Date: May 20, 2016

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

Contact: **Ms. Kathy Weinel**

Workorder: **395689**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 1562085										
QC1203534427 395689001 DUP										
Uranium-233/234		7.85E-05		7.59E-05	uCi/kg	3.42		(0%-20%)	HAKB	05/18/16 14:0
	Uncertainty	+/-5.45E-06		+/-5.38E-06						
Uranium-235/236		6.96E-06		6.07E-06	uCi/kg	13.7		(0%-20%)		
	Uncertainty	+/-1.86E-06		+/-1.75E-06						
Uranium-238		8.39E-05		7.88E-05	uCi/kg	6.24		(0%-20%)		
	Uncertainty	+/-5.63E-06		+/-5.47E-06						
QC1203534428 LCS										
Uranium-233/234				0.00018	uCi/kg					05/17/16 21:3
	Uncertainty			+/-6.83E-06						
Uranium-235/236				1.15E-05	uCi/kg					
	Uncertainty			+/-1.99E-06						
Uranium-238	0.000167			0.000194	uCi/kg		116	(75%-125%)		
	Uncertainty			+/-7.10E-06						
QC1203534426 MB										
Uranium-233/234			U	9.41E-07	uCi/kg					05/18/16 10:2
	Uncertainty			+/-1.09E-06						
Uranium-235/236			U	1.14E-06	uCi/kg					
	Uncertainty			+/-1.14E-06						
Uranium-238			U	1.19E-06	uCi/kg					
	Uncertainty			+/-1.08E-06						
Batch 1562087										
QC1203534436 395689001 DUP										
Thorium-232		1.66E-05		1.83E-05	uCi/kg	9.91		(0%-20%)	HAKB	05/12/16 14:5
	Uncertainty	+/-1.28E-06		+/-1.38E-06						
QC1203534437 LCS										
Thorium-232	0.000123			0.000111	uCi/kg		89.8	(75%-125%)		05/16/16 09:2
	Uncertainty			+/-4.42E-06						
QC1203534435 MB										
Thorium-232			U	-1.48E-07	uCi/kg					05/12/16 14:5
	Uncertainty			+/-2.76E-07						
Rad Gas Flow										
Batch 1562441										
QC1203535481 395689003 DUP										
Total Radium		0.000167		0.000142	uCi/kg	16.2		(0%-20%)	KSD1	05/17/16 19:3
	Uncertainty	+/-4.10E-06		+/-4.33E-06						
QC1203535483 LCS										
Total Radium	0.00401			0.00491	uCi/kg		123	(75%-125%)		05/18/16 14:1
	Uncertainty			+/-7.31E-05						
QC1203535480 MB										
Total Radium			U	-3.41E-06	uCi/kg					05/17/16 19:3

GEL LABORATORIES LLC

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

QC Summary

Workorder: 395689

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 1562441										
	Uncertainty									
				+/-1.91E-06						
QC1203535482 395689003 MS										
Total Radium	0.0158	0.000167		0.0184	uCi/kg		115	(75%-125%)	KSD1	05/18/16 14:1
	Uncertainty	+/-4.10E-06		+/-0.00026						
Batch 1562442										
QC1203535485 395689003 DUP										
Lead-210		0.000799		0.000723	uCi/kg	10		(0%-20%)	KSD1	05/18/16 18:5
	Uncertainty	+/-2.08E-05		+/-1.67E-05						
QC1203535487 LCS										
Lead-210	0.00992			0.0124	uCi/kg		125	(75%-125%)		05/18/16 17:5
	Uncertainty			+/-0.000171						
QC1203535484 MB										
Lead-210			U	5.48E-06	uCi/kg					05/18/16 18:5
	Uncertainty			+/-1.07E-05						
QC1203535486 395689003 MS										
Lead-210	0.0387	0.000799		0.0489	uCi/kg		124	(75%-125%)		05/19/16 13:5
	Uncertainty	+/-2.08E-05		+/-0.00063						

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: **395689**

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.

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

July 14, 2016

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

Re: Vegetation Analysis
Work Order: 399287

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 14, 2016. 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,

Hope Taylor for
Julie Robinson
Project Manager

Purchase Order: DW16138
Enclosures

Energy Fuels Resources (USA), Inc.
Vegetation Analysis
SDG: 399287

Case Narrative

Receipt Narrative
for
Energy Fuels Resources (USA), Inc.
SDG: 399287

July 14, 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 June 14, 2016 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
399287001	North East
399287002	North West
399287003	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.

Hope Taylor for
Julie Robinson
Project Manager

Chain of Custody and Supporting Documentation

Sheet 1 of 1

399287

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 Spring Vegetation 2016	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
North East	6/9/2016	700	Ra 226, U-Nat, Th-232,PB 210
North West	6/9/2016	730	Ra 226, U-Nat, Th-232,PB 210
South West	6/9/2016	800	Ra 226, U-Nat, Th-232,PB 210
			Weights:
			North East: 4100 Grams
			North West: 3750 Grams
			South West: 4500 Grams

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

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer	6/9/16 1230	P. Nient	6/14/16 9:30
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DNMI	SDG/AR/COC/Work Order: 399287
Received By: PKlent	Date Received: 6/14/16

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 cpm
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 22
2a	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 201404337
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: Lab rec'd (1) - Container Each
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 12 9186 0726 1Z 187 Y4Y 12 9497 3117

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials CAJ Date 06/14/16 Page 1 of ___

GL-CHL-SR-001 Rev 3

GEL Laboratories LLC - Login Review Report

GEL Work Order/SDG:	**399287**	**Late Spring Vegetation 2016**	**Work Order Due Date:**	**14-JUL-16**	**Collector: C**
Client SDG:	**399287**		**Package Due Date:**	**12-JUL-16**	**Prelogin #: 20160443172**
Project Manager:	**Julie Robinson**		**EDD Due Date:**	**13-JUL-16**	**Project Workdef ID: 1310529**
Project Name:	**DNMI00101 Vegetation Analysis**		**Due Date:**	**14-JUL-16**	**SDG Status: Closed**
Purchase Order:	**DW16138**		**JAR1**		**Logged by:**
Package Level:	**LEVEL3**				
EDD Format:	**EIM_DNMI**				

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
399287001	North East		09-JUN-16 07:00	14-JUN-16 09:30	-2	1	VEGETATION		30		1		
399287002	North West		09-JUN-16 07:30	14-JUN-16 09:30	-2	1	VEGETATION		30		1		
399287003	South West		09-JUN-16 08:00	14-JUN-16 09:30	-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				Cooler Seal Undisturbed	Y	
	REVW	Alphaspec U, Solid	U-Natural			Temperature (C)	22	
	REVW	GFPC, Total Alpha Radium, solid	Ra226					
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite - Dry prep instructions						
-002 North West	REVW	Alphaspec Th-232, Solid				Cooler Seal Undisturbed	Y	
	REVW	Alphaspec U, Solid	U-Natural			Temperature (C)	22	
	REVW	GFPC, Total Alpha Radium, solid	Ra226					
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite - Dry prep instructions						
-003 South West	REVW	Alphaspec Th-232, Solid				Cooler Seal Undisturbed	Y	
	REVW	Alphaspec U, Solid	U-Natural			Temperature (C)	22	
	REVW	GFPC, Total Alpha Radium, solid	Ra226					
	REVW	GFPC, Pb210, Solid						
	REVW	Laboratory Composite - Dry prep instructions						

GEL Laboratories LLC - Login Review Report

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: Ra226
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 14 July 2016

State	Certification
Alaska	UST-0110
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
Delaware	SC00012
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
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	LA160006
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122016-1
New Hampshire NELAP	205415
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	T104704235-16-11
Utah NELAP	SC000122016-20
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
West Virginia	997404

Radiochemistry
Technical Case Narrative
Energy Fuels Resources (DNMI)
SDG #: 399287

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:	1574791
Prep Batch Number:	1574432

Sample ID	Client ID
399287001	North East
399287002	North West
399287003	South West
1203568161	Method Blank (MB)
1203568163	Laboratory Control Sample (LCS)
1203568162	399287003(South West) Sample Duplicate (DUP)

The samples in this SDG were analyzed on a "dry weight" 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 volumes in this batch.

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: Refer to Data Exception Report (DER). The U-238 blank activity is greater than the MDC but is less than five percent of the lowest activity in the batch. The blank, 1203568161 (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.

Designated QC
The following sample was used for QC: 399287003 (South 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.

Recounts
Samples 1203568162 (South WestDUP), 399287001 (North East), 399287002 (North West) and 399287003 (South West) were given additional clean-up steps and recounted in order to improve the resolution. The recounts are reported. Sample 1203568161 (MB) was given additional clean-up steps and recounted in order to improve the resolution and then recounted again due to a peak shift. The second count is reported.

Miscellaneous Information:

Data Exception (DER) Documentation
A data exception report (DER) 1537647 was generated for sample 1203568161 (MB) in this SDG/batch. DER 1537647 was generated due to Peak Centroid Values Off. 1. The U-232 tracer peak centroid for sample 1203568161 is greater than 50 keV from the expected energy value of 5302 keV. 1. The sample does meet the tracer yield requirement, the detection limits, and its tracer peak is within the U-232 region of interest. Reporting results.

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

Analytical Batch Number: 1580263

Prep Batch Number: 1574432

Sample ID	Client ID
399287001	North East
399287002	North West
399287003	South West
1203581193	Method Blank (MB)
1203581195	Laboratory Control Sample (LCS)
1203581194	399287001(North East) Sample Duplicate (DUP)

The samples in this SDG were analyzed on a "dry weight" 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# 17.

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 sample and the duplicate, 1203581194 (North EastDUP) and 399287001 (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 2.56. The blank did not meet the Th-232 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: 399287001 (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
Samples were reprepped due to low carrier/tracer yield. The re-analysis is being reported.

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, Total Alpha Radium, solid**
Analytical Method:	EPA 900.1 Modified
Prep Method:	Dry Soil Prep
Analytical Batch Number:	1577438
Prep Batch Number:	1574432

Sample ID	Client ID
399287001	North East
399287002	North West
399287003	South West
1203574846	Method Blank (MB)
1203574849	Laboratory Control Sample (LCS)
1203574847	399287003(South West) Sample Duplicate (DUP)
1203574848	399287003(South West) Matrix Spike (MS)

The samples in this SDG were analyzed on a "dry weight" 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, 1203574846 (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, 1203574847 (South WestDUP) and 399287003 (South West) , did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with a value of 2.01.

Designated QC
The following sample was used for QC: 399287003 (South 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
Sample 1203574848 (South WestMS) was recounted due to low recovery. The recount is reported. Sample 399287003 (South West) was recounted to verify sample result. The second count is 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, 1203574848 (South WestMS), aliquot was reduced to conserve sample volume.

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:	1577439
Prep Batch Number:	1574432

Sample ID	Client ID
399287001	North East
399287002	North West
399287003	South West
1203574850	Method Blank (MB)
1203574853	Laboratory Control Sample (LCS)
1203574851	399287003(South West) Sample Duplicate (DUP)
1203574852	399287003(South West) Matrix Spike (MS)

The samples in this SDG were analyzed on a "dry weight" 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, 1203574850 (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: 399287003 (South 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, 1203574852 (South 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: 399287 GEL Work Order: 399287

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: 14 JUL 2016 **Title: Group Leader**

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
13-JUL-16	Radiochemistry	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ALPHA SPECTROMETER	DOE EML HASL-300, U-02-RC Modified	Solid	DNMI
Batch ID:	**Sample Numbers:**		
1574791	See Below		

Potentially affected work order(s)(SDG): 399287

Application Issues:

Peak Centroid Values Off

Specification and Requirements Exception Description:	DER Disposition:
1. The U-232 tracer peak centroid for sample 1203568161 is greater than 50 keV from the expected energy value of 5302 keV.	1. The sample does meet the tracer yield requirement, the detection limits, and its tracer peak is within the U-232 region of interest. Reporting results.

Originator's Name:

Melanie Aycock 13-JUL-16

Data Validator/Group Leader:

Jessica Davis 13-JUL-16

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 14, 2016

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

Contact: **Ms. Kathy Weinel**

Workorder: **399287**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Alpha Spec										
Batch 1574791										
QC1203568162 399287003 DUP										
Uranium-233/234		3.33E-05		3.37E-05	uCi/kg	1.11		(0%-20%)	HAKB	07/11/16 12:0
	Uncertainty	+/-1.36E-06		+/-1.26E-06						
Uranium-235/236		2.29E-06		1.99E-06	uCi/kg	13.8		(0%-20%)		
	Uncertainty	+/-4.26E-07		+/-3.47E-07						
Uranium-238		3.48E-05		3.69E-05	uCi/kg	6.06		(0%-20%)		
	Uncertainty	+/-1.38E-06		+/-1.32E-06						
QC1203568163 LCS										
Uranium-233/234				6.50E-05	uCi/kg					07/06/16 14:4
	Uncertainty			+/-1.63E-06						
Uranium-235/236				5.96E-06	uCi/kg					
	Uncertainty			+/-5.64E-07						
Uranium-238	6.71E-05			7.23E-05	uCi/kg		108	(75%-125%)		
	Uncertainty			+/-1.71E-06						
QC1203568161 MB										
Uranium-233/234			U	5.54E-07	uCi/kg					07/11/16 12:0
	Uncertainty			+/-2.18E-07						
Uranium-235/236			U	3.65E-07	uCi/kg					
	Uncertainty			+/-2.14E-07						
Uranium-238				3.69E-07	uCi/kg					
	Uncertainty			+/-1.38E-07						
Batch 1580263										
QC1203581194 399287001 DUP										
Thorium-232		4.27E-06		8.35E-06	uCi/kg	64.6*		(0%-20%)	HAKB	07/13/16 22:1
	Uncertainty	+/-8.10E-07		+/-1.22E-06						
QC1203581195 LCS										
Thorium-232	0.000132			0.000128	uCi/kg		97.2	(75%-125%)		07/13/16 22:1
	Uncertainty			+/-4.51E-06						
QC1203581193 MB										
Thorium-232			U	-1.73E-07	uCi/kg					07/13/16 22:1
	Uncertainty			+/-3.25E-07						
Rad Gas Flow										
Batch 1577438										
QC1203574847 399287003 DUP										
Total Radium		2.90E-05		2.06E-05	uCi/kg	33.8*		(0%-20%)	KSD1	07/11/16 17:1
	Uncertainty	+/-1.88E-06		+/-3.05E-06						
QC1203574849 LCS										
Total Radium	0.00384			0.00467	uCi/kg		121	(75%-125%)		07/11/16 16:2
	Uncertainty			+/-6.47E-05						
QC1203574846 MB										
Total Radium			U	2.84E-06	uCi/kg					07/11/16 17:1

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QC Summary

Workorder: 399287

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 1577438										
	Uncertainty									
				+/-1.69E-06						
QC1203574848 399287003 MS										
Total Radium	0.016	2.90E-05		0.0157	uCi/kg		97.6	(75%-125%)	KSD1	07/13/16 10:4
	Uncertainty	+/-1.88E-06		+/-0.000299						
Batch 1577439										
QC1203574851 399287003 DUP										
Lead-210		0.000195		0.000228	uCi/kg	15.7		(0% - 100%)	KSD1	07/13/16 06:5
	Uncertainty	+/-2.18E-05		+/-2.05E-05						
QC1203574853 LCS										
Lead-210	0.00947			0.0116	uCi/kg		123	(75%-125%)		07/13/16 05:4
	Uncertainty			+/-0.000174						
QC1203574850 MB										
Lead-210			U	4.46E-05	uCi/kg					07/13/16 06:5
	Uncertainty			+/-2.12E-05						
QC1203574852 399287003 MS										
Lead-210	0.0392	0.000195		0.0462	uCi/kg		117	(75%-125%)		07/13/16 05:4
	Uncertainty	+/-2.18E-05		+/-0.000654						

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: **399287**

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

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

BLANDING, UTAH

June 8-9, 2016

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:

August 19, 2016

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: 8/19/2016

Dean Kitchen

Reviewer: _____

Date: 8-19-16

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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 June 8th, 2016 and the second run on June 9th, 2016.

One run was completed on the Yellow Cake Dryer Baghouse June 9th, 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	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	29.722	1.500E+06	21.374	2.826E+06
2	28.942	1.407E+06		
AVE	**29.332**	**1.454E+06**	**21.374**	2.826E+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	101	103
2	102	

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			6/8/16	6/9/16	
Filter #			6573	6574	
Begin	Time Test Began		8:05	7:41	
End	Time Test Ended		16:07	15:46	
Pb_m	Meter Barometric Pressure	In. Hg. Abs	24.40	24.40	
ΔH	Orifice Pressure Drop	In. H_2O	0.914	0.848	
Y	Meter Calibration Y Factor	dimensionless	0.988	0.988	
Vm	Volume Gas Sampled--Meter Conditions	cf	309.260	298.586	
T_m	Avg Meter Temperature	°F	85.3	85.3	
$\sqrt{\Delta P}$	Sq Root Velocity Head	Root In. H_2O	0.3380	0.3259	
Wt_{wc}	Weight Water Collected	Grams	175.1	185.8	
T_t	Duration of Test	Minutes	480	480	
C_p	Pitot Tube Coefficient	Dimensionless	0.84	0.84	
D_n	Nozzle Diameter	Inches	0.3100	0.3100	
CO_2	Volume % Carbon Dioxide	Percent	2.80	2.60	
O_2	Volume % Oxygen	Percent	16.00	15.80	
N_2 & CO	Volume % Nitrogen and Carbon Monoxide	Percent	81.20	81.60	
Vm_{std}	Volume Gas Sampled (Standard)	dscf	241.937	233.541	
Vw	Volume Water Vapor	scf	8.256	8.760	
$Bw_{s\ (measured)}$	Fraction H_2O in Stack Gas (Measured)	Fraction	0.033	0.036	
$Bw_{s\ (saturated)}$	Fraction H_2O in Stack Gas (Saturated)	Fraction	0.147	0.143	
Bw_s	Fraction H_2O in Stack Gas *	Fraction	0.033	0.036	
X_d	Fraction of Dry Gas	Fraction	0.967	0.964	
M_d	Molecular Wt. Dry Gas	lb/lbmol	29.09	29.05	
M_s	Molecular Wt. Stack Gas	lb/lbmol	28.72	28.65	
%I	Percent Isokinetic	Percent	101.4	101.6	**AVG**
T_s	Avg Stack Temperature	°F	121.4	120.3	**120.9**
A_s	Stack Cross Sectional Area	Sq. Ft.	0.887	0.887	
P_G	Stack Static Pressure	In. H_2O	-0.075	-0.075	
Pb_p	Sample Port Barometric Pressure	In. Hg Abs	24.33	24.33	
P_s	Stack Pressure	In. Hg Abs	24.324	24.324	
Q_s	Stack Gas Volumetric Flow Rate (Std)	dscfm	8.41E+02	8.10E+02	**8.26E+02**
Q_a	Stack Gas Volumetric Flow Rate (Actual)	cfm	1.18E+03	1.14E+03	**1.16E+03**
V_s	Velocity of Stack Gas	fpm	1.33E+03	1.28E+03	**1.30E+03**
Curies	Radionuclides per sample	pCi	7191.20	6759.30	
Curies	Radionuclides per blank	pCi	0.22	0.22	
Net Curies	Net Radionuclides per sample	pCi	7190.97	6759.07	
Crad	Concentration of Radionuclides	pCi/dscf	29.722	28.942	**29.332**
ERrad	Emission Rate of Radionuclides	pCi/hr	1.500E+06	1.407E+06	**1.454E+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		6/9/2016
Filter #			6575
Begin	Time Test Began		10:20
End	Time Test Ended		12:25
Pb_m	Meter Barometric Pressure	In. Hg. Abs	24.40
ΔH	Orifice Pressure Drop	In. H_2O	0.635
Y	Meter Calibration Y Factor	dimensionless	1.010
Vm	Volume Gas Sampled–Meter Conditions	cf	65.629
T_m	Avg Meter Temperature	°F	78.9
$\sqrt{\Delta P}$	Sq Root Velocity Head	Root In. H_2O	0.5501
Wt_{wc}	Weight Water Collected	Grams	12.2
T_t	Duration of Test	Minutes	120
C_p	Pitot Tube Coefficient	Dimensionless	0.84
D_n	Nozzle Diameter	Inches	0.2235
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	53.064
Vw	Volume Water Vapor	scf	0.575
Bw_s	Fraction H_2O in Stack Gas	Fraction	0.011
X_d	Fraction of Dry Gas	Fraction	0.989
M_d	Molecular Wt. Dry Gas	lb/lbmol	28.84
M_s	Molecular Wt. Stack Gas	lb/lbmol	28.72
%I	Percent Isokinetic	Percent	102.8
T_s	Avg Stack Temperature	°F	121.4
A_s	Stack Cross Sectional Area	Sq. Ft.	1.396
P_G	Stack Static Pressure	In. H_2O	-0.33
Pb_p	Sample Port Barometric Pressure	In. Hg. Abs	24.33
P_s	Stack Pressure	In. Hg. Abs	24.306
Q_s	Stack Gas Volumetric Flow Rate (Std)	dscfm	2.20E+03
Q_a	Stack Gas Volumetric Flow Rate (Actual)	cfm	3.02E+03
V_s	Velocity of Stack Gas	fpm	2.16E+03
Curies	Radionuclides per sample	pCi	1134.40
Curies	Radionuclides per blank	pCi	0.22
Net Curies	Net Radionuclides per sample	pCi	1134.18
Crad	Concentration of Radionuclides	pCi/dscf	21.374
ERrad	Emission Rate of Radionuclides	pCi/hr	2.826E+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_g = 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 (^oF)
T_s = stack temperature (^oF)
T_{std} = absolute temperature at standard conditions (528^oR)
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^oF and 29.92 inches Hg.
V_s = velocity of stack gas (fpm)
V_w = volume water vapor (scf) at 68^oF and 29.92 inches Hg.
Wt_{we} = 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$ER_F = C_f \cdot Q_s \cdot 0.00857$$

$$ER_{gas} = P_{std} \cdot Q_s \cdot M_{wgas} \cdot C_{gas} \cdot 60 / (R \cdot T_{std} \cdot 10^6)$$

$$ER_{gas} = C_{gas(lb/dscf)} \cdot Qs \cdot 60$$

(Either ER_{gas} equation gives equivalent lb/hr values to 3 sig. figures)

$$ER_{mmBtu} = C_{gas(lb/dscf)} \cdot F_d \cdot (20.9/(20.9 - \%O_2)$$, Method 19 Equation 19-1

$$ER_{PM10} = C_{PM10} \cdot Q_s \cdot 0.00857$$

$$Errad = C_{rad} \cdot Qs \cdot 60$$

$$K_c = 1 + 2 \cdot \lambda \cdot 1.257 / Dp_{50}$$

$$\lambda = \mu_s / (0.499 \cdot \rho_s \cdot u_m)$$

$$M_d = CO_2 \cdot 0.44 + O_2 \cdot 0.32 + N_2 \cdot 0.28$$

$$M_s = (M_d \cdot X_d) + (18 \cdot B_{ws})$$

$$\mu_s = [51.05 + 0.207 \cdot (T_s + 460) + 3.24 \cdot 10^{-5} \cdot (T_s + 460)_2 + 0.53147 \cdot \%O_2 - 74.143 \cdot B_{ws}] \cdot 10^{-6}$$

$$P_s = Pb_p + (P_G / 13.6)$$

$$\theta_1 = (\sqrt{\Delta P_1'} / \sqrt{\Delta P'_{ave}}) \cdot (\theta_{test} / pts)$$

$$\theta_n = \theta_1 \cdot \sqrt{\Delta P_n} / \sqrt{\Delta P_1}$$

$$Q_a = V_s \cdot A_s$$

$$Q_s = Q_a \cdot X_d \cdot P_s \cdot T_{std} / [(T_s + 460) \cdot P_{std}]$$

$$Q_{sc} = [(T_s + 460) \cdot P_{std} / (T_{std} \cdot P_s)] \cdot [(Vm_{std} + V_w) / \theta]$$

$$Q_{sce} = [(T_s + 460) \cdot P_{std} / (T_{std} \cdot P_s)] \cdot [(Vm_{std} + V_w) / \theta]$$

$$Q_w = Q_s / X_d$$

$$\rho_s = P_s \cdot M_s \cdot 3386.39 \cdot 10^{-6} / [R \cdot (T_s + 460) / 1.8]$$

$$u_m = 100 \cdot \sqrt{\{[R \cdot (T_s + 460) / 1.8 \cdot 8 \cdot 10^3] / [\pi \cdot M_s]\}}$$

$$Vm_{std} = Vm \cdot Y \cdot T_{std} \cdot (Pb_m + \Delta H / 13.6) / [P_{std} \cdot (T_m + 460)]$$

$$V_s = 85.49 \cdot 60 \cdot Cp \cdot \sqrt{\Delta P} \cdot \sqrt{[(T_s + 460) / (P_s \cdot M_s)]}$$

$$V_w = Wt_{wc} \cdot 0.04715$$

$$X_d = 1 - B_{ws}$$

General Sample & Pretest Equations

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

$$A_s = Ds^2 / 4 \cdot \pi$$

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

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

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

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

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

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

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

$$C_{X\,(act)} = (C_{X\,(avg)} - C_0) \cdot C_{ma} / (C_m - C_0)$$

$$C_{X\,(corr)} = C_{X\,(avg)} \cdot (20.9 - \text{desired } \%O_2) / (20.9 - \text{actual } \%O_2)$$

$$C_{X\,(mass)} = M_w \cdot C_{X\,(ppm)} \cdot P_{std} / (R \cdot T_{std} \cdot 10^6)$$

$$D_{eq} = 2 \cdot L \cdot W / (L + W)$$

$$_{case}\,\Delta H_d = [Q_{sce}' \cdot X_d \cdot P_s / (T_s + 460)]^2 \cdot [(T_m + 460) \cdot M_d \cdot 1.083 \cdot \Delta H_{@} / Pb_m]$$

$$_{PM_{10}}\,\Delta H_d = [Q_{sc}' \cdot X_d \cdot P_s / (T_s + 460)]^2 \cdot [(T_m + 460) \cdot M_d \cdot 1.083 \cdot \Delta H_{@} / Pb_m]$$

$$D_{n\,des} = \sqrt{\{0.0269 \cdot (Pb_m + 0.0735) / [(T_m + 460) \cdot C_p \cdot X_d \cdot \sqrt{[(T_s + 460) \cdot M_s) / (P_s \cdot \Delta P)]}\}}$$

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

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

$$\Delta P_{max} = 1.3686 \cdot 10^{-4} \cdot P_s \cdot M_s \cdot V_{max}^2 / [(T_s + 460) \cdot C_p^2]$$

$$\Delta P_{min} = 1.3686 \cdot 10^{-4} \cdot P_s \cdot M_s \cdot V_{min}^2 / [(T_s + 460) \cdot C_p^2]$$

$$EA = (\%O_2 - 0.5\,\%CO) / [0.264\,\%N_2 - (\%O_2 - 0.5\,\%CO)]$$

$$ER_B = C_B \cdot Q_s \cdot 0.00857$$

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

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

$$ER_F = C_f \cdot Q_s \cdot 0.00857$$

$$ER_{gas} = P_{std} \cdot Q_s \cdot M_{wx} \cdot C_{X\,(act)} \cdot 60 / (R \cdot T_{std} \cdot 10^6)$$

$$ER_{mmBtu} = ER_X / (\text{mmBtu / hr})$$

$$ER_{PM10} = C_{PM10} \cdot Q_s \cdot 0.00857$$

$$K_c = 1 + 2 \cdot \lambda \cdot 1.257 / Dp_{50}$$

$$K\text{-fact} = 846.72 \cdot Dn^4 \cdot \Delta H_{@} \cdot C_p^2 \cdot X_d^2 \cdot M_d \cdot P_s \cdot (T_m + 460) / [M_s \cdot (T_s + 460) \cdot (Pb_m + \Delta H / 13.6)]$$

$$\lambda = \mu_s / (0.499 \cdot \rho_s \cdot u_m)$$

$$M_d = CO_2 \cdot 0.44 + O_2 \cdot 0.32 + N_2 \cdot 0.28$$

$$M_s = (M_d \cdot X_d) + (18 \cdot B_{ws})$$

$$\mu_s = [51.05 + 0.207 \cdot (T_s + 460) + 3.24 \cdot 10^{-5} \cdot (T_s + 460)_2 + 0.53147 \cdot \%O_2 - 74.143 \cdot B_{ws}] \cdot 10^{-6}$$

$$P_s = Pb_p + (P_G / 13.6)$$

$$\theta_1 = (\sqrt{\Delta P_1'} / \sqrt{\Delta P'}) \cdot (\theta_{test} / pts)$$

$$Q_a = V_s \cdot A_s$$

$$\theta_n = \theta_1 \cdot \sqrt{\Delta P_n} / \sqrt{\Delta P_1}$$

$$Q_s = Q_a \cdot Xd \cdot Ps \cdot T_{std} / [(Ts + 460) \cdot P_{std}]$$

$$Q_{sc} = [(T_s + 460) \cdot P_{std} / (T_{std} \cdot P_s)] \cdot [(Vm_{std} + V_w) / \theta]$$

$$Q_{sc}' = \mu_s \cdot 0.002837 \cdot [(T_s + 460) / (M_s \cdot P_s)]^{0.2949}$$

General Sample & Pretest Equations

$$Q_{sce} = [(T_s + 460) \cdot P_{std} / (T_{std} \cdot P_s)] \cdot [(Vm_{std} + V_w) / \theta]$$

$$Q_{sce}' = (60 / 28316.8) \cdot 9 \cdot \mu_s \cdot \psi \cdot \pi \cdot N \cdot D_c^3 / \{2 \cdot \rho_p \cdot [(Dp_{50} \cdot 10^{-4} + 1.257 \cdot \lambda)^2 - (1.257 \cdot \lambda)^2]\}$$

$$Q_w = Q_s / X_d$$

$$R_{max} = 0.4457 + \sqrt{[0.5690 + (0.2603 \cdot \sqrt{Q_{sc}'} \cdot \mu_s / V_n^{1.5})]}$$

$$R_{min} = 0.2457 + \sqrt{[0.3072 - (0.2603 \cdot \sqrt{Q_{sc}'} \cdot \mu_s / V_n^{1.5})]}$$

$$\rho_s = P_s \cdot M_s \cdot 3386.39 \cdot 10^{-6} / [R \cdot (T_s + 460) / 1.8]$$

$$u_m = 100 \cdot \sqrt{\{[R \cdot (T_s + 460) / 1.8 \cdot 8 \cdot 10^3] / [\pi \cdot M_s]\}}$$

$$V_{max} = V_n \cdot R_{max}$$

$$V_{min} = V_n \cdot R_{min}$$

$$Vm_{std} = Vm \cdot Y \cdot T_{std} \cdot (Pb_m + \Delta H / 13.6) / [P_{std} \cdot (T_m + 460)]$$

$$V_n = 3.056 \cdot Q_{sc}' / Dn^2$$

$$V_s = 85.49 \cdot 60 \cdot Cp \cdot \sqrt{\Delta P} \cdot \sqrt{[(T_s + 460) / (P_s \cdot M_s)]}$$

$$V_{wc} = Wt_{wc} \cdot 0.04715$$

$$X_d = 1 - B_{ws}$$

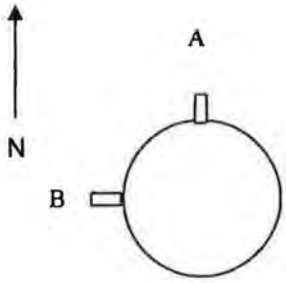
APPENDIX B

South Yellow Cake Scrubber
- Preliminary Velocity Traverse and Sampling Point Location Data
- Particulate Field Data

Yellow Cake Dryer Baghouse
- Preliminary Velocity Traverse and Sampling Point Location Data
- Particulate Field Data

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 6/8/2016

Barometric Pressure

Pb_m 24.40 in Hg Pb_p 24.33 in Hg

Static Pressure (P_G) -.075 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						
2	25.0	3.19	3.19		111 .073				
3	75.0	9.56	9.56		112 .112				
4	93.3	11.90	11.90		113 .105				

Averages:

T_S _____ ∠ Flow _____

ΔP _____ $\sqrt{\Delta P}$ _____

KEY => T_S ∠ Flow ΔP

5114 Field Data Sheet

Filter 6573 Sample Box C

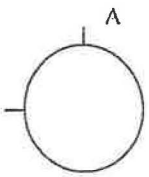
Page 1 of 1 Run # 1

Plant: Energy Fuels

Date: 6/8/2016

Location: South Yellow Cake Dryer Scrubber

Operator: M. Mizumacru



Stack Diameter 12.75" Port Reference 0"

Ports are 7' Upstream from next disturbance

Ports are 30' Downstream from last disturbance

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
B 1	8:05	0	485.250	.085	.67	.67	3	113	265	264	264	60	66	67
1		20	496.330	.082	.65	.65	2	115	263	270	270	53	72	69
1		40	507.410	.084	.66	.66	2	117	268	265	266	54	77	83
2		60	518.425	.085	.67	.67	2	117	237	268	266	53	81	86
2		80	529.465	.082	.65	.65	2	119	247	266	264	56	82	85
2		100	540.425	.085	.67	.67	2	119	230	260	259	58	83	86
3		120	551.940	.117	.92	.92	3	121	258	262	260	54	84	85
3		140	564.840	.120	.95	.95	3	122	265	261	260	52	83	86
3		160	578.410	.124	.98	.98	3	122	259	261	260	51	84	88
4		180	591.335	.120	.95	.95	3	123	261	261	262	52	86	87
4		200	604.480	.120	.95	.95	3	122	230	258	260	54	86	90
4		220	617.700	.120	.95	.95	3	122	258	256	259	55	86	89
A 1	12:07	240	630.919	.125	1.00	1.00	3	122	245	246	248	60	86	88
1		260	644.410	.136	1.08	1.08	3	123	252	248	250	47	86	89
1		280	658.400	.135	1.07	1.07	3	123	252	248	250	48	86	89
2		300	672.380	.137	1.09	1.09	3	123	257	258	260	50	86	88
2		320	686.365	.135	1.07	1.07	3	124	252	259	261	51	85	88
2		340	700.160	.138	1.10	1.10	3	124	249	263	265	61	85	89
3		360	714.255	.130	1.04	1.04	3	124	245	250	252	57	86	90
3		380	727.880	.122	.97	.97	3	124	269	251	249	51	87	91
3		400	741.250	.120	.96	.96	3	123	270	247	249	51	88	91
4		420	754.530	.120	.96	.96	3	124	244	254	255	53	89	92
4		440	767.790	.120	.96	.96	3	124	244	253	254	58	90	93
4		460	780.160	.120	.96	.96	3	123	243	254	255	60	91	95
	16:07	480	794.510											
Total			309.260	8.1113	21.930			2913					4096	
Average				.3380	.914			121.4					85.3	

Assumed Moisture 4-6 %

Probe 276-2 Cp 0.84

Nozzle Calibration

.310 .310 .310 .310

Avg D_n .310 inches

Gas Bag E-05

Console 3

Y-Factor .988

$\Delta H_@$ 1.639 in H_2O

Barometric Pressures

Pb_m 24.40 in Hg

Pb_p 24.33 in Hg

P_G -.075 in H_2O

Leak Check	Pre	Post
ft³/min	0.003	0.002
vac in Hg	21.0	11.0
Pitot Rate	0.0	0.0
in H_2O	.25	.25

Water Collected 175.1 g

Time Sampled 480 min

Review [illegible]

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)

5114 Field Data Sheet

Filter 6574 Sample Box C

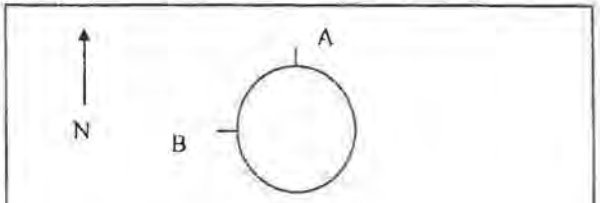
Page 1 of 1 Run # 2

Plant: Energy Fuels

Date: 6/9/2016

Location: South Yellow Cake Dryer Scrubber

Operator: M. Mendamaro



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 276-2 Cp 0.84

Nozzle Calibration

.310 .310 .310 .310

Avg D_n .310 inches

Gas Bag E-05

Console 3

Y-Factor .988

$\Delta H_@$ 1.639 in H_2O

Barometric Pressures

Pb_m 24.40 in Hg

Pb_p 24.30 in Hg

P_G -.075 in H_2O

Leak Check	Pre	Post
ft^3/min	0.004	0.001
vac in Hg	20.0	16.0
Pitot Rate	0.0	0.0
in H_2O	~~2.0~~ .25	2.5

Water Collected ~~1268~~ 1185.8 g

Time Sampled 480 min

Review MMM

K = @T_m

K = @T_m

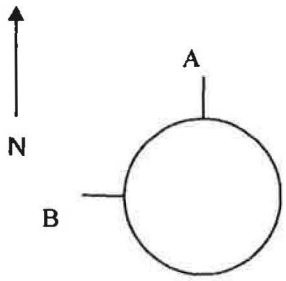
Traverse Point	Time Clock	Time Min (θ)	DGM (ft³)	ΔP (in H_2O)	ΔH (in H_2O) Desired	ΔH (in H_2O) Actual	Vacuum (in Hg)	Temperatures (°F) Stack (T_s)	Probe	Probe out	Oven	Effluent	DGM Temp (T_m) Out	In
B 1	7:41	0	795.332	.081	.64	.64	2	111	250	255	257	60	63	64
1		20	806.010	.089	.70	.70	2	114	246	229	231	48	71	74
1		40	817.228	.087	.69	.69	2	115	253	270	271	49	76	81
2		60	828.470	.090	.71	.71	2	115	230	270	271	53	80	84
2		80	839.712	.090	.71	.71	2	117	228	257	255	56	83	85
2		100	851.350	.090	.71	.71	2	116	229	249	250	60	83	85
3		120	862.715	.105	.83	.83	2	117	253	249	250	59	83	84
3		140	875.120	.105	.83	.83	2	118	260	241	243	52	83	84
3		160	887.507	.100	.79	.79	2	118	240	247	248	56	82	84
4		180	899.060	.100	.79	.79	2	119	263	247	244	58	82	83
4		200	911.101	.097	.77	.77	2	119	263	250	251	59	82	84
4		220	923.001	.096	.76	.76	2	120	261	256	257	58	83	85
A 1	11:46	240	934.815	.115	.92	.92	2	121	270	262	262	58	82	82
1		260	947.740	.120	.96	.96	3	123	240	255	251	53	83	86
1		280	961.010	.120	.96	.96	3	123	252	256	253	55	85	89
2		300	974.240	.120	.96	.96	3	123	250	249	247	56	87	89
2		320	987.545	.118	.94	.94	3	123	249	242	245	59	89	92
2		340	1000.910	.116	.92	.92	3	124	249	245	245	61	89	92
3		360	1014.275	.119	.95	.95	3	124	225	228	228	53	90	93
3		380	1027.110	.120	.96	.96	3	125	250	242	242	55	90	94
3		400	1040.485	.121	.96	.96	3	125	248	246	248	58	92	95
4		420	1053.835	.120	.96	.96	3	126	270	253	253	61	92	95
4		440	1067.200	.120	.96	.96	3	125	270	253	254	59	93	97
4		460	1080.570	.120	.96	.96	3	126	254	258	258	58	93	97
	15:46	480	1093.918											
Total			298.586	7.8206		20.340		2887					4094	
Average				.3259		0.848		120.3					85.3	

Additional (Extra) Leak Check Information

	DGM before Leak Check	Vac ("Hg)	Rate (ft³/min)	DGM After Leak Check	Vac ("Hg)	Rate (ft³/min)

Yellow Cake Dryer Bag House

Prelim 6 pts



Stack Dia 16" Reference: 0

Ports are 57" Upstream from next disturbance

Ports are 454" Downstream from last disturbance

Facility Energy Fuels

Stack Identification South Yellow Cake Dryer Baghouse

Date 6/9/2016

Barometric Pressure

Pb_m 24.40 in Hg Pb_p 24.33 in Hg

Static Pressure (P_G) -.33 in H_2O

Estimated Moisture (Bw_s) 1 %

Sample Height from Ground 70 feet

Comments:

Time:

Traverse Point	Percent Diameter	Distance From: ID	Distance From: Reference	Ports A	B	C	D	E	F
1	4.4	0.70	0.70						
2	14.6	2.34	2.34		120 .36				
3	29.6	4.74	4.74						
4	70.4	11.26	11.26		124 .34				
5	85.4	13.66	13.66						
6	95.6	15.30	15.30		124 .34				

Averages:

T_s _____ ∠ Flow _____

ΔP _____ √ΔP _____

KEY => T_s ∠ Flow ΔP

5/114 Field Data Sheet

Filter 6575 TETCO Sample Box D

Page 1 of 1 Run # 1

Plant: Denison Mines

Date: 6/9/2016

Location: Yellowcake Dryer Baghouse

Operator: M. McNamara

N

B

A

Stack Diameter 16" Port Reference 0.0"

Ports are 57" Upstream from next disturbance

Ports are 468" Downstream from last disturbance

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
A 1	10:20	0	866.852	.16	.34	.34	5	119	231	260	260	65	66	66
2		10	871.150	.18	.37	.37	2	120	231	260	260	65	66	67
3		20	875.440	.19	.39	.39	2	120	270	260	260	61	68	73
4		30	879.685	.36	.74	.74	3	120	270	263	263	61	70	75
5		40	885.570	.36	.74	.74	3	120	268	256	256	62	72	81
6		50	891.470	.36	.74	.74	3	120	270	256	256	61	75	86
B 1	11:25	60	897.375	.35	.72	.72	3	122	270	266	268	63	78	83
2		70	903.165	.36	.74	.74	3	122	270	261	261	59	79	88
3		80	909.115	.35	.72	.72	3	124	253	264	264	58	80	91
4		90	915.060	.34	.70	.70	3	124	262	262	262	60	82	92
5		100	920.745	.35	.72	.72	3	123	267	265	265	60	83	94
6		110	926.625	.34	.70	.70	3	123	267	264	264	60	84	94
	12:25	120	932.481											
Total			65.629	6.6012		7.620		1457					1893	
Average				.5501		.635		121.4					78.9	

Assumed Moisture 1 %

Probe 18-6 Cp 0.84

Nozzle Calibration

.223 .223 .224 .224

Avg D_n .2235 inches

Gas Bag Ambient Air

Console 4

Y-Factor 1.010

$\Delta H_@$ 1.516 in H_2O

Barometric Pressures

Pb_m 28.40 in Hg

Pb_p 24.33 in Hg

P_g -.33 in H_2O

Leak Check:	Pre	Post
ft³/min	0.003	0.002
vac in Hg	20.0	10.0
Pitot Rate	0.0	0.0
In H_2O	5.0	5.0

Water Collected 12.2 g

Time Sampled 120 min

Review MDW

K = @T_m

K = @T_m

Comments:

Time	Baghouse ΔP	Time	Baghouse ΔP
10:30	4.3	11:30	4.4
10:45	4.3	11:45	4.4
11:00	4.4	12:00	4.4
11:15	4.4	12:15	4.4

5 Barrels

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

Blanding

Facility: Energy Fuels

Date: 6/8/2016

Stack Identification: SYC Scrubber

Method: 5

IMPINGERS

Run: 1

Sample Box: C

Filter Number: 6573

	Impinger Number 1	2	3	4	5	6
Initial Volume of liquid (H_2O) in impingers, (ml)	KO	100	100	MT	SG	
	1	2	3	4	5	6
Final (g)	597.6	793.3	709.9	529.4	951.2	
Initial (g)	559.8	721.8	694.4	523.8	906.5	
Net (g)	37.8	71.5	15.5	5.6	44.7	

Total (g) 175.1

Initials

6/9/2016

IMPINGERS

Run: 2

Sample Box: C

Filter Number: 6574

	Impinger Number 1	2	3	4	5	6
Initial Volume of liquid (H_2O) in impingers, (ml)	KO	100	100	MT	SG	
	1	2	3	4	5	6
Final (g)	606.7	789.6	730.3	530.9	947.0	
Initial (g)	559.8	723.2	713.4	523.8	898.5	
Net (g)	46.9	66.4	16.9	7.1	48.5	

Total (g) 185.8

Initials

IMPINGERS

Run: _____

Sample Box: _____

Filter Number:

	Impinger Number 1	2	3	4	5	6
Initial Volume of liquid (H_2O) in impingers, (ml)	KO	100	100	MT	SG	
	1	2	3	4	5	6
Final (g)						
Initial (g)						
Net (g)						

Total (g) _____

Initials

Plant Energy Fuels Location SYC

Analytical Method

Date 6/8/2016
Test No. 1
Gas Bag No. E-05
Ambient Temp 72
Operator MGM

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	2.8	2.8	2.8	2.8	2.8	2.8	2.8
O_2 (Net is Actual O_2 Reading Minus Actual CO_2 Reading).	18.8	16.0	18.8	16.0	18.8	16.0	16.0
N_2 (Net is 100 Minus Actual O_2 Reading).							

Date 6/9/2016
Test No. 2
Gas Bag No. E-05
Ambient Temp 72
Operator MGM

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	2.8	2.8	2.8	2.8	2.8	2.8	2.8
O_2 (Net is Actual O_2 Reading Minus Actual CO_2 Reading).	18.6	15.8	18.6	15.8	18.6	15.6	15.6
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).							

$^{+}O_2$ was determined using a gas analyzer
CO is not measured. as it has the same molecular weight as N_2

Yellow Cake Dryer Bag House

Method 5

Facility: Intrepid Wendover

Date: 6/9/2014

Stack Identification: Yellow Cake Dryer Baghouse

Method: 5

IMPINGERS

Run: 1

Sample Box: D

Filter Number: 6575

	Impinger Number						Initials
	1	2	3	4	5	6	
	Initial Volume of liquid (H_2O) in impingers, (ml)						
	100	100	-	SG			
Final (g)	700.7	657.5	606.2	858.0			
Initial (g)	712.4	651.1	603.5	843.2			
Net (g)	-11.7	6.4	2.7	14.8			

Total (g) 12.2

IMPINGERS

Run: _____

Sample Box: _____

Filter Number:

	Impinger Number						Initials
	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) _____

IMPINGERS

Run: _____

Sample Box: _____

Filter Number:

	Impinger Number						Initials
	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 19 *Pages*

Report No.: 69179

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.
51603		6573 R1 SYC Scrubber filter an	J6F210413-2	M8R461AC	9M8R4610	6174028
		6573 R1 SYC Scrubber filter an	J6F210413-2	M8R461AF	9M8R4610	6174029
		6573 R1 SYC Scrubber filter an	J6F210413-2	M8R461AE	9M8R4610	6174030
		6573 R1 SYC Scrubber filter an	J6F210413-2	M8R461AA	9M8R4610	6174031
		6573 R1 SYC Scrubber filter an	J6F210413-2	M8R461AD	9M8R4610	6174032
		6574 R2 SYC Scrubber filter an	J6F210413-3	M8R471AC	9M8R4710	6174028
		6574 R2 SYC Scrubber filter an	J6F210413-3	M8R471AF	9M8R4710	6174029
		6574 R2 SYC Scrubber filter an	J6F210413-3	M8R471AE	9M8R4710	6174030
		6574 R2 SYC Scrubber filter an	J6F210413-3	M8R471AA	9M8R4710	6174031
		6574 R2 SYC Scrubber filter an	J6F210413-3	M8R471AD	9M8R4710	6174032
		6575 R1 Dryer BH filter and be	J6F210413-1	M8R451AC	9M8R4510	6174028
		6575 R1 Dryer BH filter and be	J6F210413-1	M8R451AF	9M8R4510	6174029
		6575 R1 Dryer BH filter and be	J6F210413-1	M8R451AE	9M8R4510	6174030
		6575 R1 Dryer BH filter and be	J6F210413-1	M8R451AA	9M8R4510	6174031
		6575 R1 Dryer BH filter and be	J6F210413-1	M8R451AD	9M8R4510	6174032

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

August 18, 2016

Denison Mines (USA) Corp
1050 17th Street, Suite 950
Denver, CO 80265

Attention: Dean Kitchen

Date Received at Lab	:	June 15, 2016
Project Name	:	Energy Fuels 2016 2nd Quarter
Sample Type	:	Three (3) Stack Filter Samples
SDG Number	:	51603

CASE NARRATIVE

I. Introduction

On June 15, 2016, 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 J6F210413.

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
Pb-210 by method RL-GPC-011
Radium-228 by method RL-RA-001
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:

The MDA for the samples and QC exceeds the CRDL due to method and matrix limitations. The blank activity for Th-228 and Th-230 is above the achieved MDA. The LCS tracer yield is below acceptance criteria; recount confirmed. There is no sample volume available for re-analysis. Data is reported. Except as noted, the LCS, batch blank and sample results are within acceptance criteria.

Uranium-234, 235, 238:

MDA exceeds CRDL for all samples in this batch; the achieved MDA of the samples exceed CRDL. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Gas Proportional Counting

Pb-210:

The samples had an ingrowth shorter than the standard 14 days. The MDA for the samples and QC exceeds the CRDL due to method and matrix limitations. The blank activity is less than the achieved MDA. Tracer yields and LCS recovery meet acceptance criteria. Except as noted, the LCS, batch blank and sample results are within acceptance criteria.

Radium-228:

MDA exceeds CRDL for all samples and QC in this batch; the achieved MDA of the samples exceed CRDL. The blank result exceeds the MDA and CRDL. The LCS recovery is outside acceptance criteria at 149%. Except as noted, the LCS, batch blank and sample results are within acceptance limits.

Alpha Scintillation

Radium-226:

The MDA for the samples and QC exceeds the CRDL due to method and matrix limitations. The blank activity is less than the achieved MDA. The LCS recovery is below acceptance criteria; recount confirmed. There is no sample volume available for re-analysis. Data is reported. Except as noted, the LCS, batch blank and sample results are within acceptance criteria.

I certify that this Certificate of Analysis is in compliance with the SOW and/or NELAC, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Whitney M Ritari

Digitally signed by Whitney Ritari
Date: 2016.08.18 09:12:49 -07'00'

Whitney Ritari
Project Manager

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|MDL	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: 18-Aug-16

TestAmerica Inc

Ordered by Method, Batch No., Client Sample ID.

Report No. : 69179

SDG No: 51603

Batch	Client Id / Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RER2
6174031	**RICHRC5011**								
	6573 R1 SYC Scrubber filter an								
	M8R461AA	TH-228	7.45E-08 +- 5.1E-08		uCi/Sample	20%	5.63E-08		
		TH-230	1.75E-07 +- 9.4E-08		uCi/Sample	20%	1.16E-07	3.00E-15	
		TH-232	-1.03E-08 +- 2.6E-08	U	uCi/Sample	20%	6.45E-08		
	6574 R2 SYC Scrubber filter an								
	M8R471AA	TH-228	1.91E-08 +- 1.4E-08		uCi/Sample	87%	1.72E-08		
		TH-230	1.52E-07 +- 3.7E-08		uCi/Sample	87%	8.11E-09	3.00E-15	
		TH-232	3.93E-09 +- 4.7E-09	U	uCi/Sample	87%	6.77E-09		
	6575 R1 Dryer BH filter and be								
	M8R451AA	TH-228	4.01E-09 +- 9.0E-09	U	uCi/Sample	65%	1.68E-08		
		TH-230	9.81E-08 +- 3.0E-08		uCi/Sample	65%	1.06E-08	3.00E-15	
		TH-232	1.71E-09 +- 3.7E-09	U	uCi/Sample	65%	8.87E-09		
6174032	**FFSR**								
	6573 R1 SYC Scrubber filter an								
	M8R461AD	U-234	3.57E-03 +- 7.3E-04		uCi/Sample	95%	5.74E-05	9.00E-15	
		U-235	1.62E-04 +- 8.8E-05		uCi/Sample	95%	3.65E-05	9.00E-15	
		U-238	3.45E-03 +- 7.1E-04		uCi/Sample	95%	1.07E-04	9.00E-15	
	6574 R2 SYC Scrubber filter an								
	M8R471AD	U-234	3.33E-03 +- 7.1E-04		uCi/Sample	84%	8.28E-05	9.00E-15	
		U-235	1.56E-04 +- 9.3E-05		uCi/Sample	84%	5.51E-05	9.00E-15	
		U-238	3.26E-03 +- 7.0E-04		uCi/Sample	84%	7.20E-05	9.00E-15	
	6575 R1 Dryer BH filter and be								
	M8R451AD	U-234	4.42E-04 +- 1.9E-04		uCi/Sample	72%	5.34E-05	9.00E-15	
		U-235	4.68E-05 +- 5.5E-05	U	uCi/Sample	72%	5.34E-05	9.00E-15	
		U-238	2.20E-04 +- 1.2E-04		uCi/Sample	72%	5.34E-05	9.00E-15	
6174028	**RICHRC5011**								
	6573 R1 SYC Scrubber filter an								
	M8R461AC	Pb-210	5.64E-06 +- 1.0E-06		uCi/Sample	88%	4.58E-07	6.00E-14	
	6574 R2 SYC Scrubber filter an								
	M8R471AC	Pb-210	7.57E-06 +- 1.4E-06		uCi/Sample	85%	4.57E-07	6.00E-14	
	6575 R1 Dryer BH filter and be								
	M8R451AC	Pb-210	2.33E-07 +- 3.2E-07	U	uCi/Sample	71%	5.18E-07	6.00E-14	
6174029	**BRTF**								
	6573 R1 SYC Scrubber filter an								
	M8R461AF	Ra-228	3.20E-06 +- 6.4E-07		uCi/Sample	89%	5.99E-07	9.00E-14	
	6574 R2 SYC Scrubber filter an								
	M8R471AF	Ra-228	5.38E-06 +- 1.0E-06		uCi/Sample	69%	9.16E-07	9.00E-14	
	6575 R1 Dryer BH filter and be								

TestAmerica Inc

rptTALRchSaSummary2 V5.6 A2002

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: 18-Aug-16

TestAmerica Inc

Ordered by Method, Batch No., Client Sample ID.

Report No. : 69179

SDG No: 51603

Batch	Client Id / Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RER2
6174029	**BRTF**								
	6575 R1 Dryer BH filter and be								
	M8R451AF	Ra-228	4.06E-06 +- 8.2E-07		uCi/Sample	73%	8.06E-07	9.00E-14	
6174030	**BRTE**								
	6573 R1 SYC Scrubber filter an								
	M8R461AE	Ra-226	1.08E-07 +- 7.3E-08	U	uCi/sample	98%	1.08E-07	9.00E-14	
	6574 R2 SYC Scrubber filter an								
	M8R471AE	Ra-226	1.71E-07 +- 1.0E-07		uCi/sample	79%	1.44E-07	9.00E-14	
	6575 R1 Dryer BH filter and be								
	M8R451AE	Ra-226	5.13E-08 +- 6.4E-08	U	uCi/sample	80%	1.04E-07	9.00E-14	

No. of Results: 27

TestAmerica Inc

rptTALRchSaSummary2 V5.6 A2002

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.

QC Results Summary

Date: 18-Aug-16

TestAmerica Inc

Ordered by Method, Batch No, QC Type,.

Report No. : 69179 **SDG No.:** 51603

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
RICHRC5011								
6174031 BLANK QC,								
M8TAF1AA	TH-228	2.17E-08 +- 1.5E-08		Ci/Sample	61%			1.79E-08
	TH-230	3.87E-08 +- 1.8E-08		Ci/Sample	61%			1.13E-08
	TH-232	0.00E+00 +- 3.9E-09	U	Ci/Sample	61%			9.43E-09
6174031 LCS,								
M8TAF1AC	TH-230	2.57E-06 +- 5.6E-07		Ci/Sample	16%	113%	0.1	1.47E-07
FFSR								
6174032 BLANK QC,								
M8TAG1AA	U-234	6.21E-09 +- 2.9E-08	U	Ci/Sample	87%			7.38E-08
	U-235	-3.96E-09 +- 2.8E-08	U	Ci/Sample	87%			6.34E-08
	U-238	2.83E-08 +- 5.0E-08	U	Ci/Sample	87%			8.57E-08
6174032 LCS,								
M8TAG1AC	U-234	1.63E-06 +- 4.3E-07		Ci/Sample	73%	92%	-0.1	6.42E-08
	U-238	2.20E-06 +- 5.3E-07		Ci/Sample	73%	119%	0.2	7.70E-08
RICHRC5011								
6174028 BLANK QC,								
M8TAC1AA	Pb-210	1.08E-07 +- 2.9E-07	U	Ci/Sample	85%			4.87E-07
6174028 LCS,								
M8TAC1AC	Pb-210	1.00E-05 +- 1.8E-06		Ci/Sample	87%	110%	0.1	4.25E-07
BRTF								
6174029 BLANK QC,								
M8TAD1AA	Ra-228	3.17E-06 +- 6.2E-07		Ci/Sample	90%			5.71E-07
6174029 LCS,								
M8TAD1AC	Ra-228	1.53E-05 +- 2.1E-06		Ci/Sample	71%	149%	0.5	5.57E-07
BRTE								
6174030 BLANK QC,								
M8TAE1AA	Ra-226	-2.55E-08 +- 7.6E-08	U	Ci/sample	100%			1.29E-07
6174030 LCS,								
M8TAE1AC	Ra-226	5.96E-06 +- 1.6E-06		Ci/sample	78%	59%	-0.4	1.64E-07

No. of Results: 15

TestAmerica Inc Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSummary V5.6 A2002 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: 18-Aug-16

Lab Name:	**TestAmerica Inc**	**SDG:**	51603	**Collection Date:**	6/8/2016 8:05:00 AM
Lot-Sample No.:	**J6F210413-2**	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	**6573 R1 SYC Scrubber filter an**	**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: 6174028	RICHRC5011			**Work Order:**	M8R461AC		**Report DB ID:**	9M8R4610				
Pb-210	5.64E-06		4.1E-07	1.0E-06	4.58E-07	uCi/Sample	88%	*(12.3)*	8/17/16 09:51 a	1.0	0.9875	GPC31C
						2.23E-07	6.00E-14	*(11.)*		Sample	Sample	
Batch: 6174029	BRTF			**Work Order:**	M8R461AF		**Report DB ID:**	9M8R4610				
Ra-228	3.20E-06		5.2E-07	6.4E-07	5.99E-07	uCi/Sample	89%	*(5.3)*	8/17/16 06:47 p	1.0	0.9875	GPC1B
						2.71E-07	9.00E-14	*(10.)*		Sample	Sample	
Batch: 6174030	BRTE			**Work Order:**	M8R461AE		**Report DB ID:**	9M8R4610				
Ra-226	1.08E-07	U	6.8E-08	7.3E-08	1.08E-07	uCi/sample	98%	*1.*	8/15/16 08:30 p	1.0	1.0	ASC4HB
						5.25E-08	9.00E-14	*(3.)*		Sample	Sample	
Batch: 6174031	RICHRC5011			**Work Order:**	M8R461AA		**Report DB ID:**	9M8R4610				
TH-228	7.45E-08		4.9E-08	5.1E-08	5.63E-08	uCi/Sample	20%	*(1.3)*	8/10/16 12:51 a	1.0	0.9875	ALP118
						2.48E-08		*(2.9)*		Sample	Sample	
TH-230	1.75E-07		8.8E-08	9.4E-08	1.16E-07	uCi/Sample	20%	*(1.5)*	8/10/16 12:51 a	1.0	0.9875	ALP118
						5.47E-08	3.00E-15	*(3.7)*		Sample	Sample	
TH-232	-1.03E-08	U	2.5E-08	2.6E-08	6.45E-08	uCi/Sample	20%	*-0.16*	8/10/16 12:51 a	1.0	0.9875	ALP118
						2.89E-08		*-0.81*		Sample	Sample	
Batch: 6174032	FFSR			**Work Order:**	M8R461AD		**Report DB ID:**	9M8R4610				
U-234	3.57E-03		3.9E-04	7.3E-04	5.74E-05	uCi/Sample	95%	*(62.2)*	8/9/16 06:47 p	1.0	0.00116	ALP1
						1.77E-05	9.00E-15	*(9.8)*		Sample	Sample	
U-235	1.62E-04		8.4E-05	8.8E-05	3.65E-05	uCi/Sample	95%	*(4.4)*	8/9/16 06:47 p	1.0	0.00116	ALP1
						7.75E-06	9.00E-15	*(3.7)*		Sample	Sample	

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name:	TestAmerica Inc	**SDG:**	51603	**Collection Date:**	6/8/2016 8:05:00 AM
Lot-Sample No.:	J6F210413-2	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	6573 R1 SYC Scrubber filter an	**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
U-238	3.45E-03		3.9E-04	7.1E-04	1.07E-04	uCi/Sample	95%	*(32.2)*	8/9/16 06:47 p	1.0	0.00116	ALP1
						4.24E-05	9.00E-15	*(9.7)*		Sample	Sample	

Ratio U-234/238 = 1.0

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name:	TestAmerica Inc	**SDG:**	51603	**Collection Date:**	8/20/2015 7:41:00 AM
Lot-Sample No.:	J6F210413-3	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	6574 R2 SYC Scrubber filter an	**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: 6174028	RICHRC5011			**Work Order:**	M8R471AC		**Report DB ID:**	9M8R4710				
Pb-210	7.57E-06	✓	4.6E-07	1.4E-06	4.57E-07	uCi/Sample	85%	*(16.6)*	8/17/16 09:51 a	1.0	0.97467	GPC31D
						2.22E-07	6.00E-14	*(11.1)*		Sample	Sample	
Batch: 6174029	BRTF			**Work Order:**	M8R471AF		**Report DB ID:**	9M8R4710				
Ra-228	5.38E-06	✓	8.0E-07	1.0E-06	9.16E-07	uCi/Sample	69%	*(5.9)*	8/17/16 06:47 p	1.0	0.97467	GPC1C
						4.16E-07	9.00E-14	*(10.7)*		Sample	Sample	
Batch: 6174030	BRTE			**Work Order:**	M8R471AE		**Report DB ID:**	9M8R4710				
Ra-226	1.71E-07	✓	9.1E-08	1.0E-07	1.44E-07	uCi/sample	79%	*(1.2)*	8/16/16 08:52 a	1.0	1.0	ASC5HA
						6.96E-08	9.00E-14	*(3.4)*		Sample	Sample	
Batch: 6174031	RICHRC5011			**Work Order:**	M8R471AA		**Report DB ID:**	9M8R4710				
TH-228	1.91E-08		1.4E-08	1.4E-08	1.72E-08	uCi/Sample	87%	*(1.1)*	8/12/16 05:20 a	1.0	0.97467	ALP117
						7.58E-09		*(2.7)*		Sample	Sample	
TH-230	1.52E-07		2.8E-08	3.7E-08	8.11E-09	uCi/Sample	87%	*(18.8)*	8/12/16 05:20 a	1.0	0.97467	ALP117
						3.42E-09	3.00E-15	*(8.2)*		Sample	Sample	
TH-232	L 3.93E-09	U	4.7E-09	4.7E-09	6.77E-09	uCi/Sample	87%	*0.58*	8/12/16 05:20 a	1.0	0.97467	ALP117
						2.83E-09		*(1.7)*		Sample	Sample	
Batch: 6174032	FFSR			**Work Order:**	M8R471AD		**Report DB ID:**	9M8R4710				
U-234	3.33E-03		4.1E-04	7.1E-04	8.28E-05	uCi/Sample	84%	*(40.3)*	8/9/16 06:47 p	1.0	0.00115	ALP3
						2.88E-05	9.00E-15	*(9.4)*		Sample	Sample	
U-235	1.56E-04		8.9E-05	9.3E-05	5.51E-05	uCi/Sample	84%	*(2.8)*	8/9/16 06:47 p	1.0	0.00115	ALP3
						1.51E-05	9.00E-15	*(3.4)*		Sample	Sample	

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name:	**TestAmerica Inc**	**SDG:**	51603	**Collection Date:**	8/20/2015 7:41:00 AM
Lot-Sample No.:	**J6F210413-3**	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	**6574 R2 SYC Scrubber filter an**	**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
U-238	3.26E-03		4.0E-04	7.0E-04	7.20E-05	uCi/Sample	84%	*(45.2)*	8/9/16 06:47 p	1.0	0.00115	ALP3
						2.34E-05	9.00E-15	*(9.3)*		Sample	Sample	

Ratio U-234/238 = 1.0

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name:	**TestAmerica Inc**	**SDG:**	51603	**Collection Date:**	6/9/2016 10:00:00 AM
Lot-Sample No.:	**J6F210413-1**	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	**6575 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: 6174028	RICHRC5011			**Work Order:**	M8R451AC		**Report DB ID:**	9M8R4510				
Pb-210	2.33E-07	U	3.1E-07	3.2E-07	5.18E-07	uCi/Sample	71%	*0.45*	8/17/16 09:51 a	1.0	0.99415	GPC31B
						2.52E-07	6.00E-14	*(1.5)*		Sample	Sample	
Batch: 6174029	BRTF			**Work Order:**	M8R451AF		**Report DB ID:**	9M8R4510				
Ra-228	4.06E-06		6.7E-07	8.2E-07	8.06E-07	uCi/Sample	73%	*(5.)*	8/17/16 06:47 p	1.0	0.99415	GPC1A
						3.67E-07	9.00E-14	*(10.)*		Sample	Sample	
Batch: 6174030	BRTE			**Work Order:**	M8R451AE		**Report DB ID:**	9M8R4510				
Ra-226	5.13E-08	U	6.3E-08	6.4E-08	1.04E-07	uCi/sample	80%	*0.49*	8/15/16 08:32 p	1.0	1.0	ASC2RC
						5.01E-08	9.00E-14	*(1.6)*		Sample	Sample	
Batch: 6174031	RICHRC5011			**Work Order:**	M8R451AA		**Report DB ID:**	9M8R4510				
TH-228	4.01E-09	U	9.0E-09	9.0E-09	1.68E-08	uCi/Sample	65%	*0.24*	8/10/16 12:49 a	1.0	0.99415	ALP117
						7.39E-09		*0.89*		Sample	Sample	
TH-230	9.81E-08		2.6E-08	3.0E-08	1.06E-08	uCi/Sample	65%	*(9.2)*	8/10/16 12:49 a	1.0	0.99415	ALP117
						4.48E-09	3.00E-15	*(6.4)*		Sample	Sample	
TH-232	1.71E-09	U	3.7E-09	3.7E-09	8.87E-09	uCi/Sample	65%	*0.19*	8/10/16 12:49 a	1.0	0.99415	ALP117
						3.71E-09		*0.93*		Sample	Sample	
Batch: 6174032	FFSR			**Work Order:**	M8R451AD		**Report DB ID:**	9M8R4510				
U-234	4.42E-04		1.7E-04	1.9E-04	5.34E-05	uCi/Sample	72%	*(8.3)*	8/9/16 06:46 p	1.0	0.00113	ALP424
						1.13E-05	9.00E-15	*(4.8)*		Sample	Sample	
U-235	4.68E-05	U	5.5E-05	5.5E-05	5.34E-05	uCi/Sample	72%	*0.88*	8/9/16 06:46 p	1.0	0.00113	ALP424
						1.13E-05	9.00E-15	*(1.7)*		Sample	Sample	

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name:	**TestAmerica Inc**	**SDG:**	51603	**Collection Date:**	6/9/2016 10:00:00 AM
Lot-Sample No.:	**J6F210413-1**	**Report No. :**	69179	**Received Date:**	6/15/2016 2:35:00 PM
Client Sample ID:	**6575 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
U-238	2.20E-04		1.2E-04	1.2E-04	5.34E-05	uCi/Sample	72%	*(4.1)*	8/9/16 06:46 p	1.0	0.00113	ALP424
						1.13E-05	9.00E-15	*(3.5)*		Sample	Sample	

Ratio U-234/238 = 2.0

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.6 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: 18-Aug-16

Lab Name: TestAmerica Inc

Matrix: SOLID

SDG: 51603

Report No. : 69179

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: 6174028	RICHRC5011			**Work Order:**	M8TAC1AA		**Report DB ID:**	M8TAC1AB				
Pb-210	1.08E-07	U	2.9E-07	2.9E-07	4.87E-07	uCi/Sample	85%	0.22	8/17/16 09:51 a	1.0	1.0	GPC32A
					2.37E-07	6.00E-14		0.74		Sample	Sample	
Batch: 6174030	BRTE			**Work Order:**	M8TAE1AA		**Report DB ID:**	M8TAE1AB				
Ra-226	-2.55E-08	U	7.6E-08	7.6E-08	1.29E-07	uCi/sample	100%	-0.2	8/15/16 08:32 p	1.0	1.0	ASC6MB
					6.30E-08	9.00E-14		-0.67		Sample	Sample	
Batch: 6174029	BRTF			**Work Order:**	M8TAD1AA		**Report DB ID:**	M8TAD1AB				
Ra-228	3.17E-06		5.0E-07	6.2E-07	5.71E-07	uCi/Sample	90%	(5.5)	8/17/16 06:47 p	1.0	1.0	GPC1D
					2.58E-07	9.00E-14		(10.2)		Sample	Sample	
Batch: 6174032	FFSR			**Work Order:**	M8TAG1AA		**Report DB ID:**	M8TAG1AB				
U-234	6.21E-09	U	2.9E-08	2.9E-08	7.38E-08	uCi/Sample	87%	0.08	8/9/16 06:47 p	1.01	1.01	ALP4
					2.25E-08	9.00E-15		0.43		g	g	
U-235	-3.96E-09	U	2.8E-08	2.8E-08	6.34E-08	uCi/Sample	87%	-0.06	8/9/16 06:47 p	1.01	1.01	ALP4
					1.74E-08	9.00E-15		-0.28		g	g	
U-238	2.83E-08	U	4.9E-08	5.0E-08	8.57E-08	uCi/Sample	87%	0.33	8/9/16 06:47 p	1.01	1.01	ALP4
					2.84E-08	9.00E-15		(1.1)		g	g	
							Ratio U-234/238 = 0.2					
Batch: 6174031	RICHRC5011			**Work Order:**	M8TAF1AA		**Report DB ID:**	M8TAF1AB				
TH-228	2.17E-08		1.5E-08	1.5E-08	1.79E-08	uCi/Sample	61%	(1.2)	8/10/16 07:01 p	1.0	1.0	ALP117
					7.87E-09			(2.8)		Sample	Sample	
TH-230	3.87E-08		1.7E-08	1.8E-08	1.13E-08	uCi/Sample	61%	(3.4)	8/10/16 07:01 p	1.0	1.0	ALP117
					4.77E-09	3.00E-15		(4.2)		Sample	Sample	

TestAmerica Inc
rptSTLRchBlank
V5.6 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: 18-Aug-16

Lab Name: TestAmerica Inc

Matrix: SOLID

SDG: 51603

Report No. : 69179

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	0.00E+00	U	0.0E+00	3.9E-09	9.43E-09 3.95E-09	uCi/Sample	61%	0. 0.	8/10/16 07:01 p	1.0 Sample	1.0 Sample	ALP117

No. of Results: 9 **Comments:**

TestAmerica Inc
rptSTLRchBlank
V5.6 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: 18-Aug-16

Lab Name: TestAmerica Inc

SDG: 51603

Matrix: SOLID

Report No. : 69179

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: 6174028	RICHRC5011			**Work Order:**	M8TAC1AC		**Report DB ID:**	M8TAC1CS					
Pb-210	1.00E-05		4.9E-07	1.8E-06	4.25E-07	uCi/Sample	87%	9.11E-06	1.55E-07	110%	8/17/16 09:51 a	1.0	GPC32B
							Rec Limits:	75	125	0.1		Sample	
Batch: 6174030	BRTE			**Work Order:**	M8TAE1AC		**Report DB ID:**	M8TAE1CS					
Ra-226	5.96E-06		2.3E-07	1.6E-06	1.64E-07	uCi/sample	78%	1.01E-05	1.03E-07	59%	8/16/16 08:51 a	1.0	ASC8HA
							Rec Limits:	75	125	-0.4		Sample	
Batch: 6174029	BRTF			**Work Order:**	M8TAD1AC		**Report DB ID:**	M8TAD1CS					
Ra-228	1.53E-05		1.1E-06	2.1E-06	5.57E-07	uCi/Sample	71%	1.02E-05	1.17E-07	149%	8/17/16 06:48 p	1.0	GPC2A
							Rec Limits:	75	125	0.5		Sample	
Batch: 6174032	FFSR			**Work Order:**	M8TAG1AC		**Report DB ID:**	M8TAG1CS					
U-234	1.63E-06		3.1E-07	4.3E-07	6.42E-08	uCi/Sample	73%	1.77E-06	9.69E-09	92%	8/9/16 06:47 p	1.06	ALP6
							Rec Limits:	75	125	-0.1		g	
U-238	2.20E-06		3.6E-07	5.3E-07	7.70E-08	uCi/Sample	73%	1.85E-06	1.01E-08	119%	8/9/16 06:47 p	1.06	ALP6
							Rec Limits:	75	125	0.2		g	
Batch: 6174031	RICHRC5011			**Work Order:**	M8TAF1AC		**Report DB ID:**	M8TAF1CS					
TH-230	2.57E-06		2.8E-07	5.6E-07	1.47E-07	uCi/Sample	16%	2.28E-06	2.36E-08	113%	8/10/16 07:02 p	1.0	ALP118
							Rec Limits:	75	125	0.1		Sample	

No. of Results: 6 **Comments:**

TestAmerica Inc **Bias** - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V5.6 A2002

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Tetco	Project Manager: Dean Kitchen	Date: 6/13/2016	Chain of Custody Number:
Address: 391 East 620 South	Telephone Number (Area Code)/Fax Number: 801-492-9106	Lab Number:	Page 1 of 1
City: American Fork; State: Ut; Zip Code: 84003	Site Contact: Logan Shumway	Lab Contact:	
Project Name and Location (State): Energy Fuels 2016 2nd Quarter	Carrier/Waybill Number:		
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 (Attach list if more space is needed): U-Nat	Ra-226	Ra-228	Th-228	Th-230	Th-232	Lead-210						Special Instructions/ Conditions of Receipt
6575 R1 Dryer BH filter and beaker	6/9/2016	10:00	X												X	X	X	X	X	X	X						MSR45
6573 R1 SYC Scrubber filter and beaker	6/8/2016	8:05	X												X	X	X	X	X	X	X						MSR46
6574 R2 SYC Scrubber filter and beaker	8/20/15	7:41	X												X	X	X	X	X	X	X						MSR47

J6F210413
SDG-51603
Due 7-14-16

J6F210413

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):

	Date	Time		Date	Time
1. Relinquished By: [signature]	6/13/2016		1. Received By: [signature] J. Bock TALA	6-15-16	1435
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6-15-16 | 1435 Container GM Screen Result: (Airlock) 0 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [B]

Client: DGW SDG #: 51603 SAF #: NA [B]

Lot Number: J6F210413

Chain of Custody # N/A

Shipping Container ID or Air Bill Number : NA [B]

Samples received inside shipping container/cooler/box Yes [B] 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 [B]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [B]
3. Cooler temperature: _____°C NA [B]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [B]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [B] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 3
7. Containers received: 3x 250 ml g; 3x filter
8. Sample holding times exceeded? NA [ ] Yes [ ] No [B]
9. Samples have: ____tape ____hazard labels ____custody seals [B] appropriate sample labels
10. Matrix: [B] A (FLT, Wipe, Solid, Soil) ____I (Water) ____S (Air, Niosh 7400) [B] T (Biological, Ni-63)
    Bio-01-14
11. Samples:
    [B] 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 [B]
    (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 [B]
14. Description of anomalies (include sample numbers): NA [B]
15. Sample Location, Sample Collector Listed on COC? * Yes [ ] No [B]
    *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: [signature] Date: 6-15-16

Client Notification needed? Yes [ ] No [ ] Date: _____
By: _____
Person contacted: _____

[X] No action necessary; process as is

Project Manager [signature] Date 6-22-16

APPENDIX D

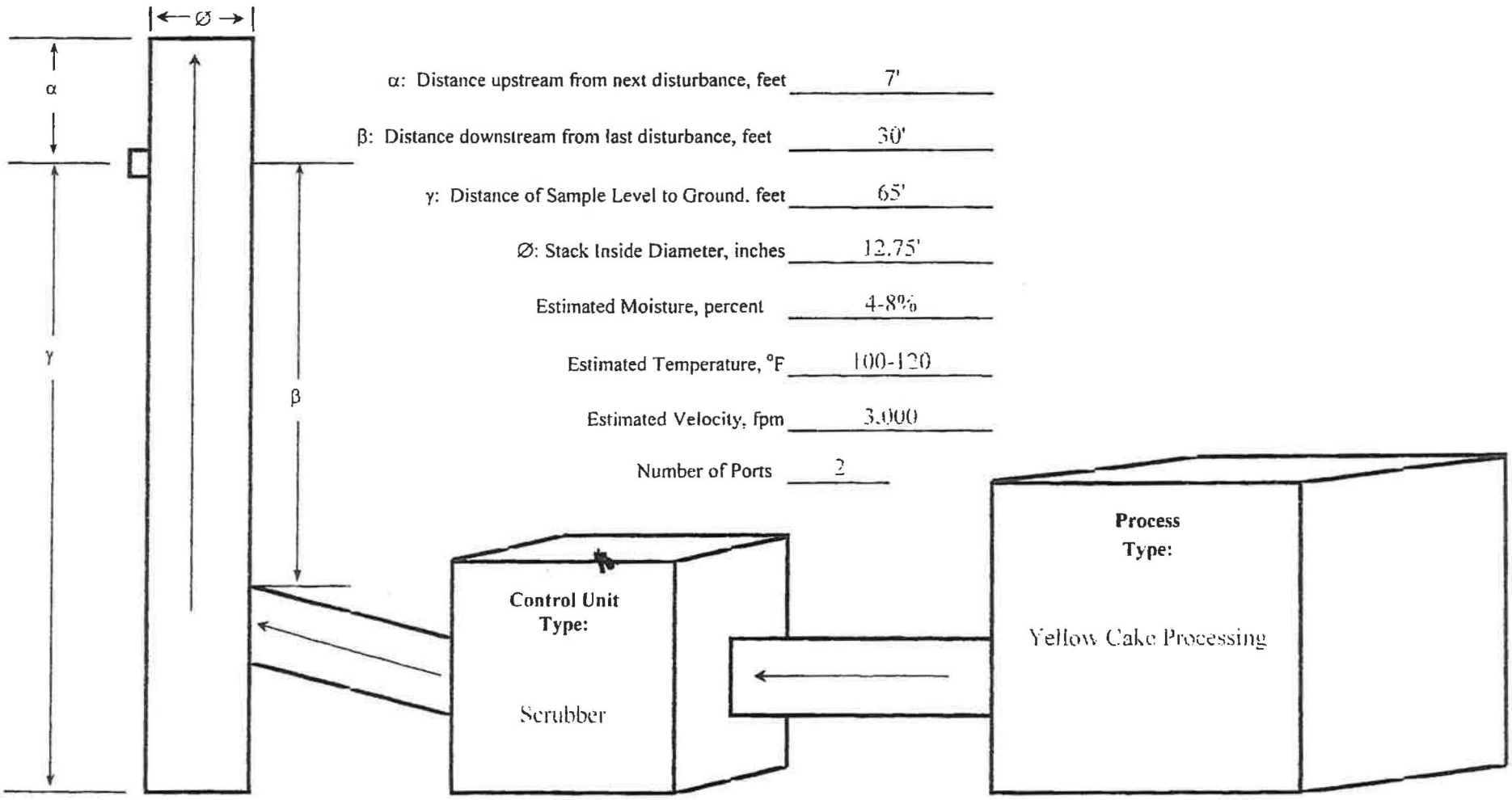
South Yellow Cake Scrubber
Figure 1. Facility Schematic Representation

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



α: Distance upstream from next disturbance, feet 7'

β: Distance downstream from last disturbance, feet 30'

γ: Distance of Sample Level to Ground, feet 65'

Ø: Stack Inside Diameter, inches 12.75'

Estimated Moisture, percent 4-8%

Estimated Temperature, °F 100-120

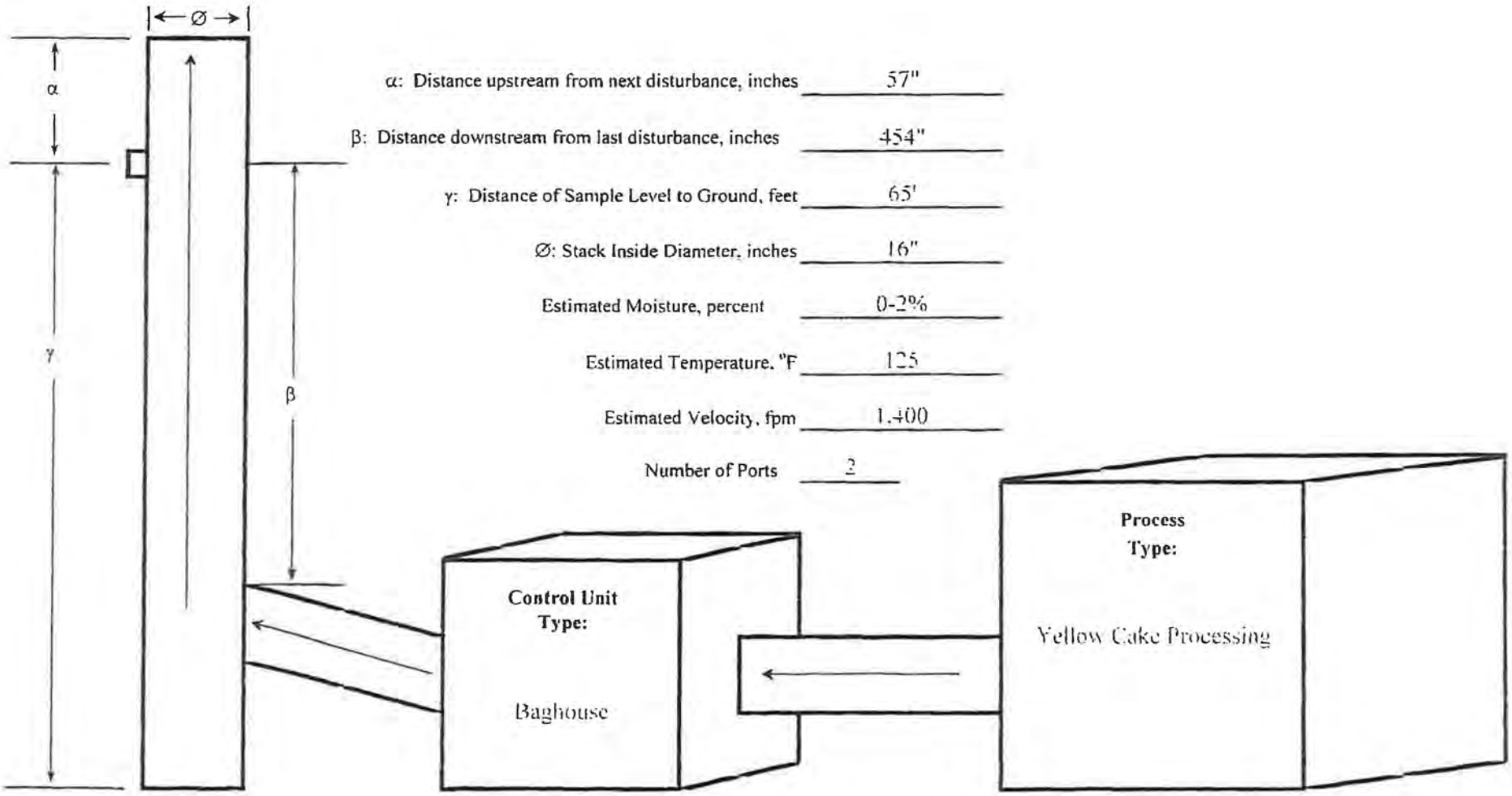
Estimated Velocity, fpm 3,000

Number of Ports 2

Figure 1. Facility Schematic Representation

Facility: Denison Mines

Stack Identification: Baghouse



α: Distance upstream from next disturbance, inches 57"

β: Distance downstream from last disturbance, inches 454"

γ: Distance of Sample Level to Ground, feet 65'

Ø: Stack Inside Diameter, inches 16"

Estimated Moisture, percent 0-2%

Estimated Temperature, °F 125

Estimated Velocity, fpm 1,400

Number of Ports 2

Figure 2. Facility Schematic Representation

Energy Fuels Resources, Blanding, UT Process Data

Source: South Yellow Cake	Date: 6/8/2016		
	Scrubber Flow GPM		South Scrubber Pressure
Time	Demister #1 spray	Humidification spray #2 south scrubber venturi inlet	ΔP
8:05	4.4	6.7/31.3	~~8~~ 27.0
8:35	4.4	6.7/31.3	26.9
9:05	4.5	6.9/31.9	26.8
9:30	4.5	6.9/32.1	26.8
10:00	4.5	6.9/31.9	26.7
10:30	4.5	6.9/32.0	26.7
11:05	4.5	6.8/31.6	26.8
11:35	4.5	6.9/32.0	26.7
12:10	4.5	6.8/31.5	26.7
12:40	4.5	6.9/31.9	26.8
13:15	4.5	6.8/31.9	26.6
13:45	4.5	6.8/31.9	26.8
14:30	4.5	6.8/31.9	26.7
14:55	4.5	6.8/31.9	26.6
15:30	4.5	6.8/31.7	26.6
16:00	4.5	6.8/31.9	26.7

Energy Fuels Resources, Blanding, UT Process Data

Source: South Yellow Cake		Date: 6/9/2016	
	Scrubber Flow GPM		
Time	Demister Spray #1	Humidification Spray #2 / South Scrubber Venturi Inlet	South scrubber Pressure ΔP
7:51	4.5	6.5 / ~~27.2~~ 32.2	27.2
8:30	4.5	6.9 / 31.9	27.1
9:00	4.5	6.8 / 31.8	27.0
9:30	4.5	6.8 / 31.8	27.0
10:05	4.5	6.9 / 32.1	27.0
10:35	4.5	6.9 / 32.1	27.0
11:05	4.5	6.9 / 32.0	27.0
11:35	4.5	6.9 / 32.0	26.8
12:05	4.5	6.9 / 32.1	26.8
12:35	4.5	6.9 / 32.2	26.7
13:05	4.5	6.9 / 32.1	26.7
13:35	4.5	6.9 / 32.1	26.7
14:05	4.5	6.9 / 32.0	26.6
14:35	4.5	6.9 / 31.9	26.5
15:05	4.5	6.9 / 32.1	26.6
15:35	4.5	6.9 / 32.1	26.6

APPENDIX E

Calibration of the console dry gas meter(s), pitot tubes, nozzles diameters, and temperature sensors were carried out in accordance with the procedures outlined in the Quality Assurance Handbook. The appropriate calibration data are presented in the following pages. The nozzle calibrations are recorded on the first page of the field data sheets.

Figure 3 Schematic of Method 5/114 Sampling Train
Meter Box Calibration Data and Calculations Forms
Post-test Dry Gas Meter Calibration Data Forms
Type S Pitot Tube Inspection Data
Sample Box Temperature Sensor Calibration

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.

ENVIRONMENTAL SUPPLY COMPANY

Facility: **2016 Pre-Calibration**

DATE: 12/23/15 | METER SERIAL #: 300315 | BAROMETRIC PRESSURE (In Hg): INITIAL 25.45, FINAL 25.45, AVG (P_{bar}) 25.45

METER PART #: Console 3 | CRITICAL ORIFICE SET SERIAL #: 1453S | EQUIPMENT ID #: Console #3

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	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	42.625	49.630	6.005	60	77	74	76	74	75.25	5.50	2.95	5.9825	4.9962	0.983		1.702
	2	0.8137	13	48.630	56.281	7.661	60	77	74	75	75	75.25	7.00	2.95	6.4757	6.3588	0.982		1.702
	3	0.8137	13	56.281	63.394	7.113	60	75	76	76	76	75.75	6.50	2.85	6.0147	5.9046	0.982		1.700
																AVG =	0.982	-0.62	
19	1	0.5317	13	63.394	69.044	5.550	60	72	73	73	75	73.25	8.00	1.20	4.7759	4.7487	0.994		1.619
	2	0.5317	13	69.044	76.4600	7.416	60	73	72	75	73	73.25	10.50	1.20	6.2587	6.2326	0.994		1.619
	3	0.5317	13	76.4600	82.805	6.345	60	73	73	75	75	74.00	9.00	1.20	5.3559	5.3423	0.997		1.617
																AVG =	0.996	0.70	
12	1	0.3307	13	82.805	88.375	5.570	60	77	74	76	74	75.25	12.50	0.46	4.6807	4.6149	0.986		1.595
	2	0.3307	13	88.375	99.03	10.655	60	74	75	74	75	74.50	24.00	0.46	8.9665	8.8686	0.988		1.598
	3	0.3307	13	99.030	105.695	6.668	60	75	76	75	76	75.50	15.00	0.46	5.6008	5.5378	0.989		1.595
																AVG =	0.988	-0.08	

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 = **0.988**

AVERAGE $\Delta H_@$ = **1.639**

(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) $$Vcr_{(std)} = K' * \frac{Phar * \Theta}{\sqrt{Tamb}}$$

= 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	68	68
202	203	203

Technician: J. Graton

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 date and information in the GREEN cells. YELLOW cells are calculated.

2016 Pre-Calibration

					INITIAL	FINAL	AVG (P_{bar})
DATE:	12/1/15	METER SERIAL #:	27863	BAROMETRIC PRESSURE (in Hg):	25.00	25.00	25.00
METER PART #:	Console 4	CRITICAL ORIFICE SET SERIAL #:	14535	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	FINAL	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	415.740	421.565	5.825	70	66	68	69	73	69	5.50	2.80	4.8960	4.8513	0.993		1.573
	2	0.8137	13	421.565	429.0	7.435	70	68	68	73	74	71	7.00	2.60	6.2267	6.1872	0.994		1.568
	3	0.8137	13	429.0	435.377	6.377	70	70	70	74	74	72.00	6.00	2.60	5.3297	5.3033	0.995		1.565
																AVG =	0.994	-1.56	
19	1	0.5317	13	435.377	441.190	5.813	70	70	70	74	75	72.25	8.50	1.10	4.8248	4.9092	1.016		1.543
	2	0.5317	13	441.190	447.352	6.162	70	70	71	75	75	72.75	9.00	1.10	5.1203	5.1980	1.015		1.541
	3	0.5317	13	447.352	453.163	5.811	70	71	72	75	76	73.50	8.50	1.10	4.8218	4.9092	1.018		1.539
																AVG =	1.016	0.65	
12	1	0.3307	13	453.163	458.908	5.745	70	71	75	75	78	74.75	13.50	0.40	4.7461	4.8495	1.022		1.440
	2	0.3307	13	458.908	465.113	6.205	70	75	75	76	76	76.00	14.50	0.40	5.1143	5.2067	1.018		1.437
	3	0.3307	13	465.113	471.108	5.995	70	75	73	76	75	74.75	14.00	0.40	4.9527	5.0291	1.015		1.440
																AVG =	1.019	0.89	

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 = **1.010**

AVERAGE $\Delta H_@$ = **1.516**

(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

Technician: J. Graton

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

ENVIRONMENTAL SUPPLY COMPANY

Facility **Energy Fuels**

							INITIAL	FINAL	AVG (P_{bar})
DATE:	6/14/16	METER SERIAL #:	300315	BAROMETRIC PRESSURE (In Hg):			25.35	25.35	25.35
METER PART #:	Console 3	CRITICAL ORIFICE SET SERIAL #:	1453S	EQUIPMENT ID #:	Console #3				

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 (%)	$\Delta H_@$
	1					.0						0							
	2					.0						0							
	3					.0						0.00							
																AVG =			
19	1	0.5317	12	102.500	108.815	6.315	80	78	84	82	86	82.50	9.00	1.10	5.2249	5.2217	0.999		1.521
	2	0.5317	12	108.815	118.6800	9.865	80	86	92	85	89	88.00	14.00	1.10	8.0802	8.1227	1.005		1.506
	3	0.5317	12	118.6800	124.695	6.015	80	87	91	87	91	89.00	8.50	1.10	4.9178	4.9316	1.003		1.503
																AVG =	1.002	0.00	
	1					.0						0.00							
	2			.0		.0						0.00							
	3			.0		.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 $\Delta H_@$ = 1.510

(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

$$\Delta H_@ = \left(\frac{0.76\,\theta}{V_{cr}(std)}\right)^2 \Delta H \left(\frac{V_m(std)}{V_m}\right)$$

Temperature Sensors

Reference °F	In °F	Out °F
33	34	34
67	68	68
202	203	203

Technician J Graton

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

							INITIAL	FINAL	AVG (P_{bar})
DATE:	4/14/16	METER SERIAL #:	27863	BAROMETRIC PRESSURE (in Hg):	25.35	25.35	25.35
METER PART #:	Console 4	CRITICAL ORIFICE SET SERIAL #:	14535	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 (%)	$\Delta H_@$
	1					.0						0							
	2					.0						0							
	3					.0						0.00							
																AVG =			
19	1	0.5317	12	946.520	953.065	6.545	72	73	73	70	74	72.50	9.50	1.10	5.5170	5.5531	1.007		1.526
	2	0.5317	12	953.065	964.460	11.395	75	80	75	77	73	76.25	16.50	1.10	9.5380	9.6178	1.008		1.524
	3	0.5317	12	964.460	970.335	5.875	75	80	76	73	77	76.50	8.50	1.10	4.9153	4.9546	1.008		1.524
																AVG =	1.008	0.00	
	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 = 1.008

AVERAGE $\Delta H_@$ = 1.525

(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

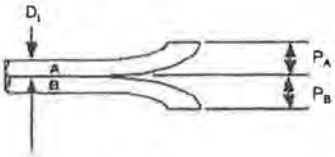
Technician: J. Graton

Type S Pitot Tube Inspection Data

Date: 12/15/15

Pitot Tube Identification: 18 G

Technician: K. McNamara



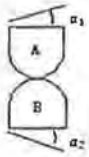
D_t = 0.375 in.

Is $P_A = P_B$? Yes

Is $1.05 \cdot D_t \le P_A$ & $P_B \le 1.50 \cdot D_t$? Yes

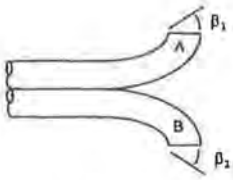
P_A = 0.452 in.

P_B = 0.452 in.



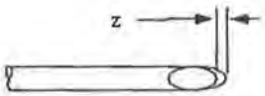
$\alpha_1 < 10°$ α_1 = 1 °

$\alpha_2 < 10°$ α_2 = 2 °



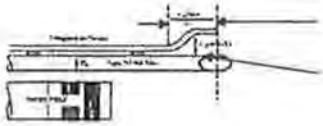
$\beta_1 < 5°$ β_1 = 0 °

$\beta_2 < 5°$ β_2 = 1 °



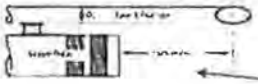
$Z \le 0.125$ in. Z = 0.016 in.

$W \le 0.03125$ in. W = 0.005 in.



W > 3 inches W = 6.75 in.

Z > 3/4 inch Z = 1.75 in.



$Y \ge 3$ inches Y = 3 1/2 in

The pitot tube meets the specifications for a calibration factor of 0.84? Yes

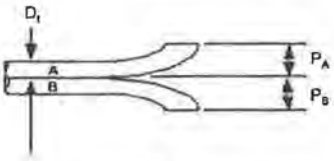
Temperature Sensor Calibration				
Reference: Omega CL3512A				
Probe	Continuity Check			Yes
	Heat Check 248			Yes
	Temperature Source (Medium)	Temperature Reference (°F)	Temperature Sensor (°F)	Temperature Difference (°F)
Probe	AIR	65	66	1
Stack	AIR	65	64	1
	ICE WATER	33	34	1
	BOIL WATER	204	204	0
	SILICONE OIL			

Type S Pitot Tube Inspection Data

Date: 2/5/16

Pitot Tube Identification: 27-G-2

Technician: K. McNamara



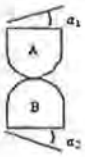
D_t = 0.375 in.

Is $P_A = P_B$? Yes

Is $1.05 \cdot D_t \le P_A$ & $P_B \le 1.50 \cdot D_t$? Yes

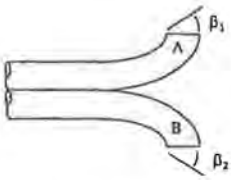
P_A = 0.450 in.

P_B = 0.450 in.



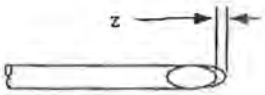
$\alpha_1 < 10°$ α_1 = 0 °

$\alpha_2 < 10°$ α_2 = 0 °



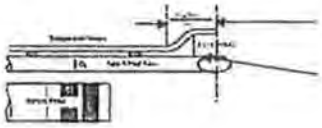
$\beta_1 < 5°$ β_1 = 0 °

$\beta_2 < 5°$ β_2 = 0 °



$Z \le 0.125$ in. Z = 0.016 in

$W \le 0.03125$ in. W = 0.001 in.



W > 3 inches W = 6.75 in.

Z > 3/4 inch Z = 1.5 in.

$Y \ge 3$ inches Y = 4 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	71	71	0
Stack	AIR	71	71	0
	ICE WATER	33	35	2
	BOIL WATER	205	203	2
	SILICONE OIL			

TETCO

Sample Box Temperature Sensor Calibration

Date: 12/16/15 Calibrator: Alex Moore, Michael McNamara Reference: Omega CL3512A

Unit ID	Thermocouple Location	Temperature Source (Medium)	Temperature Reference (°F)	Temperature Sensor (°F)	Temperature Difference (°F)
A	Oven (3)	Water	33	33	0
		Water	204	206	2
	Oven (4)	Water	33	33	0
		Water	204	205	1
B	Oven (3)	Water	33	34	1
		Water	204	205	1
	Oven (4)	Water	33	33	0
		Water	204	205	1
C	Oven (3)	Water	33	33	0
		Water	204	205	1
	Oven (4)	Water	33	34	1
		Water	204	205	1
D	Oven (3)	Water	33	33	0
		Water	204	205	1
	Oven (4)	Water	33	34	1
		Water	204	206	2
E	Oven (3)	Water	33	34	1
		Water	204	205	1
	Oven (4)	Water	33	34	1
		Water	204	205	1
F	Oven (3)	Water	33	34	1
		Water	204	206	2
	Oven (4)	Water	33	33	0
		Water	204	205	1
G	Oven	Water	33	33	0
		Water	204	206	2
H	Oven	Water	33	33	0
		Water	204	205	1
	Impinger Out A	Water	33	34	1
		Water	204	204	0
	Impinger Out B	Water	33	35	2
		Water	204	204	0
	Impinger Out C	Water	33	35	2
		Water	203	204	1
	Impinger Out D	Water	33	34	1
		Water	202	202	0
	Impinger Out E	Water	33	34	1
		Water	204	203	-1
	Impinger Out F	Water	33	34	1
		Water	204	204	0
	Impinger Out G	Water	33	33	0
		Water	203	203	0
	Impinger Out H	Water	33	34	1
		Water	204	204	0
	Impinger Out I	Water	33	35	2
		Water	204	204	0
	Impinger Out J	Water	33	34	1
		Water	203	203	0
	Impinger Out K	Water	33	34	1
		Water	204	203	-1

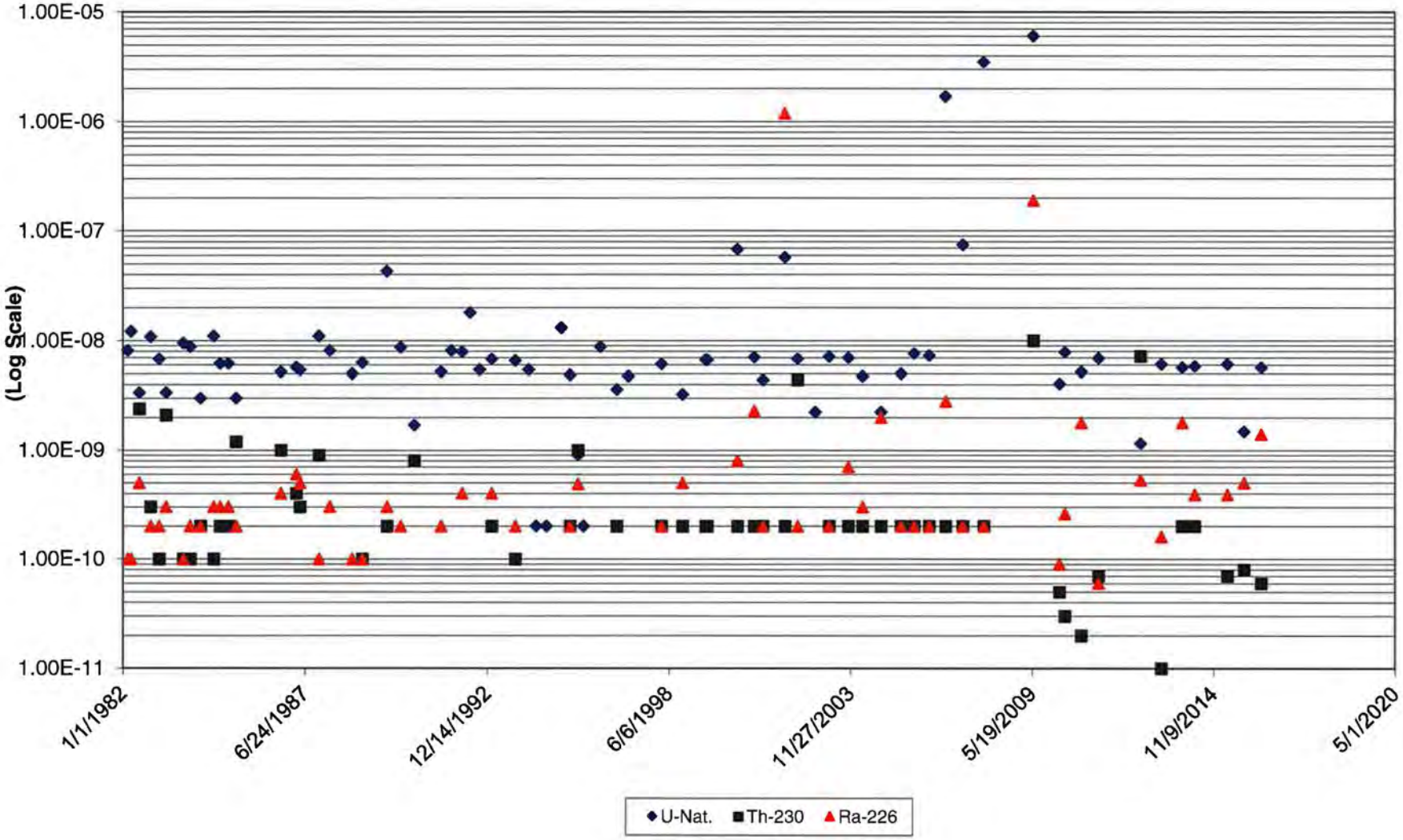
APPENDIX F

The testing followed the same procedures as outlined in previous protocols and tests at this facility.

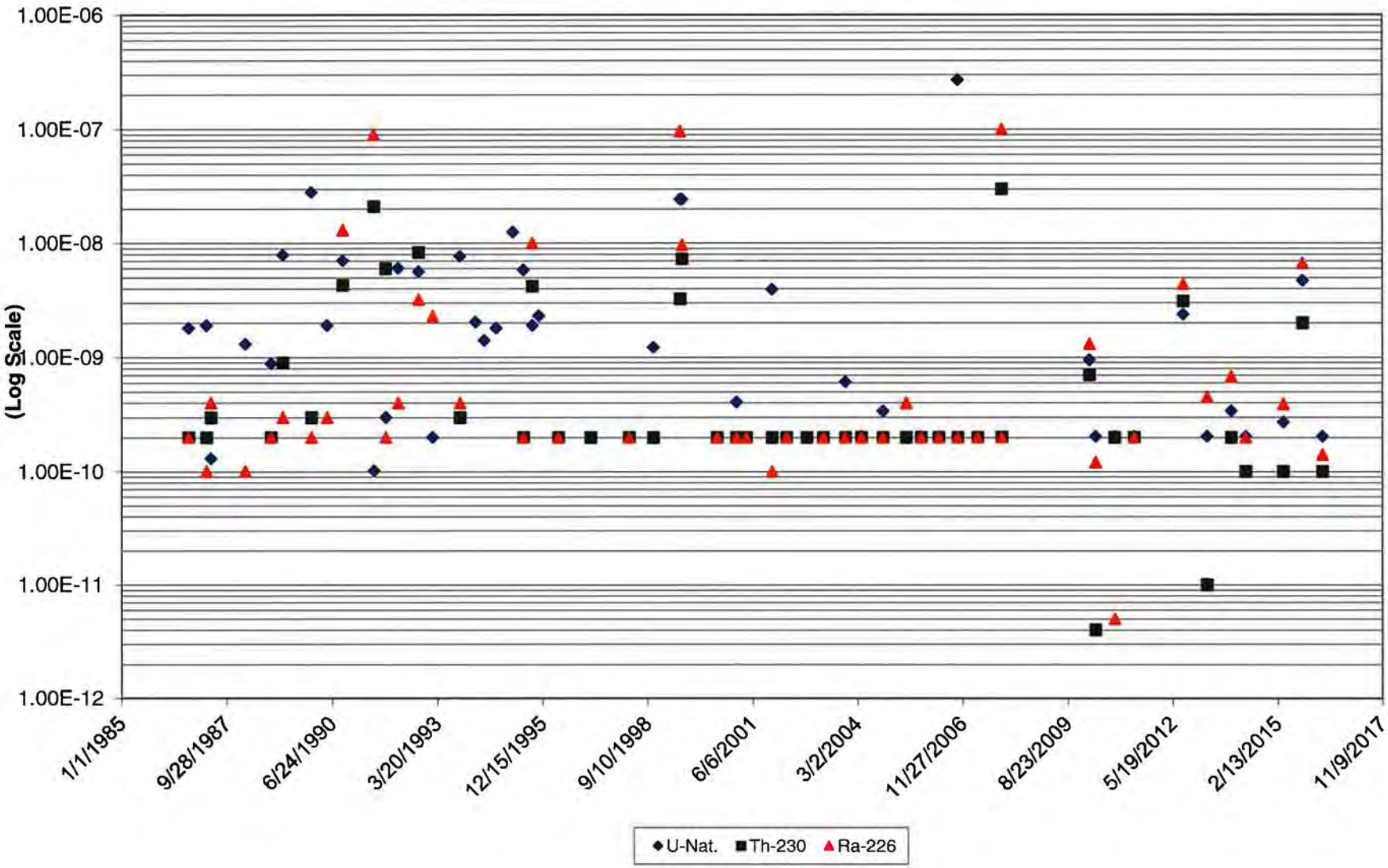
ATTACHMENT H

SURFACE WATER GRAPHS AND FIELD DATA SHEETS

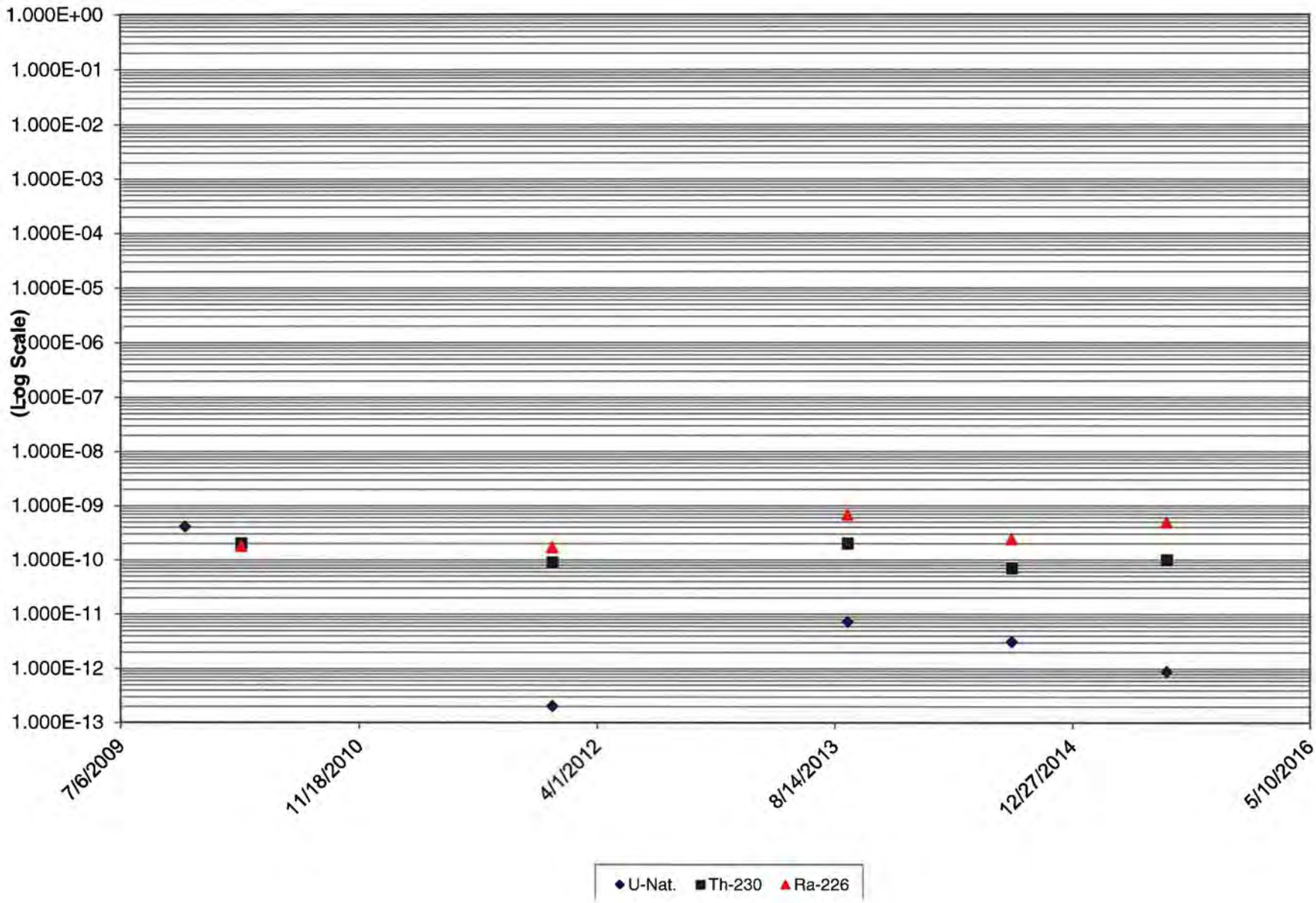
Cottonwood Creek Dissolved Radionuclide Concentrations (uCi/ml)



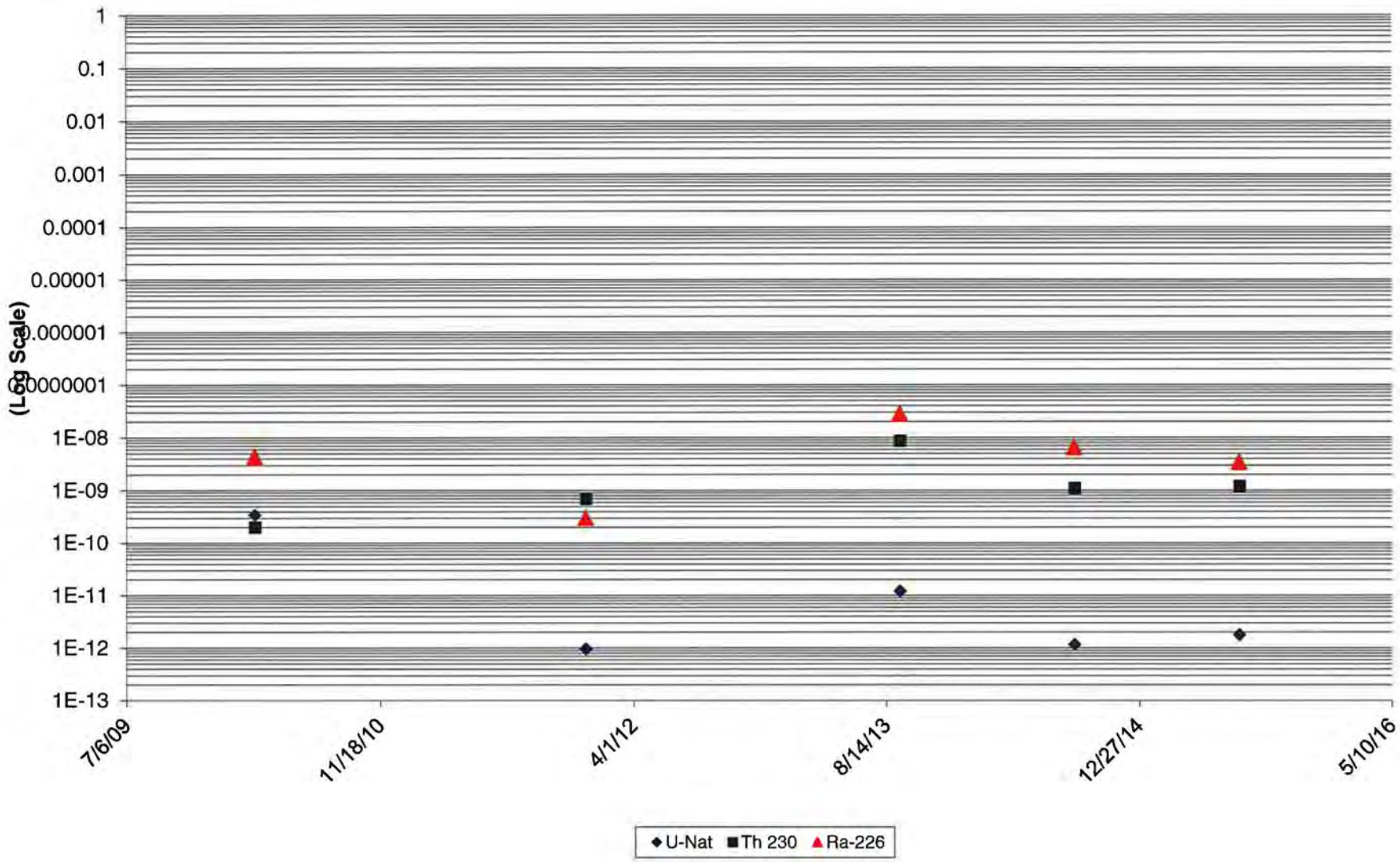
Cottonwood Creek Suspended Radionuclide Concentrations (uCi/ml)



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: 3/29/16

BY: G.P.
(Sampler's initials)

pH BUFFER 7.0 7.0

pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: 6 Inches

pH of WATER 6.77

TEMP 7.11

COND µmhos 810

pH Units 6.77

Temp °C 7.13

COND µmhos 809

pH units 6.78

Temp °C 7.11

COND µmhos 811

pH units 6.78

Temp °C 7.11

COND µmhos 813

pH units 6.78

Temp °C 7.11

Turb
25

Comments:

Garrin and Tanner present for sampling event.
Samples were collected at 0800. See attached photo.

Cottonwood Creek
3/29/2016

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek (Westwater Canyon) Other (describe)_____

DATE: 3/14/16 BY: G.P. (Sampler's initials)

pH BUFFER 7.0 7.0 pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: Θ

pH of WATER _____ TEMP _____

COND µmhos _____ COND µmhos _____

pH Units _____ pH units _____

Temp °C _____ Temp °C _____

COND µmhos _____ COND µmhos _____

pH units _____ pH units _____

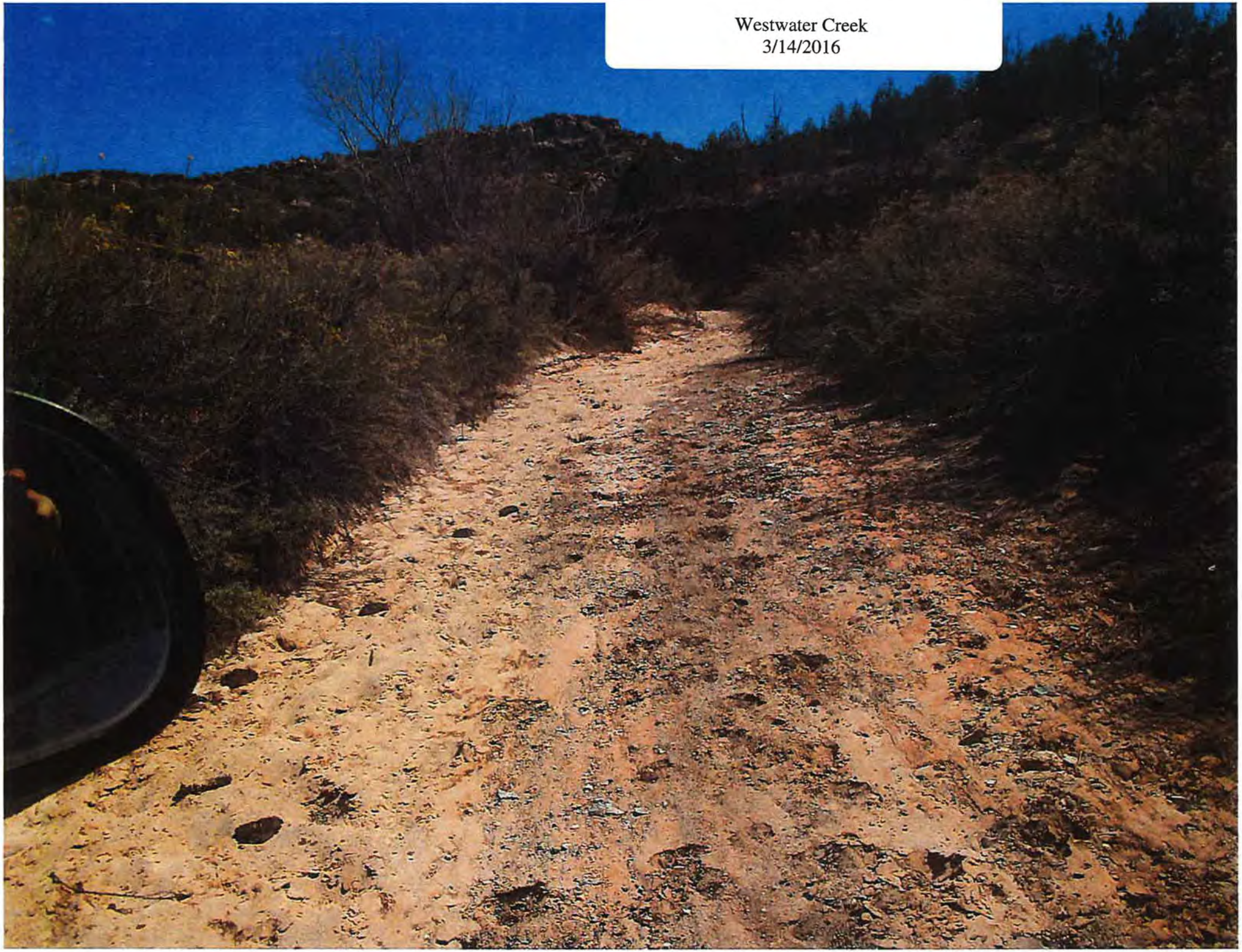
Temp °C _____ Temp °C _____

Comments:

3/14/16 Arrived on site at 1300. Creek was dry. See photo.

3/24/16 - Arrived on site at 1345. Creek was dry. See photo.

3/29/16 - Arrived on site at 0830. Creek was dry. See photo.


Westwater Creek
3/14/2016

Westwater Creek
3/24/2016

Westwater Creek
3/29/2016

ANALYTICAL SUMMARY REPORT

April 06, 2016

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

Work Order: C16030871

Project Name: 1st Quarter Surface Water 2016

Energy Laboratories, Inc. Casper WY received the following 1 sample for Energy Fuels Resources (USA) Inc on 3/30/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16030871-001	Cotton Wood Creek	03/29/16 08:00	03/30/16	Surface Water	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: David Blaida, Project Manager

Digitally signed by Dave Blaida
Date: 2016.04.06 10:25:15 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 1st Quarter Surface Water 2016
Work Order: C16030871

Report Date: 04/06/16

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Energy Fuels Resources (USA) Inc
Project: 1st Quarter Surface Water 2016
Lab ID: C16030871-001
Client Sample ID: Cotton Wood Creek

Report Date: 04/06/16
Collection Date: 03/29/16 08:00
DateReceived: 03/30/16
Matrix: Surface Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	526	mg/L		10		A2540 C	04/01/16 10:41 / mag
Solids, Total Suspended TSS @ 105 C	29	mg/L		10		A2540 D	03/31/16 11:09 / mag

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
Project: 1st Quarter Surface Water 2016

Report Date: 04/06/16
Work Order: C16030871

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS160401A
Lab ID: MB-1_160401A		Method Blank				Run: BAL-18_160401B				04/01/16 10:40
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	8						
Lab ID: LCS-2_160401A		Laboratory Control Sample				Run: BAL-18_160401B				04/01/16 10:41
Solids, Total Dissolved TDS @ 180 C		1090	mg/L	11	99	90	110			
Lab ID: C16030871-001A DUP		Sample Duplicate				Run: BAL-18_160401B				04/01/16 10:42
Solids, Total Dissolved TDS @ 180 C		528	mg/L	10.0				0.3	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
Project: 1st Quarter Surface Water 2016

Report Date: 04/06/16
Work Order: C16030871

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D									Batch: TSS160331A	
Lab ID: MB-1_160331A		Method Blank				Run: BAL-18_160331A			03/31/16 11:08	
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.8						
Lab ID: LCS-2_160331A		Laboratory Control Sample				Run: BAL-18_160331A			03/31/16 11:09	
Solids, Total Suspended TSS @ 105 C		89.0	mg/L	10	89	80	120			
Lab ID: C16030871-001ADUP		Sample Duplicate				Run: BAL-18_160331A			03/31/16 11:09	
Solids, Total Suspended TSS @ 105 C		39.0	mg/L	10				29	5	R

- 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.
R - RPD exceeds advisory limit.

Work Order Receipt Checklist

Energy Fuels Resources (USA) Inc

C16030871

Login completed by: Ralph Stanley
Reviewed by: BL2000\dblaida
Reviewed Date: 3/30/2016

Date Received: 3/30/2016
Received by: res
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:	1.2°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:

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
1st Quarter Surface Water 2016	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
CottonWood Creek	3/29/2016	800	TDS
			TSS

Comments: Samples are non filtered and non preserved.

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer Garrin Palmer	3/29/2016 1230	Adolph Stanley	3/30/16 11:15
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

C16030871

On ice
1.2° IR-1
No Seal-bottle
Cooler only
VOS-NO4 RS-N

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek Westwater Canyon Other (describe)_____

DATE: 4/14/2016

BY: Garrin Palmer GP
(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 7.89

TEMP 9.88

COND µmhos 793

pH Units 7.90

Temp °C 9.89

COND µmhos 789

pH units 7.89

Temp °C 9.87

COND µmhos 798

pH units 7.89

Temp °C 9.88

COND µmhos 795

pH units 7.90

Temp °C 9.87

Comments: Turb. 12

Samples collected at 0800 Tanner and Garrin present for sampling

Cottonwood Creek
4/14/2016

ANALYTICAL SUMMARY REPORT

May 18, 2016

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

Work Order: C16040478

Project Name: 2nd Quarter Surface Water 2016

Energy Laboratories, Inc. Casper WY received the following 1 sample for Energy Fuels Resources (USA) Inc on 4/15/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C16040478-001	Cottonwood Creek	04/14/16 08:00	04/15/16	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

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, Project Manager

Digitally signed by Dave Blaida
Date: 2016.05.18 12:14:31 -06:00

CLIENT: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016
Work Order: C16040478

Revised Date: 05/18/16
Report Date: 04/29/16

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 5/18/2016 for the change of client sample ID on the sample. The data presented here is from that change. 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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Revised Date: 05/18/16
Report Date: 04/29/16
Collection Date: 04/14/16 08:00
DateReceived: 04/15/16
Matrix: Aqueous

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016
Lab ID: C16040478-001
Client Sample ID: Cottonwood Creek

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	503	mg/L		10		A2540 C	04/18/16 15:08 / mag
Solids, Total Suspended TSS @ 105 C	25	mg/L		10		A2540 D	04/19/16 09:03 / mag
METALS - DISSOLVED							
Uranium	0.0084	mg/L		0.0003		E200.8	04/23/16 01:42 / smm
METALS - SUSPENDED							
Uranium	ND	mg/L		0.0003		E200.8	04/23/16 16:50 / smm
RADIONUCLIDES - DISSOLVED							
Gross Alpha	12.1	pCi/L				E900.0	04/28/16 14:31 / trs
Gross Alpha precision (±)	4.4	pCi/L				E900.0	04/28/16 14:31 / trs
Gross Alpha MDC	3.8	pCi/L				E900.0	04/28/16 14:31 / trs
Radium 226	1.4	pCi/L				E903.0	04/25/16 08:11 / dmf
Radium 226 precision (±)	0.33	pCi/L				E903.0	04/25/16 08:11 / dmf
Radium 226 MDC	0.11	pCi/L				E903.0	04/25/16 08:11 / dmf
Thorium 230	0.06	pCi/L	U			E908.0	04/27/16 13:59 / cng
Thorium 230 precision (±)	0.1	pCi/L				E908.0	04/27/16 13:59 / cng
Thorium 230 MDC	0.2	pCi/L				E908.0	04/27/16 13:59 / cng
RADIONUCLIDES - SUSPENDED							
Radium 226	0.14	pCi/L	U			E903.0	04/26/16 08:26 / trs
Radium 226 precision (±)	0.14	pCi/L				E903.0	04/26/16 08:26 / trs
Radium 226 MDC	0.21	pCi/L				E903.0	04/26/16 08:26 / trs
Thorium 230	0.1	pCi/L	U			E908.0	04/27/16 09:28 / cng
Thorium 230 precision (±)	0.2	pCi/L				E908.0	04/27/16 09:28 / cng
Thorium 230 MDC	0.4	pCi/L				E908.0	04/27/16 09:28 / 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

Revised Date: 05/18/16
Report Date: 04/29/16
Work Order: C16040478

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: TDS160418C	
Lab ID: MB-1_160418C		Method Blank				Run: BAL-18_160418B			04/18/16 14:45	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	8						
Lab ID: LCS-2_160418C		Laboratory Control Sample				Run: BAL-18_160418B			04/18/16 14:45	
Solids, Total Dissolved TDS @ 180 C		1110	mg/L	11	100	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

Revised Date: 05/18/16

Client: Energy Fuels Resources (USA) Inc

Report Date: 04/29/16

Project: 2nd Quarter Surface Water 2016

Work Order: C16040478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS160419A
Lab ID: MB-1_160419A		Method Blank				Run: BAL-18_160419B				04/19/16 09:01
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.8						
Lab ID: LCS-2_160419A		Laboratory Control Sample				Run: BAL-18_160419B				04/19/16 09:02
Solids, Total Suspended TSS @ 105 C		92.0	mg/L	10	92	80	120			
Lab ID: C16040478-001ADUP		Sample Duplicate				Run: BAL-18_160419B				04/19/16 09:03
Solids, Total Suspended TSS @ 105 C		24.0	mg/L	10				4.1	5	

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

Revised Date: 05/18/16
Report Date: 04/29/16
Work Order: C16040478

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.8**									Analytical Run: ICPMS4-C_160422A	
Lab ID:	**ICV**		Initial Calibration Verification Standard							04/22/16 14:18	
Uranium			0.0485	mg/L	0.00030	97	90	110			
Method:	**E200.8**									Batch: 47294	
Lab ID:	**MB-47294**		Method Blank				Run: ICPMS4-C_160422A			04/23/16 15:51	
Uranium			0.0003	mg/L	3E-05						
Lab ID:	**LCS2-47294**		Laboratory Control Sample				Run: ICPMS4-C_160422A			04/23/16 15:58	
Uranium			0.0929	mg/L	0.00030	93	85	115			
Lab ID:	**C16040357-008AMS**		Sample Matrix Spike				Run: ICPMS4-C_160422A			04/23/16 18:14	
Uranium			0.0501	mg/filter	0.00030	99	70	130			
Lab ID:	**C16040357-008AMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160422A			04/23/16 18:21	
Uranium			0.0532	mg/filter	0.00030	105	70	130	6.0	20	
Method:	**E200.8**									Batch: R211056	
Lab ID:	**LRB**		Method Blank				Run: ICPMS4-C_160422A			04/22/16 15:20	
Uranium			ND	mg/L	4E-06						
Lab ID:	**LFB**		Laboratory Fortified Blank				Run: ICPMS4-C_160422A			04/22/16 15:26	
Uranium			0.0486	mg/L	0.00030	97	85	115			
Lab ID:	**C16040552-002BMS4**		Sample Matrix Spike				Run: ICPMS4-C_160422A			04/23/16 02:14	
Uranium			0.0578	mg/L	0.00030	114	70	130			
Lab ID:	**C16040552-002BMSD**		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160422A			04/23/16 02:20	
Uranium			0.0606	mg/L	0.00030	120	70	130	4.6	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

Revised Date: 05/18/16

Client: Energy Fuels Resources (USA) Inc

Report Date: 04/29/16

Project: 2nd Quarter Surface Water 2016

Work Order: C16040478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-2218
Lab ID: Th230-GrAB-2218		Laboratory Control Sample				Run: G5000W_160426B			04/28/16 14:31	
Gross Alpha		107	pCi/L		107	80	120			
Lab ID: MB-GrAB-2218	3	Method Blank				Run: G5000W_160426B			04/28/16 14:31	
Gross Alpha		-0.0007	pCi/L							U
Gross Alpha precision (±)		0.9	pCi/L							
Gross Alpha MDC		1	pCi/L							
Lab ID: C16040536-004AMS		Sample Matrix Spike				Run: G5000W_160426B			04/28/16 14:32	
Gross Alpha		777	pCi/L		-85	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD recoveries are acceptable, the response is considered to be matrix relate The batch is approved.										
Lab ID: C16040536-004AMSD		Sample Matrix Spike Duplicate				Run: G5000W_160426B			04/28/16 14:32	
Gross Alpha		717	pCi/L		-145	70	130	8.1	48.8	S
Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD recoveries are acceptable, the response is considered to be matrix relatec The batch is approved.										

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

Revised Date: 05/18/16
Report Date: 04/29/16
Work Order: C16040478

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 47294
Lab ID: C16040478-001DMS		Sample Matrix Spike				Run: BERTHOLD 770-1_160420A				04/26/16 08:26
Radium 226		13	pCi/L		87	70	130			
Lab ID: C16040478-001DMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-1_160420A				04/26/16 08:26
Radium 226		12	pCi/L		77	70	130	12	49.3	
Lab ID: LCS-47294		Laboratory Control Sample				Run: BERTHOLD 770-1_160420A				04/26/16 08:26
Radium 226		15.6	pCi/L		80	80	120			
Lab ID: MB-47294	3	Method Blank				Run: BERTHOLD 770-1_160420A				04/26/16 08:26
Radium 226		-0.03	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Method: E903.0										Batch: RA226-8064
Lab ID: LCS-RA226-8064		Laboratory Control Sample				Run: TENNELEC-3_160418B				04/25/16 08:11
Radium 226		9.2	pCi/L		88	80	120			
Lab ID: MB-RA226-8064	3	Method Blank				Run: TENNELEC-3_160418B				04/25/16 08:11
Radium 226		0.1	pCi/L							
Radium 226 precision (±)		0.08	pCi/L							
Radium 226 MDC		0.1	pCi/L							
Lab ID: C16040478-001CMS		Sample Matrix Spike				Run: TENNELEC-3_160418B				04/25/16 08:11
Radium 226		19	pCi/L		87	70	130			
Lab ID: C16040478-001CMSD		Sample Matrix Spike Duplicate				Run: TENNELEC-3_160418B				04/25/16 08:11
Radium 226		19	pCi/L		86	70	130	1.9	48.9	

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

Revised Date: 05/18/16
Report Date: 04/29/16
Work Order: C16040478

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 47294
Lab ID: LCS-47294		Laboratory Control Sample				Run: EGG-ORTEC_160425A				04/27/16 09:28
Thorium 230		22	pCi/L		91	80	120			
Lab ID: LCS-47294DUP		Laboratory Control Sample Duplicate				Run: EGG-ORTEC_160425A				04/27/16 09:28
Thorium 230		22	pCi/L		86	80	120	1.5	20	
Lab ID: MB-47294	3	Method Blank				Run: EGG-ORTEC_160425A				04/27/16 09:28
Thorium 230		0.3	pCi/L							U
Thorium 230 precision (±)		0.3	pCi/L							
Thorium 230 MDC		0.4	pCi/L							
Method: E908.0										Batch: RA-TH-ISO-2409
Lab ID: LCS-RA-TH-ISO-2409		Laboratory Control Sample				Run: EGG-ORTEC_160425C				04/27/16 09:29
Thorium 230		5.1	pCi/L		87	80	120			
Lab ID: C16040433-002DMS		Sample Matrix Spike				Run: EGG-ORTEC_160425C				04/27/16 13:59
Thorium 230		8.9	pCi/L		77	70	130			
Lab ID: C16040433-002DMSD		Sample Matrix Spike Duplicate				Run: EGG-ORTEC_160425C				04/27/16 13:59
Thorium 230		11	pCi/L		98	70	130	24	48	
Lab ID: MB-RA-TH-ISO-2409	3	Method Blank				Run: EGG-ORTEC_160425C				04/28/16 12:34
Thorium 230		0.06	pCi/L							U
Thorium 230 precision (±)		0.10	pCi/L							
Thorium 230 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

Revised Date: 05/18/16
Report Date: 04/29/16
Work Order: C16040478

Client: Energy Fuels Resources (USA) Inc
Project: 2nd Quarter Surface Water 2016

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Analytical Run: ICPMS4-C_160422A	
Lab ID: ICV		Initial Calibration Verification Standard							04/22/16 14:18	
Uranium		0.0485	mg/L	0.00030	97	90	110			
Method: SW6020									Batch: 47294	
Lab ID: MB-47294		Method Blank				Run: ICPMS4-C_160422A			04/23/16 15:51	
Uranium		0.0003	mg/L	3E-05						
Lab ID: LCS2-47294		Laboratory Control Sample				Run: ICPMS4-C_160422A			04/23/16 15:58	
Uranium		0.0929	mg/L	8.5E-06	93	85	115			
Lab ID: C16040249-001ADIL		Serial Dilution				Run: ICPMS4-C_160422A			04/23/16 16:44	
Uranium		3.92E-11	mg/L	1.5E-10					20	
Lab ID: C16040357-008AMS4		Sample Matrix Spike				Run: ICPMS4-C_160422A			04/23/16 18:14	
Uranium		0.050	mg/filter	0.00030	99	75	125			
Lab ID: C16040357-008AMSD		Sample Matrix Spike Duplicate				Run: ICPMS4-C_160422A			04/23/16 18:21	
Uranium		0.053	mg/filter	0.00030	105	75	125	6.0	20	
Lab ID: MB-47294		Method Blank				Run: ICPMS4-C_160422A			04/23/16 15:51	
Uranium		ND	mg/L	3E-05						
Lab ID: LCS2-47294		Laboratory Control Sample				Run: ICPMS4-C_160422A			04/23/16 15:58	
Uranium		0.093	mg/filter	0.00030	93	70	130			
Lab ID: C16040249-001ADIL		Serial Dilution				Run: ICPMS4-C_160422A			04/23/16 16:44	
Uranium		ND	mg/L	0.00030		0	0		10	
Method: SW6020									Batch: R211056	
Lab ID: LRB		Method Blank				Run: ICPMS4-C_160422A			04/22/16 15:20	
Uranium		ND	mg/L	4E-06						
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS4-C_160422A			04/22/16 15:26	
Uranium		0.0486	mg/L	0.00030	97	85	115			

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

C16040478

Login completed by: Ralph Stanley
Reviewed by: BL2000\dblaida
Reviewed Date: 4/18/2016

Date Received: 4/15/2016
Received by: res
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 ☐	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
2nd Quarter Surface Water 2016	Garrin Palmer	Garrin Palmer

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
~~Westwater Creek~~	4/14/2016	800	TDS
Cottonwood Creek			TSS
			Dissolved Gross Alpha
			Suspended U-nat
			Dissolved U-nat
			Suspended Ra-226
			Dissolved Ra-226
			Suspended Th-230
			Dissolved Th-230
			*Samples are non filtered and non preserved.

Comments: Samples are non filtered and non preserved.

Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
Garrin Palmer Garrin Palmer	4/14/2016 1230		
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time
		Ralph Stanley	4/15/16 11:41

Temp = 1.4
IR-7
on ice
cooler seals

QP2-NDA
RT-N

C16040478

Page 12 of 12

Attachment A

FIELD WATER ANALYSIS SURFACE WATER
WHITE MESA MILL

LOCATION (Circle one): Cottonwood Creek Westwater Canyon Other (describe) _____

DATE: 4-14-16 BY: GP (Sampler's initials)

pH BUFFER 7.0 7.0 pH BUFFER 4.0 4.0

SPECIFIC CONDUCTIVITY 1000 µMHOs

STEAM DEPTH: NA

pH of WATER NA TEMP NA

COND µmhos _____ COND µmhos _____

pH Units _____ pH units _____

Temp °C _____ Temp °C _____

COND µmhos _____ COND µmhos _____

pH units _____ pH units _____

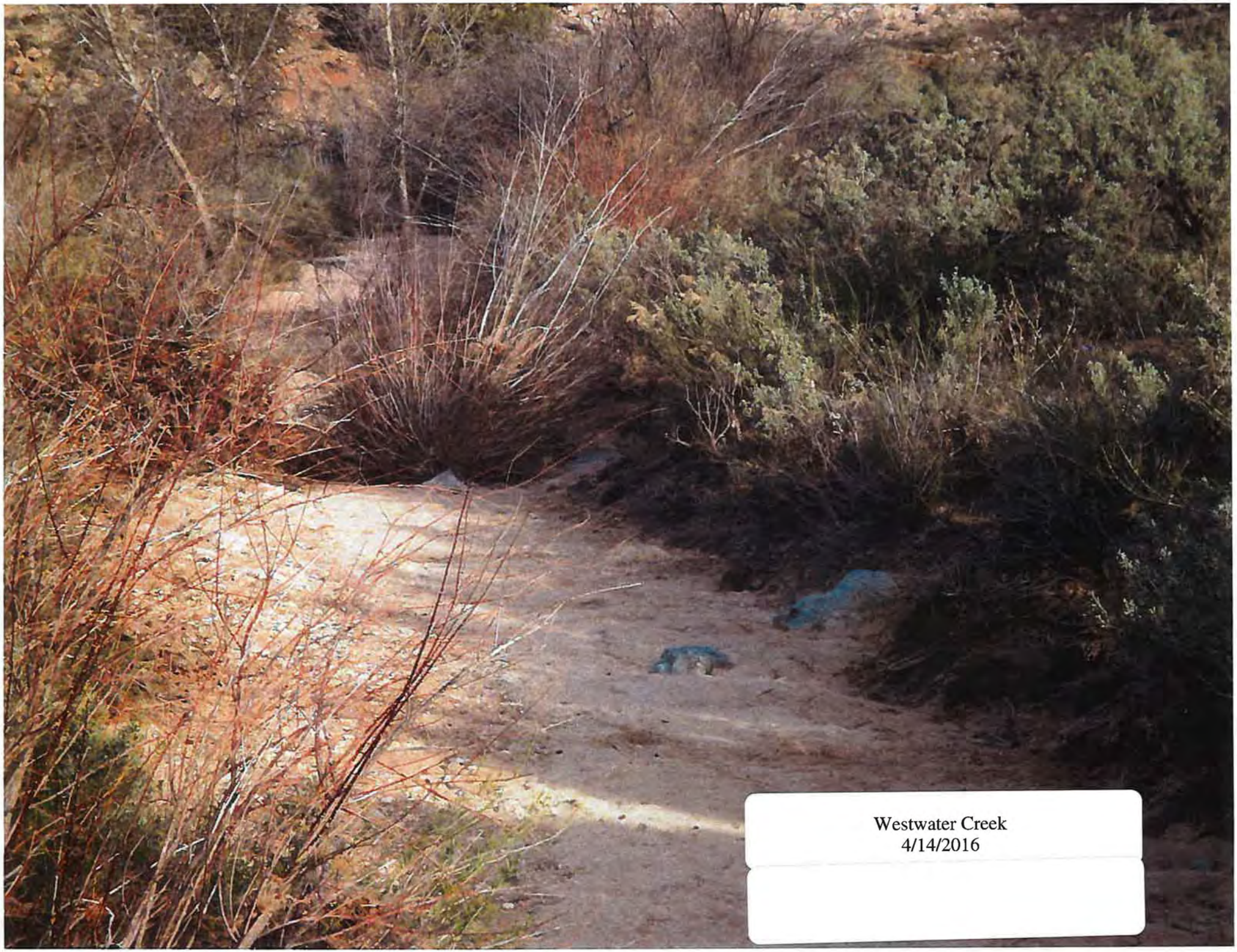
Temp °C _____ Temp °C _____

Comments:

Arrived on site at 0830. Creek was Dry. (See photo)

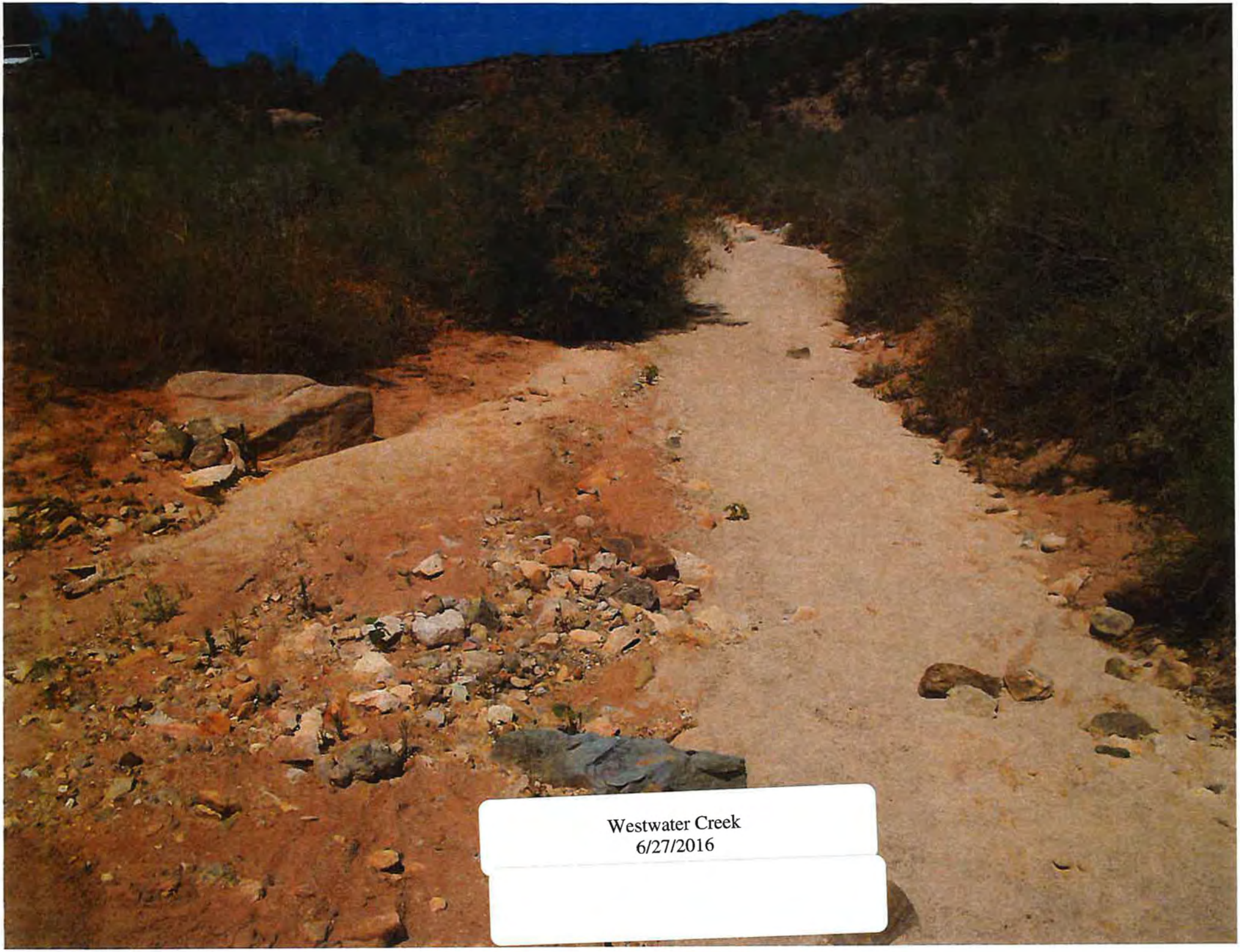
6/12/16 - Arrived on site at 1200. Creek was Dry. (See photo)

6/27/16 - Arrived on site at 1215. Creek was Dry. (See photo)



Westwater Creek
4/14/2016

Westwater Creek
6/12/2016


Westwater Creek
6/27/2016

ATTACHMENT I

SOIL SAMPLE GRAPHS, DATA TABLE, LABORATORY RESULTS AND QA/QC

*Soil samples are collected during the third quarter. This attachment has been deliberately left blank.

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
4/4/2016	0.0	0.71	0.1	0.34	0.2	0	0.5	0.7	1.43	0.1	0.83	0	1.12	0	0.71
7/5/2016	0.1	0.71	0.0	0.34	0.07	0	0.5	0.23	1.43	0	0.83	0	1.12	0	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.

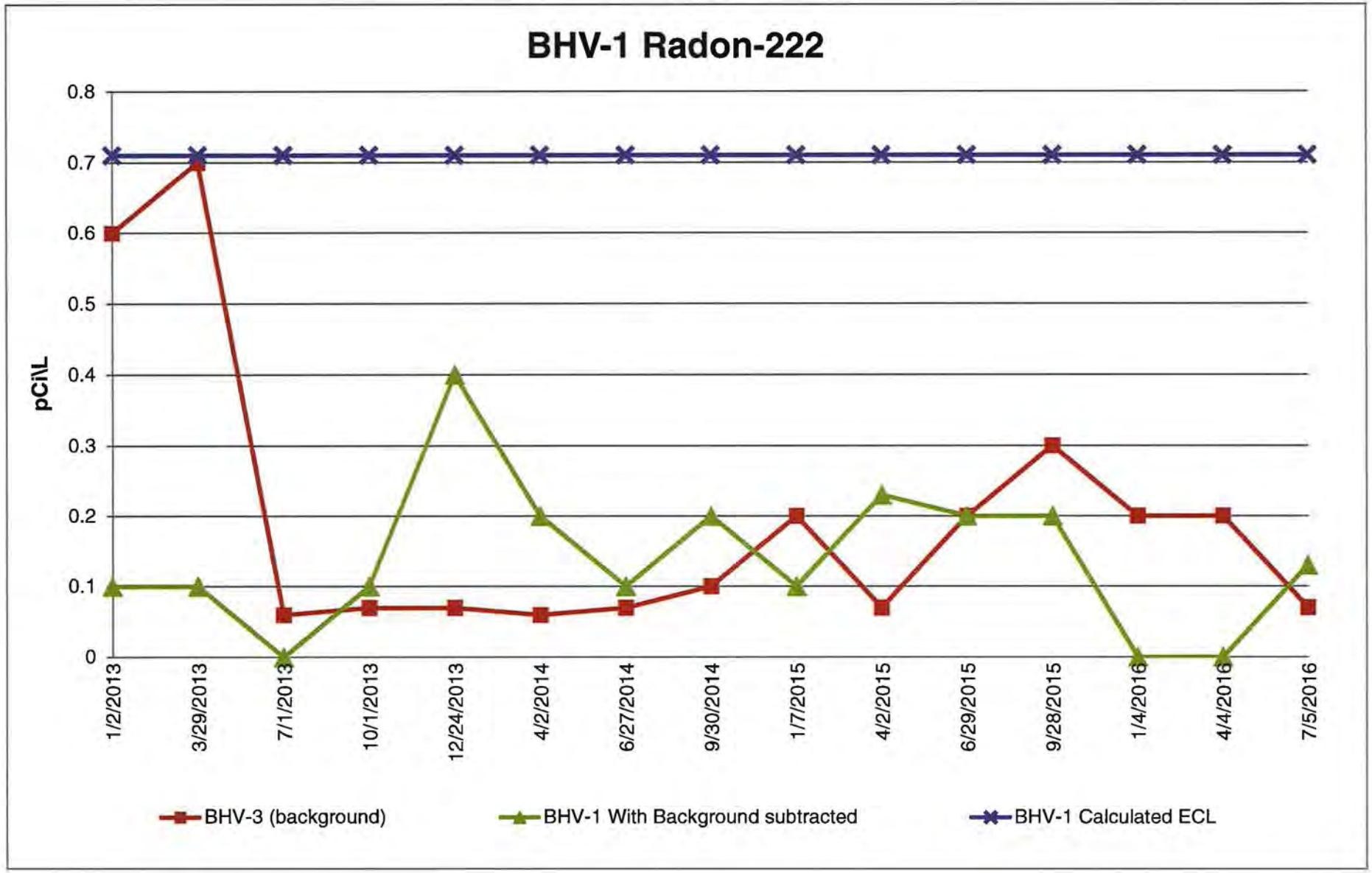
NA - Not Available - the canister was damaged. No data reported.

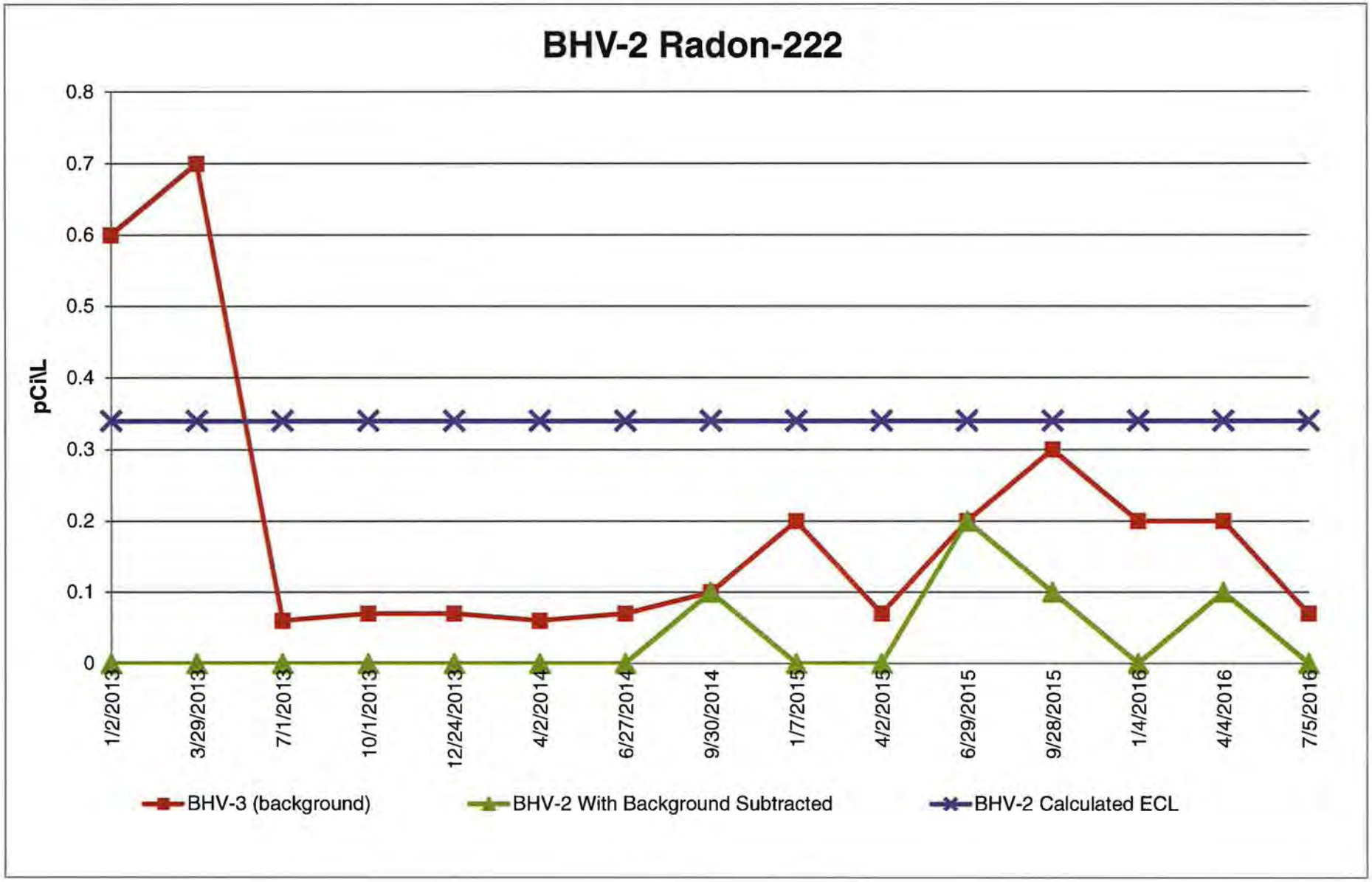
NS - Not Sampled - EFRI installed and began radon sampling at BHV-7 and BHV-8 in the fourth quarter of 2014.

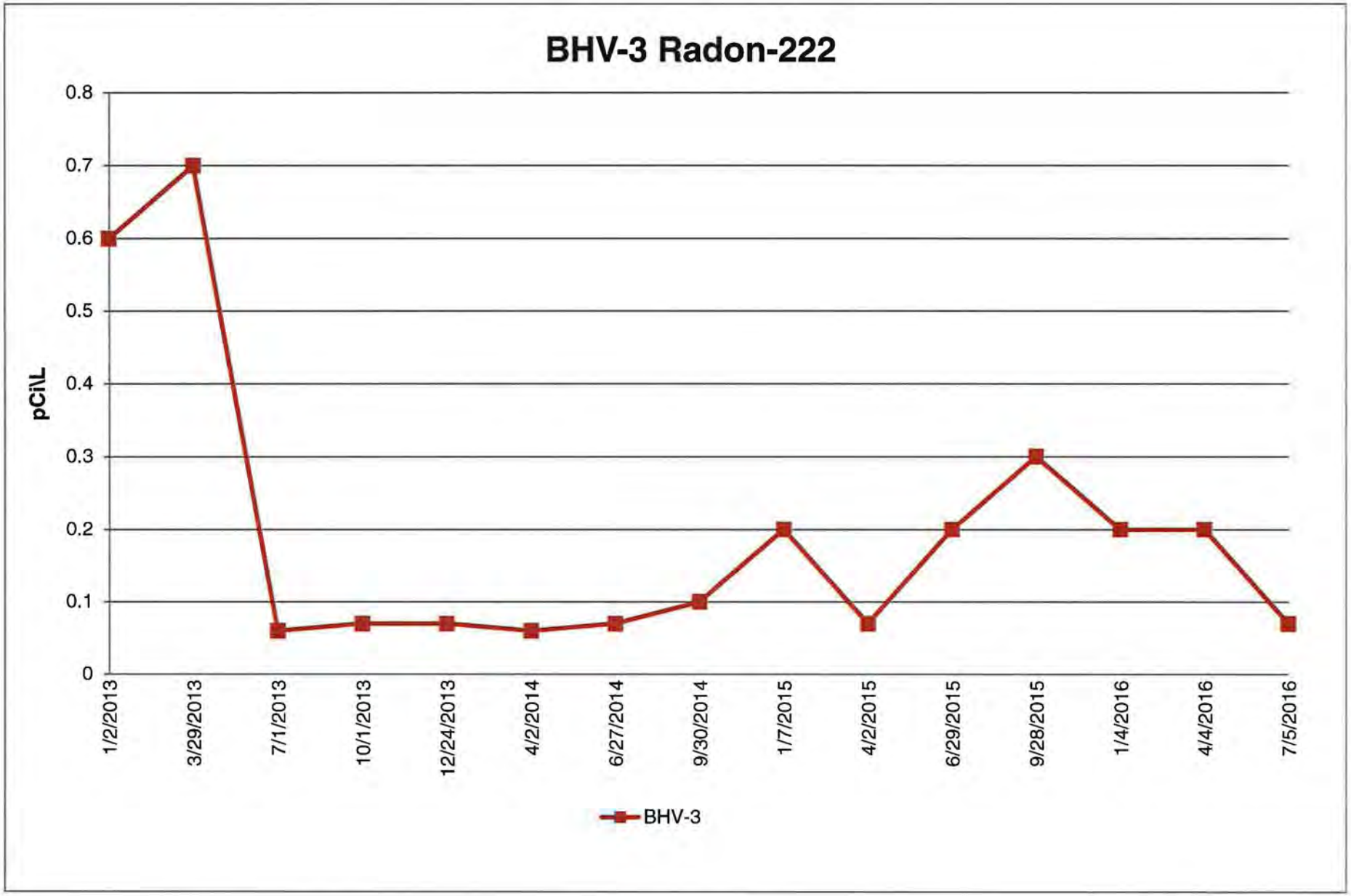
White Mesa Mill Radon Sampling

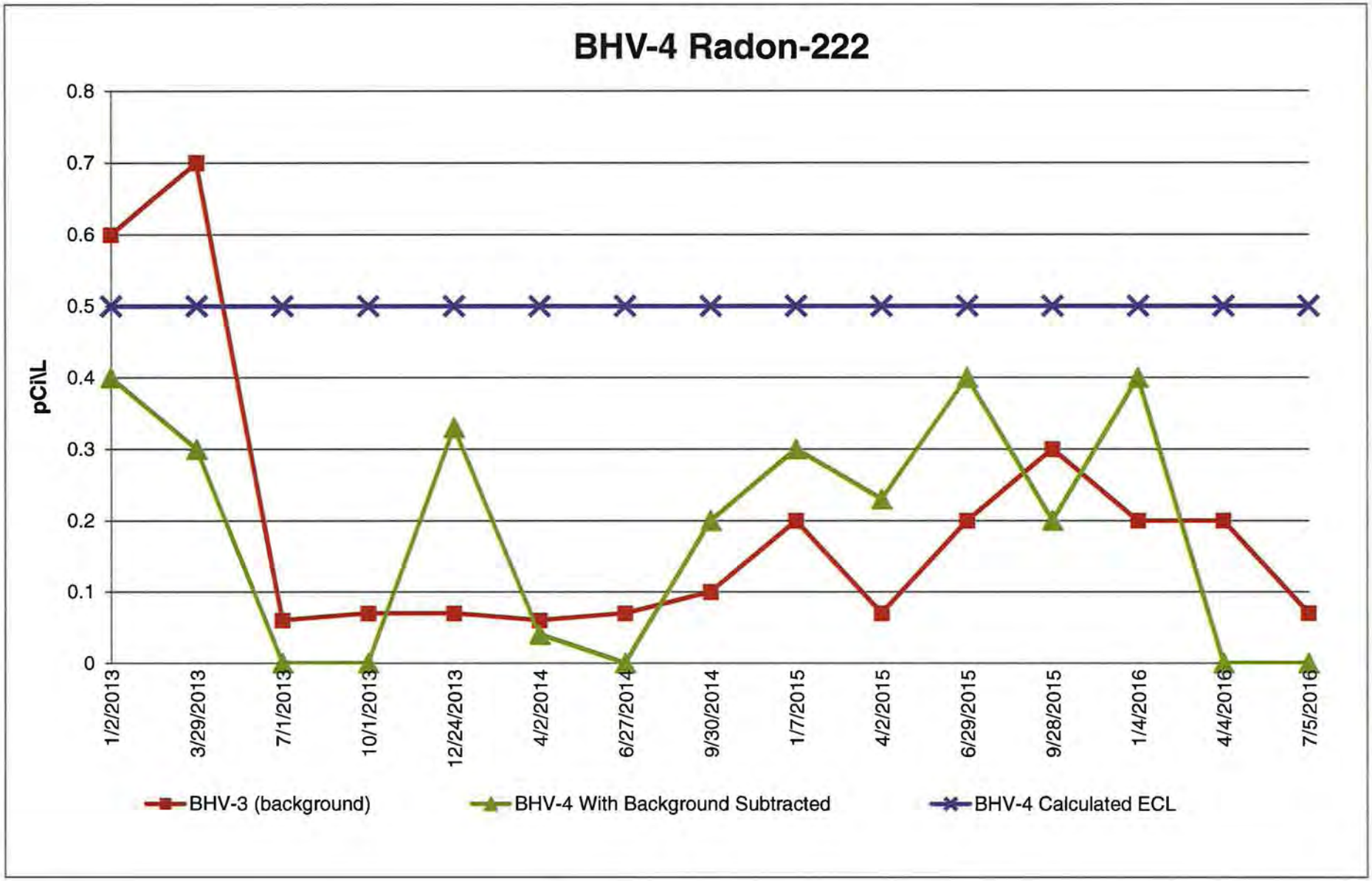
Quarterly Field Blank Results

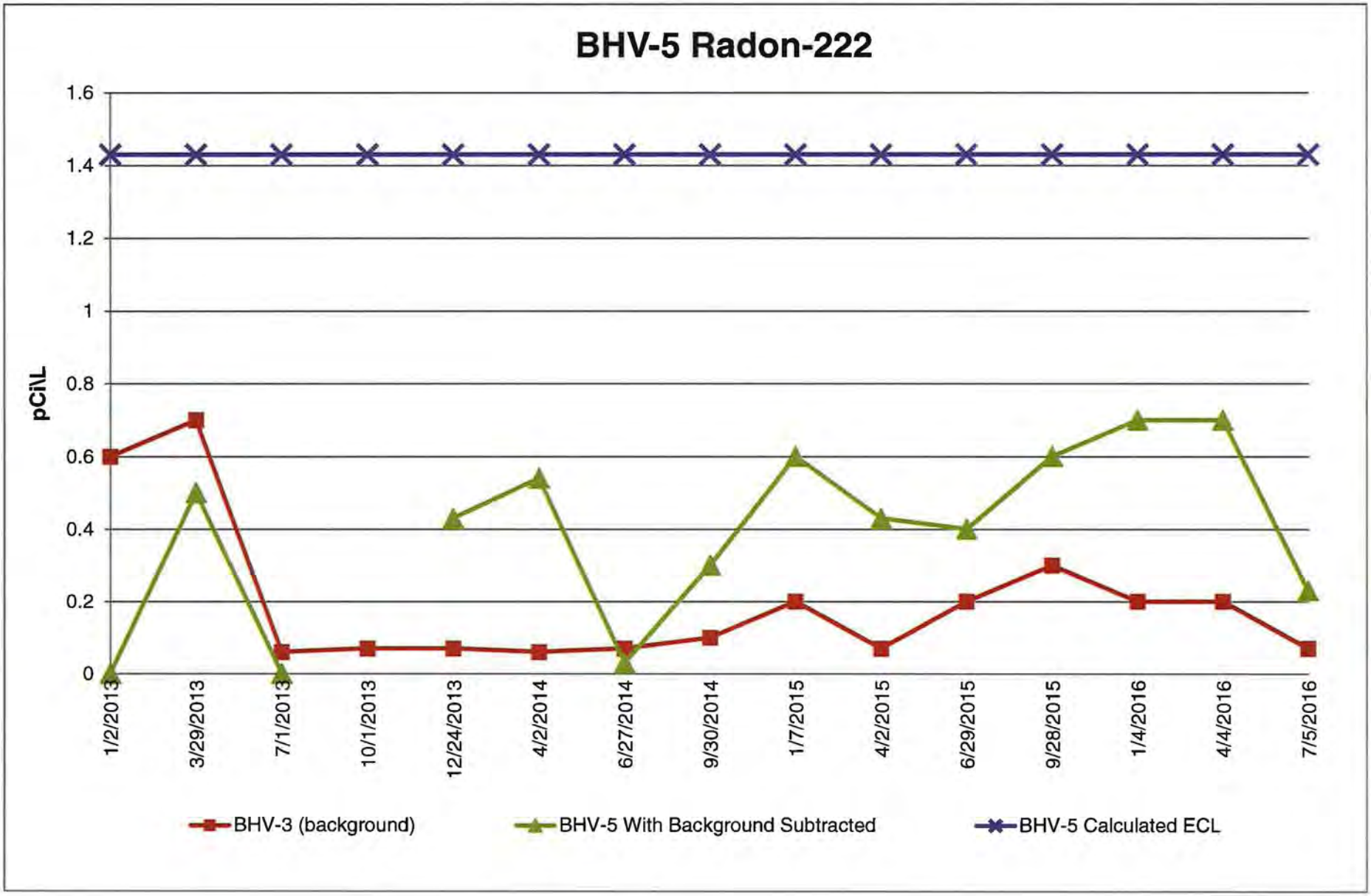
Date	Field Blank (pCi/L)
1/2/2013	2.4
3/29/2013	1.4
7/1/2013	0.7
10/1/2013	0.3
12/24/2013	0.7
4/2/2014	1.6
6/27/2014	1.1
9/30/2014	0.8
1/7/2015	1.4
4/2/2015	1.0
6/29/2015	1.7
9/28/2015	1.5
1/4/2016	1.8
4/4/2016	2.0
7/5/2016	1.1

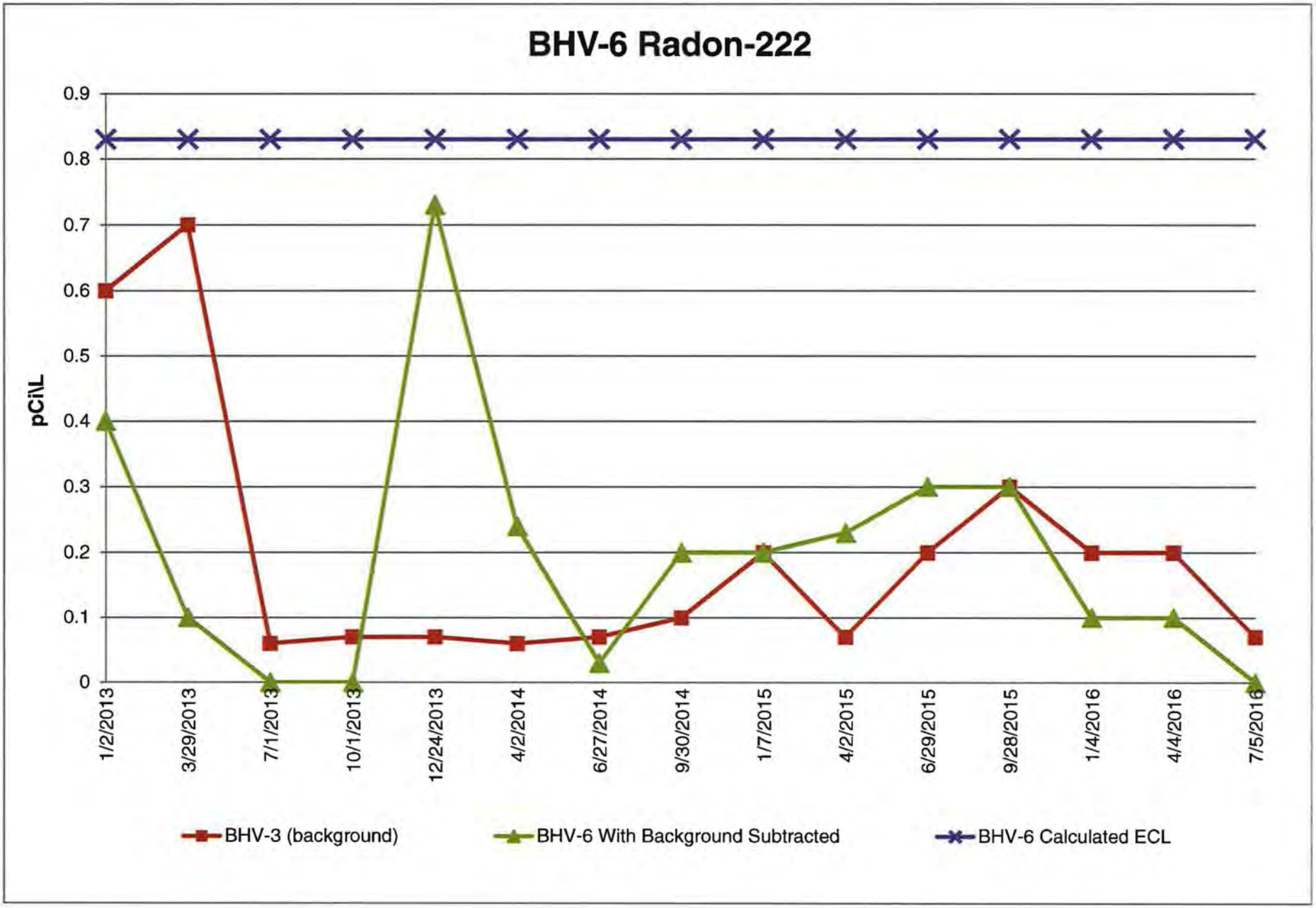

BHV-1 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
4/4/2016
7/5/2016
BHV-3 (background)
BHV-1 With Background subtracted
BHV-1 Calculated ECL

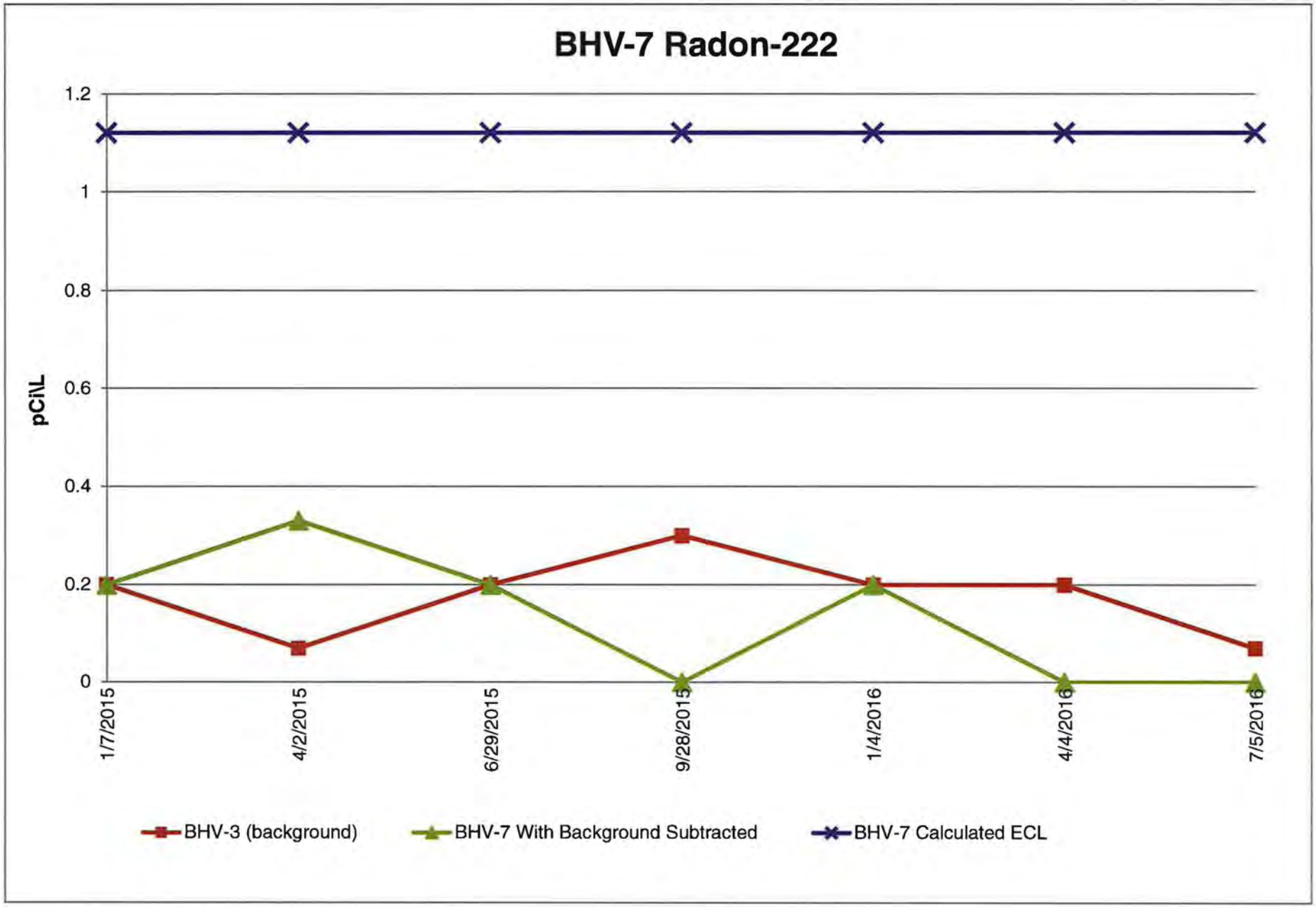

BHV-2 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
4/4/2016
7/5/2016
BHV-3 (background)
BHV-2 With Background Subtracted
BHV-2 Calculated ECL

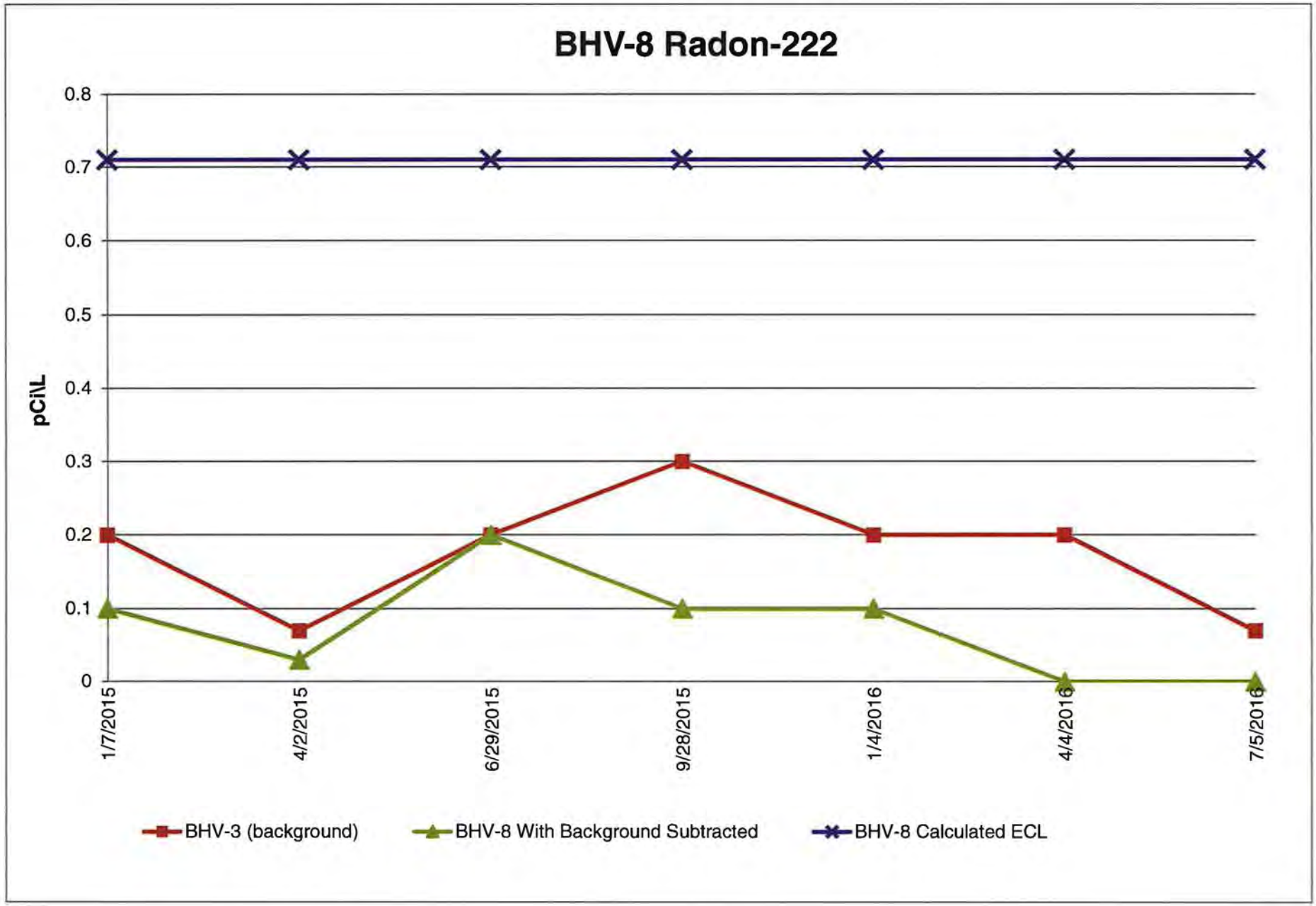

BHV-3 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/2/2013
3/29/2013
7/1/2013
10/1/2013
12/24/2013
4/2/2014
6/27/2014
9/30/2014
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
4/4/2016
7/5/2016
BHV-3


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
4/4/2016
7/5/2016
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
4/4/2016
7/5/2016
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
4/4/2016
7/5/2016
BHV-3 (background)
BHV-6 With Background Subtracted
BHV-6 Calculated ECL


BHV-7 Radon-222
pCi\L
1.2
1
0.8
0.6
0.4
0.2
0
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
4/4/2016
7/5/2016
BHV-3 (background)
BHV-7 With Background Subtracted
BHV-7 Calculated ECL


BHV-8 Radon-222
pCi\L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1/7/2015
4/2/2015
6/29/2015
9/28/2015
1/4/2016
4/4/2016
7/5/2016
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

Cell 2
2016 Radon Flux Measurement Program

White Mesa Mill
6425 South Highway 191
Blanding, Utah 84511

March 2016 Sampling Results

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 March 14-15, 2016 Tellco Environmental, LLC (Tellco) of Grand Junction, Colorado, provided support to Energy Fuels Resources (USA) Inc. (Energy Fuels) to conduct radon flux measurements on Cell2 at its White Mesa Mill site.

Pursuant to Utah Department of Environmental Quality (UDEQ) requirements, Energy Fuels conducts radon flux measurements on a semiannual basis.

This report presents the radon flux measurements results for Cell 2 that represent the first half of the year 2016. 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.

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. There was no standing liquid and were no apparent exposed tailings within Cell 2 during this sampling.

3. REGULATORY REQUIREMENTS FOR CELL 2

Radon emissions from the uranium mill tailings at this site are regulated by the State of Utah's Division of Waste Management and Radiation Control (DWMRC). In accordance with DWMRC requirements specified in correspondence dated July 23, 2014, Energy Fuels must measure the radon flux on Cell 2 in accordance with 40 CFR 61, Appendix B, Method 115, "Monitoring for Radon-222 Emissions" (2013) semiannually. The average annual measured radon flux for Cell 2 shall not exceed a value of 20 picoCuries per meter squared per second (pCi/m^2-s).

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 sample 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 March 14, 2016, 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., A01…A100). 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 March 15, 2016 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.

The charcoal from one of the samples (A22) was evidently spilled during the retrieval process (see Section 6.2 below). The remaining 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 32 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.
- Acculab Model V1-1200 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. During sample weighing, the container for sample A22 was found to have only about half of the charcoal media present and that sample was deemed void.

The remaining 99 sample containers and 5 blank containers 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 0.05 to 0.11 pCi/m^2-s, with an average of approximately 0.07 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 9.0 percent with an average precision of approximately 3.2 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 -0.3 percent to +2.4 percent. The arithmetic average bias of the lab control sample measurements was approximately +1.1 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:

$$\text{Error}, 2\sigma = 2 \times \frac{\sqrt{\dfrac{\text{Gross Sample, cpm}}{\text{Sample Count, t, min}} + \dfrac{\text{Background Sample, cpm}}{\text{Background Count, t, min}}}}{\text{Net, cpm}} \times \text{Sample Concentration}$$

Equation 8.3:

$$\text{LLD} = \frac{2.71 + (4.65)(S_b)}{[Ts*A*b*0.5^{(d/91.75)}]}$$

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 = 4.1 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 = 4.1 pCi/m^2-s

$$\frac{(4.1)(270{,}624)}{270{,}624} = 4.1$$

As shown above, the arithmetic mean of the radon flux rate measurements representing the first half of the year 2016 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 2016.

Figure 1

Large Area Activated Charcoal Canisters Diagram

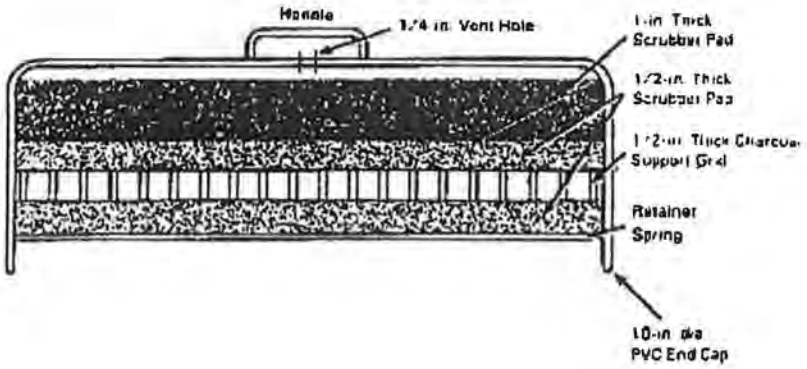


FIGURE 1 Large-Area Radon Collector

Appendix A

Charcoal Canister Analyses Support Documents

ACCURACY APPRAISAL TABLE
MARCH 2016

ENERGY FUELS RESOURCES
WHITE MESA MILL, BLANDING, UTAH
2016 NESHAPs RADON FLUX MEASUREMENTS
CELL 2
SAMPLING DATES: 03/14/16-03/15/16

SYSTEM I.D.	COUNT DATE	Bkg Counts (1 min. each) #1	#2	#3	Source Counts (1 min. each) #1	#2	#3	AVG NET cpm	YIELD cpm/pCi	FOUND pCi	SOURCE ID	KNOWN pCi	% BIAS
M-01/D-21	3/18/2016	122	153	141	10336	10294	10370	10195	0.1697	60075	GS-04	59300	1.3%
M-01/D-21	3/18/2016	135	142	131	10457	10490	10362	10300	0.1697	60697	GS-04	59300	2.4%
M-01/D-21	3/19/2016	117	123	140	10200	10333	10222	10125	0.1697	59664	GS-04	59300	0.6%
M-01/D-21	3/19/2016	118	123	129	10365	10442	10337	10258	0.1697	60448	GS-04	59300	1.9%
M-01/D-21	3/18/2016	122	153	141	10168	10235	10100	10029	0.1697	59098	GS-05	59300	-0.3%
M-01/D-21	3/18/2016	135	142	131	10182	10109	10241	10041	0.1697	59171	GS-05	59300	-0.2%
M-01/D-21	3/19/2016	117	123	140	10165	10315	9988	10029	0.1697	59100	GS-05	59300	-0.3%
M-01/D-21	3/19/2016	118	123	129	10107	10271	10167	10058	0.1697	59271	GS-05	59300	0.0%
M-02/D-20	3/18/2016	117	132	113	10479	10331	10511	10320	0.1711	60314	GS-04	59300	1.7%
M-02/D-20	3/18/2016	122	131	138	10514	10233	10321	10226	0.1711	59764	GS-04	59300	0.8%
M-02/D-20	3/19/2016	129	123	130	10466	10446	10292	10274	0.1711	60047	GS-04	59300	1.3%
M-02/D-20	3/19/2016	139	133	119	10519	10218	10461	10269	0.1711	60018	GS-04	59300	1.2%
M-02/D-20	3/18/2016	117	132	113	10482	10499	10510	10376	0.1711	60645	GS-05	59300	2.3%
M-02/D-20	3/18/2016	122	131	138	10537	10489	10441	10359	0.1711	60542	GS-05	59300	2.1%
M-02/D-20	3/19/2016	129	123	130	10533	10482	10477	10370	0.1711	60608	GS-05	59300	2.2%
M-02/D-20	3/19/2016	139	133	119	10431	10484	10399	10308	0.1711	60244	GS-05	59300	1.6%
								AVERAGE PERCENT BIAS FOR ALL ANALYTICAL SESSIONS:					1.1%

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: 041533 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3 Kpci

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 Cog

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
Pre	3/18/16	DLC	122	153	141	139	10336	10294	10370	10333	Y
Post	3/18/16	DLC	135	142	131	136	10457	10490	10362	10436	Y
Pre	3/19/16	DLC	117	123	140	127	10200	10333	10222	10252	Y
Post	3/19/16	DLC	118	123	129	123	10365	10442	10337	10381	Y
Pre	3/20/16	DLC	147	126	123	132	10344	10353	10273	10323	Y
Post	3/20/16	DLC	129	132	128	130	10337	10430	10389	10385	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: 041533 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3Kp Ci

Blank Canister Bkgd. Range, cpm: 2 σ = 92 to 167 3 σ = 74 to 186

Gross Source Range, cpm: 2 σ = 9825 to 10511 3 σ = 9654 to 10681

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
Pre	3/18/16	DLC	122	153	141	139	10168	10235	10100	10168	Y
Post	3/18/16	DLC	135	142	131	136	10182	10109	10241	10177	Y
Pre	3/19/16	DLC	117	123	140	127	10165	10315	9988	10156	Y
Post	3/19/16	DLC	118	123	129	123	10107	10271	10167	10182	Y
Pre	3/20/16	DLC	147	126	123	132	10028	10279	10189	10165	Y
Post	3/20/16	DLC	111	132	128	130	10229	10199	10183	10204	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: 041532 Source ID/SN: Ra^{226}/GS-04 Source Activity: 59.3Kpd

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 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
Pre	3/18/16	DLC	117	132	113	121	10479	10331	10511	10440	Y
Post	3/18/16	DLC	122	131	138	130	10514	10233	10321	10356	Y
Pre	3/19/16	DLC	129	123	130	127	10466	10446	10292	10401	Y
Post	3/19/16	DLC	139	133	119	130	10519	10218	10461	10399	Y
Pre	3/20/16	DLC	134	136	157	142	10267	10507	10131	10302	Y
Post	3/20/16	DLC	111	154	152	139	10306	10303	10364	10324	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: 041532 Source ID/SN: Ra^{226}/GS-05 Source Activity: 59.3 KpC

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: DLCoop

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
Pre	3/18/16	DLC	117	132	113	121	10482	10449	10510	10497	Y
Post	3/18/16	DLC	122	131	138	130	10537	10489	10441	10489	Y
Pre	3/19/16	DLC	129	123	130	127	10533	10482	10477	10497	Y
Post	3/19/16	DLC	139	133	119	130	10431	10484	10399	10438	Y
Pre	3/20/16	DLC	134	136	157	142	10273	10555	10389	10406	Y
Post	3/20/16	DLC	111	154	152	139	10375	10483	10530	10463	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: Acculab VI-1200

Standard Weight (g): 300.0 grams

Date	Pre-check (g)	Post-check (g)	O.K. ± 0.1 % ?	By
3/18/16	299.8	300.0	Yes	DLCoy
3/19/16	299.9	299.9	yes	DLCoy
3/20/16	300.0	300.0	yes	DLCoy

Appendix B

Recount Data Analyses

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 16004.01

PILE: 2 BATCH: A SURFACE: SOIL AIR TEMP MIN: 32°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 3 14 16 RETRIEVED: 3 15 16 CHARCOAL BKG: 148 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.	HR	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	PRECISION % RPD
A10	A10	7	48	7	44	3	18	16	18	3	4	1066	223.3	0.3	0.1	0.05	
RECOUNT	A10	7	48	7	44	3	19	16	14	59	5	1083	223.3	0.2	0.1	0.06	40.0%
A20	A20	8	4	7	59	3	18	16	18	14	1	4989	220.9	12.7	1.3	0.05	
RECOUNT	A20	8	4	7	59	3	19	16	14	56	1	4291	220.9	12.8	1.3	0.06	0.8%
A30	A30	7	48	7	44	3	18	16	18	34	1	1223	221.9	2.9	0.3	0.05	
RECOUNT	A30	7	48	7	44	3	19	16	15	3	1	1019	221.9	2.7	0.3	0.06	7.1%
A40	A40	8	4	7	49	3	18	16	18	44	2	1004	223.9	1.0	0.1	0.05	
RECOUNT	A40	8	4	7	49	3	19	16	15	5	3	1355	223.9	1.0	0.1	0.06	0.0%
A50	A50	7	48	7	44	3	18	16	18	59	2	1121	216.6	1.1	0.1	0.05	
RECOUNT	A50	7	48	7	44	3	19	16	15	9	3	1492	216.6	1.1	0.1	0.06	0.0%
A60	A60	8	4	7	49	3	18	16	19	13	1	1340	218.6	3.2	0.3	0.05	
RECOUNT	A60	8	4	7	49	3	19	16	15	7	1	1254	218.6	3.5	0.4	0.06	9.0%
A70	A70	8	24	8	5	3	18	16	19	29	2	1556	220.5	1.7	0.2	0.05	
RECOUNT	A70	8	24	8	5	3	19	16	15	12	2	1436	220.5	1.8	0.2	0.06	5.7%
A80	A80	8	15	8	5	3	18	16	19	45	1	1203	215.8	2.8	0.3	0.05	
RECOUNT	A80	8	15	8	5	3	19	16	15	11	1	1060	215.8	2.8	0.3	0.06	0.0%
A90	A90	8	13	8	1	3	18	16	19	57	4	1049	216.7	0.3	0.1	0.05	
RECOUNT	A90	8	13	8	1	3	19	16	15	16	5	1061	216.7	0.2	0.1	0.06	40.0%
A100	A100	8	31	8	9	3	18	16	20	15	4	1132	219.9	0.4	0.1	0.05	
RECOUNT	A100	8	31	8	9	3	19	16	15	16	4	1025	219.9	0.4	0.1	0.06	0.0%

AVERAGE PERCENT PRECISION FOR THE CELL 2 COVER REGION: 10.3%

Appendix C

Radon Flux Sample Laboratory Data (including Blanks)

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 16004.01

PILE: 2 BATCH: A SURFACE: SOIL AIR TEMP MIN: 32°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 3 14 16 RETRIEVED: 3 15 16 CHARCOAL BKG: 148 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:
A01	A01	7	35	7	40	3	18	16	17	45	1	2715	222.5	6.8	0.7	0.05	
A02	A02	7	36	7	40	3	18	16	17	47	4	1164	220.4	0.4	0.1	0.05	
A03	A03	7	38	7	41	3	18	16	17	51	3	1128	223.3	0.6	0.1	0.05	
A04	A04	7	39	7	41	3	18	16	17	51	3	1133	219.9	0.6	0.1	0.05	
A05	A05	7	41	7	42	3	18	16	17	55	4	1111	223.0	0.3	0.1	0.05	
A06	A06	7	42	7	42	3	18	16	17	55	3	1016	214.9	0.5	0.1	0.05	
A07	A07	7	44	7	43	3	18	16	17	57	3	1001	218.0	0.5	0.1	0.05	
A08	A08	7	45	7	43	3	18	16	17	56	1	1967	219.2	4.8	0.5	0.05	
A09	A09	7	47	7	44	3	18	16	18	1	1	1093	218.6	2.5	0.3	0.05	
A10	A10	7	48	7	44	3	18	16	18	3	4	1066	223.3	0.3	0.1	0.05	
A11	A11	7	50	7	45	3	18	16	18	6	1	1732	220.8	4.2	0.4	0.05	
A12	A12	7	51	7	45	3	18	16	18	6	1	1457	221.6	3.4	0.3	0.05	
A13	A13	7	53	7	46	3	18	16	18	9	3	1231	223.1	0.7	0.1	0.05	
A14	A14	7	54	7	46	3	18	16	18	8	1	5869	220.1	15.1	1.5	0.05	
A15	A15	7	56	7	57	3	18	16	18	11	1	1869	223.1	4.5	0.5	0.05	
A16	A16	7	57	7	57	3	18	16	18	11	1	1141	221.7	2.6	0.3	0.05	
A17	A17	7	59	7	58	3	18	16	18	13	1	1010	222.4	2.3	0.2	0.05	
A18	A18	8	0	7	58	3	18	16	18	13	1	1720	222.0	4.1	0.4	0.05	
A19	A19	8	2	7	59	3	18	16	18	15	2	1726	218.6	1.9	0.2	0.05	
A20	A20	8	4	7	59	3	18	16	18	14	1	4989	220.9	12.7	1.3	0.05	
A21	A21	7	35	7	40	3	18	16	18	20	6	1033	217.5	0.1	0.0	0.05	
A22	A22	7	36	7	40						SAMPLE VOID - CHARCOAL SPILLED						VOID
A23	A23	7	38	7	41	3	18	16	18	26	5	1181	221.1	0.2	0.0	0.05	
A24	A24	7	39	7	41	3	18	16	18	24	2	1111	218.8	1.1	0.1	0.05	
A25	A25	7	41	7	42	3	18	16	18	30	1	3044	224.2	7.7	0.8	0.05	
A26	A26	7	42	7	42	3	18	16	18	30	1	1610	222.6	3.8	0.4	0.05	
A27	A27	7	44	7	43	3	18	16	18	32	2	1464	225.8	1.6	0.2	0.05	
A28	A28	7	45	7	43	3	18	16	18	32	2	1254	221.8	1.3	0.1	0.05	
A29	A29	7	47	7	44	3	18	16	18	34	1	1550	221.7	3.7	0.4	0.05	
A30	A30	7	48	7	44	3	18	16	18	34	1	1223	221.9	2.8	0.3	0.05	
A31	A31	7	50	7	45	3	18	16	18	35	1	3707	217.2	9.5	0.9	0.05	
A32	A32	7	51	7	45	3	18	16	18	35	1	1213	217.8	2.8	0.3	0.05	
A33	A33	7	53	7	46	3	18	16	18	37	1	1679	218.2	4.1	0.4	0.05	
A34	A34	7	54	7	46	3	18	16	18	37	1	2634	218.0	6.6	0.7	0.05	
A35	A35	7	56	7	47	3	18	16	18	39	2	1036	215.5	1.0	0.1	0.05	
A36	A36	7	57	7	47	3	18	16	18	38	1	1682	219.2	4.1	0.4	0.05	
A37	A37	7	59	7	48	3	18	16	18	41	1	1154	221.3	2.7	0.3	0.05	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 16004.01

PILE: 2 BATCH: A SURFACE: SOIL AIR TEMP MIN: 32°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 3 14 16 RETRIEVED: 3 15 16 CHARCOAL BKG: 148 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:
A38	A38	8	0	7	48	3	18	16	18	42	2	1705	217.0	1.9	0.2	0.05	
A39	A39	8	2	7	49	3	18	16	18	43	1	5432	220.0	14.1	1.4	0.05	
A40	A40	8	4	7	49	3	18	16	18	44	2	1004	223.9	0.9	0.1	0.05	
A41	A41	7	35	7	40	3	18	16	18	48	3	1414	220.4	0.9	0.1	0.05	
A42	A42	7	36	7	40	3	18	16	18	47	1	1012	216.0	2.3	0.2	0.05	
A43	A43	7	38	7	41	3	18	16	18	52	5	1019	215.9	0.1	0.0	0.05	
A44	A44	7	39	7	41	3	18	16	18	52	4	1203	220.6	0.4	0.1	0.05	
A45	A45	7	41	7	42	3	18	16	18	54	1	5416	217.0	14.0	1.4	0.05	
A46	A46	7	42	7	42	3	18	16	18	55	1	9102	215.1	23.6	2.4	0.05	
A47	A47	7	44	7	43	3	18	16	18	56	1	2514	222.4	6.3	0.6	0.05	
A48	A48	7	45	7	43	3	18	16	18	56	1	2853	220.1	7.2	0.7	0.05	
A49	A49	7	47	7	44	3	18	16	18	58	1	1260	220.5	3.0	0.3	0.05	
A50	A50	7	48	7	44	3	18	16	18	59	2	1121	216.6	1.1	0.1	0.05	
A51	A51	7	50	7	45	3	18	16	19	1	1	1451	211.3	3.5	0.3	0.05	
A52	A52	7	51	7	45	3	18	16	19	1	2	1002	217.7	0.9	0.1	0.05	
A53	A53	7	53	7	46	3	18	16	19	4	2	1052	216.7	1.0	0.1	0.05	
A54	A54	7	54	7	46	3	18	16	19	4	1	2620	217.7	6.6	0.7	0.05	
A55	A55	7	56	7	47	3	18	16	19	7	3	1154	213.1	0.6	0.1	0.05	
A56	A56	7	57	7	47	3	18	16	19	7	2	1011	221.5	1.0	0.1	0.05	
A57	A57	7	59	7	48	3	18	16	19	11	2	1733	225.5	1.9	0.2	0.05	
A58	A58	8	0	7	48	3	18	16	19	11	2	1793	221.0	2.0	0.2	0.05	
A59	A59	8	2	7	49	3	18	16	19	13	1	1132	217.8	2.6	0.3	0.05	
A60	A60	8	4	7	49	3	18	16	19	13	1	1340	218.6	3.2	0.3	0.05	
A61	A61	8	11	8	1	3	18	16	19	17	4	1017	217.0	0.3	0.1	0.05	
A62	A62	8	12	8	1	3	18	16	19	17	4	1025	214.8	0.3	0.1	0.05	
A63	A63	8	14	8	2	3	18	16	19	20	2	1408	219.3	1.5	0.1	0.05	
A64	A64	8	15	8	2	3	18	16	19	20	1	2650	217.5	6.7	0.7	0.05	
A65	A65	8	17	8	3	3	18	16	19	23	1	2282	220.4	5.7	0.6	0.05	
A66	A66	8	18	8	3	3	18	16	19	23	1	6563	218.8	17.1	1.7	0.05	
A67	A67	8	20	8	4	3	18	16	19	24	1	1927	223.0	4.8	0.5	0.05	
A68	A68	8	21	8	4	3	18	16	19	25	3	1039	214.5	0.5	0.1	0.05	
A69	A69	8	23	8	5	3	18	16	19	29	3	1212	218.1	0.7	0.1	0.05	
A70	A70	8	24	8	5	3	18	16	19	29	2	1556	220.5	1.7	0.2	0.05	
A71	A71	8	26	8	6	3	18	16	19	31	1	1905	223.0	4.7	0.5	0.05	
A72	A72	8	28	8	6	3	18	16	19	31	1	15573	220.5	41.4	4.1	0.05	
A73	A73	8	29	8	7	3	18	16	19	34	2	1632	220.0	1.8	0.2	0.05	
A74	A74	8	30	8	7	3	18	16	19	34	1	2969	220.1	7.6	0.8	0.05	

CLIENT: ENERGY FUELS RESOURCES PROJECT: RADON FLUX MEASUREMENTS, WHITE MESA MILL PROJECT NO.: 16004.01

PILE: 2 BATCH: A SURFACE: SOIL AIR TEMP MIN: 32°F WEATHER: CLEAR, NO RAIN
AREA: COVER DEPLOYED: 3 14 16 RETRIEVED: 3 15 16 CHARCOAL BKG: 148 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:
A75	A75	8	32	8	8	3	18	16	19	37	3	1333	219.4	0.8	0.1	0.05	
A76	A76	8	34	8	8	3	18	16	19	37	2	1284	218.2	1.3	0.1	0.05	
A77	A77	8	11	8	4	3	18	16	19	42	3	1377	216.8	0.8	0.1	0.05	
A78	A78	8	12	8	4	3	18	16	19	42	4	1026	223.0	0.3	0.1	0.05	
A79	A79	8	14	8	5	3	18	16	19	45	2	1180	219.5	1.2	0.1	0.05	
A80	A80	8	15	8	5	3	18	16	19	45	1	1203	215.8	2.8	0.3	0.05	
A81	A81	8	17	8	6	3	18	16	19	48	1	1000	222.5	2.3	0.2	0.05	
A82	A82	8	18	8	6	3	18	16	19	48	1	3217	222.7	8.2	0.8	0.05	
A83	A83	8	20	8	7	3	18	16	19	50	2	1735	222.3	1.9	0.2	0.05	
A84	A84	8	21	8	7	3	18	16	19	50	2	1666	221.0	1.8	0.2	0.05	
A85	A85	8	23	8	8	3	18	16	19	52	1	1024	218.3	2.4	0.2	0.05	
A86	A86	8	24	8	8	3	18	16	19	52	1	1548	217.6	3.7	0.4	0.05	
A87	A87	8	26	8	9	3	18	16	19	53	1	1680	218.3	4.1	0.4	0.05	
A88	A88	8	28	8	9	3	18	16	19	53	1	5081	219.8	13.2	1.3	0.05	
A89	A89	8	12	8	1	3	18	16	19	57	4	1328	218.5	0.5	0.1	0.05	
A90	A90	8	13	8	1	3	18	16	19	57	4	1049	216.7	0.3	0.1	0.05	
A91	A91	8	15	8	2	3	18	16	20	1	4	1126	219.0	0.4	0.1	0.05	
A92	A92	8	16	8	2	3	18	16	20	0	2	1447	217.8	1.5	0.2	0.05	
A93	A93	8	18	8	3	3	18	16	20	5	1	1015	221.1	2.3	0.2	0.05	
A94	A94	8	19	8	3	3	18	16	20	5	1	2456	220.0	6.2	0.6	0.05	
A95	A95	8	21	8	4	3	18	16	20	7	2	1800	217.6	2.0	0.2	0.05	
A96	A96	8	22	8	4	3	18	16	20	6	1	1629	223.3	4.0	0.4	0.05	
A97	A97	8	24	8	5	3	18	16	20	10	1	9943	220.3	26.6	2.7	0.05	
A98	A98	8	28	8	8	3	18	16	20	11	4	1276	221.5	0.5	0.1	0.05	
A99	A99	8	30	8	8	3	18	16	20	15	4	1014	220.0	0.3	0.1	0.05	
A100	A100	8	31	8	9	3	18	16	20	15	4	1132	219.9	0.4	0.1	0.05	

AVERAGE RADON FLUX RATE FOR THE CELL 2 COVER REGION: 4.1 pCi/m²s

0.1 MIN
41.4 MAX

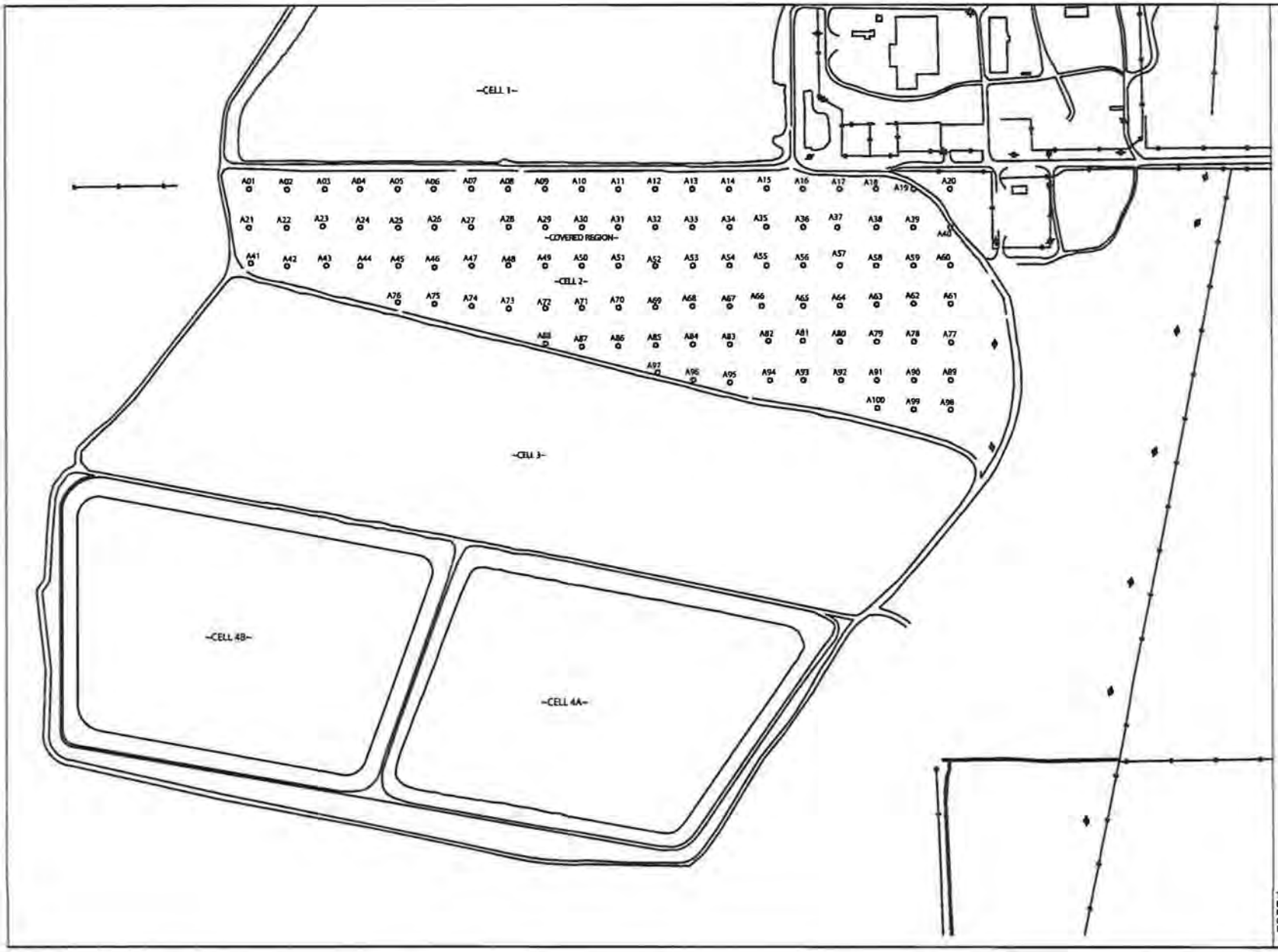
BLANK CANISTER ANALYSIS:

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:
A BLANK 1	A BLANK 1	7	25	7	45	3	18	16	13	45	10	1624	211.5	0.04	0.03	0.05	CONTROL
A BLANK 2	A BLANK 2	7	25	7	45	3	18	16	13	45	10	1827	222.7	0.09	0.03	0.05	CONTROL
A BLANK 3	A BLANK 3	7	25	7	45	3	18	16	13	56	10	1833	210.0	0.09	0.04	0.05	CONTROL
A BLANK 4	A BLANK 4	7	25	7	45	3	18	16	13	56	10	1610	210.9	0.03	0.03	0.05	CONTROL
A BLANK 5	A BLANK 5	7	25	7	45	3	18	16	14	7	10	1616	210.4	0.03	0.03	0.05	CONTROL

AVERAGE BLANK CANISTER ANALYSIS FOR THE CELL 2 COVER REGION: 0.06 pCi/m²s

Appendix D

Sample Locations Map (Figure 2)



WHITE MESA MILL
BLANDING, UTAH

NESHAPS 2016

RADON FLUX SAMPLING

3/14/16-3/15/16

PREPARED FOR
ENERGY FUELS RESOURCES

LEGEND

A01 ◘ - SAMPLE LOCATION ON COVERED AREAS

FIGURE 2

N

SCALE IN FEET
200 100 0 200 400

TELLCO
ENVIRONMENTAL, LLC

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