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FINAL ANALYTICAL REPORT FOR SOIL SAMPLES IN SUPPORT OF AN INTERIM BARRIER AT SX FARM

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Abstract: This final report contains the analytical results supporting characterization of soil samples for an interim barrier for SX Farm. It also contains the results for associated field and trip blanks supporting the sampling effort.

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222-S LABORATORY

FINAL ANALYTICAL REPORT FOR SOIL SAMPLES IN SUPPORT OF AN INTERIM BARRIER AT SX FARM

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222-S LABORATORY

FINAL ANALYTICAL REPORT FOR SOIL SAMPLES IN SUPPORT OF AN INTERIM BARRIER AT SX FARM

1.0 INTRODUCTION

This report has been reissued based on the Report Comment Record (RCR) for ATL Document No.RPP-RPT-47008 (see Attachment 6) received from the Vadose customer. In addition the laboratory has also made the following changes to this report:

- Attachment 8: Analytical Batch and Laboratory Sample Identification Number Index
- Various editorial corrections
- Corrected "Sample Depth" demographic for sample B206X5B

This report presents the final results for soil samples taken from May 20, 2009, to September 1, 2009, from SX Farm core holes. The samples were analyzed in accordance with RPP-PLAN-41491, *Field Sampling and Analysis Plan of Soil Samples in Support of an Interim Barrier at SX Farm* (SAP); ATL-MP-1011, *ATL Quality Assurance Project Plan for 222-S Laboratory* (QAPP); and SW-846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. All known deviations from the requirements in these documents are cited in this narrative.

Attachment 1	Data Summary Report – Tier I Analysis
Attachment 2	Data Summary Report – "Quick Turnaround" Analyses
Attachment 3	Sample Breakdown Diagrams
Attachment 4	Holding Time Reports
Attachment 5	Geologic Sample Descriptions
Attachment 6	Correspondence
Attachment 7	Receipt Paperwork

One characterization change notice (CCN-WMAC-001) was received by the laboratory, which cancelled the stable isotope and rhenium analyses.

2.0 SAMPLE RECEIPT, HANDLING, AND BREAKDOWN

Thirty-six core intervals taken from 11 core holes were received between May 20, 2009, and September 1, 2009 (see Attachment 7). Each complete core interval consists of three liner segments (A, B, and C) and the shoe. One interval did not have complete recovery. In core hole C7184, the interval from 83 ft to 85 ft recovered only two liners. All sample liners were extruded, photographed, and described by the Washington River Protection Solutions LLC (WRPS) geologist. The sample descriptions are contained in Attachment 4. Samples were analyzed on an expedited basis for nitrate and ^{99}Tc using the shoe sample. Based on the client's instructions (see Attachment 6), the "B" liner was used for the expedited analyses for the 83ft to 85ft interval from core hole C7184 and all four intervals for core hole C7172, all of which had to be reanalyzed. Additionally all intervals were analyzed for the Tier I analysis described in the

SAP using the "A" liner. Due to the need for additional samples, the "B" liners from the following intervals were used:

- C7154, 74-76 ft
- C7170, 81.5-83.5 ft
- C7180, 93-95 ft
- C7180, 127-129 ft
- C7184, 83-85 ft
- C7184, 141-143 ft
- C7186, 145-147 ft
- C7192, 140-142 ft

In addition to the soil samples, a total of four equipment blanks were received. The first two were not analyzed and will not be discussed further in this report. The last two were analyzed, and the results are in Attachment 1.

Most samples were delivered in a cooler with ice. Initially some samples were delivered in an unrefrigerated condition. Exactly which samples were not refrigerated and how long they were outside of refrigeration was not documented. Samples were placed in refrigerated storage upon receipt at the laboratory. The temperature of a randomly selected sample from each cooler was measured and recorded on the chain of custody form. Laboratory sample receipt personnel failed to record the receipt temperature for the following samples:

- C7184 – intervals I001, I002, I003
- C7172 – all samples
- C7178 – interval I002

This was caused partially by the confusion from the delivery of multiple core projects at the same time and failure of laboratory personnel to follow the sample receipt procedure. These issues have been addressed and corrective measures have been taken. Many of the samples received were outside the required temperature ranges. This was due to the fact that these samples had not been in the cooler long enough to reach equilibrium with the cooler temperature. This can be verified, in most cases, by comparing the receipt time with the sampling time. The cooler wall was sometimes measured and was found to be within the required temperature range. This temperature was not generally recorded since this measurement point is not called out in the procedure. For future projects, the temperature of a temperature blank or the side of the cooler will be measured and recorded as described in SW-846.

The SAP requests that the laboratory strive to meet the holding times specified in SW-846; however, the client did not release the samples for Tier I analysis until 5 months after sampling began. This negatively affected the laboratory's ability to meet these holding times. Holding times are discussed for each method in Section 3.0 of this report.

3.0 ANALYTICAL RESULTS SUMMARY

The Data Summary Report in Attachment 1 presents the final analytical results for the Tier I analytes requested in the SAP. Attachment 2 contains the rapid turnaround analysis for ^{99}Tc and nitrate. Since the rapid turnaround analysis was designated as a "screen" and used to assist in the drilling operation, they are not discussed in detail in this narrative. All required quality control

(QC) elements were included with these samples, and the data has been reviewed and properly flagged.

In Attachments 1 and 2, the column labeled "A#" indicates the aliquot class or the method used for sample preparation before analysis. The aliquot classes are defined as follows:

- "AV" indicates samples that were prepared by the vadose acid digestion.
- "WV" indicates samples that were prepared by the vadose water digestion.

Samples without a letter identifier in the "A#" column were analyzed directly with no separate preparation analysis or with sample preparation performed as a part of the procedure steps.

The "Qual Flags" columns in Attachments 1 and 2 contain data qualifier flags that are defined as follows:

- "B" for radiochemistry results is used to indicate that the analyte was detected in the method or preparation blank and in the sample.
- "B"for inorganic results is used to indicate that the reported result should be considered an estimate because it is below the quantitation limit. The "B" flag is applied to sample concentrations that are greater than the MDL but less than the quantitation limit.
- "C" for inorganic results is used to indicate that the analyte was detected in the method or preparation blank and in the sample, and the result for the blank was greater than or equal to 20% of the reported sample result.
- "N" for all but gas chromatography/mass spectrometry (GC/MS) is used to indicate that the matrix spike (MS) recovery or matrix spike duplicate (MSD) recovery was outside of the specified range in the QAPP or SAP.
- "M" for inorganic results is used to indicate that the relative percent difference (RPD) between the sample and the duplicate is greater than 30%.
- "U" for all results is used to indicate that the reported result is less than the calculated detection limit
- "X" See conductivity discussion section 3.2.2.

Manual calculations using rounded results from the Data Summary Report (Attachment 1 and Attachment 2) or result calculation forms may differ slightly from the actual results derived from the raw data.

3.1 INORGANIC AND RADIOCHEMICAL DIGESTIONS

3.1.1 Vadose Acid Digestion

Ten grams of dry soil was digested in 30 mL of 8 M nitric acid (ratio of three parts acid to one part soil) using vials for ModBlock™[1] acid digestion. The slurries were heated to about 90 °C ±5 °C for approximately 4 hours. Then the fluid was separated by filtration through 0.41-0.45 micron membranes. The acid extracts were brought to a final volume of approximately 35 mL using reagent water. The samples were then analyzed for cations and trace metals by inductively coupled plasma-atomic emission spectroscopy (ICP-AES), for radioactive isotopes by inductively coupled plasma-mass spectrometry (ICP-MS), and for gross alpha/beta (GAB) using liquid scintillation counting.

3.1.2 Water Digestion

A 70-g sample of soil was leached using a ratio of one part water to one part soil. To maintain a one-to-one ratio, the amount of water added to the sample was adjusted based on the percent moisture of the soil. The slurries were placed on a shaker table for about 1 hour. They were then transferred to a centrifuge tube and centrifuged at 4,000 rpm for 30 minutes. An unfiltered aliquot was set aside for alkalinity and conductivity analysis. Then the remainder was filtered using a disposable vacuum filtration system. The extracts were collected in a clean bottle and then analyzed for anions using IC, cations, and trace metals by ICP-AES, for radioactive isotopes by ICP-MS, and for GAB using liquid scintillation counting.

3.2 INORGANIC ANALYSES

3.2.1 pH Analysis

The pH analysis was performed on an unfiltered aliquot of the vadose water digest of liner “A” samples and a direct aliquot of the equipment blank. These analyses met all QC requirements specified in the SAP and the QAPP. The SAP and SW-846 list a pH holding time requirement of “as soon as possible.” All pH measurements for the soils were taken immediately after the water leach was performed for the expedited nitrate and ^{99}Tc analyses. Since this water leach is typically performed on all samples from a single core hole after the receipt of the last sample in the core hole, the sampling to analysis time varied from 1 to 13 days (see Attachment 4). There was no correlation between pH results and days to analysis, and the results fall within an expected range for alkaline soils. This indicates that the large variation in time had no apparent effect on the results. The client’s expectation was that analysis would be performed within 14 days, and this was met. Due to an oversight error by the laboratory’s analytical staff, the pH for one equipment blank was analyzed 27 days after sampling.

[1] ModBlock™ is a product of CPI International, Santa Rosa, California.

3.2.2 Conductivity

The conductivity analysis was performed on an unfiltered aliquot for the vadose water digest of liner samples and the equipment blank. With the exception of batch 17593, these analyses met all QC requirements specified in the SAP and the QAPP. There is no holding time listed for conductivity in the SAP.

Batch 17593: The bench sheet contained ambiguous information concerning the true value of the standards used in this analysis. Because of this, the batch was reanalyzed. However, three of the six samples in the batch had insufficient sample for reanalysis. Since the two sets of results for the reanalyzed samples were within the expected analytical precision for a duplicate analysis, the client agreed with the laboratory that further analysis was unnecessary (see Attachment 6).

3.2.3 Alkalinity

Analysis for alkalinity was performed on a vadose water digest of subsamples of the shoe samples with the following exceptions:

- Liner "B" was used for samples B206Y1, B206Y3, B209Y5, B20H52, and B20227
- No alkalinity analysis was performed on samples B206R2, B206R4, B206R6, due to insufficient shoe sample. The client instructed the laboratory not to use additional liner sample for this analysis (see Attachment 6).

The SAP lists the holding time for alkalinity as 14 days. Ten of the soil sample analyses for alkalinity exceeded the 14-day holding time.

3.2.4 Ion Chromatography – Anions and Small Organic Acids

Ion chromatography analysis was performed on a vadose water digest of subsamples from all liner "A" soil samples and a direct aliquot of the equipment blank. Due to the size of the sample aliquot (approximately 70 g), pre-digestion spikes were not used. All batches contained post-digestion spikes. Since the preparation method was a water digestion or leach, the initial calibration verification standard served as the LCS. The SW-846 holding time for IC analysis on soils is 48 hours after preparation. All soil samples except two were analyzed within the holding time. The two samples analyzed outside the holding time were from shoe samples, and since a separated "A" liner sample for each core was analyzed, there is no effect on the data quality.

Batch 15648 (equipment blank)**:** The method blank contained chloride, nitrate, and sulfate at levels below the quantitation limit. Only chloride and nitrate were found in the sample at a similar level to the blank, and the results have been flagged with a "B". Since the blank result was below the quantitation limit, reanalysis was not required. The continuing calibration blanks (CCB) contained sulfate at levels below the quantitation limit. Sulfate was not present in the sample.

Batch 15977 (equipment blank)**:** The preparation blank contained chloride at level below the quantitation limit. Chloride was detected in the two samples: one above the quantitation limit and

one below. However, since the blank result was below the quantitation limit, reanalysis was not required. The samples have been flagged with a “B”.

Batch 17752: All CCBs contained chloride and/or nitrate at levels below the quantitation limit. The nitrate level exceeded 5% of the sample result for only one sample. This result was below the quantitation limit and was flagged with a “B”. All chloride results were more than 20 times the blank level.

Batch 17775: Chloride was not reported for eight samples from this batch due to a high level of chloride in the CCBs. These were reported from three previous batches of the expedited analysis. This was done with client approval (see Attachment 6). For the three samples reported for chloride from this batch, the blank level was less than 5% of the sample level. Therefore, the data quality was not affected and reanalysis was not required. Nitrate was present in the CCB below the quantitation level and at less than 5% of the low sample result, therefore the data quality was not affected and reanalysis was not required.

Batch 17856: There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met. For one sample, nitrate was over range and reported from a previous batch of the expedited analysis. This was done with client approval (see Attachment 6).

Batch 17910: The laboratory did not include a closing CCB. The client was contacted and verbally accepted the data “as is.” There were no other notable issues, and all QC requirements specified in the SAP and the QAPP were met.

Batch 14488: Only three chloride results were reported from this batch. The recovery for chloride in low level standard (LLS) exceeded the required ±50% at 180%. This could indicate that sample results near the level of the LLS could be biased high. However, since two sample results were well above the LLS and above the continuing calibration verification standard (CCV) level and the other sample result was below the MDL, the data quality was not affected.

Batch 14919: Only three chloride results were reported from this batch. The RPD for chloride for one of the three duplicates in this batch exceeded the 30% limit specified in the SAP; however, since the sample result was below the quantitation limit, this criterion does not apply.

Batch 15289: Only one nitrate result was reported from this batch. There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met.

Batch 15299: Only two chloride results were reported from this batch. The preparation blank contained chloride above the MDL and below the quantitation limit and at less than 5% of the lowest sample results. Reanalysis was not required.

3.2.5 Inductively Coupled Plasma/Atomic Emission Spectrometry

The ICP/AES analysis was performed on the vadose acid-digest and the vadose water-digest of all “A” liner samples and a direct aliquot of the equipment blank. Due to the size of the sample aliquot (approximately 70 g), pre-digestion spikes were not used for the vadose water digestion batches. All batches contained post-digestion spikes. Since the preparation method was a water digestion or leach, the initial calibration verification standard served as the LCS.

The majority of the ICP/AES analyses exceeded the SW-846 6-month holding time. This was caused by a combination of late notification (5 months after sampling began) by the client to start analysis, competing priorities with other WRPS projects, and major instrument downtime. There is no technical reason to believe that the results have been impacted in any way by the extended holding times. The laboratory believes there was no effect on data quality.

Batch 17765 (equipment blank)**:** There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met.

WATER DIGEST BATCHES

Batch 17796: The inter-element correction standard A (ICSA) result for manganese was approximately three times the MDL. This could indicate that there was an uncorrected inter-element interference for manganese. However, the ICSAB recovery for manganese was 96%, which demonstrates that the inter-element correction for manganese was sufficient. Iron was present in the preparation blank at greater than 5% of the sample results for two of the samples in the batch. These samples have been flagged with a “B”. Since the blank result was below the quantitation limit, reanalysis was not required. Zirconium was present in the blank; since the samples were nondetect for zirconium, the data quality was not affected.

The RPD for iron exceeded the 30% requirement specified in the SAP at 67%. All iron results in this batch were flagged with “c”. The RPD for aluminum and titanium exceeded the 30% requirement specified in the SAP; since the results for these elements were below the quantitation limit, this criterion does not apply. The low level standard for bismuth exceeded the required 130% at 133%; since all samples were nondetect for bismuth, the data quality was not affected and reanalysis was not required.

Batch 18262: The preparation blank contained sodium above the MDL and below the quantitation limit. All sample results were greater than 20 times the blank level; therefore, the data quality was not affected and reanalysis was not required.

Batches 18263 and 18272: There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met.

ACID DIGEST BATCHES

Batch 17936: The preparation blank contained calcium at slightly above the MDL and below the quantitation limit. All sample results were greater than 20 times the blank results; therefore, the data quality was not affected and reanalysis was not required. The preparation blank contained zinc at a level greater than 5% of the sample results, and all zinc results in this batch have been flagged with a “B”. Since the blank result for zinc was below the quantitation limit, reanalysis was not required.

The MS recoveries for aluminum, calcium, iron, potassium, magnesium, titanium, sodium, and phosphorous exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the sample results for these elements exceeded four times the spike level, this criterion does not apply.

The MS recoveries for sulfur, selenium, and silicon exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the required sample dilution reduced the matrix spikes to levels below or near the MDL, a recovery of ±25% could not be expected and reanalysis was not performed. All sample results for these elements in this batch have been flagged with a "b".

The MS recovery for antimony exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the client-required digest does not contain hydrochloric acid, a satisfactory recovery of antimony was not expected and reanalysis was not performed. All sample results for antimony in this batch have been flagged with a "b".

Batch 17947: The initial calibration blank and two of the three CCBs contained silver slightly above the MDL and below the quantitation limit. Four samples also contained silver below the quantitation limit and were flagged with a "B". Since the blank and sample results for silver were below the quantitation limit, reanalysis was not required. The preparation blank contained iron above the MDL and below the quantitation limit. All sample results were greater than 20 times the blank result; therefore, the data quality was not affected and reanalysis was not required. The preparation blank contained zinc and silicon at levels greater than 5% of the sample results, and all zinc and silicon results in this batch have been flagged with a "B". Since the blank results for zinc and silicon were below the quantitation limit, reanalysis was not required.

The MS recoveries for aluminum, calcium, iron, potassium, magnesium, sodium, and phosphorous exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the sample results for these elements exceeded four times the spike level, this criterion does not apply.

The MS recoveries for silver, sulfur, selenium, silicon, thallium, tin, and uranium exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the required sample dilution reduced the matrix spikes to levels below or near the MDL, a recovery of ±25% could not be expected and reanalysis was not performed. All sample results for these elements in this batch have been flagged with a "b".

The MS recovery for antimony exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the client-required digest does not contain hydrochloric acid, a satisfactory recovery of antimony was not expected and reanalysis was not performed. All sample results for antimony in this batch have been flagged with a "b".

The RPDs for cobalt, copper, sodium, silicon, and zirconium exceeded the 30% requirement specified in the SAP; however, since all results were below the quantitation limits, this criterion does not apply.

Batch 17969: The initial calibration verification standard and two of the three CCVs for silicon failed high from 112% to 125%, and the silicon results have been flagged with an "a". The silicon results could be considered biased high. However, since all results in the batch were below the quantitation limit and the LLS recoveries were near 100%, the results were most likely not affected. The initial calibration blank and the closing continuing calibration blank contained silver slightly above the MDL and below the quantitation limit. Two samples also contained silver below the quantitation limit and were flagged with a "B". Since the blank and sample

results for silver were below the quantitation limit, reanalysis was not required. The LLSs were recovered low for potassium at 63% and 34%. Results near the level of the LLS should be considered biased low. All results for potassium were below the quantitation limit and are flagged with a “J”. The initial LLS for antimony was recovered above the required ±30% limit at 139%. Since all results for antimony were below or slightly above the MDL, the data quality was not affected. The preparation blank contained iron and calcium above the MDL and below the quantitation limit. All sample results were greater than 20 times the blank results; therefore, the data quality was not affected and reanalysis was not required. The preparation blank contained zinc at a level greater than 5% of the sample results, and all zinc results in this batch have been flagged with a “B”. Since the blank results for zinc were below the quantitation limit, reanalysis was not required.

The MS recoveries for aluminum, calcium, iron, potassium, magnesium, manganese, sodium, titanium, and phosphorous exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the sample results for these elements exceeded four times the spike level, this criterion does not apply.

The MS recoveries for bismuth, sulfur, selenium, and silicon exceeded the ± 25% requirement specified in the SAP and QAPP; however since the required sample dilution reduced the matrix spike to a level below or near the MDL, a recovery of ±25% could not be expected and reanalysis was not performed. All sample results for these elements in this batch have been flagged with a “b”.

The MS recovery for antimony exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the client-required digest does not contain hydrochloric acid, a satisfactory recovery of antimony was not expected and reanalysis was not performed. All sample results for antimony in this batch have been flagged with a “b”.

The MS recovery for barium exceeded the ±25 requirement at 68%. Results for barium could be biased low. A “b” flag has been applied to all barium results in the batch.

The RPD for nickel exceeded the 30% requirement specified in the SAP; however, since all results were below the quantitation limit, this criterion does not apply.

Batch 18124: The preparation blank contained aluminum and calcium slightly above the MDL and below the quantitation limit. All samples were greater than 20 times the blank results; therefore, the data quality was not affected and reanalysis was not required. The preparation blank contained zinc at a level greater than 5% of the sample results, and all zinc results in this batch have been flagged with a “B”. Since the blank results for zinc were below the quantitation limit, reanalysis was not required. The preparation blank contained chromium and lead at levels greater than 5% of the sample results, and all chromium and lead results above the MDL have been flagged with a “B”. Since the blank and sample results for chromium and lead were below the quantitation limit, reanalysis was not required.

The MS recoveries for aluminum, calcium, iron, potassium, magnesium, manganese, sodium, titanium, and phosphorous exceeded the ± 25% requirement specified in the SAP and QAPP;

however, since the sample results for these elements exceeded four times the spike level, this criterion does not apply.

The MS recoveries for silver, arsenic, bismuth, sulfur, selenium, and silicon exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the required sample dilution reduced the matrix spike to a level below or near the MDL, a recovery of ±25% could not be expected and reanalysis was not performed. All sample results for these elements in this batch have been flagged with a “b”.

The MS recovery for antimony exceeded the ± 25% requirement specified in the SAP and QAPP; however, since the client-required digest does not contain hydrochloric acid, a satisfactory recovery of antimony was not expected and reanalysis was not performed. All sample results for antimony in this batch have been flagged with “b”.

The RPD for cobalt exceeded the 30% requirement specified in the SAP; however, since all results were below the quantitation limit, this criterion does not apply.

3.2.6 Inductively Coupled Plasma/Mass Spectroscopy

The ICP/MS analyses were performed on the vadose water and vadose acid digestions of all “A” liner samples and on a direct aliquot of the equipment blank. The acid digestion was analyzed for two separate analyses: ^{99}Tc and actinides (^{238}U, ^{237}Np, ^{239}Pu, and ^{241}Am). The water digestion was also analyzed twice by ICP/MS for ^{99}Tc and ^{238}U. The SAP listed ^{129}I as an isotope to be analyzed by ICP/MS. This analysis was moved to the radiochemical method, which is less subject to interferences.

The majority of the ICP/MS analyses exceeded the SW-846 6-month holding time. This was caused by a combination of late notification (5 months after sampling began) by the client to start analysis, competing priorities with other WRPS projects, and major instrument downtime. There is no technical reason to believe that the results have been impacted in any way by the extended holding times. The laboratory believes there was no effect on data quality.

Due to the size of the sample aliquot (approximately 50 g), pre-digestion spikes were not used for the vadose water digestion batches. All batches contained post-digestion spikes. Since this preparation method was a water digestion or leach, the initial calibration verification standard served as the LCS.

In addition to the ^{238}U required for the water digest, the laboratory also reported ^{233}U, ^{234}U, ^{235}U, and ^{236}U. Only ^{238}U and ^{235}U were used in the LCS and MS. Direct calibration, where a standard containing the isotope and element of interest is used to calibrate the response of the isotope, is the most accurate type of calibration; however, standard material is not available for all of the isotopes of interest. Concentrations of those isotopes without available standards are estimated based on the instrument’s mass-response curve, which is generated by using the intensity/concentration relationship for the available isotope standards. Results estimated in this manner are designated “semi-quantitative.”

Table 1. Inductively Coupled Plasma-Mass Spectroscopy Standards and Spikes

Standard Type	Analytes Analyzed
Initial calibration verification (nondigested)	^{235}U, ^{238}U, ^{237}Np, ^{241}Am, ^{99}Tc
Acid digest standard (LCS)	^{235}U, ^{238}U, ^{237}Np, ^{241}Am, ^{99}Tc
Pre-digest spike (MS)	^{235}U, ^{238}U, ^{237}Np, ^{241}Am, ^{99}Tc
Post-digest spike	^{235}U, ^{238}U, ^{237}Np, ^{241}Am, ^{99}Tc
No standard or spike of either type	^{233}U, ^{234}U, ^{236}U

3.2.6.1 Technetium-99

The ^{99}Tc analysis by ICP/MS is subject to interferences from chloride, if above 10 µg/mL, and cobalt, if above 0.04 µg/mL, in the digested sample. Based on the IC and ICP/AES results, these interferences were not expected in these samples except for Batch 18295.

WATER DIGEST BATCHES

Batches 17900, 18052, and 18053,: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 17901: The second CCB contained ^{99}Tc slightly above the MDL and below the quantitation limit. Four samples contained ^{99}Tc at a similar level and were flagged with a “B”. One sample contained ^{99}Tc above the quantitation limit, was not 20 times the blank level, and has been flagged with a “B”. The remaining sample results were more than 20 times the blank level. Since the concentration of ^{99}Tc in the blank was below the quantitation level, reanalysis was not required.

Batch 18054: This batch contained only one sample which was inadvertently left out of analytical batch 18053 (preparation batch 17591). All preparation QC samples (MS, LCS, preparation blank) were analyzed in batch 18053. Batch 18054 contains only analytical QC (CCV, CCB, LLS, etc.). The duplicate contained in this batch is a second aliquot of the sample and not a separately prepared duplicate.

ACID DIGEST BATCHES

Batches 18079, 18080, and 18292: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 18295: Based on ICP/AES results for cobalt, samples B20733A (S09V001531), B20735A (S09V001534), and B20753A (S09V001543) could show a significant isobaric interference at mass 99. Samples B20733A and B20735A have results below the quantitation level and are “J” flagged as estimated. The result for sample B20753A is high enough that the interference would be insignificant. There were no other notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

3.2.6.2 Actinides

Batch 16436 (equipment blank)**:** There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met.

WATER DIGEST BATCHES

Batches 16522, 18184, 18185, 18186, and 18187: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

ACID DIGEST BATCHES

Batches 18210, 18302, and 18371: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 18293: The second CCB contained ^{237}Np at a level above the MDL and below the quantitation limit. Two samples in the batch had similar results for ^{237}Np and have been flagged with a "B". Since all results were below the quantitation limit, reanalysis was not required.

3.3 RADIOCHEMICAL ANALYSIS

The majority of the radionuclide analyses exceeded the administrative 6-month holding time in the SAP. This was caused by a combination of late notification (5 months after sampling began) by the client to start analysis and competing priorities. There is no technical reason to believe that the results have been impacted in any way by the extended holding times. The laboratory believes there was no effect on data quality.

3.3.1 Gamma Energy Analysis

Gamma energy analysis was performed directly on approximately 60 mL of soil from all "A" liner samples and the equipment blank.

Batches 15713, 16848, 16889, and 16881: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 16893: The method blank contained a low level of ^{214}Pb. All but one sample contained ^{214}Pb at less than 20 times the blank level. The sample results for ^{214}Pb have been flagged with a "B". Since the blank level was below the quantitation limit, reanalysis was not required. The RPDs for ^{212}Pb and ^{214}Pb exceeded the 30% requirement specified in the SAP. However, since the counting errors for these results were greater than 15%, this criterion does not apply.

Batch 16904: The RPD for ^{40}K exceeded the 30% requirement the SAP. However, since the counting error for the result was greater than 15%, this criterion does not apply.

3.3.2 Gross Alpha/Gross Beta

The GAB analysis by liquid scintillation counting was performed on a vadose acid digestion and vadose water digestion using the "A" liner samples, except for sample B20715, which used the

"B" liner. GAB was also performed on a direct aliquot of the equipment blanks. All spikes were post-digestion spikes.

Batch 15715: A low level of gross alpha was detected in the preparation blank. Since alpha was not detected in the sample, there was no effect on the data quality. The RPD for gross beta exceeded the 30% requirement specified in the SAP at 34%; however, since the counting error of the sample results was greater than 15%, this criterion does not apply.

Batch 16965: A low level of gross alpha was detected in the preparation blank. Since alpha was not detected in the sample, there was no effect on the data quality.

WATER DIGEST BATCHES

Batches 167754 and 17800: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 17753: A low level of gross beta was detected in the preparation blank. The blank level exceeded 5% of the sample results for three samples in the batch, which have been flagged with a "B". The remaining sample results were either below the MDL or greater than 20 times the blank level. Since the blank result was below the quantitation limit, reanalysis was not required.

ACID DIGEST BATCHES

Batch 17496: A low level of gross beta was detected in the preparation blank. All samples in the batch have been flagged with a "B". Since the blank result was below the quantitation limit, reanalysis was not required. The RPD for gross beta exceeded the 30% requirement specified in the SAP at 47%; however, since the counting error of the sample result was greater than 15%, this criterion does not apply.

Batch 17766: A low level of gross alpha was detected in the preparation blank. All samples in the batch have been flagged with a "B". Since the blank result was below the quantitation limit, reanalysis was not required. Since alpha was not detected in the sample, there was no effect on the data quality. The RPD for gross alpha and gross beta exceeded the 30% requirement specified in the SAP at 52% and 40%, respectively; however, since the counting errors of the sample results were greater than 15%, this criterion does not apply.

Batches 17500, 17610, and 18387: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 20203: The preparation blank contained gross alpha above the minimum detectible activity (MDA) and below the quantification limit. All positive alpha sample results have been flagged with a "B". Since the blank and all positive results were below the quantitation limit, reanalysis was not required. The RPD for gross alpha exceeded the 30% requirement specified in the SAP at 53%; however, since the counting was greater than 15%, this criterion does not apply.

3.3.3 Iodine-129

Analysis for ^{129}I was performed on an iodine-specific fusion digest of a mixture of "A" and "B" liner samples and direct aliquots of the equipment blanks. The SAP lists ICP/MS as the method for ^{129}I. With the client's permission (see Attachment 6), this analysis was performed using the radiochemical method, which is less prone to interferences than ICP/MS.

Batches 17970, 17971, and 18387: There were no notable issues with these batches, and all QC requirements specified in the SAP and the QAPP were met.

Batch 18009: The carrier recovery for sample B206Y5A was higher than expected at 170%. Since the sample result was below the MDA, the data quality was not affected, and reanalysis was not required.

Batch 18287: Samples B20709A and B20715B had positive results above the quantitation limit. This was the second positive result for B20709A, which was reanalyzed from batch 18009 in order to confirm the original positive result. There were no notable issues with this batch, and all QC requirements specified in the SAP and the QAPP were met.

Batch 18650: The LCS exceeded the ±20% requirement specified in the SAP and QAPP. This could indicate that the results are biased high. However, since the sample results were below the MDA, the data quality was not affected and reanalysis not required.

4.0 PROCEDURES

Table 2 lists the analytical procedures used for analysis of the SX Farm samples.

Table 2. Analytical Procedures

Analysis	Preparation Method	Analysis Procedure
Inorganic Analyses		
pH (solid)	08-ATL-078, Vadose Water Digest	LA-212-105, Rev. G-0 (SW-846 9045D)
pH (liquid)		LA-212-106, Rev. H-0 (SW-846 9040C)
Conductivity	08-ATL-078, Vadose Water Digest	LA-512-107, Rev. F-0
Alkalinity	08-ATL-078, Vadose Water Digest	ATS-LT-661-105, Rev. A-1 (SM-2320B)
Anions & Organic Acids – IC	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-533-115, Rev. J-0 (SW-846 9056A)
Anions – IC	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-533-107, Rev. H-0 (SW-846 9056A)
Metals – ICP/AES	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-505-161, Rev. J-0A (SW-846 6010C)
^{99}Tc – ICP/MS	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-506-102, Rev. E-0
$^{99}Tc/Re$ – ICP/MS	N/A (Liquid Only)	LA-506-103, Rev. A-0
Actinides – ICP/MS	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-506-102, Rev. E-0

Table 2. Analytical Procedures

Analysis	Preparation Method	Analysis Procedure
Radiochemical Analyses		
GEA	Direct	LA-548-121, Rev. I-0
Gross Alpha Beta by Liquid Scintillation Counting	08-ATL-078, Vadose Water Digest 08-ATL-035, Vadose Acid Digest	LA-548-111, Rev. G-0
^{129}I – Separation/GEA (solid)	LA-378-105, Rev. C-0	LA-378-105, Rev. C-0

5.0 REFERENCES

ATL-MP-1011, 2009, *ATL Quality Assurance Project Plan for 222-S Laboratory*, Rev. 8 and Rev. 9, Advanced Technologies and Laboratories International, Inc., Richland, Washington.

SW-846, 1986, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods,* Third Edition, as amended, U.S. Environmental Protection Agency, Washington, D.C.

RPP-PLAN-41491, *Field Sampling and Analysis Plan of Soil Samples in Support of an Interim Barrier at SX Farm* (SAP) Rev. 0, Washington River Protection Solutions, Inc.

DOE/RL-96-68, 2007, *Hanford Analytical Services Quality Assurance Requirements Document (HASQARD),* Rev. 3, Volume 4, U.S. Department of Energy, Hanford Site, Richland, Washington.

Attachment 1

DATA SUMMARY REPORT-TIER I ANALYSIS

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RPP-RPT-47008 Rev.0

SX Barrier
Data Summary Report

Sample Group: 20090635
Core Number: C7186
Sample Depth: Equipment Blank
Customer Sample ID: B20766

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001264		7440-22-4	Silver	ug/mL	93.3	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264		7429-90-5	Aluminum	ug/mL	97.3	<0.0300	<0.0306	n/a	n/a	n/a	n/a	0.0306	n/a	U
S09V001264		7440-38-2	Arsenic	ug/mL	97.9	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7440-42-8	Boron	ug/mL	101	<0.0300	<0.0306	n/a	n/a	n/a	n/a	0.0306	n/a	U
S09V001264		7440-39-3	Barium	ug/mL	98.3	<3.00E-03	<3.06E-03	n/a	n/a	n/a	n/a	3.06E-03	n/a	U
S09V001264		7440-41-7	Beryllium	ug/mL	96.8	<1.00E-03	<1.02E-03	n/a	n/a	n/a	n/a	1.02E-03	n/a	U
S09V001264		7440-69-9	Bismuth	ug/mL	98.3	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264		7440-70-2	Calcium	ug/mL	108	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7440-43-9	Cadmium	ug/mL	97.6	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264		7440-48-4	Cobalt	ug/mL	97.8	<0.0100	<0.0102	n/a	n/a	n/a	n/a	0.0102	n/a	U
S09V001264		7440-47-3	Chromium	ug/mL	97.7	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264		7440-50-8	Copper	ug/mL	98.1	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264		7439-89-6	Iron	ug/mL	97.7	<5.00E-03	0.0540	n/a	n/a	n/a	n/a	5.10E-03	n/a	
S09V001264		7440-09-7	Potassium	ug/mL	102	<0.500	0.528	n/a	n/a	n/a	n/a	0.510	n/a	B
S09V001264		7439-93-2	Lithium	ug/mL	102	<3.00E-03	<3.06E-03	n/a	n/a	n/a	n/a	3.06E-03	n/a	U
S09V001264		7439-95-4	Magnesium	ug/mL	97.5	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7439-96-5	Manganese	ug/mL	97.1	<3.00E-03	<3.06E-03	n/a	n/a	n/a	n/a	3.06E-03	n/a	U
S09V001264		7439-98-7	Molybdenum	ug/mL	101	<0.0200	<0.0204	n/a	n/a	n/a	n/a	0.0204	n/a	U
S09V001264		7440-23-5	Sodium	ug/mL	100	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264		7440-02-0	Nickel	ug/mL	96.6	<0.0200	<0.0204	n/a	n/a	n/a	n/a	0.0204	n/a	U
S09V001264		7723-14-0	Phosphorus	ug/mL	98.1	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7439-92-1	Lead	ug/mL	101	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7704-34-9	Sulfur	ug/mL	100	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264		7440-36-0	Antimony	ug/mL	98.0	<0.0500	<0.0510	n/a	n/a	n/a	n/a	0.0510	n/a	U
S09V001264		7782-49-2	Selenium	ug/mL	101	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264		7440-21-3	Silicon	ug/mL	93.8	<0.0300	<0.0306	n/a	n/a	n/a	n/a	0.0306	n/a	U
S09V001264		7440-31-5	Tin	ug/mL	103	<0.0300	<0.0306	n/a	n/a	n/a	n/a	0.0306	n/a	U
S09V001264		7440-24-6	Strontium	ug/mL	98.2	<3.00E-03	<3.06E-03	n/a	n/a	n/a	n/a	3.06E-03	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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SX Barrier
Data Summary Report

Sample Group: 20090635
Core Number: C7186
Sample Depth: Equipment Blank
Customer Sample ID: B20766

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001264			7440-32-6	Titanium	ug/mL	99.9	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264			7440-28-0	Thallium	ug/mL	95.5	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264			7440-61-1	Uranium	ug/mL	101	<0.100	<0.102	n/a	n/a	n/a	n/a	0.102	n/a	U
S09V001264			7440-62-2	Vanadium	ug/mL	99.4	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264			7440-65-5	Yttrium	ug/mL	97.7	<2.00E-03	<2.04E-03	n/a	n/a	n/a	n/a	2.04E-03	n/a	U
S09V001264			7440-66-6	Zinc	ug/mL	97.9	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001264			7440-67-7	Zirconium	ug/mL	99.7	<5.00E-03	<5.10E-03	n/a	n/a	n/a	n/a	5.10E-03	n/a	U
S09V001265			16984-48-8	Fluoride	ug/mL	99.0	<6.16E-03	<6.16E-03	<6.16E-03	n/a	n/a	89.0	6.16E-03	n/a	U
S09V001265			16887-00-6	Chloride	ug/mL	101	0.0223	0.0636	0.0659	0.0648	3.57	100	3.10E-03	n/a	C
S09V001265			14797-65-0	Nitrite	ug/mL	99.9	<0.0400	<0.0400	<0.0400	n/a	n/a	102	0.0400	n/a	U
S09V001265			24959-67-9	Bromide	ug/mL	98.3	<0.0237	<0.0237	<0.0237	n/a	n/a	100	0.0237	n/a	U
S09V001265			14797-55-8	Nitrate	ug/mL	99.1	<0.0162	1.27	1.27	1.27	0.433	110	0.0162	n/a	
S09V001265			14265-44-2	Phosphate	ug/mL	101	<0.0381	<0.0381	<0.0381	n/a	n/a	104	0.0381	n/a	U
S09V001265			14808-79-8	Sulfate	ug/mL	101	<0.0219	0.0379	0.0374	0.0377	1.30	104	0.0219	n/a	B
S09V001266			ALKALINITY	Total Alkalinity	MEQL	109	n/a	0.0780	n/a	n/a	n/a	n/a	2.40E-03	n/a	
S09V001268			13994-20-2	Neptunium-237	ug/mL	106	<5.30E-08	<5.30E-08	n/a	n/a	n/a	n/a	5.30E-08	n/a	U
S09V001268			U-238	Uranium-238	ug/mL	99.1	<5.50E-07	<5.50E-07	n/a	n/a	n/a	n/a	5.50E-07	n/a	U
S09V001268			15117-48-3	Plutonium-239	ug/mL	98.1	<6.90E-07	<6.90E-07	n/a	n/a	n/a	n/a	6.90E-07	n/a	U
S09V001268			14596-10-2	Americium-241	ug/mL	99.0	<8.00E-08	<8.00E-08	n/a	n/a	n/a	n/a	8.00E-08	n/a	U
S09V001268			14133-76-7	Technetium-99	ug/mL	100	<4.00E-07	<4.00E-07	n/a	n/a	n/a	n/a	4.00E-07	n/a	U
S09V001269			12587-46-1	Gross alpha	uCi/mL	98.8	3.15E-07	<3.13E-07	<3.13E-07	n/a	n/a	99.9	3.13E-07	n/a	U
S09V001269			12587-47-2	Gross beta	uCi/mL	97.9	<2.08E-06	<1.42E-06	<1.42E-06	n/a	n/a	96.4	1.42E-06	n/a	U
S09V001269			10198-40-0	Cobalt-60	uCi/mL	101	<4.24E-07	<4.16E-07	<4.05E-07	n/a	n/a	n/a	4.16E-07	n/a	U
S09V001269			14681-63-1	Niobium-94	uCi/mL	n/a	<3.72E-07	<3.92E-07	<3.76E-07	n/a	n/a	n/a	3.92E-07	n/a	U
S09V001269			RU/RH-106	Ruthenium/Rhodium-106	uCi/mL	n/a	<6.96E-06	<7.09E-06	<6.89E-06	n/a	n/a	n/a	7.09E-06	n/a	U
S09V001269			14234-35-6	Antimony-125	uCi/mL	n/a	<1.03E-06	<9.66E-07	<9.77E-07	n/a	n/a	n/a	9.66E-07	n/a	U
S09V001269			13967-70-9	Cesium-134	uCi/mL	n/a	<4.08E-07	<4.05E-07	<3.98E-07	n/a	n/a	n/a	4.05E-07	n/a	U
S09V001269			10045-97-3	Cesium-137	uCi/mL	105	<5.24E-07	<5.09E-07	<4.94E-07	n/a	n/a	n/a	5.09E-07	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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RPP-RPT-47008 Rev.0

SX Barrier
Data Summary Report

Sample Group: 20090635

Core Number: C7186

Sample Depth: Equipment Blank

Customer Sample ID: B20766

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001269			CE/PR-144	Cerium/Praseodymium-144	uCi/mL	n/a	<2.73E-06	<2.87E-06	<2.73E-06	n/a	n/a	n/a	2.87E-06	n/a	U
S09V001269			14683-23-9	Europium-152	uCi/mL	n/a	<2.12E-06	<2.19E-06	<2.10E-06	n/a	n/a	n/a	2.19E-06	n/a	U
S09V001269			15585-10-1	Europium-154	uCi/mL	n/a	<1.19E-06	<1.34E-06	<1.30E-06	n/a	n/a	n/a	1.34E-06	n/a	U
S09V001269			14391-16-3	Europium-155	uCi/mL	n/a	<6.22E-07	<6.49E-07	<6.12E-07	n/a	n/a	n/a	6.49E-07	n/a	U
S09V001269			13982-63-3	Radium-226	uCi/mL	n/a	<6.44E-06	<6.28E-06	<6.48E-06	n/a	n/a	n/a	6.28E-06	n/a	U
S09V001269			14596-10-2	Americium-241	uCi/mL	n/a	<3.62E-07	<3.71E-07	<3.77E-07	n/a	n/a	n/a	3.71E-07	n/a	U
S09V001269			15046-84-1	Iodine-129	uCi/mL	132	<9.22E-08	<1.07E-07	n/a	n/a	n/a	n/a	1.07E-07	n/a	U
S09V001270			CONDUCT	Conductivity	uMHO/cm	96.6	1.36	3.53	3.55	3.54	0.565	n/a	0.200	n/a	
S09V001271			PH	pH	unitless	n/a	n/a	5.18	5.11	5.14	1.36	n/a	0.0100	n/a	

Customer Sample ID: B20768

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001204			7440-22-4	Silver	ug/mL	93.3	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	99.4	5.10E-03	n/a	U
S09V001204			7429-90-5	Aluminum	ug/mL	97.3	<0.0300	<0.0306	<0.0306	n/a	n/a	110	0.0306	n/a	U
S09V001204			7440-38-2	Arsenic	ug/mL	97.9	<0.0500	<0.0510	<0.0510	n/a	n/a	108	0.0510	n/a	U
S09V001204			7440-42-8	Boron	ug/mL	101	<0.0300	<0.0306	<0.0306	n/a	n/a	108	0.0306	n/a	U
S09V001204			7440-39-3	Barium	ug/mL	98.3	<3.00E-03	<3.06E-03	<3.06E-03	n/a	n/a	106	3.06E-03	n/a	U
S09V001204			7440-41-7	Beryllium	ug/mL	96.8	<1.00E-03	<1.02E-03	<1.02E-03	n/a	n/a	107	1.02E-03	n/a	U
S09V001204			7440-69-9	Bismuth	ug/mL	98.3	<0.100	<0.102	<0.102	n/a	n/a	99.5	0.102	n/a	U
S09V001204			7440-70-2	Calcium	ug/mL	108	<0.0500	<0.0510	<0.0510	n/a	n/a	115	0.0510	n/a	U
S09V001204			7440-43-9	Cadmium	ug/mL	97.6	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	111	5.10E-03	n/a	U
S09V001204			7440-48-4	Cobalt	ug/mL	97.8	<0.0100	<0.0102	<0.0102	n/a	n/a	110	0.0102	n/a	U
S09V001204			7440-47-3	Chromium	ug/mL	97.7	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	112	5.10E-03	n/a	U
S09V001204			7440-50-8	Copper	ug/mL	98.1	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	107	5.10E-03	n/a	U
S09V001204			7439-89-6	Iron	ug/mL	97.7	<5.00E-03	0.0243	0.0250	0.0247	2.76	109	5.10E-03	n/a	B
S09V001204			7440-09-7	Potassium	ug/mL	102	<0.500	<0.510	<0.510	n/a	n/a	108	0.510	n/a	U
S09V001204			7439-93-2	Lithium	ug/mL	102	<3.00E-03	<3.06E-03	<3.06E-03	n/a	n/a	114	3.06E-03	n/a	U
S09V001204			7439-95-4	Magnesium	ug/mL	97.5	<0.0500	<0.0510	<0.0510	n/a	n/a	108	0.0510	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090635
Core Number: C7186
Sample Depth: Equipment Blank
Customer Sample ID: B20768

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001204			7439-96-5	Manganese	ug/mL	97.1	<3.00E-03	<3.06E-03	<3.06E-03	n/a	n/a	109	3.06E-03	n/a	U
S09V001204			7439-98-7	Molybdenum	ug/mL	101	<0.0200	<0.0204	<0.0204	n/a	n/a	108	0.0204	n/a	U
S09V001204			7440-23-5	Sodium	ug/mL	100	<0.100	<0.102	<0.102	n/a	n/a	118	0.102	n/a	U
S09V001204			7440-02-0	Nickel	ug/mL	96.6	<0.0200	<0.0204	<0.0204	n/a	n/a	111	0.0204	n/a	U
S09V001204			7723-14-0	Phosphorus	ug/mL	98.1	<0.0500	<0.0510	<0.0510	n/a	n/a	104	0.0510	n/a	U
S09V001204			7439-92-1	Lead	ug/mL	101	<0.0500	<0.0510	<0.0510	n/a	n/a	115	0.0510	n/a	U
S09V001204			7704-34-9	Sulfur	ug/mL	100	<0.100	<0.102	<0.102	n/a	n/a	111	0.102	n/a	U
S09V001204			7440-36-0	Antimony	ug/mL	98.0	<0.0500	<0.0510	<0.0510	n/a	n/a	106	0.0510	n/a	U
S09V001204			7782-49-2	Selenium	ug/mL	101	<0.100	<0.102	<0.102	n/a	n/a	110	0.102	n/a	U
S09V001204			7440-21-3	Silicon	ug/mL	93.8	<0.0300	<0.0306	<0.0306	n/a	n/a	102	0.0306	n/a	U
S09V001204			7440-31-5	Tin	ug/mL	103	<0.0300	<0.0306	<0.0306	n/a	n/a	106	0.0306	n/a	U
S09V001204			7440-24-6	Strontium	ug/mL	98.2	<3.00E-03	<3.06E-03	<3.06E-03	n/a	n/a	107	3.06E-03	n/a	U
S09V001204			7440-32-6	Titanium	ug/mL	99.9	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	109	5.10E-03	n/a	U
S09V001204			7440-28-0	Thallium	ug/mL	95.5	<0.100	<0.102	<0.102	n/a	n/a	98.8	0.102	n/a	U
S09V001204			7440-61-1	Uranium	ug/mL	101	<0.100	<0.102	<0.102	n/a	n/a	106	0.102	n/a	U
S09V001204			7440-62-2	Vanadium	ug/mL	99.4	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	109	5.10E-03	n/a	U
S09V001204			7440-65-5	Yttrium	ug/mL	97.7	<2.00E-03	<2.04E-03	<2.04E-03	n/a	n/a	107	2.04E-03	n/a	U
S09V001204			7440-66-6	Zinc	ug/mL	97.9	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	107	5.10E-03	n/a	U
S09V001204			7440-67-7	Zirconium	ug/mL	99.7	<5.00E-03	<5.10E-03	<5.10E-03	n/a	n/a	102	5.10E-03	n/a	U
S09V001205			16984-48-8	Fluoride	ug/mL	102	<6.16E-03	<6.16E-03	n/a	n/a	n/a	n/a	6.16E-03	n/a	U
S09V001205			16887-00-6	Chloride	ug/mL	105	0.0126	0.0322	n/a	n/a	n/a	n/a	3.10E-03	n/a	CB
S09V001205			14797-65-0	Nitrite	ug/mL	100	<0.0400	<0.0400	n/a	n/a	n/a	n/a	0.0400	n/a	U
S09V001205			24959-67-9	Bromide	ug/mL	98.5	<0.0237	<0.0237	n/a	n/a	n/a	n/a	0.0237	n/a	U
S09V001205			14797-55-8	Nitrate	ug/mL	98.8	0.0435	0.363	n/a	n/a	n/a	n/a	0.0162	n/a	C
S09V001205			14265-44-2	Phosphate	ug/mL	101	<0.0381	<0.0381	n/a	n/a	n/a	n/a	0.0381	n/a	U
S09V001205			14808-79-8	Sulfate	ug/mL	101	0.0552	<0.0219	n/a	n/a	n/a	n/a	0.0219	n/a	U
S09V001205			PH	pH	unitless	n/a	n/a	5.89	5.92	5.90	0.508	n/a	0.0100	n/a	
S09V001206			ALKALINITY	Total Alkalinity	MEQL	112	n/a	0.127	n/a	n/a	n/a	n/a	2.40E-03	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090635
Core Number: C7186
Sample Depth: Equipment Blank
Customer Sample ID: B20768

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001208		15046-84-1	Iodine-129	uCi/mL	132	<9.22E-08	<1.06E-07	n/a	n/a	n/a	n/a	1.06E-07	n/a	U
S09V001208		13994-20-2	Neptunium-237	ug/mL	106	<5.30E-08	<5.30E-08	<5.30E-08	n/a	n/a	102	5.30E-08	n/a	U
S09V001208		U-238	Uranium-238	ug/mL	99.1	<5.50E-07	<5.50E-07	<5.50E-07	n/a	n/a	101	5.50E-07	n/a	U
S09V001208		15117-48-3	Plutonium-239	ug/mL	98.1	<6.90E-07	<6.90E-07	<6.90E-07	n/a	n/a	102	6.90E-07	n/a	U
S09V001208		14596-10-2	Americium-241	ug/mL	99.0	<8.00E-08	<8.00E-08	<8.00E-08	n/a	n/a	103	8.00E-08	n/a	U
S09V001208		14133-76-7	Technetium-99	ug/mL	100	<4.00E-07	<4.00E-07	<4.00E-07	n/a	n/a	105	4.00E-07	n/a	U
S09V001209		12587-46-1	Gross alpha	uCi/mL	101	9.46E-07	<7.95E-07	<7.95E-07	n/a	n/a	99.1	7.95E-07	n/a	U
S09V001209		12587-47-2	Gross beta	uCi/mL	95.2	<1.32E-06	1.91E-06	1.35E-06	1.63E-06	34.0	95.7	1.32E-06	84.41	
S09V001209		10198-40-0	Cobalt-60	uCi/mL	104	<5.94E-07	<6.29E-07	<6.08E-07	n/a	n/a	n/a	6.29E-07	n/a	U
S09V001209		14681-63-1	Niobium-94	uCi/mL	n/a	<5.85E-07	<5.36E-07	<5.71E-07	n/a	n/a	n/a	5.36E-07	n/a	U
S09V001209		RU/RH-106	Ruthenium/Rhodium-106	uCi/mL	n/a	<1.06E-05	<1.02E-05	<1.03E-05	n/a	n/a	n/a	1.02E-05	n/a	U
S09V001209		14234-35-6	Antimony-125	uCi/mL	n/a	<1.42E-06	<1.44E-06	<1.42E-06	n/a	n/a	n/a	1.44E-06	n/a	U
S09V001209		13967-70-9	Cesium-134	uCi/mL	n/a	<5.76E-07	<5.91E-07	<5.70E-07	n/a	n/a	n/a	5.91E-07	n/a	U
S09V001209		10045-97-3	Cesium-137	uCi/mL	104	<6.51E-07	<6.16E-07	<6.70E-07	n/a	n/a	n/a	6.16E-07	n/a	U
S09V001209		CE/PR-144	Cerium/Praseodymium-144	uCi/mL	n/a	<4.35E-06	<4.71E-06	<4.57E-06	n/a	n/a	n/a	4.71E-06	n/a	U
S09V001209		14683-23-9	Europium-152	uCi/mL	n/a	<3.10E-06	<3.07E-06	<3.14E-06	n/a	n/a	n/a	3.07E-06	n/a	U
S09V001209		15585-10-1	Europium-154	uCi/mL	n/a	<1.88E-06	<1.93E-06	<1.73E-06	n/a	n/a	n/a	1.93E-06	n/a	U
S09V001209		14391-16-3	Europium-155	uCi/mL	n/a	<1.06E-06	<1.11E-06	<1.04E-06	n/a	n/a	n/a	1.11E-06	n/a	U
S09V001209		13982-63-3	Radium-226	uCi/mL	n/a	<1.10E-05	<1.19E-05	<1.12E-05	n/a	n/a	n/a	1.19E-05	n/a	U
S09V001209		14596-10-2	Americium-241	uCi/mL	n/a	<8.99E-07	<8.95E-07	<9.43E-07	n/a	n/a	n/a	8.95E-07	n/a	U
S09V001210		CONDUCT	Conductivity	uMHO/cm	96.6	1.36	1.96	2.10	2.03	7.06	n/a	0.200	n/a	B

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 74-76
Customer Sample ID: B206P7A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001437			%WATERA	%WATER-APD	%	n/a	n/a	18.59	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001437			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.30E-07	n/a	n/a	n/a	n/a	3.30E-07	n/a	U
S09V001437			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<8.40E-07	n/a	n/a	n/a	n/a	8.40E-07	n/a	U
S09V001437			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.02E-07	n/a	n/a	n/a	n/a	4.02E-07	n/a	U
S09V001437			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.51E-06	n/a	n/a	n/a	n/a	1.51E-06	n/a	U
S09V001437			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<9.69E-07	n/a	n/a	n/a	n/a	9.69E-07	n/a	U
S09V001437			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<5.27E-07	n/a	n/a	n/a	n/a	5.27E-07	n/a	U
S09V001437			WT%SOLID	Weight percent solids	%	n/a	n/a	81.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001441			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	200	204	202	2.03	n/a	1.00	n/a	

Customer Sample ID: B206P7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001443		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.93E-06	<6.92E-06	n/a	n/a	100	6.93E-06	n/a	U
S09V001443		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	8.48E-05	5.23E-05	6.85E-05	47.5	94.1	2.01E-05	29.884	B
S09V001443		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	<3.48	n/a	n/a	94.7	3.49	n/a	U
S09V001443		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.33E+04	1.20E+04	1.26E+04	10.3	1.91E+03	20.9	n/a	
S09V001443		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.8	<41.8	n/a	n/a	84.4	41.8	n/a	U
S09V001443		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	<20.9	n/a	n/a	99.8	20.9	n/a	U
S09V001443		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	118	117	117	0.184	107	2.09	n/a	
S09V001443		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.697	<0.696	n/a	n/a	99.1	0.697	n/a	U
S09V001443		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.7	<69.6	n/a	n/a	104	69.7	n/a	U
S09V001443		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.13E+04	1.05E+04	1.09E+04	8.19	1.36E+03	34.9	n/a	
S09V001443		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	<3.48	n/a	n/a	77.5	3.49	n/a	U
S09V001443		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	10.9	<6.96	n/a	n/a	91.5	6.97	n/a	B
S09V001443		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	10.9	13.2	12.1	19.0	105	3.49	n/a	B
S09V001443		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	12.8	11.8	12.3	7.84	101	3.49	n/a	B
S09V001443		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	2.71E+04	2.49E+04	2.60E+04	8.19	-777	3.49	n/a	
S09V001443		AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.65E+03	1.60E+03	1.63E+03	3.12	39.1	349	n/a	B

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 74-76
Customer Sample ID: B206P7A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001443	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	11.4	10.4	10.9	8.82	106	2.09	n/a	B
S09V001443	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	5.96E+03	5.71E+03	5.83E+03	4.30	1.19E+03	34.9	n/a	
S09V001443	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	467	446	457	4.45	111	2.09	n/a	
S09V001443	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	<13.9	n/a	n/a	96.1	13.9	n/a	U
S09V001443	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	497	423	460	16.0	251	69.7	n/a	B
S09V001443	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	18.1	22.2	20.2	20.2	116	13.9	n/a	B
S09V001443	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	767	732	750	4.66	164	34.9	n/a	
S09V001443	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	41.9	<34.8	n/a	n/a	84.5	34.9	n/a	B
S09V001443	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.7	<69.6	n/a	n/a	0.0	69.7	n/a	UN
S09V001443	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	<34.8	n/a	n/a	55.9	34.9	n/a	UN
S09V001443	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.7	<69.6	n/a	n/a	0.0	69.7	n/a	UN
S09V001443	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	23.3	23.6	23.4	1.08	1.16	20.9	n/a	BN
S09V001443	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	<20.9	n/a	n/a	83.8	20.9	n/a	U
S09V001443	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	42.0	39.3	40.6	6.70	112	2.09	n/a	
S09V001443	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	1.46E+03	1.30E+03	1.38E+03	11.5	24.8	3.49	n/a	
S09V001443	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	70.4	<69.6	n/a	n/a	77.8	69.7	n/a	B
S09V001443	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.7	<69.6	n/a	n/a	76.8	69.7	n/a	U
S09V001443	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	57.2	51.8	54.5	9.83	95.0	3.49	n/a	
S09V001443	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	11.2	10.4	10.8	7.96	78.1	1.39	n/a	B
S09V001443	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	47.4	43.1	45.2	9.67	98.0	3.49	n/a	C
S09V001443	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	20.4	17.9	19.1	13.1	81.1	3.49	n/a	B
S09V001443	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.24E-05	<9.23E-05	n/a	n/a	106	9.24E-05	n/a	U
S09V001443	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.592	0.551	0.572	7.19	103	9.59E-04	n/a	
S09V001443	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	<1.20E-03	n/a	n/a	97.4	1.20E-03	n/a	U
S09V001443	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	<1.39E-04	n/a	n/a	93.9	1.39E-04	n/a	U
S09V001443	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	<1.05E-04	<1.04E-04	n/a	n/a	101	1.05E-04	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 74-76
Customer Sample ID: B206P7A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001442	WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<5.24E-07	<5.24E-07	n/a	n/a	103	5.24E-07	n/a	U
S09V001442	WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	<2.01E-06	<2.01E-06	n/a	n/a	98.0	2.01E-06	n/a	U
S09V001442	WV	16984-48-8	Fluoride	ug/g	94.8	<6.16E-03	0.870	0.888	0.879	2.05	99.2	8.26E-03	n/a	
S09V001442	WV	16887-00-6	Chloride	ug/g	101	<3.10E-03	15.6	15.5	15.6	0.733	97.4	0.0457	n/a	
S09V001442	WV	14797-65-0	Nitrite	ug/g	92.8	<0.0400	<0.0536	<0.0535	n/a	n/a	105	0.0536	n/a	U
S09V001442	WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.126	0.120	0.123	4.65	104	0.0318	n/a	B
S09V001442	WV	14797-55-8	Nitrate	ug/g	101	<0.0162	9.72	9.73	9.72	0.0385	105	0.0217	n/a	
S09V001442	WV	14265-44-2	Phosphate	ug/g	99.9	<0.0381	0.307	0.334	0.321	8.28	105	0.0511	n/a	B
S09V001442	WV	14808-79-8	Sulfate	ug/g	101	<0.0219	13.0	13.1	13.0	0.864	109	0.0294	n/a	
S09V001442	WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442	WV	7429-90-5	Aluminum	ug/g	102	<0.0300	1.31	n/a	n/a	n/a	n/a	0.0804	n/a	
S09V001442	WV	7440-38-2	Arsenic	ug/g	101	<0.0600	<0.161	n/a	n/a	n/a	n/a	0.161	n/a	U
S09V001442	WV	7440-42-8	Boron	ug/g	102	<0.0300	<0.0804	n/a	n/a	n/a	n/a	0.0804	n/a	U
S09V001442	WV	7440-39-3	Barium	ug/g	101	<3.00E-03	0.0274	n/a	n/a	n/a	n/a	8.04E-03	n/a	B
S09V001442	WV	7440-41-7	Beryllium	ug/g	100	<1.00E-03	<2.68E-03	n/a	n/a	n/a	n/a	2.68E-03	n/a	U
S09V001442	WV	7440-69-9	Bismuth	ug/g	99.8	<0.100	<0.268	n/a	n/a	n/a	n/a	0.268	n/a	U
S09V001442	WV	7440-70-2	Calcium	ug/g	99.2	<0.0500	14.3	n/a	n/a	n/a	n/a	0.134	n/a	
S09V001442	WV	7440-43-9	Cadmium	ug/g	102	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442	WV	7440-48-4	Cobalt	ug/g	102	<0.0100	<0.0268	n/a	n/a	n/a	n/a	0.0268	n/a	U
S09V001442	WV	7440-47-3	Chromium	ug/g	102	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442	WV	7440-50-8	Copper	ug/g	100	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442	WV	7439-89-6	Iron	ug/g	101	<5.00E-03	1.51	n/a	n/a	n/a	n/a	0.0134	n/a	
S09V001442	WV	7440-09-7	Potassium	ug/g	103	<0.500	7.15	n/a	n/a	n/a	n/a	1.34	n/a	B
S09V001442	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	0.0113	n/a	n/a	n/a	n/a	8.04E-03	n/a	B
S09V001442	WV	7439-95-4	Magnesium	ug/g	101	<0.0500	3.34	n/a	n/a	n/a	n/a	0.134	n/a	
S09V001442	WV	7439-96-5	Manganese	ug/g	102	<3.00E-03	0.0175	n/a	n/a	n/a	n/a	8.04E-03	n/a	B
S09V001442	WV	7439-98-7	Molybdenum	ug/g	104	<0.0200	<0.0536	n/a	n/a	n/a	n/a	0.0536	n/a	U
S09V001442	WV	7440-23-5	Sodium	ug/g	102	0.236	32.4	n/a	n/a	n/a	n/a	0.268	n/a	

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X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 74-76
Customer Sample ID: B206P7A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001442		WV	7440-02-0	Nickel	ug/g	101	<0.0200	<0.0536	n/a	n/a	n/a	n/a	0.0536	n/a	U
S09V001442		WV	7723-14-0	Phosphorus	ug/g	102	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001442		WV	7439-92-1	Lead	ug/g	105	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001442		WV	7704-34-9	Sulfur	ug/g	104	<0.100	4.38	n/a	n/a	n/a	n/a	0.268	n/a	
S09V001442		WV	7440-36-0	Antimony	ug/g	102	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001442		WV	7782-49-2	Selenium	ug/g	103	<0.100	<0.268	n/a	n/a	n/a	n/a	0.268	n/a	U
S09V001442		WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	21.4	n/a	n/a	n/a	n/a	0.0804	n/a	
S09V001442		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0804	n/a	n/a	n/a	n/a	0.0804	n/a	U
S09V001442		WV	7440-24-6	Strontium	ug/g	100	<3.00E-03	0.0694	n/a	n/a	n/a	n/a	8.04E-03	n/a	B
S09V001442		WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	0.0828	n/a	n/a	n/a	n/a	0.0134	n/a	B
S09V001442		WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.268	n/a	n/a	n/a	n/a	0.268	n/a	U
S09V001442		WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.268	n/a	n/a	n/a	n/a	0.268	n/a	U
S09V001442		WV	7440-62-2	Vanadium	ug/g	103	<5.00E-03	0.0518	n/a	n/a	n/a	n/a	0.0134	n/a	B
S09V001442		WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<5.36E-03	n/a	n/a	n/a	n/a	5.36E-03	n/a	U
S09V001442		WV	7440-66-6	Zinc	ug/g	102	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442		WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001442		WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	5.61E-06	5.86E-06	5.73E-06	4.27	102	4.02E-06	n/a	B
S09V001442		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.34E-06	<1.34E-06	n/a	n/a	n/a	1.34E-06	n/a	U
S09V001442		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	<6.70E-07	<6.69E-07	n/a	n/a	n/a	6.70E-07	n/a	U
S09V001442		WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	2.30E-05	1.87E-05	2.09E-05	20.5	n/a	1.47E-06	n/a	
S09V001442		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<5.36E-07	<5.35E-07	n/a	n/a	n/a	5.36E-07	n/a	U
S09V001442		WV	U-238	Uranium-238	ug/g	104	<5.50E-05	3.01E-03	2.78E-03	2.90E-03	7.96	n/a	7.37E-05	n/a	

Customer Sample ID: B206P7B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001196			%WATERA	%WATER-APD	%	n/a	n/a	16.86	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001196			WT%SOLID	Weight percent solids	%	n/a	n/a	83.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001196			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.34E-07	n/a	n/a	n/a	n/a	1.34E-07	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 106-108
Customer Sample ID: B206P9A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001237			%WATERA	%WATER-APD	%	n/a	n/a	12.79	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001237			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.62E-07	n/a	n/a	n/a	n/a	3.62E-07	n/a	U
S09V001237			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<9.43E-07	n/a	n/a	n/a	n/a	9.43E-07	n/a	U
S09V001237			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.68E-07	n/a	n/a	n/a	n/a	4.68E-07	n/a	U
S09V001237			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.64E-06	n/a	n/a	n/a	n/a	1.64E-06	n/a	U
S09V001237			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.24E-06	n/a	n/a	n/a	n/a	1.24E-06	n/a	U
S09V001237			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<5.94E-07	n/a	n/a	n/a	n/a	5.94E-07	n/a	U
S09V001237			WT%SOLID	Weight percent solids	%	n/a	n/a	87.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001237			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.69E-07	n/a	n/a	n/a	n/a	1.69E-07	n/a	U
S09V001438			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	189	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206P9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001440		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.94E-06	n/a	n/a	n/a	n/a	6.94E-06	n/a	U
S09V001440		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	1.00E-04	n/a	n/a	n/a	n/a	2.02E-05	25.611	B
S09V001440		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001440		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.23E+04	n/a	n/a	n/a	n/a	21.0	n/a	
S09V001440		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.9	n/a	n/a	n/a	n/a	41.9	n/a	U
S09V001440		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001440		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	153	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001440		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.698	n/a	n/a	n/a	n/a	0.698	n/a	U
S09V001440		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001440		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	9.50E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001440		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001440		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	8.36	n/a	n/a	n/a	n/a	6.98	n/a	B
S09V001440		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	14.4	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001440		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	14.7	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001440		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	2.28E+04	n/a	n/a	n/a	n/a	3.49	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 106-108
Customer Sample ID: B206P9A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001440	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.57E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001440	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	11.2	n/a	n/a	n/a	n/a	2.10	n/a	B
S09V001440	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	5.69E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001440	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	569	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001440	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<14.0	n/a	n/a	n/a	n/a	14.0	n/a	U
S09V001440	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	361	n/a	n/a	n/a	n/a	69.8	n/a	B
S09V001440	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	19.0	n/a	n/a	n/a	n/a	14.0	n/a	B
S09V001440	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	662	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001440	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001440	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001440	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001440	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001440	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	21.7	n/a	n/a	n/a	n/a	21.0	n/a	BN
S09V001440	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001440	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	37.5	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001440	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	1.28E+03	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001440	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001440	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001440	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	49.5	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001440	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	9.80	n/a	n/a	n/a	n/a	1.40	n/a	B
S09V001440	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	46.7	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001440	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	15.3	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001440	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.25E-05	n/a	n/a	n/a	n/a	9.25E-05	n/a	U
S09V001440	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.674	n/a	n/a	n/a	n/a	9.60E-04	n/a	
S09V001440	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001440	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.40E-04	n/a	n/a	n/a	n/a	1.40E-04	n/a	U
S09V001440	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	<1.05E-04	n/a	n/a	n/a	n/a	1.05E-04	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 106-108
Customer Sample ID: B206P9A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001439	WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<4.62E-07	n/a	n/a	n/a	n/a	4.62E-07	n/a	U
S09V001439	WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	<2.39E-06	n/a	n/a	n/a	n/a	2.39E-06	n/a	U
S09V001439	WV	16984-48-8	Fluoride	ug/g	94.8	<6.16E-03	0.732	n/a	n/a	n/a	n/a	7.28E-03	n/a	
S09V001439	WV	16887-00-6	Chloride	ug/g	101	<3.10E-03	11.7	n/a	n/a	n/a	n/a	0.0403	n/a	
S09V001439	WV	14797-65-0	Nitrite	ug/g	92.8	<0.0400	<0.0473	n/a	n/a	n/a	n/a	0.0473	n/a	U
S09V001439	WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0835	n/a	n/a	n/a	n/a	0.0280	n/a	B
S09V001439	WV	14797-55-8	Nitrate	ug/g	101	<0.0162	6.08	n/a	n/a	n/a	n/a	0.0191	n/a	
S09V001439	WV	14265-44-2	Phosphate	ug/g	99.9	<0.0381	0.321	n/a	n/a	n/a	n/a	0.0450	n/a	
S09V001439	WV	14808-79-8	Sulfate	ug/g	101	<0.0219	7.56	n/a	n/a	n/a	n/a	0.0259	n/a	
S09V001439	WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0118	<0.0118	n/a	n/a	79.9	0.0118	n/a	U
S09V001439	WV	7429-90-5	Aluminum	ug/g	102	<0.0300	0.359	0.355	0.357	1.05	101	0.0709	n/a	B
S09V001439	WV	7440-38-2	Arsenic	ug/g	101	<0.0600	<0.142	<0.142	n/a	n/a	103	0.142	n/a	U
S09V001439	WV	7440-42-8	Boron	ug/g	102	<0.0300	<0.0709	<0.0709	n/a	n/a	99.9	0.0709	n/a	U
S09V001439	WV	7440-39-3	Barium	ug/g	101	<3.00E-03	0.0219	0.0218	0.0219	0.429	99.6	7.09E-03	n/a	B
S09V001439	WV	7440-41-7	Beryllium	ug/g	100	<1.00E-03	<2.36E-03	<2.36E-03	n/a	n/a	97.6	2.36E-03	n/a	U
S09V001439	WV	7440-69-9	Bismuth	ug/g	99.8	<0.100	<0.236	<0.236	n/a	n/a	98.9	0.236	n/a	U
S09V001439	WV	7440-70-2	Calcium	ug/g	99.2	<0.0500	13.7	13.7	13.7	0.548	93.9	0.118	n/a	
S09V001439	WV	7440-43-9	Cadmium	ug/g	102	<5.00E-03	<0.0118	<0.0118	n/a	n/a	98.4	0.0118	n/a	U
S09V001439	WV	7440-48-4	Cobalt	ug/g	102	<0.0100	<0.0236	<0.0236	n/a	n/a	96.9	0.0236	n/a	U
S09V001439	WV	7440-47-3	Chromium	ug/g	102	<5.00E-03	<0.0118	<0.0118	n/a	n/a	98.3	0.0118	n/a	U
S09V001439	WV	7440-50-8	Copper	ug/g	100	<5.00E-03	<0.0118	<0.0118	n/a	n/a	101	0.0118	n/a	U
S09V001439	WV	7439-89-6	Iron	ug/g	101	<5.00E-03	0.456	0.455	0.456	0.162	96.9	0.0118	n/a	
S09V001439	WV	7440-09-7	Potassium	ug/g	103	<0.500	5.31	4.68	4.99	12.6	90.6	1.18	n/a	B
S09V001439	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	<7.09E-03	7.28E-03	n/a	n/a	99.0	7.09E-03	n/a	U
S09V001439	WV	7439-95-4	Magnesium	ug/g	101	<0.0500	3.13	3.14	3.13	0.115	98.3	0.118	n/a	
S09V001439	WV	7439-96-5	Manganese	ug/g	102	<3.00E-03	0.0262	0.0259	0.0261	1.18	99.1	7.09E-03	n/a	B
S09V001439	WV	7439-98-7	Molybdenum	ug/g	104	<0.0200	<0.0473	<0.0473	n/a	n/a	98.7	0.0473	n/a	U
S09V001439	WV	7440-23-5	Sodium	ug/g	102	0.236	24.9	24.0	24.4	3.61	97.1	0.236	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090802
Core Number: C7154
Sample Depth: 106-108
Customer Sample ID: B206P9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001439		WV	7440-02-0	Nickel	ug/g	101	<0.0200	<0.0473	<0.0473	n/a	n/a	96.8	0.0473	n/a	U
S09V001439		WV	7723-14-0	Phosphorus	ug/g	102	<0.0500	<0.118	0.123	n/a	n/a	102	0.118	n/a	U
S09V001439		WV	7439-92-1	Lead	ug/g	105	<0.0500	<0.118	<0.118	n/a	n/a	99.5	0.118	n/a	U
S09V001439		WV	7704-34-9	Sulfur	ug/g	104	<0.100	2.64	2.68	2.66	1.63	103	0.236	n/a	
S09V001439		WV	7440-36-0	Antimony	ug/g	102	<0.0500	<0.118	<0.118	n/a	n/a	99.4	0.118	n/a	U
S09V001439		WV	7782-49-2	Selenium	ug/g	103	<0.100	<0.236	<0.236	n/a	n/a	105	0.236	n/a	U
S09V001439		WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	15.4	15.4	15.4	0.390	89.5	0.0709	n/a	
S09V001439		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0709	<0.0709	n/a	n/a	96.1	0.0709	n/a	U
S09V001439		WV	7440-24-6	Strontium	ug/g	100	<3.00E-03	0.0610	0.0610	0.0610	0.0	98.5	7.09E-03	n/a	B
S09V001439		WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	0.0332	0.0342	0.0337	2.98	99.0	0.0118	n/a	B
S09V001439		WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.236	<0.236	n/a	n/a	98.3	0.236	n/a	U
S09V001439		WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.236	<0.236	n/a	n/a	101	0.236	n/a	U
S09V001439		WV	7440-62-2	Vanadium	ug/g	103	<5.00E-03	0.0351	0.0412	0.0382	15.9	98.6	0.0118	n/a	B
S09V001439		WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<4.73E-03	<4.73E-03	n/a	n/a	97.6	4.73E-03	n/a	U
S09V001439		WV	7440-66-6	Zinc	ug/g	102	<5.00E-03	<0.0118	<0.0118	n/a	n/a	98.1	0.0118	n/a	U
S09V001439		WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0118	<0.0118	n/a	n/a	92.1	0.0118	n/a	U
S09V001439		WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	3.58E-06	n/a	n/a	n/a	n/a	3.54E-06	n/a	B
S09V001439		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.18E-07	n/a	n/a	n/a	n/a	1.18E-07	n/a	U
S09V001439		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	1.43E-07	n/a	n/a	n/a	n/a	5.91E-08	n/a	
S09V001439		WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	1.48E-05	n/a	n/a	n/a	n/a	1.30E-07	n/a	
S09V001439		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<4.73E-08	n/a	n/a	n/a	n/a	4.73E-08	n/a	U
S09V001439		WV	U-238	Uranium-238	ug/g	104	<5.50E-05	2.00E-03	n/a	n/a	n/a	n/a	6.50E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 92-94
Customer Sample ID: B206R3A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001261			%WATERA	%WATER-APD	%	n/a	n/a	13.74	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001261			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.86E-07	n/a	n/a	n/a	n/a	3.86E-07	n/a	U
S09V001261			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<9.62E-07	n/a	n/a	n/a	n/a	9.62E-07	n/a	U
S09V001261			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.72E-07	n/a	n/a	n/a	n/a	4.72E-07	n/a	U
S09V001261			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.76E-06	n/a	n/a	n/a	n/a	1.76E-06	n/a	U
S09V001261			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.16E-06	n/a	n/a	n/a	n/a	1.16E-06	n/a	U
S09V001261			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<6.06E-07	n/a	n/a	n/a	n/a	6.06E-07	n/a	U
S09V001261			WT%SOLID	Weight percent solids	%	n/a	n/a	86.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001261			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.52E-07	n/a	n/a	n/a	n/a	1.52E-07	n/a	U
S09V001444			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	190	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206R3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001446		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.94E-06	n/a	n/a	n/a	n/a	6.94E-06	n/a	U
S09V001446		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	8.25E-05	n/a	n/a	n/a	n/a	2.02E-05	30.681	B
S09V001446		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001446		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.26E+04	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001446		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.9	n/a	n/a	n/a	n/a	41.9	n/a	U
S09V001446		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001446		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	102	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001446		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.698	n/a	n/a	n/a	n/a	0.698	n/a	U
S09V001446		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001446		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.01E+04	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001446		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001446		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001446		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	13.3	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001446		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	11.6	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001446		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	2.00E+04	n/a	n/a	n/a	n/a	3.49	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 92-94
Customer Sample ID: B206R3A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001446	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.58E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001446	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	12.9	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001446	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	5.90E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001446	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	411	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001446	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<14.0	n/a	n/a	n/a	n/a	14.0	n/a	U
S09V001446	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	339	n/a	n/a	n/a	n/a	69.8	n/a	B
S09V001446	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	21.0	n/a	n/a	n/a	n/a	14.0	n/a	B
S09V001446	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	481	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001446	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001446	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001446	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001446	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001446	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	24.8	n/a	n/a	n/a	n/a	20.9	n/a	BN
S09V001446	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001446	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	37.5	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001446	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	882	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001446	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	70.1	n/a	n/a	n/a	n/a	69.8	n/a	B
S09V001446	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001446	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	38.8	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001446	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	8.11	n/a	n/a	n/a	n/a	1.40	n/a	B
S09V001446	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	41.7	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001446	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	11.1	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001446	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.25E-05	n/a	n/a	n/a	n/a	9.25E-05	n/a	U
S09V001446	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.762	n/a	n/a	n/a	n/a	9.60E-04	n/a	
S09V001446	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001446	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.40E-04	n/a	n/a	n/a	n/a	1.40E-04	n/a	U
S09V001446	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	7.44E-05	n/a	n/a	n/a	n/a	5.23E-05	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 92-94
Customer Sample ID: B206R3A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001445		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<4.72E-07	n/a	n/a	n/a	n/a	4.72E-07	n/a	U
S09V001445		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	<2.08E-06	n/a	n/a	n/a	n/a	2.08E-06	n/a	U
S09V001445		WV	16984-48-8	Fluoride	ug/g	94.8	<6.16E-03	1.21	n/a	n/a	n/a	n/a	7.43E-03	n/a	
S09V001445		WV	16887-00-6	Chloride	ug/g	101	<3.10E-03	4.07	n/a	n/a	n/a	n/a	3.74E-03	n/a	
S09V001445		WV	14797-65-0	Nitrite	ug/g	92.8	<0.0400	<0.0482	n/a	n/a	n/a	n/a	0.0482	n/a	U
S09V001445		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0728	n/a	n/a	n/a	n/a	0.0286	n/a	B
S09V001445		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	8.53	n/a	n/a	n/a	n/a	0.0195	n/a	
S09V001445		WV	14265-44-2	Phosphate	ug/g	99.9	<0.0381	0.507	n/a	n/a	n/a	n/a	0.0460	n/a	
S09V001445		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	6.39	n/a	n/a	n/a	n/a	0.0264	n/a	
S09V001445		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0121	n/a	n/a	n/a	n/a	0.0121	n/a	U
S09V001445		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	1.71	n/a	n/a	n/a	n/a	0.0724	n/a	
S09V001445		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.145	n/a	n/a	n/a	n/a	0.145	n/a	U
S09V001445		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0724	n/a	n/a	n/a	n/a	0.0724	n/a	U
S09V001445		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0196	n/a	n/a	n/a	n/a	7.24E-03	n/a	B
S09V001445		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.41E-03	n/a	n/a	n/a	n/a	2.41E-03	n/a	U
S09V001445		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.241	n/a	n/a	n/a	n/a	0.241	n/a	U
S09V001445		WV	7440-70-2	Calcium	ug/g	100	<0.0500	6.62	n/a	n/a	n/a	n/a	0.121	n/a	
S09V001445		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0121	n/a	n/a	n/a	n/a	0.0121	n/a	U
S09V001445		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0241	n/a	n/a	n/a	n/a	0.0241	n/a	U
S09V001445		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	0.0144	n/a	n/a	n/a	n/a	0.0121	n/a	B
S09V001445		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0121	n/a	n/a	n/a	n/a	0.0121	n/a	U
S09V001445		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.86	n/a	n/a	n/a	n/a	0.0121	n/a	
S09V001445		WV	7440-09-7	Potassium	ug/g	102	<0.500	4.93	n/a	n/a	n/a	n/a	1.21	n/a	B
S09V001445		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	0.0106	n/a	n/a	n/a	n/a	7.24E-03	n/a	B
S09V001445		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	1.74	n/a	n/a	n/a	n/a	0.121	n/a	
S09V001445		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	0.0278	n/a	n/a	n/a	n/a	7.24E-03	n/a	B
S09V001445		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0482	n/a	n/a	n/a	n/a	0.0482	n/a	U
S09V001445		WV	7440-23-5	Sodium	ug/g	103	0.236	36.5	n/a	n/a	n/a	n/a	0.241	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 92-94
Customer Sample ID: B206R3A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001445	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0482	n/a	n/a	n/a	n/a	0.0482	n/a	U
S09V001445	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.121	n/a	n/a	n/a	n/a	0.121	n/a	U
S09V001445	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.121	n/a	n/a	n/a	n/a	0.121	n/a	U
S09V001445	WV	7704-34-9	Sulfur	ug/g	101	<0.100	2.18	n/a	n/a	n/a	n/a	0.241	n/a	B
S09V001445	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.121	n/a	n/a	n/a	n/a	0.121	n/a	U
S09V001445	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.241	n/a	n/a	n/a	n/a	0.241	n/a	U
S09V001445	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	18.7	n/a	n/a	n/a	n/a	0.0724	n/a	
S09V001445	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0724	n/a	n/a	n/a	n/a	0.0724	n/a	U
S09V001445	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.0329	n/a	n/a	n/a	n/a	7.24E-03	n/a	B
S09V001445	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	0.0993	n/a	n/a	n/a	n/a	0.0121	n/a	B
S09V001445	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.241	n/a	n/a	n/a	n/a	0.241	n/a	U
S09V001445	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.241	n/a	n/a	n/a	n/a	0.241	n/a	U
S09V001445	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	0.0711	n/a	n/a	n/a	n/a	0.0121	n/a	B
S09V001445	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<4.82E-03	n/a	n/a	n/a	n/a	4.82E-03	n/a	U
S09V001445	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	0.0170	n/a	n/a	n/a	n/a	0.0121	n/a	B
S09V001445	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0121	n/a	n/a	n/a	n/a	0.0121	n/a	U
S09V001445	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	4.58E-06	n/a	n/a	n/a	n/a	3.62E-06	n/a	B
S09V001445	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.21E-07	n/a	n/a	n/a	n/a	1.21E-07	n/a	U
S09V001445	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	3.15E-07	n/a	n/a	n/a	n/a	6.03E-08	n/a	
S09V001445	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	3.04E-05	n/a	n/a	n/a	n/a	1.33E-07	n/a	
S09V001445	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<4.82E-08	n/a	n/a	n/a	n/a	4.82E-08	n/a	U
S09V001445	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	4.17E-03	n/a	n/a	n/a	n/a	6.63E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803

Core Number: C7156

Sample Depth: 126-128

Customer Sample ID: B206R5A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001275			%WATERA	%WATER-APD	%	n/a	n/a	10.65	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001275			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.88E-07	n/a	n/a	n/a	n/a	3.88E-07	n/a	U
S09V001275			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<9.96E-07	n/a	n/a	n/a	n/a	9.96E-07	n/a	U
S09V001275			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.97E-07	n/a	n/a	n/a	n/a	4.97E-07	n/a	U
S09V001275			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.91E-06	n/a	n/a	n/a	n/a	1.91E-06	n/a	U
S09V001275			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.18E-06	n/a	n/a	n/a	n/a	1.18E-06	n/a	U
S09V001275			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<6.41E-07	n/a	n/a	n/a	n/a	6.41E-07	n/a	U
S09V001275			WT%SOLID	Weight percent solids	%	n/a	n/a	89.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001275			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.53E-07	<1.67E-07	n/a	n/a	n/a	1.53E-07	n/a	U
S09V001447			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	252	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206R5A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001450		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.91E-06	n/a	n/a	n/a	n/a	6.91E-06	n/a	U
S09V001450		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	5.76E-05	n/a	n/a	n/a	n/a	2.01E-05	43.103	B
S09V001450		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001450		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.02E+04	n/a	n/a	n/a	n/a	20.8	n/a	
S09V001450		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.7	n/a	n/a	n/a	n/a	41.7	n/a	U
S09V001450		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001450		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	80.5	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001450		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.695	n/a	n/a	n/a	n/a	0.695	n/a	U
S09V001450		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	U
S09V001450		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.22E+04	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001450		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001450		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.95	n/a	n/a	n/a	n/a	6.95	n/a	U
S09V001450		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	19.3	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001450		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	13.0	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001450		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.46E+04	n/a	n/a	n/a	n/a	3.47	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 126-128
Customer Sample ID: B206R5A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001450	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.59E+03	n/a	n/a	n/a	n/a	347	n/a	B
S09V001450	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	13.3	n/a	n/a	n/a	n/a	2.08	n/a	B
S09V001450	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	5.85E+03	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001450	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	264	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001450	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001450	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	222	n/a	n/a	n/a	n/a	69.5	n/a	B
S09V001450	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	17.0	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001450	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	563	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001450	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	41.5	n/a	n/a	n/a	n/a	34.7	n/a	B
S09V001450	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	UN
S09V001450	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001450	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	UN
S09V001450	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	UN
S09V001450	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001450	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	34.8	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001450	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	591	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001450	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	U
S09V001450	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	U
S09V001450	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	23.4	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001450	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	7.39	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001450	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	36.7	n/a	n/a	n/a	n/a	3.47	n/a	C
S09V001450	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	6.91	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001450	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.20E-05	n/a	n/a	n/a	n/a	9.20E-05	n/a	U
S09V001450	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.640	n/a	n/a	n/a	n/a	9.55E-04	n/a	
S09V001450	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001450	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001450	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	5.12E-04	n/a	n/a	n/a	n/a	5.21E-05	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 126-128
Customer Sample ID: B206R5A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001448		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<5.02E-07	n/a	n/a	n/a	n/a	5.02E-07	n/a	U
S09V001448		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	8.70E-06	n/a	n/a	n/a	n/a	1.70E-06	24.734	B
S09V001448		WV	16984-48-8	Fluoride	ug/g	94.8	<6.16E-03	0.622	n/a	n/a	n/a	n/a	6.96E-03	n/a	
S09V001448		WV	16887-00-6	Chloride	ug/g	101	<3.10E-03	3.48	n/a	n/a	n/a	n/a	3.50E-03	n/a	
S09V001448		WV	14797-65-0	Nitrite	ug/g	92.8	<0.0400	0.278	n/a	n/a	n/a	n/a	0.0452	n/a	
S09V001448		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0949	n/a	n/a	n/a	n/a	0.0268	n/a	B
S09V001448		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	46.4	n/a	n/a	n/a	n/a	0.201	n/a	
S09V001448		WV	14265-44-2	Phosphate	ug/g	99.9	<0.0381	0.590	n/a	n/a	n/a	n/a	0.0431	n/a	
S09V001448		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	21.9	n/a	n/a	n/a	n/a	0.272	n/a	
S09V001448		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	0.258	n/a	n/a	n/a	n/a	0.0678	n/a	B
S09V001448		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.136	n/a	n/a	n/a	n/a	0.136	n/a	U
S09V001448		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0678	n/a	n/a	n/a	n/a	0.0678	n/a	U
S09V001448		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0202	n/a	n/a	n/a	n/a	6.78E-03	n/a	B
S09V001448		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.26E-03	n/a	n/a	n/a	n/a	2.26E-03	n/a	U
S09V001448		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.226	n/a	n/a	n/a	n/a	0.226	n/a	U
S09V001448		WV	7440-70-2	Calcium	ug/g	100	<0.0500	15.9	n/a	n/a	n/a	n/a	0.113	n/a	
S09V001448		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0226	n/a	n/a	n/a	n/a	0.0226	n/a	U
S09V001448		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	1.55	n/a	n/a	n/a	n/a	0.0113	n/a	
S09V001448		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	0.248	n/a	n/a	n/a	n/a	0.0113	n/a	
S09V001448		WV	7440-09-7	Potassium	ug/g	102	<0.500	4.20	n/a	n/a	n/a	n/a	1.13	n/a	B
S09V001448		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	<6.78E-03	n/a	n/a	n/a	n/a	6.78E-03	n/a	U
S09V001448		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	4.23	n/a	n/a	n/a	n/a	0.113	n/a	
S09V001448		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<6.78E-03	n/a	n/a	n/a	n/a	6.78E-03	n/a	U
S09V001448		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0452	n/a	n/a	n/a	n/a	0.0452	n/a	U
S09V001448		WV	7440-23-5	Sodium	ug/g	103	0.236	30.2	n/a	n/a	n/a	n/a	0.226	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 126-128
Customer Sample ID: B206R5A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001448	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0452	n/a	n/a	n/a	n/a	0.0452	n/a	U
S09V001448	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.113	n/a	n/a	n/a	n/a	0.113	n/a	U
S09V001448	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.113	n/a	n/a	n/a	n/a	0.113	n/a	U
S09V001448	WV	7704-34-9	Sulfur	ug/g	101	<0.100	7.43	n/a	n/a	n/a	n/a	0.226	n/a	
S09V001448	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.113	n/a	n/a	n/a	n/a	0.113	n/a	U
S09V001448	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.226	n/a	n/a	n/a	n/a	0.226	n/a	U
S09V001448	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	8.57	n/a	n/a	n/a	n/a	0.0678	n/a	
S09V001448	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0678	n/a	n/a	n/a	n/a	0.0678	n/a	U
S09V001448	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.0685	n/a	n/a	n/a	n/a	6.78E-03	n/a	
S09V001448	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	0.0114	n/a	n/a	n/a	n/a	0.0113	n/a	B
S09V001448	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.226	n/a	n/a	n/a	n/a	0.226	n/a	U
S09V001448	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.226	n/a	n/a	n/a	n/a	0.226	n/a	U
S09V001448	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<4.52E-03	n/a	n/a	n/a	n/a	4.52E-03	n/a	U
S09V001448	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0113	n/a	n/a	n/a	n/a	0.0113	n/a	U
S09V001448	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	4.93E-04	n/a	n/a	n/a	n/a	3.39E-06	n/a	
S09V001448	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.13E-07	n/a	n/a	n/a	n/a	1.13E-07	n/a	U
S09V001448	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	6.10E-08	n/a	n/a	n/a	n/a	5.65E-08	n/a	
S09V001448	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	7.47E-06	n/a	n/a	n/a	n/a	1.24E-07	n/a	
S09V001448	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<4.52E-08	n/a	n/a	n/a	n/a	4.52E-08	n/a	U
S09V001448	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	1.07E-03	n/a	n/a	n/a	n/a	6.22E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803

Core Number: C7156

Sample Depth: 140-142

Customer Sample ID: B206R7A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001281			%WATERA	%WATER-APD	%	n/a	n/a	21.73	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001281			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.40E-07	n/a	n/a	n/a	n/a	3.40E-07	n/a	U
S09V001281			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<9.02E-07	n/a	n/a	n/a	n/a	9.02E-07	n/a	U
S09V001281			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.32E-07	n/a	n/a	n/a	n/a	4.32E-07	n/a	U
S09V001281			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.79E-06	n/a	n/a	n/a	n/a	1.79E-06	n/a	U
S09V001281			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.03E-06	n/a	n/a	n/a	n/a	1.03E-06	n/a	U
S09V001281			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<5.79E-07	n/a	n/a	n/a	n/a	5.79E-07	n/a	U
S09V001281			WT%SOLID	Weight percent solids	%	n/a	n/a	78.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001281			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.47E-07	n/a	n/a	n/a	n/a	1.47E-07	n/a	U
S09V001451			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	879	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206R7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001453		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.94E-06	n/a	n/a	n/a	n/a	6.94E-06	n/a	U
S09V001453		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	1.39E-04	n/a	n/a	n/a	n/a	2.02E-05	18.917	B
S09V001453		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001453		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.60E+04	n/a	n/a	n/a	n/a	21.0	n/a	
S09V001453		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.9	n/a	n/a	n/a	n/a	41.9	n/a	U
S09V001453		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001453		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	117	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001453		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.698	n/a	n/a	n/a	n/a	0.698	n/a	U
S09V001453		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001453		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.25E+04	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001453		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001453		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001453		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	14.9	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001453		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	18.2	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001453		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.97E+04	n/a	n/a	n/a	n/a	3.49	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 140-142
Customer Sample ID: B206R7A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001453	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	2.27E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001453	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	19.0	n/a	n/a	n/a	n/a	2.10	n/a	B
S09V001453	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	7.75E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001453	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	310	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001453	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<14.0	n/a	n/a	n/a	n/a	14.0	n/a	U
S09V001453	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	255	n/a	n/a	n/a	n/a	69.8	n/a	B
S09V001453	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	33.1	n/a	n/a	n/a	n/a	14.0	n/a	B
S09V001453	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	430	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001453	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001453	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001453	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001453	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	UN
S09V001453	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	22.2	n/a	n/a	n/a	n/a	21.0	n/a	BN
S09V001453	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001453	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	34.8	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001453	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	647	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001453	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001453	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.8	n/a	n/a	n/a	n/a	69.8	n/a	U
S09V001453	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	31.6	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001453	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	9.74	n/a	n/a	n/a	n/a	1.40	n/a	B
S09V001453	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	50.0	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001453	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	6.27	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001453	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.26E-05	n/a	n/a	n/a	n/a	9.26E-05	n/a	U
S09V001453	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.761	n/a	n/a	n/a	n/a	9.60E-04	n/a	
S09V001453	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001453	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.40E-04	n/a	n/a	n/a	n/a	1.40E-04	n/a	U
S09V001453	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	5.40E-03	n/a	n/a	n/a	n/a	1.05E-04	n/a	

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U - Less Than Detection Limit
M - RPD Outside Range
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RPP-RPT-47008 Rev.0

SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 140-142
Customer Sample ID: B206R7A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001452		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	6.51E-06	n/a	n/a	n/a	n/a	5.60E-07	15.214	
S09V001452		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	1.08E-04	n/a	n/a	n/a	n/a	2.15E-06	3.630	
S09V001452		WV	16984-48-8	Fluoride	ug/g	94.8	<6.16E-03	0.640	n/a	n/a	n/a	n/a	8.81E-03	n/a	
S09V001452		WV	16887-00-6	Chloride	ug/g	101	<3.10E-03	14.5	n/a	n/a	n/a	n/a	0.0488	n/a	
S09V001452		WV	14797-65-0	Nitrite	ug/g	92.8	<0.0400	<0.629	n/a	n/a	n/a	n/a	0.629	n/a	U
S09V001452		WV	24959-67-9	Bromide	ug/g	102	<0.0237	<0.373	n/a	n/a	n/a	n/a	0.373	n/a	U
S09V001452		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	521	n/a	n/a	n/a	n/a	2.92	n/a	
S09V001452		WV	14265-44-2	Phosphate	ug/g	99.9	<0.0381	<0.599	n/a	n/a	n/a	n/a	0.599	n/a	U
S09V001452		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	19.9	n/a	n/a	n/a	n/a	0.344	n/a	
S09V001452		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	<0.0858	n/a	n/a	n/a	n/a	0.0858	n/a	U
S09V001452		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.172	n/a	n/a	n/a	n/a	0.172	n/a	U
S09V001452		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0858	n/a	n/a	n/a	n/a	0.0858	n/a	U
S09V001452		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.157	n/a	n/a	n/a	n/a	8.58E-03	n/a	
S09V001452		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.86E-03	n/a	n/a	n/a	n/a	2.86E-03	n/a	U
S09V001452		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.286	n/a	n/a	n/a	n/a	0.286	n/a	U
S09V001452		WV	7440-70-2	Calcium	ug/g	100	<0.0500	94.5	n/a	n/a	n/a	n/a	0.143	n/a	
S09V001452		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0286	n/a	n/a	n/a	n/a	0.0286	n/a	U
S09V001452		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-09-7	Potassium	ug/g	102	<0.500	11.7	n/a	n/a	n/a	n/a	1.43	n/a	B
S09V001452		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	9.98E-03	n/a	n/a	n/a	n/a	8.58E-03	n/a	B
S09V001452		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	31.9	n/a	n/a	n/a	n/a	0.143	n/a	
S09V001452		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<8.58E-03	n/a	n/a	n/a	n/a	8.58E-03	n/a	U
S09V001452		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0572	n/a	n/a	n/a	n/a	0.0572	n/a	U
S09V001452		WV	7440-23-5	Sodium	ug/g	103	0.236	72.3	n/a	n/a	n/a	n/a	0.286	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090803
Core Number: C7156
Sample Depth: 140-142
Customer Sample ID: B206R7A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001452		WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0572	n/a	n/a	n/a	n/a	0.0572	n/a	U
S09V001452		WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.143	n/a	n/a	n/a	n/a	0.143	n/a	U
S09V001452		WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.143	n/a	n/a	n/a	n/a	0.143	n/a	U
S09V001452		WV	7704-34-9	Sulfur	ug/g	101	<0.100	6.64	n/a	n/a	n/a	n/a	0.286	n/a	
S09V001452		WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.143	n/a	n/a	n/a	n/a	0.143	n/a	U
S09V001452		WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.286	n/a	n/a	n/a	n/a	0.286	n/a	U
S09V001452		WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	10.8	n/a	n/a	n/a	n/a	0.0858	n/a	
S09V001452		WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0858	n/a	n/a	n/a	n/a	0.0858	n/a	U
S09V001452		WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.416	n/a	n/a	n/a	n/a	8.58E-03	n/a	
S09V001452		WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.286	n/a	n/a	n/a	n/a	0.286	n/a	U
S09V001452		WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.286	n/a	n/a	n/a	n/a	0.286	n/a	U
S09V001452		WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<5.72E-03	n/a	n/a	n/a	n/a	5.72E-03	n/a	U
S09V001452		WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0143	n/a	n/a	n/a	n/a	0.0143	n/a	U
S09V001452		WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	6.77E-03	n/a	n/a	n/a	n/a	4.29E-06	n/a	
S09V001452		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.43E-07	n/a	n/a	n/a	n/a	1.43E-07	n/a	U
S09V001452		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	<7.15E-08	n/a	n/a	n/a	n/a	7.15E-08	n/a	U
S09V001452		WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	5.85E-06	n/a	n/a	n/a	98.9	1.57E-07	n/a	
S09V001452		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<5.72E-08	n/a	n/a	n/a	n/a	5.72E-08	n/a	U
S09V001452		WV	U-238	Uranium-238	ug/g	104	<5.50E-05	8.29E-04	n/a	n/a	n/a	99.5	7.87E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090804

Core Number: C7158

Sample Depth: 87-89

Customer Sample ID: B206R9A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001243			%WATERA	%WATER-APD	%	n/a	n/a	3.380	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001243			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<2.93E-07	n/a	n/a	n/a	n/a	2.93E-07	n/a	U
S09V001243			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<7.10E-07	n/a	n/a	n/a	n/a	7.10E-07	n/a	U
S09V001243			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<3.46E-07	n/a	n/a	n/a	n/a	3.46E-07	n/a	U
S09V001243			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.37E-06	n/a	n/a	n/a	n/a	1.37E-06	n/a	U
S09V001243			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<8.88E-07	n/a	n/a	n/a	n/a	8.88E-07	n/a	U
S09V001243			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<4.53E-07	n/a	n/a	n/a	n/a	4.53E-07	n/a	U
S09V001243			WT%SOLID	Weight percent solids	%	n/a	n/a	96.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001243			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.73E-07	n/a	n/a	n/a	n/a	1.73E-07	n/a	U
S09V001454			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	138	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206R9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001456		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.93E-06	n/a	n/a	n/a	n/a	6.93E-06	n/a	U
S09V001456		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	5.79E-05	n/a	n/a	n/a	n/a	2.01E-05	42.968	B
S09V001456		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.48	n/a	n/a	n/a	n/a	3.48	n/a	U
S09V001456		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	5.15E+03	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001456		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	U
S09V001456		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001456		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	44.9	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001456		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.697	n/a	n/a	n/a	n/a	0.697	n/a	U
S09V001456		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001456		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	4.60E+03	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001456		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.48	n/a	n/a	n/a	n/a	3.48	n/a	U
S09V001456		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U
S09V001456		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	36.8	n/a	n/a	n/a	n/a	3.48	n/a	
S09V001456		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	8.68	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001456		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.15E+04	n/a	n/a	n/a	n/a	3.48	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 87-89
Customer Sample ID: B206R9A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001456	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	525	n/a	n/a	n/a	n/a	348	n/a	B
S09V001456	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	4.32	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001456	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	2.45E+03	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001456	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	166	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001456	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001456	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	298	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001456	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	27.5	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001456	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	408	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001456	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001456	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001456	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001456	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001456	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	21.9	n/a	n/a	n/a	n/a	20.9	n/a	BN
S09V001456	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001456	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	18.6	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001456	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	760	n/a	n/a	n/a	n/a	3.48	n/a	
S09V001456	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	73.4	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001456	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001456	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	23.0	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001456	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	6.34	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001456	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	19.6	n/a	n/a	n/a	n/a	3.48	n/a	CB
S09V001456	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	7.70	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001456	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.23E-05	n/a	n/a	n/a	n/a	9.23E-05	n/a	U
S09V001456	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.389	n/a	n/a	n/a	n/a	9.58E-04	n/a	
S09V001456	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001456	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001456	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	8.55E-05	n/a	n/a	n/a	n/a	5.22E-05	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 87-89
Customer Sample ID: B206R9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001455		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<3.79E-07	n/a	n/a	n/a	n/a	3.79E-07	n/a	U
S09V001455		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	<1.22E-06	n/a	n/a	n/a	n/a	1.22E-06	n/a	U
S09V001455		WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	0.714	n/a	n/a	n/a	n/a	5.97E-03	n/a	
S09V001455		WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	1.43	n/a	n/a	n/a	n/a	3.01E-03	n/a	
S09V001455		WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	<0.0388	n/a	n/a	n/a	n/a	0.0388	n/a	U
S09V001455		WV	24959-67-9	Bromide	ug/g	103	<0.0237	<0.0230	n/a	n/a	n/a	n/a	0.0230	n/a	U
S09V001455		WV	14797-55-8	Nitrate	ug/g	102	<0.0162	0.333	n/a	n/a	n/a	n/a	0.0157	n/a	C
S09V001455		WV	14265-44-2	Phosphate	ug/g	102	<0.0381	0.242	n/a	n/a	n/a	n/a	0.0369	n/a	B
S09V001455		WV	14808-79-8	Sulfate	ug/g	102	<0.0219	4.34	n/a	n/a	n/a	n/a	0.0212	n/a	
S09V001455		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<9.70E-03	n/a	n/a	n/a	n/a	9.70E-03	n/a	U
S09V001455		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	11.0	n/a	n/a	n/a	n/a	0.0582	n/a	
S09V001455		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.116	n/a	n/a	n/a	n/a	0.116	n/a	U
S09V001455		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0582	n/a	n/a	n/a	n/a	0.0582	n/a	U
S09V001455		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0825	n/a	n/a	n/a	n/a	5.82E-03	n/a	
S09V001455		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<1.94E-03	n/a	n/a	n/a	n/a	1.94E-03	n/a	U
S09V001455		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.194	n/a	n/a	n/a	n/a	0.194	n/a	U
S09V001455		WV	7440-70-2	Calcium	ug/g	100	<0.0500	7.94	n/a	n/a	n/a	n/a	0.0970	n/a	
S09V001455		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<9.70E-03	n/a	n/a	n/a	n/a	9.70E-03	n/a	U
S09V001455		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0194	n/a	n/a	n/a	n/a	0.0194	n/a	U
S09V001455		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	0.0334	n/a	n/a	n/a	n/a	9.70E-03	n/a	B
S09V001455		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	0.0130	n/a	n/a	n/a	n/a	9.70E-03	n/a	B
S09V001455		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	13.2	n/a	n/a	n/a	n/a	9.70E-03	n/a	
S09V001455		WV	7440-09-7	Potassium	ug/g	102	<0.500	6.49	n/a	n/a	n/a	n/a	0.970	n/a	B
S09V001455		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	0.0143	n/a	n/a	n/a	n/a	5.82E-03	n/a	B
S09V001455		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	3.48	n/a	n/a	n/a	n/a	0.0970	n/a	
S09V001455		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	0.224	n/a	n/a	n/a	n/a	5.82E-03	n/a	
S09V001455		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	0.0396	n/a	n/a	n/a	n/a	0.0388	n/a	B
S09V001455		WV	7440-23-5	Sodium	ug/g	103	0.236	24.5	n/a	n/a	n/a	n/a	0.194	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 87-89
Customer Sample ID: B206R9A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001455	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0388	n/a	n/a	n/a	n/a	0.0388	n/a	U
S09V001455	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	0.161	n/a	n/a	n/a	n/a	0.0970	n/a	B
S09V001455	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.0970	n/a	n/a	n/a	n/a	0.0970	n/a	U
S09V001455	WV	7704-34-9	Sulfur	ug/g	101	<0.100	1.62	n/a	n/a	n/a	n/a	0.194	n/a	B
S09V001455	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.0970	n/a	n/a	n/a	n/a	0.0970	n/a	U
S09V001455	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.194	n/a	n/a	n/a	n/a	0.194	n/a	U
S09V001455	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	34.7	n/a	n/a	n/a	n/a	0.0582	n/a	
S09V001455	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0582	n/a	n/a	n/a	n/a	0.0582	n/a	U
S09V001455	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.0374	n/a	n/a	n/a	n/a	5.82E-03	n/a	B
S09V001455	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	0.495	n/a	n/a	n/a	n/a	9.70E-03	n/a	
S09V001455	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.194	n/a	n/a	n/a	n/a	0.194	n/a	U
S09V001455	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.194	n/a	n/a	n/a	n/a	0.194	n/a	U
S09V001455	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	0.0288	n/a	n/a	n/a	n/a	9.70E-03	n/a	B
S09V001455	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	5.01E-03	n/a	n/a	n/a	n/a	3.88E-03	n/a	B
S09V001455	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	0.0252	n/a	n/a	n/a	n/a	9.70E-03	n/a	B
S09V001455	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	0.0208	n/a	n/a	n/a	n/a	9.70E-03	n/a	B
S09V001455	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	3.88E-06	n/a	n/a	n/a	n/a	2.91E-06	n/a	B
S09V001455	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	1.40E-07	n/a	n/a	n/a	n/a	9.70E-08	n/a	
S09V001455	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	6.01E-08	n/a	n/a	n/a	n/a	4.85E-08	n/a	
S09V001455	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	1.08E-05	n/a	n/a	n/a	n/a	1.07E-07	n/a	
S09V001455	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<3.88E-08	n/a	n/a	n/a	n/a	3.88E-08	n/a	U
S09V001455	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	1.47E-03	n/a	n/a	n/a	n/a	5.33E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090804

Core Number: C7158

Sample Depth: 124-126

Customer Sample ID: B206T1A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001249			%WATERA	%WATER-APD	%	n/a	n/a	18.10	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001249			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.14E-07	n/a	n/a	n/a	n/a	3.14E-07	n/a	U
S09V001249			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<8.30E-07	n/a	n/a	n/a	n/a	8.30E-07	n/a	U
S09V001249			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.06E-07	n/a	n/a	n/a	n/a	4.06E-07	n/a	U
S09V001249			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.55E-06	n/a	n/a	n/a	n/a	1.55E-06	n/a	U
S09V001249			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.04E-06	n/a	n/a	n/a	n/a	1.04E-06	n/a	U
S09V001249			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<5.44E-07	n/a	n/a	n/a	n/a	5.44E-07	n/a	U
S09V001249			WT%SOLID	Weight percent solids	%	n/a	n/a	81.9	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001249			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.56E-07	n/a	n/a	n/a	n/a	1.56E-07	n/a	U
S09V001457			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	224	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206T1A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001459		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.90E-06	n/a	n/a	n/a	n/a	6.90E-06	n/a	U
S09V001459		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	4.27E-05	n/a	n/a	n/a	n/a	2.00E-05	57.497	B
S09V001459		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001459		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.33E+04	n/a	n/a	n/a	n/a	20.8	n/a	
S09V001459		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.6	n/a	n/a	n/a	n/a	41.6	n/a	U
S09V001459		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001459		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	89.2	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001459		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.694	n/a	n/a	n/a	n/a	0.694	n/a	U
S09V001459		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	U
S09V001459		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.34E+04	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001459		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001459		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.94	n/a	n/a	n/a	n/a	6.94	n/a	U
S09V001459		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	12.4	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001459		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	15.3	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001459		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.85E+04	n/a	n/a	n/a	n/a	3.47	n/a	

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U - Less Than Detection Limit
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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 124-126
Customer Sample ID: B206T1A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001459	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.70E+03	n/a	n/a	n/a	n/a	347	n/a	B
S09V001459	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	15.5	n/a	n/a	n/a	n/a	2.08	n/a	B
S09V001459	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	6.52E+03	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001459	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	305	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001459	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001459	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	238	n/a	n/a	n/a	n/a	69.4	n/a	B
S09V001459	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	28.8	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001459	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	568	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001459	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	U
S09V001459	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	UN
S09V001459	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001459	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	UN
S09V001459	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	22.2	n/a	n/a	n/a	n/a	20.8	n/a	BN
S09V001459	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001459	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	38.0	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001459	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	714	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001459	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	70.0	n/a	n/a	n/a	n/a	69.4	n/a	B
S09V001459	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	U
S09V001459	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	31.6	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001459	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	9.13	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001459	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	47.2	n/a	n/a	n/a	n/a	3.47	n/a	C
S09V001459	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	7.45	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001459	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.19E-05	n/a	n/a	n/a	n/a	9.19E-05	n/a	U
S09V001459	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.864	n/a	n/a	n/a	n/a	9.54E-04	n/a	
S09V001459	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001459	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001459	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	1.17E-04	n/a	n/a	n/a	n/a	5.20E-05	n/a	

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B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 124-126
Customer Sample ID: B206T1A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001458	WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<5.18E-07	n/a	n/a	n/a	n/a	5.18E-07	n/a	U
S09V001458	WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	<2.48E-06	n/a	n/a	n/a	n/a	2.48E-06	n/a	U
S09V001458	WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	0.868	n/a	n/a	n/a	n/a	8.15E-03	n/a	
S09V001458	WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	9.63	n/a	n/a	n/a	n/a	0.0451	n/a	
S09V001458	WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	<0.0529	n/a	n/a	n/a	n/a	0.0529	n/a	U
S09V001458	WV	24959-67-9	Bromide	ug/g	103	<0.0237	0.370	n/a	n/a	n/a	n/a	0.0314	n/a	B
S09V001458	WV	14797-55-8	Nitrate	ug/g	102	<0.0162	24.9	n/a	n/a	n/a	n/a	0.236	n/a	
S09V001458	WV	14265-44-2	Phosphate	ug/g	102	<0.0381	1.09	n/a	n/a	n/a	n/a	0.0504	n/a	
S09V001458	WV	14808-79-8	Sulfate	ug/g	102	<0.0219	21.7	n/a	n/a	n/a	n/a	0.319	n/a	
S09V001458	WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	0.646	n/a	n/a	n/a	n/a	0.0794	n/a	B
S09V001458	WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001458	WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0794	n/a	n/a	n/a	n/a	0.0794	n/a	U
S09V001458	WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0238	n/a	n/a	n/a	n/a	7.94E-03	n/a	B
S09V001458	WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.65E-03	n/a	n/a	n/a	n/a	2.65E-03	n/a	U
S09V001458	WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001458	WV	7440-70-2	Calcium	ug/g	100	<0.0500	14.4	n/a	n/a	n/a	n/a	0.132	n/a	
S09V001458	WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0265	n/a	n/a	n/a	n/a	0.0265	n/a	U
S09V001458	WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	0.512	n/a	n/a	n/a	n/a	0.0132	n/a	
S09V001458	WV	7440-09-7	Potassium	ug/g	102	<0.500	5.13	n/a	n/a	n/a	n/a	1.32	n/a	B
S09V001458	WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	<7.94E-03	n/a	n/a	n/a	n/a	7.94E-03	n/a	U
S09V001458	WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	3.37	n/a	n/a	n/a	n/a	0.132	n/a	
S09V001458	WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<7.94E-03	n/a	n/a	n/a	n/a	7.94E-03	n/a	U
S09V001458	WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0529	n/a	n/a	n/a	n/a	0.0529	n/a	U
S09V001458	WV	7440-23-5	Sodium	ug/g	103	0.236	40.0	n/a	n/a	n/a	n/a	0.265	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 124-126
Customer Sample ID: B206T1A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001458	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0529	n/a	n/a	n/a	n/a	0.0529	n/a	U
S09V001458	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	0.163	n/a	n/a	n/a	n/a	0.132	n/a	B
S09V001458	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.132	n/a	n/a	n/a	n/a	0.132	n/a	U
S09V001458	WV	7704-34-9	Sulfur	ug/g	101	<0.100	7.31	n/a	n/a	n/a	n/a	0.265	n/a	
S09V001458	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.132	n/a	n/a	n/a	n/a	0.132	n/a	U
S09V001458	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001458	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	12.0	n/a	n/a	n/a	n/a	0.0794	n/a	
S09V001458	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0794	n/a	n/a	n/a	n/a	0.0794	n/a	U
S09V001458	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.0684	n/a	n/a	n/a	n/a	7.94E-03	n/a	B
S09V001458	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	0.0376	n/a	n/a	n/a	n/a	0.0132	n/a	B
S09V001458	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001458	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001458	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	0.0178	n/a	n/a	n/a	n/a	0.0132	n/a	B
S09V001458	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<5.29E-03	n/a	n/a	n/a	n/a	5.29E-03	n/a	U
S09V001458	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001458	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	4.84E-05	n/a	n/a	n/a	n/a	3.97E-06	n/a	B
S09V001458	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.32E-07	n/a	n/a	n/a	n/a	1.32E-07	n/a	U
S09V001458	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	6.75E-08	n/a	n/a	n/a	n/a	6.62E-08	n/a	
S09V001458	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	1.45E-05	n/a	n/a	n/a	n/a	1.46E-07	n/a	
S09V001458	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<5.29E-08	n/a	n/a	n/a	n/a	5.29E-08	n/a	U
S09V001458	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	1.89E-03	n/a	n/a	n/a	n/a	7.28E-06	n/a	

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M - RPD Outside Range
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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 141-143
Customer Sample ID: B206T3A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001255			%WATERA	%WATER-APD	%	n/a	n/a	18.04	18.54	18.29	2.734	n/a	0.01000	n/a	
S09V001255			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.28E-07	n/a	n/a	n/a	n/a	3.28E-07	n/a	U
S09V001255			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<8.33E-07	n/a	n/a	n/a	n/a	8.33E-07	n/a	U
S09V001255			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.05E-07	n/a	n/a	n/a	n/a	4.05E-07	n/a	U
S09V001255			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.57E-06	n/a	n/a	n/a	n/a	1.57E-06	n/a	U
S09V001255			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.05E-06	n/a	n/a	n/a	n/a	1.05E-06	n/a	U
S09V001255			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<5.47E-07	n/a	n/a	n/a	n/a	5.47E-07	n/a	U
S09V001255			WT%SOLID	Weight percent solids	%	n/a	n/a	82.0	81.5	81.7	0.612	n/a	0.0100	n/a	
S09V001255			15046-84-1	Iodine-129	uCi/g	87.6	<1.60E-07	<1.55E-07	n/a	n/a	n/a	n/a	1.55E-07	n/a	U
S09V001460			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	322	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206T3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001462		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.95E-06	n/a	n/a	n/a	n/a	6.95E-06	n/a	U
S09V001462		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	9.40E-05	n/a	n/a	n/a	n/a	2.02E-05	27.173	B
S09V001462		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.50	n/a	n/a	n/a	n/a	3.50	n/a	U
S09V001462		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.27E+04	n/a	n/a	n/a	n/a	21.0	n/a	
S09V001462		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.9	n/a	n/a	n/a	n/a	41.9	n/a	U
S09V001462		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001462		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	111	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001462		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.699	n/a	n/a	n/a	n/a	0.699	n/a	U
S09V001462		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.9	n/a	n/a	n/a	n/a	69.9	n/a	U
S09V001462		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.18E+04	n/a	n/a	n/a	n/a	35.0	n/a	
S09V001462		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.50	n/a	n/a	n/a	n/a	3.50	n/a	U
S09V001462		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.99	n/a	n/a	n/a	n/a	6.99	n/a	U
S09V001462		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	16.0	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001462		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	17.3	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001462		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.78E+04	n/a	n/a	n/a	n/a	3.50	n/a	

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RPP-RPT-47008 Rev.0

SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 141-143
Customer Sample ID: B206T3A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001462	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.89E+03	n/a	n/a	n/a	n/a	350	n/a	B
S09V001462	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	15.2	n/a	n/a	n/a	n/a	2.10	n/a	B
S09V001462	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	6.59E+03	n/a	n/a	n/a	n/a	35.0	n/a	
S09V001462	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	428	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001462	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<14.0	n/a	n/a	n/a	n/a	14.0	n/a	U
S09V001462	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	217	n/a	n/a	n/a	n/a	69.9	n/a	B
S09V001462	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	<14.0	n/a	n/a	n/a	n/a	14.0	n/a	U
S09V001462	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	500	n/a	n/a	n/a	n/a	35.0	n/a	
S09V001462	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001462	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.9	n/a	n/a	n/a	n/a	69.9	n/a	UN
S09V001462	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001462	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.9	n/a	n/a	n/a	n/a	69.9	n/a	UN
S09V001462	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	27.7	n/a	n/a	n/a	n/a	21.0	n/a	BN
S09V001462	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001462	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	34.4	n/a	n/a	n/a	n/a	2.10	n/a	
S09V001462	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	678	n/a	n/a	n/a	n/a	3.50	n/a	
S09V001462	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.9	n/a	n/a	n/a	n/a	69.9	n/a	U
S09V001462	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.9	n/a	n/a	n/a	n/a	69.9	n/a	U
S09V001462	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	30.1	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001462	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	8.74	n/a	n/a	n/a	n/a	1.40	n/a	B
S09V001462	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	45.3	n/a	n/a	n/a	n/a	3.50	n/a	C
S09V001462	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	6.99	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001462	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.26E-05	n/a	n/a	n/a	n/a	9.26E-05	n/a	U
S09V001462	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.750	n/a	n/a	n/a	n/a	9.61E-04	n/a	
S09V001462	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.21E-03	n/a	n/a	n/a	n/a	1.21E-03	n/a	U
S09V001462	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.40E-04	n/a	n/a	n/a	n/a	1.40E-04	n/a	U
S09V001462	AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	3.45E-04	n/a	n/a	n/a	n/a	1.05E-04	n/a	

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X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 141-143
Customer Sample ID: B206T3A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001461		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<5.18E-07	n/a	n/a	n/a	n/a	5.18E-07	n/a	U
S09V001461		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	8.82E-06	n/a	n/a	n/a	n/a	1.99E-06	28.342	B
S09V001461		WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	0.641	n/a	n/a	n/a	n/a	8.15E-03	n/a	
S09V001461		WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	16.4	n/a	n/a	n/a	n/a	0.0451	n/a	
S09V001461		WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	0.636	n/a	n/a	n/a	n/a	0.0529	n/a	
S09V001461		WV	24959-67-9	Bromide	ug/g	103	<0.0237	0.172	n/a	n/a	n/a	n/a	0.0314	n/a	B
S09V001461		WV	14797-55-8	Nitrate	ug/g	102	<0.0162	62.3	n/a	n/a	n/a	n/a	0.236	n/a	
S09V001461		WV	14265-44-2	Phosphate	ug/g	102	<0.0381	0.690	n/a	n/a	n/a	n/a	0.0504	n/a	
S09V001461		WV	14808-79-8	Sulfate	ug/g	102	<0.0219	41.7	n/a	n/a	n/a	n/a	0.319	n/a	
S09V001461		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	0.127	n/a	n/a	n/a	n/a	0.0794	n/a	B
S09V001461		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001461		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0794	n/a	n/a	n/a	n/a	0.0794	n/a	U
S09V001461		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0421	n/a	n/a	n/a	n/a	7.94E-03	n/a	B
S09V001461		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.65E-03	n/a	n/a	n/a	n/a	2.65E-03	n/a	U
S09V001461		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001461		WV	7440-70-2	Calcium	ug/g	100	<0.0500	25.8	n/a	n/a	n/a	n/a	0.132	n/a	
S09V001461		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0265	n/a	n/a	n/a	n/a	0.0265	n/a	U
S09V001461		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	0.0659	n/a	n/a	n/a	n/a	0.0132	n/a	B
S09V001461		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	0.0334	n/a	n/a	n/a	n/a	0.0132	n/a	B
S09V001461		WV	7440-09-7	Potassium	ug/g	102	<0.500	6.01	n/a	n/a	n/a	n/a	1.32	n/a	B
S09V001461		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	<7.94E-03	n/a	n/a	n/a	n/a	7.94E-03	n/a	U
S09V001461		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	7.68	n/a	n/a	n/a	n/a	0.132	n/a	
S09V001461		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<7.94E-03	n/a	n/a	n/a	n/a	7.94E-03	n/a	U
S09V001461		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0529	n/a	n/a	n/a	n/a	0.0529	n/a	U
S09V001461		WV	7440-23-5	Sodium	ug/g	103	0.236	41.9	n/a	n/a	n/a	n/a	0.265	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090804
Core Number: C7158
Sample Depth: 141-143
Customer Sample ID: B206T3A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001461	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0529	n/a	n/a	n/a	n/a	0.0529	n/a	U
S09V001461	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.132	n/a	n/a	n/a	n/a	0.132	n/a	U
S09V001461	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.132	n/a	n/a	n/a	n/a	0.132	n/a	U
S09V001461	WV	7704-34-9	Sulfur	ug/g	101	<0.100	14.1	n/a	n/a	n/a	n/a	0.265	n/a	
S09V001461	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.132	n/a	n/a	n/a	n/a	0.132	n/a	U
S09V001461	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001461	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	9.65	n/a	n/a	n/a	n/a	0.0794	n/a	
S09V001461	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0794	n/a	n/a	n/a	n/a	0.0794	n/a	U
S09V001461	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.114	n/a	n/a	n/a	n/a	7.94E-03	n/a	
S09V001461	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001461	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.265	n/a	n/a	n/a	n/a	0.265	n/a	U
S09V001461	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<5.29E-03	n/a	n/a	n/a	n/a	5.29E-03	n/a	U
S09V001461	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0132	n/a	n/a	n/a	n/a	0.0132	n/a	U
S09V001461	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	2.88E-04	n/a	n/a	n/a	n/a	3.97E-06	n/a	
S09V001461	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.32E-07	n/a	n/a	n/a	n/a	1.32E-07	n/a	U
S09V001461	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	7.15E-08	n/a	n/a	n/a	n/a	6.62E-08	n/a	
S09V001461	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	7.45E-06	n/a	n/a	n/a	n/a	1.46E-07	n/a	
S09V001461	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<5.29E-08	n/a	n/a	n/a	n/a	5.29E-08	n/a	U
S09V001461	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	9.68E-04	n/a	n/a	n/a	n/a	7.28E-06	n/a	

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 81-83
Customer Sample ID: B206W9A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000813			%WATERA	%WATER-APD	%	n/a	n/a	9.900	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000813			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.76E-05	n/a	n/a	n/a	n/a	6.66E-06	26.26	
S09V000813			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.59E-07	n/a	n/a	n/a	n/a	3.59E-07	n/a	U
S09V000813			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<8.83E-07	n/a	n/a	n/a	n/a	8.83E-07	n/a	U
S09V000813			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.44E-07	n/a	n/a	n/a	n/a	4.44E-07	n/a	U
S09V000813			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.59E-06	n/a	n/a	n/a	n/a	1.59E-06	n/a	U
S09V000813			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.03E-06	n/a	n/a	n/a	n/a	1.03E-06	n/a	U
S09V000813			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<5.86E-07	n/a	n/a	n/a	n/a	5.86E-07	n/a	U
S09V000813			15092-94-1	Lead-212	uCi/g	n/a	n/a	8.33E-07	n/a	n/a	n/a	n/a	6.20E-07	31.61	
S09V000813			WT%SOLID	Weight percent solids	%	n/a	n/a	90.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000813			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.65E-07	n/a	n/a	n/a	n/a	1.65E-07	n/a	U
S09V001463			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	1.88E+03	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206W9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001465		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.93E-06	n/a	n/a	n/a	n/a	6.93E-06	n/a	U
S09V001465		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	1.38E-04	n/a	n/a	n/a	n/a	2.01E-05	18.941	B
S09V001465		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001465		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	8.85E+03	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001465		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	U
S09V001465		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001465		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	72.7	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001465		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.697	n/a	n/a	n/a	n/a	0.697	n/a	U
S09V001465		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001465		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	8.03E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001465		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001465		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U
S09V001465		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	44.9	n/a	n/a	n/a	n/a	3.49	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 81-83
Customer Sample ID: B206W9A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001465	AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	9.35	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001465	AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.40E+04	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001465	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	1.59E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001465	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	11.4	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001465	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	5.08E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001465	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	270	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001465	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001465	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	1.54E+03	n/a	n/a	n/a	n/a	69.7	n/a	
S09V001465	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001465	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	488	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001465	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001465	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001465	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001465	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001465	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	UN
S09V001465	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001465	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	29.6	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001465	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	635	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001465	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001465	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001465	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	24.9	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001465	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	5.89	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001465	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	33.2	n/a	n/a	n/a	n/a	3.49	n/a	CB
S09V001465	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	4.92	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001465	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<3.70E-04	n/a	n/a	n/a	n/a	3.70E-04	n/a	U
S09V001465	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	7.06	n/a	n/a	n/a	n/a	3.83E-03	n/a	
S09V001465	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<4.81E-03	n/a	n/a	n/a	n/a	4.81E-03	n/a	U
S09V001465	AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<5.58E-04	n/a	n/a	n/a	n/a	5.58E-04	n/a	U

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M - RPD Outside Range
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X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 81-83
Customer Sample ID: B206W9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001465		AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	3.25E-03	n/a	n/a	n/a	n/a	5.23E-05	n/a	

Customer Sample ID: B206W9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001464		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	3.52E-06	n/a	n/a	n/a	n/a	4.35E-07	19.956	
S09V001464		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	1.40E-04	n/a	n/a	n/a	n/a	1.67E-06	2.563	
S09V001464		WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	1.17	n/a	n/a	n/a	n/a	6.85E-03	n/a	
S09V001464		WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	6.85	n/a	n/a	n/a	n/a	0.0379	n/a	
S09V001464		WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	4.48	n/a	n/a	n/a	n/a	0.0445	n/a	
S09V001464		WV	24959-67-9	Bromide	ug/g	103	<0.0237	0.0337	n/a	n/a	n/a	n/a	0.0264	n/a	B
S09V001464		WV	14797-55-8	Nitrate	ug/g	102	<0.0162	757	693	725	8.84	103	2.27	n/a	
S09V001464		WV	14265-44-2	Phosphate	ug/g	102	<0.0381	3.71	n/a	n/a	n/a	n/a	0.0424	n/a	
S09V001464		WV	14808-79-8	Sulfate	ug/g	102	<0.0219	45.3	n/a	n/a	n/a	n/a	0.268	n/a	
S09V001464		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001464		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	2.79	n/a	n/a	n/a	n/a	0.0667	n/a	
S09V001464		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.133	n/a	n/a	n/a	n/a	0.133	n/a	U
S09V001464		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0667	n/a	n/a	n/a	n/a	0.0667	n/a	U
S09V001464		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0260	n/a	n/a	n/a	n/a	6.67E-03	n/a	B
S09V001464		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.22E-03	n/a	n/a	n/a	n/a	2.22E-03	n/a	U
S09V001464		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001464		WV	7440-70-2	Calcium	ug/g	100	<0.0500	0.896	n/a	n/a	n/a	n/a	0.111	n/a	B
S09V001464		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001464		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0222	n/a	n/a	n/a	n/a	0.0222	n/a	U
S09V001464		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	7.76	n/a	n/a	n/a	n/a	0.0111	n/a	
S09V001464		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001464		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	3.82	n/a	n/a	n/a	n/a	0.0111	n/a	
S09V001464		WV	7440-09-7	Potassium	ug/g	102	<0.500	3.74	n/a	n/a	n/a	n/a	1.11	n/a	B
S09V001464		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	0.0121	n/a	n/a	n/a	n/a	6.67E-03	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 81-83
Customer Sample ID: B206W9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001464		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	0.708	n/a	n/a	n/a	n/a	0.111	n/a	B
S09V001464		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	0.0672	n/a	n/a	n/a	n/a	6.67E-03	n/a	
S09V001464		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	0.109	n/a	n/a	n/a	n/a	0.0445	n/a	B
S09V001464		WV	7440-23-5	Sodium	ug/g	103	0.236	441	n/a	n/a	n/a	n/a	0.222	n/a	
S09V001464		WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0445	n/a	n/a	n/a	n/a	0.0445	n/a	U
S09V001464		WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	0.452	n/a	n/a	n/a	n/a	0.111	n/a	B
S09V001464		WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.111	n/a	n/a	n/a	n/a	0.111	n/a	U
S09V001464		WV	7704-34-9	Sulfur	ug/g	101	<0.100	15.5	n/a	n/a	n/a	n/a	0.222	n/a	
S09V001464		WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.111	n/a	n/a	n/a	n/a	0.111	n/a	U
S09V001464		WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001464		WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	13.8	n/a	n/a	n/a	n/a	0.0667	n/a	
S09V001464		WV	7440-31-5	Tin	ug/g	96.0	<0.0300	0.0955	n/a	n/a	n/a	n/a	0.0667	n/a	B
S09V001464		WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.0113	n/a	n/a	n/a	n/a	6.67E-03	n/a	B
S09V001464		WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	0.140	n/a	n/a	n/a	n/a	0.0111	n/a	
S09V001464		WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001464		WV	7440-61-1	Uranium	ug/g	100	<0.100	2.14	n/a	n/a	n/a	n/a	0.222	n/a	B
S09V001464		WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	0.192	n/a	n/a	n/a	n/a	0.0111	n/a	
S09V001464		WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<4.45E-03	n/a	n/a	n/a	n/a	4.45E-03	n/a	U
S09V001464		WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	0.0182	n/a	n/a	n/a	n/a	0.0111	n/a	B
S09V001464		WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001464		WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	2.99E-03	n/a	n/a	n/a	n/a	3.34E-06	n/a	
S09V001464		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<2.22E-05	n/a	n/a	n/a	n/a	2.22E-05	n/a	U
S09V001464		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	1.41E-04	n/a	n/a	n/a	n/a	1.11E-05	n/a	
S09V001464		WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	0.0144	n/a	n/a	n/a	n/a	2.45E-05	n/a	
S09V001464		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	2.15E-04	n/a	n/a	n/a	n/a	8.90E-06	n/a	
S09V001464		WV	U-238	Uranium-238	ug/g	104	<5.50E-05	2.14	n/a	n/a	n/a	n/a	1.22E-03	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090805

Core Number: C7168

Sample Depth: 129-131

Customer Sample ID: B206X1A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000819			%WATERA	%WATER-APD	%	n/a	n/a	16.39	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000819			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.67E-05	n/a	n/a	n/a	n/a	6.41E-06	26.45	
S09V000819			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.24E-07	n/a	n/a	n/a	n/a	3.24E-07	n/a	U
S09V000819			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<8.51E-07	n/a	n/a	n/a	n/a	8.51E-07	n/a	U
S09V000819			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.08E-07	n/a	n/a	n/a	n/a	4.08E-07	n/a	U
S09V000819			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.57E-06	n/a	n/a	n/a	n/a	1.57E-06	n/a	U
S09V000819			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.11E-06	n/a	n/a	n/a	n/a	1.11E-06	n/a	U
S09V000819			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<5.50E-07	n/a	n/a	n/a	n/a	5.50E-07	n/a	U
S09V000819			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.20E-06	n/a	n/a	n/a	n/a	5.87E-07	23.16	
S09V000819			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.09E-06	n/a	n/a	n/a	n/a	5.70E-07	33.75	
S09V000819			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.02E-06	n/a	n/a	n/a	n/a	7.83E-07	33.86	
S09V000819			WT%SOLID	Weight percent solids	%	n/a	n/a	83.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000819			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.51E-07	n/a	n/a	n/a	n/a	1.51E-07	n/a	U
S09V001466			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	3.07	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206X1A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001468		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.93E-06	n/a	n/a	n/a	n/a	6.93E-06	n/a	U
S09V001468		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	1.85E-04	n/a	n/a	n/a	n/a	2.01E-05	14.498	B
S09V001468		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001468		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.42E+04	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001468		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	U
S09V001468		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001468		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	112	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001468		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.697	n/a	n/a	n/a	n/a	0.697	n/a	U
S09V001468		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001468		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.31E+04	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001468		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 129-131
Customer Sample ID: B206X1A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001468		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U
S09V001468		AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	15.2	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001468		AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	16.5	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001468		AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.88E+04	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001468		AV	7440-09-7	Potassium	ug/g	96.9	<0.500	2.12E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001468		AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	17.8	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001468		AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	7.16E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001468		AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	315	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001468		AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001468		AV	7440-23-5	Sodium	ug/g	99.0	<0.100	326	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001468		AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	21.5	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001468		AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	489	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001468		AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001468		AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001468		AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001468		AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001468		AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	24.7	n/a	n/a	n/a	n/a	20.9	n/a	BN
S09V001468		AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001468		AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	37.5	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001468		AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	564	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001468		AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001468		AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001468		AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	27.6	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001468		AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	8.94	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001468		AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	45.9	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001468		AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	5.84	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001468		AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.24E-05	n/a	n/a	n/a	n/a	9.24E-05	n/a	U
S09V001468		AV	U-238	Uranium-238	ug/g	108	<2.75E-04	1.04	n/a	n/a	n/a	n/a	9.59E-04	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090805

Core Number: C7168

Sample Depth: 129-131

Customer Sample ID: B206X1A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001468		AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001468		AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001468		AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	6.56E-03	n/a	n/a	n/a	n/a	5.23E-05	n/a	

Customer Sample ID: B206X1A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001467		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	7.69E-06	n/a	n/a	n/a	n/a	4.99E-07	12.471	
S09V001467		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	2.04E-04	n/a	n/a	n/a	n/a	1.91E-06	2.204	
S09V001467		WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	2.82	n/a	n/a	n/a	n/a	7.86E-03	n/a	
S09V001467		WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	21.6	n/a	n/a	n/a	n/a	0.0435	n/a	
S09V001467		WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	1.45	n/a	n/a	n/a	n/a	0.0511	n/a	
S09V001467		WV	24959-67-9	Bromide	ug/g	103	<0.0237	<0.0302	n/a	n/a	n/a	n/a	0.0302	n/a	U
S09V001467		WV	14797-55-8	Nitrate	ug/g	102	<0.0162	2.14E+03	n/a	n/a	n/a	n/a	2.61	n/a	
S09V001467		WV	14265-44-2	Phosphate	ug/g	102	<0.0381	<0.0486	n/a	n/a	n/a	n/a	0.0486	n/a	U
S09V001467		WV	14808-79-8	Sulfate	ug/g	102	<0.0219	18.7	n/a	n/a	n/a	n/a	0.307	n/a	
S09V001467		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	<0.0766	n/a	n/a	n/a	n/a	0.0766	n/a	U
S09V001467		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.153	n/a	n/a	n/a	n/a	0.153	n/a	U
S09V001467		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0766	n/a	n/a	n/a	n/a	0.0766	n/a	U
S09V001467		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.296	n/a	n/a	n/a	n/a	7.66E-03	n/a	
S09V001467		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.55E-03	n/a	n/a	n/a	n/a	2.55E-03	n/a	U
S09V001467		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.255	n/a	n/a	n/a	n/a	0.255	n/a	U
S09V001467		WV	7440-70-2	Calcium	ug/g	100	<0.0500	404	n/a	n/a	n/a	n/a	0.128	n/a	
S09V001467		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0255	n/a	n/a	n/a	n/a	0.0255	n/a	U
S09V001467		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	0.0273	n/a	n/a	n/a	n/a	0.0128	n/a	B
S09V001467		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 129-131
Customer Sample ID: B206X1A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001467	WV	7440-09-7	Potassium	ug/g	102	<0.500	22.8	n/a	n/a	n/a	n/a	1.28	n/a	
S09V001467	WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	0.0165	n/a	n/a	n/a	n/a	7.66E-03	n/a	B
S09V001467	WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	95.5	n/a	n/a	n/a	n/a	0.128	n/a	
S09V001467	WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<7.66E-03	n/a	n/a	n/a	n/a	7.66E-03	n/a	U
S09V001467	WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0511	n/a	n/a	n/a	n/a	0.0511	n/a	U
S09V001467	WV	7440-23-5	Sodium	ug/g	103	0.236	171	n/a	n/a	n/a	n/a	0.255	n/a	
S09V001467	WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0511	n/a	n/a	n/a	n/a	0.0511	n/a	U
S09V001467	WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001467	WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001467	WV	7704-34-9	Sulfur	ug/g	101	<0.100	5.89	n/a	n/a	n/a	n/a	0.255	n/a	
S09V001467	WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001467	WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.255	n/a	n/a	n/a	n/a	0.255	n/a	U
S09V001467	WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	9.61	n/a	n/a	n/a	n/a	0.0766	n/a	
S09V001467	WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0766	n/a	n/a	n/a	n/a	0.0766	n/a	U
S09V001467	WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	1.84	n/a	n/a	n/a	n/a	7.66E-03	n/a	
S09V001467	WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467	WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.255	n/a	n/a	n/a	n/a	0.255	n/a	U
S09V001467	WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.255	n/a	n/a	n/a	n/a	0.255	n/a	U
S09V001467	WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467	WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<5.11E-03	n/a	n/a	n/a	n/a	5.11E-03	n/a	U
S09V001467	WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467	WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001467	WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	9.13E-03	n/a	n/a	n/a	n/a	3.83E-06	n/a	
S09V001467	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<6.38E-08	n/a	n/a	n/a	n/a	6.38E-08	n/a	U
S09V001467	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	5.36E-08	n/a	n/a	n/a	n/a	3.19E-08	n/a	
S09V001467	WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	6.00E-06	n/a	n/a	n/a	n/a	7.02E-08	n/a	
S09V001467	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<2.55E-08	n/a	n/a	n/a	n/a	2.55E-08	n/a	U
S09V001467	WV	U-238	Uranium-238	ug/g	104	<5.50E-05	8.31E-04	n/a	n/a	n/a	n/a	3.51E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090805

Core Number: C7168

Sample Depth: 145-147

Customer Sample ID: B206X3A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000825			%WATERA	%WATER-APD	%	n/a	n/a	18.37	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000825			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.36E-05	n/a	n/a	n/a	n/a	6.53E-06	32.11	
S09V000825			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.07E-07	n/a	n/a	n/a	n/a	3.07E-07	n/a	U
S09V000825			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<8.76E-07	n/a	n/a	n/a	n/a	8.76E-07	n/a	U
S09V000825			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.20E-07	n/a	n/a	n/a	n/a	4.20E-07	n/a	U
S09V000825			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.58E-06	n/a	n/a	n/a	n/a	1.58E-06	n/a	U
S09V000825			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.03E-06	n/a	n/a	n/a	n/a	1.03E-06	n/a	U
S09V000825			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<5.33E-07	n/a	n/a	n/a	n/a	5.33E-07	n/a	U
S09V000825			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.04E-06	n/a	n/a	n/a	n/a	6.11E-07	27.27	
S09V000825			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.07E-06	n/a	n/a	n/a	n/a	8.39E-07	36.72	
S09V000825			WT%SOLID	Weight percent solids	%	n/a	n/a	81.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000825			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.39E-07	n/a	n/a	n/a	n/a	1.39E-07	n/a	U
S09V001469			CONDUCT	Conductivity	uMHO/cm	99.5	<1.00	310	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B206X3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001471		AV	12587-46-1	Gross alpha	uCi/g	106	<6.94E-06	<6.93E-06	n/a	n/a	n/a	n/a	6.93E-06	n/a	U
S09V001471		AV	12587-47-2	Gross beta	uCi/g	90.8	2.96E-05	5.13E-05	n/a	n/a	n/a	n/a	2.01E-05	48.333	B
S09V001471		AV	7440-22-4	Silver	ug/g	99.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001471		AV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	1.57E+04	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001471		AV	7440-38-2	Arsenic	ug/g	94.3	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	U
S09V001471		AV	7440-42-8	Boron	ug/g	98.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001471		AV	7440-39-3	Barium	ug/g	92.8	<3.00E-03	116	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001471		AV	7440-41-7	Beryllium	ug/g	98.1	<1.00E-03	<0.697	n/a	n/a	n/a	n/a	0.697	n/a	U
S09V001471		AV	7440-69-9	Bismuth	ug/g	98.7	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001471		AV	7440-70-2	Calcium	ug/g	90.3	0.0510	1.46E+04	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001471		AV	7440-43-9	Cadmium	ug/g	93.4	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001471		AV	7440-48-4	Cobalt	ug/g	87.6	<0.0100	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U

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M - RPD Outside Range
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X - Comment
B - Blank Contamination
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30 - Aug - 2011 14:41:57
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 145-147
Customer Sample ID: B206X3A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001471	AV	7440-47-3	Chromium	ug/g	87.1	<5.00E-03	13.2	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001471	AV	7440-50-8	Copper	ug/g	81.2	<5.00E-03	16.7	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001471	AV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	1.85E+04	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001471	AV	7440-09-7	Potassium	ug/g	96.9	<0.500	2.61E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001471	AV	7439-93-2	Lithium	ug/g	88.2	<3.00E-03	19.5	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001471	AV	7439-95-4	Magnesium	ug/g	87.2	<0.0500	8.60E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001471	AV	7439-96-5	Manganese	ug/g	88.2	<3.00E-03	448	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001471	AV	7439-98-7	Molybdenum	ug/g	97.5	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001471	AV	7440-23-5	Sodium	ug/g	99.0	<0.100	213	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001471	AV	7440-02-0	Nickel	ug/g	89.6	<0.0200	26.7	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001471	AV	7723-14-0	Phosphorus	ug/g	91.4	<0.0500	445	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001471	AV	7439-92-1	Lead	ug/g	80.2	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001471	AV	7704-34-9	Sulfur	ug/g	88.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001471	AV	7440-36-0	Antimony	ug/g	85.8	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001471	AV	7782-49-2	Selenium	ug/g	99.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001471	AV	7440-21-3	Silicon	ug/g	83.2	<0.0300	38.4	n/a	n/a	n/a	n/a	20.9	n/a	BN
S09V001471	AV	7440-31-5	Tin	ug/g	81.1	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001471	AV	7440-24-6	Strontium	ug/g	93.4	<3.00E-03	30.9	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001471	AV	7440-32-6	Titanium	ug/g	99.8	<5.00E-03	608	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001471	AV	7440-28-0	Thallium	ug/g	80.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001471	AV	7440-61-1	Uranium	ug/g	83.4	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001471	AV	7440-62-2	Vanadium	ug/g	97.1	<5.00E-03	26.7	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001471	AV	7440-65-5	Yttrium	ug/g	81.4	<2.00E-03	10.2	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001471	AV	7440-66-6	Zinc	ug/g	89.1	8.52E-03	42.9	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001471	AV	7440-67-7	Zirconium	ug/g	99.9	<5.00E-03	6.24	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001471	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.24E-05	n/a	n/a	n/a	n/a	9.24E-05	n/a	U
S09V001471	AV	U-238	Uranium-238	ug/g	108	<2.75E-04	0.930	n/a	n/a	n/a	n/a	9.59E-04	n/a	
S09V001471	AV	15117-48-3	Plutonium-239	ug/g	105	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 145-147
Customer Sample ID: B206X3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001471		AV	14596-10-2	Americium-241	ug/g	107	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001471		AV	14133-76-7	Technetium-99	ug/g	120	<1.50E-05	2.33E-04	n/a	n/a	n/a	n/a	5.23E-05	n/a	

Customer Sample ID: B206X3A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001470		WV	12587-46-1	Gross alpha	uCi/g	99.7	<4.62E-07	<5.23E-07	n/a	n/a	n/a	n/a	5.23E-07	n/a	U
S09V001470		WV	12587-47-2	Gross beta	uCi/g	98.1	1.92E-06	4.11E-06	n/a	n/a	n/a	n/a	2.01E-06	59.606	B
S09V001470		WV	16984-48-8	Fluoride	ug/g	97.7	<6.16E-03	0.279	n/a	n/a	n/a	n/a	8.23E-03	n/a	
S09V001470		WV	16887-00-6	Chloride	ug/g	103	<3.10E-03	8.97	n/a	n/a	n/a	n/a	0.0456	n/a	
S09V001470		WV	14797-65-0	Nitrite	ug/g	94.1	<0.0400	<0.0535	n/a	n/a	n/a	n/a	0.0535	n/a	U
S09V001470		WV	24959-67-9	Bromide	ug/g	103	<0.0237	0.0621	n/a	n/a	n/a	n/a	0.0317	n/a	B
S09V001470		WV	14797-55-8	Nitrate	ug/g	102	<0.0162	<0.0217	n/a	n/a	n/a	n/a	0.0217	n/a	U
S09V001470		WV	14265-44-2	Phosphate	ug/g	102	<0.0381	0.760	n/a	n/a	n/a	n/a	0.0509	n/a	
S09V001470		WV	14808-79-8	Sulfate	ug/g	102	<0.0219	33.0	n/a	n/a	n/a	n/a	0.322	n/a	
S09V001470		WV	7440-22-4	Silver	ug/g	90.0	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7429-90-5	Aluminum	ug/g	99.0	<0.0300	0.107	n/a	n/a	n/a	n/a	0.0802	n/a	B
S09V001470		WV	7440-38-2	Arsenic	ug/g	97.9	<0.0600	<0.160	n/a	n/a	n/a	n/a	0.160	n/a	U
S09V001470		WV	7440-42-8	Boron	ug/g	99.3	<0.0300	<0.0802	n/a	n/a	n/a	n/a	0.0802	n/a	U
S09V001470		WV	7440-39-3	Barium	ug/g	97.7	<3.00E-03	0.0343	n/a	n/a	n/a	n/a	8.02E-03	n/a	B
S09V001470		WV	7440-41-7	Beryllium	ug/g	96.2	<1.00E-03	<2.67E-03	n/a	n/a	n/a	n/a	2.67E-03	n/a	U
S09V001470		WV	7440-69-9	Bismuth	ug/g	96.9	<0.100	<0.267	n/a	n/a	n/a	n/a	0.267	n/a	U
S09V001470		WV	7440-70-2	Calcium	ug/g	100	<0.0500	26.0	n/a	n/a	n/a	n/a	0.134	n/a	
S09V001470		WV	7440-43-9	Cadmium	ug/g	96.3	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7440-48-4	Cobalt	ug/g	96.6	<0.0100	<0.0267	n/a	n/a	n/a	n/a	0.0267	n/a	U
S09V001470		WV	7440-47-3	Chromium	ug/g	96.4	<5.00E-03	0.0135	n/a	n/a	n/a	n/a	0.0134	n/a	B
S09V001470		WV	7440-50-8	Copper	ug/g	99.0	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7439-89-6	Iron	ug/g	96.3	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7440-09-7	Potassium	ug/g	102	<0.500	7.41	n/a	n/a	n/a	n/a	1.34	n/a	B

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
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N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090805
Core Number: C7168
Sample Depth: 145-147
Customer Sample ID: B206X3A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001470		WV	7439-93-2	Lithium	ug/g	103	<3.00E-03	<8.02E-03	n/a	n/a	n/a	n/a	8.02E-03	n/a	U
S09V001470		WV	7439-95-4	Magnesium	ug/g	98.3	<0.0500	11.0	n/a	n/a	n/a	n/a	0.134	n/a	
S09V001470		WV	7439-96-5	Manganese	ug/g	96.2	<3.00E-03	<8.02E-03	n/a	n/a	n/a	n/a	8.02E-03	n/a	U
S09V001470		WV	7439-98-7	Molybdenum	ug/g	98.9	<0.0200	<0.0535	n/a	n/a	n/a	n/a	0.0535	n/a	U
S09V001470		WV	7440-23-5	Sodium	ug/g	103	0.236	32.6	n/a	n/a	n/a	n/a	0.267	n/a	
S09V001470		WV	7440-02-0	Nickel	ug/g	95.2	<0.0200	<0.0535	n/a	n/a	n/a	n/a	0.0535	n/a	U
S09V001470		WV	7723-14-0	Phosphorus	ug/g	97.1	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001470		WV	7439-92-1	Lead	ug/g	99.2	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001470		WV	7704-34-9	Sulfur	ug/g	101	<0.100	11.3	n/a	n/a	n/a	n/a	0.267	n/a	
S09V001470		WV	7440-36-0	Antimony	ug/g	98.8	<0.0500	<0.134	n/a	n/a	n/a	n/a	0.134	n/a	U
S09V001470		WV	7782-49-2	Selenium	ug/g	99.6	<0.100	<0.267	n/a	n/a	n/a	n/a	0.267	n/a	U
S09V001470		WV	7440-21-3	Silicon	ug/g	93.5	<0.0300	9.45	n/a	n/a	n/a	n/a	0.0802	n/a	
S09V001470		WV	7440-31-5	Tin	ug/g	96.0	<0.0300	<0.0802	n/a	n/a	n/a	n/a	0.0802	n/a	U
S09V001470		WV	7440-24-6	Strontium	ug/g	96.7	<3.00E-03	0.135	n/a	n/a	n/a	n/a	8.02E-03	n/a	
S09V001470		WV	7440-32-6	Titanium	ug/g	97.9	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7440-28-0	Thallium	ug/g	93.5	<0.100	<0.267	n/a	n/a	n/a	n/a	0.267	n/a	U
S09V001470		WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.267	n/a	n/a	n/a	n/a	0.267	n/a	U
S09V001470		WV	7440-62-2	Vanadium	ug/g	98.6	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7440-65-5	Yttrium	ug/g	93.4	<2.00E-03	<5.35E-03	n/a	n/a	n/a	n/a	5.35E-03	n/a	U
S09V001470		WV	7440-66-6	Zinc	ug/g	97.6	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	7440-67-7	Zirconium	ug/g	93.9	<5.00E-03	<0.0134	n/a	n/a	n/a	n/a	0.0134	n/a	U
S09V001470		WV	14133-76-7	Technetium-99	ug/g	107	<3.00E-06	1.67E-04	n/a	n/a	n/a	n/a	4.01E-06	n/a	
S09V001470		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-06	<1.34E-07	n/a	n/a	n/a	n/a	1.34E-07	n/a	U
S09V001470		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-07	3.01E-07	n/a	n/a	n/a	n/a	6.68E-08	n/a	
S09V001470		WV	15117-96-1	Uranium-235	ug/g	103	<1.10E-06	2.69E-05	n/a	n/a	n/a	n/a	1.47E-07	n/a	
S09V001470		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-07	<5.35E-08	n/a	n/a	n/a	n/a	5.35E-08	n/a	U
S09V001470		WV	U-238	Uranium-238	ug/g	104	<5.50E-05	3.71E-03	n/a	n/a	n/a	n/a	7.35E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806

Core Number: C7170

Sample Depth: 81.5-83.5

Customer Sample ID: B206X5A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000789			%WATERA	%WATER-APD	%	n/a	n/a	5.550	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000789			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.16E-05	1.84E-05	1.50E-05	45.2	n/a	7.31E-06	41.05	
S09V000789			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.93E-07	<3.73E-07	n/a	n/a	n/a	3.93E-07	n/a	U
S09V000789			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<9.40E-07	<9.56E-07	n/a	n/a	n/a	9.40E-07	n/a	U
S09V000789			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.88E-07	<4.74E-07	n/a	n/a	n/a	4.88E-07	n/a	U
S09V000789			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.67E-06	<1.78E-06	n/a	n/a	n/a	1.67E-06	n/a	U
S09V000789			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.24E-06	<1.14E-06	n/a	n/a	n/a	1.24E-06	n/a	U
S09V000789			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<6.06E-07	<6.01E-07	n/a	n/a	n/a	6.06E-07	n/a	U
S09V000789			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.00E-06	9.98E-07	1.00E-06	0.490	n/a	7.75E-07	35.59	
S09V000789			WT%SOLID	Weight percent solids	%	n/a	n/a	94.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001472			CONDUCT	Conductivity	uMHO/cm	100	0.430	684	801	742	15.8	n/a	0.200	n/a	

Customer Sample ID: B206X5A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001474		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	7.99E-06	n/a	n/a	n/a	100	3.69E-06	63.445	B
S09V001474		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	3.40E-05	n/a	n/a	n/a	95.6	2.14E-05	76.349	
S09V001474		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<2.47	<1.74	n/a	n/a	41.1	2.47	n/a	UN
S09V001474		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	9.44E+03	1.23E+04	1.09E+04	26.6	6.43E+03	14.8	n/a	
S09V001474		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<29.6	<20.8	n/a	n/a	77.5	29.6	n/a	U
S09V001474		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<14.8	<10.4	n/a	n/a	90.2	14.8	n/a	U
S09V001474		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	79.9	93.6	86.8	15.7	107	1.48	n/a	
S09V001474		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	<0.494	0.429	0.462	14.1	92.1	0.494	n/a	U
S09V001474		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<24.7	<34.7	n/a	n/a	83.4	24.7	n/a	U
S09V001474		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	9.52E+03	1.27E+04	1.11E+04	28.6	6.01E+03	24.7	n/a	
S09V001474		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<2.47	<1.74	n/a	n/a	85.3	2.47	n/a	U
S09V001474		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	8.06	11.0	9.54	31.0	96.9	4.94	n/a	B
S09V001474		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	20.6	23.2	21.9	11.8	94.7	2.47	n/a	B
S09V001474		AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	11.0	15.0	13.0	30.6	98.1	2.47	n/a	B

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X - Comment
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U - Less Than Detection Limit
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B - Blank Contamination

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SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 81.5-83.5
Customer Sample ID: B206X5A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001474	AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.67E+04	1.96E+04	1.82E+04	16.2	1.94E+03	2.47	n/a	
S09V001474	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	2.18E+03	2.09E+03	2.13E+03	4.13	-628	247	n/a	B
S09V001474	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	12.9	15.0	14.0	14.6	92.5	1.48	n/a	B
S09V001474	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	5.99E+03	6.52E+03	6.25E+03	8.49	-38.9	24.7	n/a	
S09V001474	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	343	339	341	1.08	78.6	1.48	n/a	
S09V001474	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<9.88	<6.94	n/a	n/a	80.2	9.88	n/a	U
S09V001474	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	243	391	317	46.8	497	49.4	n/a	B
S09V001474	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	20.6	18.7	19.7	9.61	81.1	9.88	n/a	B
S09V001474	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	502	582	542	14.6	224	24.7	n/a	
S09V001474	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<24.7	20.3	22.5	19.7	83.0	24.7	n/a	U
S09V001474	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<49.4	47.5	48.5	3.91	205	49.4	n/a	UN
S09V001474	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<24.7	<17.4	n/a	n/a	0.0	24.7	n/a	UN
S09V001474	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<49.4	<34.7	n/a	n/a	0.0	49.4	n/a	UN
S09V001474	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	35.9	17.6	26.8	68.1	1.79	14.8	n/a	CBN
S09V001474	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<14.8	<10.4	n/a	n/a	72.3	14.8	n/a	UN
S09V001474	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	34.7	41.6	38.2	18.1	104	1.48	n/a	
S09V001474	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	702	740	721	5.35	79.9	2.47	n/a	
S09V001474	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<49.4	<34.7	n/a	n/a	177	49.4	n/a	UN
S09V001474	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<49.4	<34.7	n/a	n/a	0.0	49.4	n/a	UN
S09V001474	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	29.3	33.9	31.6	14.5	96.5	2.47	n/a	
S09V001474	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	6.51	8.49	7.50	26.4	91.7	0.988	n/a	B
S09V001474	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	42.4	47.3	44.9	11.0	91.3	2.47	n/a	C
S09V001474	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	4.92	9.36	7.14	62.2	82.3	2.47	n/a	B
S09V001474	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<1.05E-04	n/a	n/a	n/a	106	1.05E-04	n/a	U
S09V001474	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.751	n/a	n/a	n/a	87.4	1.09E-03	n/a	
S09V001474	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<1.36E-03	n/a	n/a	n/a	97.1	1.36E-03	n/a	U
S09V001474	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.58E-04	n/a	n/a	n/a	101	1.58E-04	n/a	U
S09V001474	AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	2.76E-03	n/a	n/a	n/a	98.8	2.96E-04	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 81.5-83.5

Customer Sample ID: B206X5A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001473	WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	1.93E-06	1.97E-06	1.95E-06	1.67	93.4	3.57E-07	28.019	
S09V001473	WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	3.64E-05	4.15E-05	3.89E-05	13.2	100	1.53E-06	6.423	
S09V001473	WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.399	0.349	0.374	13.3	122	6.26E-03	n/a	
S09V001473	WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	0.854	1.06	0.957	21.5	94.4	0.447	n/a	B
S09V001473	WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0918	0.0941	0.0929	2.52	119	0.0241	n/a	B
S09V001473	WV	14797-55-8	Nitrate	ug/g	101	<0.0162	290	366	328	23.4	105	0.674	n/a	
S09V001473	WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	<0.426	<0.426	n/a	n/a	109	0.426	n/a	U
S09V001473	WV	14808-79-8	Sulfate	ug/g	101	<0.0219	18.2	21.0	19.6	14.6	104	0.245	n/a	
S09V001473	WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473	WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	<0.0609	<0.0609	n/a	n/a	n/a	0.0609	n/a	U
S09V001473	WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.122	<0.122	n/a	n/a	n/a	0.122	n/a	U
S09V001473	WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0609	<0.0609	n/a	n/a	n/a	0.0609	n/a	U
S09V001473	WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	0.0206	0.0261	0.0234	23.7	n/a	6.09E-03	n/a	B
S09V001473	WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.03E-03	<2.03E-03	n/a	n/a	n/a	2.03E-03	n/a	U
S09V001473	WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.203	<0.203	n/a	n/a	n/a	0.203	n/a	U
S09V001473	WV	7440-70-2	Calcium	ug/g	106	<0.0500	51.8	67.5	59.6	26.4	n/a	0.102	n/a	
S09V001473	WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473	WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0203	<0.0203	n/a	n/a	n/a	0.0203	n/a	U
S09V001473	WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	0.0745	0.0837	0.0791	11.6	n/a	0.0102	n/a	B
S09V001473	WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473	WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473	WV	7440-09-7	Potassium	ug/g	103	<0.500	8.55	10.1	9.31	16.3	n/a	1.02	n/a	B
S09V001473	WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	8.75E-03	1.19E-02	1.03E-02	30.3	n/a	6.09E-03	n/a	B
S09V001473	WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	11.5	14.8	13.2	25.0	n/a	0.102	n/a	
S09V001473	WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	<6.09E-03	7.67E-03	6.88E-03	22.9	n/a	6.09E-03	n/a	U
S09V001473	WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0406	<0.0406	n/a	n/a	n/a	0.0406	n/a	U
S09V001473	WV	7440-23-5	Sodium	ug/g	95.0	<0.100	49.4	55.3	52.3	11.3	n/a	0.203	n/a	

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B - Blank Contamination
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30 - Aug - 2011 14:41:57
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 81.5-83.5
Customer Sample ID: B206X5A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001473		WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0406	<0.0406	n/a	n/a	n/a	0.0406	n/a	U
S09V001473		WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	<0.102	<0.102	n/a	n/a	n/a	0.102	n/a	U
S09V001473		WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.102	<0.102	n/a	n/a	n/a	0.102	n/a	U
S09V001473		WV	7704-34-9	Sulfur	ug/g	101	<0.100	6.37	7.32	6.84	14.0	n/a	0.203	n/a	
S09V001473		WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.102	<0.102	n/a	n/a	n/a	0.102	n/a	U
S09V001473		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.203	<0.203	n/a	n/a	n/a	0.203	n/a	U
S09V001473		WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	6.99	7.13	7.06	1.96	n/a	0.0609	n/a	
S09V001473		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0609	<0.0609	n/a	n/a	n/a	0.0609	n/a	U
S09V001473		WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	0.241	0.310	0.276	25.1	n/a	6.09E-03	n/a	
S09V001473		WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473		WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.203	<0.203	n/a	n/a	n/a	0.203	n/a	U
S09V001473		WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.203	<0.203	n/a	n/a	n/a	0.203	n/a	U
S09V001473		WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473		WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<4.06E-03	<4.06E-03	n/a	n/a	n/a	4.06E-03	n/a	U
S09V001473		WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473		WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0102	<0.0102	n/a	n/a	n/a	0.0102	n/a	U
S09V001473		WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	1.55E-03	1.90E-03	1.73E-03	20.0	107	3.05E-06	n/a	
S09V001473		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	1.14E-07	<1.02E-07	n/a	n/a	n/a	1.02E-07	n/a	
S09V001473		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<5.08E-08	<5.08E-08	n/a	n/a	n/a	5.08E-08	n/a	U
S09V001473		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	2.15E-06	2.30E-06	2.23E-06	6.51	98.4	1.12E-07	n/a	
S09V001473		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<4.06E-08	<4.06E-08	n/a	n/a	n/a	4.06E-08	n/a	U
S09V001473		WV	U-238	Uranium-238	ug/g	102	<5.50E-06	3.04E-04	3.37E-04	3.20E-04	10.5	98.3	5.59E-06	n/a	

Customer Sample ID: B206X5B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000790			%WATERA	%WATER-APD	%	n/a	n/a	9.010	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000790			WT%SOLID	Weight percent solids	%	n/a	n/a	91.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000790			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.68E-07	n/a	n/a	n/a	n/a	1.68E-07	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806

Core Number: C7170

Sample Depth: 113-115

Customer Sample ID: B206X7A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000795			%WATERA	%WATER-APD	%	n/a	n/a	12.39	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000795			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.38E-05	n/a	n/a	n/a	n/a	6.99E-06	33.72	
S09V000795			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.89E-07	n/a	n/a	n/a	n/a	3.89E-07	n/a	U
S09V000795			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<9.63E-07	n/a	n/a	n/a	n/a	9.63E-07	n/a	U
S09V000795			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<3.95E-07	n/a	n/a	n/a	n/a	3.95E-07	n/a	U
S09V000795			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.76E-06	n/a	n/a	n/a	n/a	1.76E-06	n/a	U
S09V000795			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.08E-06	n/a	n/a	n/a	n/a	1.08E-06	n/a	U
S09V000795			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<6.09E-07	n/a	n/a	n/a	n/a	6.09E-07	n/a	U
S09V000795			14913-50-9	Thallium-208	uCi/g	n/a	n/a	5.52E-07	n/a	n/a	n/a	n/a	4.06E-07	47.83	
S09V000795			15092-94-1	Lead-212	uCi/g	n/a	n/a	9.28E-07	n/a	n/a	n/a	n/a	6.15E-07	29.57	
S09V000795			15067-28-4	Lead-214	uCi/g	n/a	n/a	8.42E-07	n/a	n/a	n/a	n/a	8.40E-07	42.58	
S09V000795			WT%SOLID	Weight percent solids	%	n/a	n/a	87.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000795			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.58E-07	n/a	n/a	n/a	n/a	1.58E-07	n/a	U
S09V001475			CONDUCT	Conductivity	uMHO/cm	100	0.430	3.39	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B206X7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001477		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	2.64E-05	1.54E-05	2.09E-05	52.5	n/a	5.22E-06	31.350	B
S09V001477		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	2.64E-04	1.75E-04	2.19E-04	40.3	n/a	3.02E-05	15.145	
S09V001477		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	UN
S09V001477		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.19E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001477		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001477		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001477		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	97.9	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001477		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.417	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001477		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001477		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.26E+04	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001477		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 113-115
Customer Sample ID: B206X7A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001477	AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	9.35	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001477	AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	24.6	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001477	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	14.7	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001477	AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.94E+04	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001477	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.76E+03	n/a	n/a	n/a	n/a	175	n/a	
S09V001477	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	13.2	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001477	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	6.55E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001477	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	342	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001477	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001477	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	346	n/a	n/a	n/a	n/a	34.9	n/a	B
S09V001477	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	17.4	n/a	n/a	n/a	n/a	6.98	n/a	B
S09V001477	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	598	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001477	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	U
S09V001477	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001477	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001477	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001477	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	19.1	n/a	n/a	n/a	n/a	10.5	n/a	CBN
S09V001477	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001477	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	42.4	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001477	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	759	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001477	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001477	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001477	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	33.5	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001477	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	8.58	n/a	n/a	n/a	n/a	0.698	n/a	
S09V001477	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	46.7	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001477	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	9.66	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001477	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<9.25E-05	<7.36E-05	n/a	n/a	n/a	9.25E-05	n/a	U
S09V001477	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.739	0.807	0.773	8.82	n/a	9.60E-04	n/a	

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B - Estimated
X - Comment
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SX Barrier
Data Summary Report

Sample Group: 20090806

Core Number: C7170

Sample Depth: 113-115

Customer Sample ID: B206X7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001477		AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<1.20E-03	<9.58E-04	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001477		AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.40E-04	<1.11E-04	n/a	n/a	96.1	1.40E-04	n/a	U
S09V001477		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	1.01E-02	9.66E-03	9.90E-03	4.89	95.2	3.49E-04	n/a	

Customer Sample ID: B206X7A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001476		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	8.38E-06	n/a	n/a	n/a	n/a	4.14E-07	10.739	
S09V001476		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	1.78E-04	n/a	n/a	n/a	n/a	1.78E-06	2.287	
S09V001476		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.242	n/a	n/a	n/a	n/a	0.0797	n/a	B
S09V001476		WV	16887-00-6	Chloride	ug/g	102	<3.10E-03	16.9	n/a	n/a	n/a	n/a	3.64E-03	n/a	
S09V001476		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	4.19	n/a	n/a	n/a	n/a	0.517	n/a	
S09V001476		WV	24959-67-9	Bromide	ug/g	102	<0.0237	<0.0279	n/a	n/a	n/a	n/a	0.0279	n/a	U
S09V001476		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	2.11E+03	n/a	n/a	n/a	n/a	3.83	n/a	
S09V001476		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	<0.0448	n/a	n/a	n/a	n/a	0.0448	n/a	U
S09V001476		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	64.1	n/a	n/a	n/a	n/a	0.283	n/a	
S09V001476		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476		WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	<0.0705	n/a	n/a	n/a	n/a	0.0705	n/a	U
S09V001476		WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.141	n/a	n/a	n/a	n/a	0.141	n/a	U
S09V001476		WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0705	n/a	n/a	n/a	n/a	0.0705	n/a	U
S09V001476		WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	0.182	n/a	n/a	n/a	n/a	7.05E-03	n/a	
S09V001476		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.35E-03	n/a	n/a	n/a	n/a	2.35E-03	n/a	U
S09V001476		WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.235	n/a	n/a	n/a	n/a	0.235	n/a	U
S09V001476		WV	7440-70-2	Calcium	ug/g	106	<0.0500	421	n/a	n/a	n/a	n/a	0.118	n/a	
S09V001476		WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476		WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0235	n/a	n/a	n/a	n/a	0.0235	n/a	U
S09V001476		WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	0.361	n/a	n/a	n/a	n/a	0.0118	n/a	
S09V001476		WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476		WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 113-115
Customer Sample ID: B206X7A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001476	WV	7440-09-7	Potassium	ug/g	103	<0.500	23.0	n/a	n/a	n/a	n/a	1.18	n/a	
S09V001476	WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	0.0193	n/a	n/a	n/a	n/a	7.05E-03	n/a	B
S09V001476	WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	85.7	n/a	n/a	n/a	n/a	0.118	n/a	
S09V001476	WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	0.0552	n/a	n/a	n/a	n/a	7.05E-03	n/a	B
S09V001476	WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0470	n/a	n/a	n/a	n/a	0.0470	n/a	U
S09V001476	WV	7440-23-5	Sodium	ug/g	95.0	<0.100	178	n/a	n/a	n/a	n/a	0.235	n/a	
S09V001476	WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0470	n/a	n/a	n/a	n/a	0.0470	n/a	U
S09V001476	WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	<0.118	n/a	n/a	n/a	n/a	0.118	n/a	U
S09V001476	WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.118	n/a	n/a	n/a	n/a	0.118	n/a	U
S09V001476	WV	7704-34-9	Sulfur	ug/g	101	<0.100	20.3	n/a	n/a	n/a	n/a	0.235	n/a	
S09V001476	WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.118	n/a	n/a	n/a	n/a	0.118	n/a	U
S09V001476	WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.235	n/a	n/a	n/a	n/a	0.235	n/a	U
S09V001476	WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	10.1	n/a	n/a	n/a	n/a	0.0705	n/a	
S09V001476	WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0705	n/a	n/a	n/a	n/a	0.0705	n/a	U
S09V001476	WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	1.72	n/a	n/a	n/a	n/a	7.05E-03	n/a	
S09V001476	WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476	WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.235	n/a	n/a	n/a	n/a	0.235	n/a	U
S09V001476	WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.235	n/a	n/a	n/a	n/a	0.235	n/a	U
S09V001476	WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476	WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<4.70E-03	n/a	n/a	n/a	n/a	4.70E-03	n/a	U
S09V001476	WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476	WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0118	n/a	n/a	n/a	n/a	0.0118	n/a	U
S09V001476	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	7.97E-03	n/a	n/a	n/a	n/a	3.53E-06	n/a	
S09V001476	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.18E-07	n/a	n/a	n/a	n/a	1.18E-07	n/a	U
S09V001476	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<5.88E-08	n/a	n/a	n/a	n/a	5.88E-08	n/a	U
S09V001476	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	6.59E-06	n/a	n/a	n/a	n/a	1.29E-07	n/a	
S09V001476	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<4.70E-08	n/a	n/a	n/a	n/a	4.70E-08	n/a	U
S09V001476	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	9.25E-04	n/a	n/a	n/a	n/a	6.47E-06	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 133-135
Customer Sample ID: B206X9A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000801			%WATERA	%WATER-APD	%	n/a	n/a	9.870	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000801			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.41E-05	n/a	n/a	n/a	n/a	8.21E-06	38.02	
S09V000801			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<4.20E-07	n/a	n/a	n/a	n/a	4.20E-07	n/a	U
S09V000801			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<1.05E-06	n/a	n/a	n/a	n/a	1.05E-06	n/a	U
S09V000801			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.39E-07	n/a	n/a	n/a	n/a	4.39E-07	n/a	U
S09V000801			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.95E-06	n/a	n/a	n/a	n/a	1.95E-06	n/a	U
S09V000801			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.32E-06	n/a	n/a	n/a	n/a	1.32E-06	n/a	U
S09V000801			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<6.78E-07	n/a	n/a	n/a	n/a	6.78E-07	n/a	U
S09V000801			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.13E-06	n/a	n/a	n/a	n/a	7.33E-07	29.12	
S09V000801			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.02E-06	n/a	n/a	n/a	n/a	1.12E-06	43.76	
S09V000801			WT%SOLID	Weight percent solids	%	n/a	n/a	90.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000801			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.42E-07	<1.42E-07	n/a	n/a	n/a	1.42E-07	n/a	U
S09V001478			CONDUCT	Conductivity	uMHO/cm	100	0.430	228	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B206X9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001480		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.38E-05	n/a	n/a	n/a	n/a	3.68E-06	39.843	B
S09V001480		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	<2.13E-05	n/a	n/a	n/a	n/a	2.13E-05	n/a	U
S09V001480		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	UN
S09V001480		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.29E+04	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001480		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001480		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001480		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	118	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001480		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.430	n/a	n/a	n/a	n/a	0.348	n/a	B
S09V001480		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001480		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.23E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001480		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001480		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	9.86	n/a	n/a	n/a	n/a	3.48	n/a	B

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X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 133-135
Customer Sample ID: B206X9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001480		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	22.9	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001480		AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	18.2	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001480		AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.87E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001480		AV	7440-09-7	Potassium	ug/g	97.8	<0.500	2.43E+03	n/a	n/a	n/a	n/a	174	n/a	
S09V001480		AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	17.8	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001480		AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	7.40E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001480		AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	249	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001480		AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.96	n/a	n/a	n/a	n/a	6.96	n/a	U
S09V001480		AV	7440-23-5	Sodium	ug/g	90.5	<0.100	219	n/a	n/a	n/a	n/a	34.8	n/a	B
S09V001480		AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	21.9	n/a	n/a	n/a	n/a	6.96	n/a	B
S09V001480		AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	516	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001480		AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	U
S09V001480		AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001480		AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001480		AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001480		AV	7440-21-3	Silicon	ug/g	87.9	0.0305	17.9	n/a	n/a	n/a	n/a	10.4	n/a	CBN
S09V001480		AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	UN
S09V001480		AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	39.2	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001480		AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	720	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001480		AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001480		AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001480		AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	29.7	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001480		AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	8.55	n/a	n/a	n/a	n/a	0.696	n/a	
S09V001480		AV	7440-66-6	Zinc	ug/g	86.4	0.0140	50.4	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001480		AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.75	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001480		AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<9.23E-05	n/a	n/a	n/a	n/a	9.23E-05	n/a	U
S09V001480		AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.999	n/a	n/a	n/a	n/a	9.57E-04	n/a	
S09V001480		AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U

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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090806

Core Number: C7170

Sample Depth: 133-135

Customer Sample ID: B206X9A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001480		AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001480		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	<3.48E-04	n/a	n/a	n/a	n/a	3.48E-04	n/a	U

Customer Sample ID: B206X9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001479		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	<4.12E-07	n/a	n/a	n/a	n/a	4.12E-07	n/a	U
S09V001479		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	<1.69E-06	n/a	n/a	n/a	n/a	1.69E-06	n/a	U
S09V001479		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.569	n/a	n/a	n/a	n/a	0.0753	n/a	
S09V001479		WV	16887-00-6	Chloride	ug/g	102	<3.10E-03	4.26	n/a	n/a	n/a	n/a	3.44E-03	n/a	
S09V001479		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	0.223	n/a	n/a	n/a	n/a	0.0444	n/a	B
S09V001479		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0323	n/a	n/a	n/a	n/a	0.0263	n/a	B
S09V001479		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	15.0	n/a	n/a	n/a	n/a	0.0180	n/a	
S09V001479		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	0.560	n/a	n/a	n/a	n/a	0.0423	n/a	
S09V001479		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	18.7	n/a	n/a	n/a	n/a	0.268	n/a	
S09V001479		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	0.490	n/a	n/a	n/a	n/a	0.0667	n/a	B
S09V001479		WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.133	n/a	n/a	n/a	n/a	0.133	n/a	U
S09V001479		WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0667	n/a	n/a	n/a	n/a	0.0667	n/a	U
S09V001479		WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	0.0194	n/a	n/a	n/a	n/a	6.67E-03	n/a	B
S09V001479		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.22E-03	n/a	n/a	n/a	n/a	2.22E-03	n/a	U
S09V001479		WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001479		WV	7440-70-2	Calcium	ug/g	106	<0.0500	12.8	n/a	n/a	n/a	n/a	0.111	n/a	
S09V001479		WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0222	n/a	n/a	n/a	n/a	0.0222	n/a	U
S09V001479		WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	0.268	n/a	n/a	n/a	n/a	0.0111	n/a	
S09V001479		WV	7440-09-7	Potassium	ug/g	103	<0.500	3.95	n/a	n/a	n/a	n/a	1.11	n/a	B

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U - Less Than Detection Limit
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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 133-135
Customer Sample ID: B206X9A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001479		WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	<6.67E-03	n/a	n/a	n/a	n/a	6.67E-03	n/a	U
S09V001479		WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	3.51	n/a	n/a	n/a	n/a	0.111	n/a	
S09V001479		WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	<6.67E-03	n/a	n/a	n/a	n/a	6.67E-03	n/a	U
S09V001479		WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0444	n/a	n/a	n/a	n/a	0.0444	n/a	U
S09V001479		WV	7440-23-5	Sodium	ug/g	95.0	<0.100	22.6	n/a	n/a	n/a	n/a	0.222	n/a	
S09V001479		WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0444	n/a	n/a	n/a	n/a	0.0444	n/a	U
S09V001479		WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	<0.111	n/a	n/a	n/a	n/a	0.111	n/a	U
S09V001479		WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.111	n/a	n/a	n/a	n/a	0.111	n/a	U
S09V001479		WV	7704-34-9	Sulfur	ug/g	101	<0.100	6.47	n/a	n/a	n/a	n/a	0.222	n/a	
S09V001479		WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.111	n/a	n/a	n/a	n/a	0.111	n/a	U
S09V001479		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001479		WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	9.15	n/a	n/a	n/a	n/a	0.0667	n/a	
S09V001479		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0667	n/a	n/a	n/a	n/a	0.0667	n/a	U
S09V001479		WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	0.0606	n/a	n/a	n/a	n/a	6.67E-03	n/a	B
S09V001479		WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	0.0266	n/a	n/a	n/a	n/a	0.0111	n/a	B
S09V001479		WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001479		WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.222	n/a	n/a	n/a	n/a	0.222	n/a	U
S09V001479		WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	0.0174	n/a	n/a	n/a	n/a	0.0111	n/a	B
S09V001479		WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<4.44E-03	n/a	n/a	n/a	n/a	4.44E-03	n/a	U
S09V001479		WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0111	n/a	n/a	n/a	n/a	0.0111	n/a	U
S09V001479		WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	5.14E-05	n/a	n/a	n/a	n/a	3.33E-06	n/a	
S09V001479		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	1.30E-07	n/a	n/a	n/a	n/a	1.11E-07	n/a	
S09V001479		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	9.11E-08	n/a	n/a	n/a	n/a	5.56E-08	n/a	
S09V001479		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.35E-05	n/a	n/a	n/a	n/a	1.22E-07	n/a	
S09V001479		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<4.44E-08	n/a	n/a	n/a	n/a	4.44E-08	n/a	U
S09V001479		WV	U-238	Uranium-238	ug/g	102	<5.50E-06	1.85E-03	n/a	n/a	n/a	n/a	6.11E-06	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806

Core Number: C7170

Sample Depth: 150-152

Customer Sample ID: B20H48A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000807			%WATERA	%WATER-APD	%	n/a	n/a	19.75	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000807			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.52E-05	n/a	n/a	n/a	n/a	6.46E-06	28.86	
S09V000807			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.29E-07	n/a	n/a	n/a	n/a	3.29E-07	n/a	U
S09V000807			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<8.31E-07	n/a	n/a	n/a	n/a	8.31E-07	n/a	U
S09V000807			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.07E-07	n/a	n/a	n/a	n/a	4.07E-07	n/a	U
S09V000807			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.57E-06	n/a	n/a	n/a	n/a	1.57E-06	n/a	U
S09V000807			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.03E-06	n/a	n/a	n/a	n/a	1.03E-06	n/a	U
S09V000807			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<5.41E-07	n/a	n/a	n/a	n/a	5.41E-07	n/a	U
S09V000807			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.16E-06	n/a	n/a	n/a	n/a	5.68E-07	22.82	
S09V000807			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	9.20E-07	n/a	n/a	n/a	n/a	6.45E-07	43.39	
S09V000807			15067-28-4	Lead-214	uCi/g	n/a	n/a	7.86E-07	n/a	n/a	n/a	n/a	5.97E-07	41.13	
S09V000807			WT%SOLID	Weight percent solids	%	n/a	n/a	80.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000807			15046-84-1	Iodine-129	uCi/g	86.7	<1.68E-07	<1.54E-07	n/a	n/a	n/a	n/a	1.54E-07	n/a	U
S09V001481			CONDUCT	Conductivity	uMHO/cm	100	0.430	268	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B20H48A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001483		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.21E-05	n/a	n/a	n/a	n/a	3.68E-06	44.383	B
S09V001483		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	<2.13E-05	n/a	n/a	n/a	n/a	2.13E-05	n/a	U
S09V001483		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	2.58	n/a	n/a	n/a	n/a	1.74	n/a	CBN
S09V001483		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.44E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001483		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001483		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001483		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	138	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001483		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.510	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001483		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001483		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.52E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001483		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 150-152
Customer Sample ID: B20H48A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001483	AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	6.63	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001483	AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	15.3	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001483	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	18.3	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001483	AV	7439-89-6	Iron	ug/g	81.1	0.0140	2.00E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001483	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	2.13E+03	n/a	n/a	n/a	n/a	174	n/a	
S09V001483	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	17.4	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001483	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	8.31E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001483	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	475	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001483	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U
S09V001483	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	215	n/a	n/a	n/a	n/a	34.9	n/a	B
S09V001483	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	18.2	n/a	n/a	n/a	n/a	6.97	n/a	B
S09V001483	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	462	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001483	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	18.2	n/a	n/a	n/a	n/a	17.4	n/a	B
S09V001483	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001483	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001483	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001483	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	23.2	n/a	n/a	n/a	n/a	10.5	n/a	CBN
S09V001483	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001483	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	38.8	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001483	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	644	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001483	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	53.8	n/a	n/a	n/a	n/a	34.9	n/a	BN
S09V001483	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001483	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	31.0	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001483	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	10.5	n/a	n/a	n/a	n/a	0.697	n/a	
S09V001483	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	47.6	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001483	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	8.79	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001483	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<9.24E-05	n/a	n/a	n/a	n/a	9.24E-05	n/a	U
S09V001483	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	1.19	n/a	n/a	n/a	n/a	9.59E-04	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 150-152
Customer Sample ID: B20H48A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001483		AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001483		AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001483		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	<2.09E-04	n/a	n/a	n/a	n/a	2.09E-04	n/a	U

Customer Sample ID: B20H48A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001482		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	<6.52E-07	n/a	n/a	n/a	n/a	6.52E-07	n/a	U
S09V001482		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	<3.45E-06	n/a	n/a	n/a	n/a	3.45E-06	n/a	U
S09V001482		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.334	n/a	n/a	n/a	n/a	8.46E-03	n/a	
S09V001482		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	0.375	n/a	n/a	n/a	n/a	0.0549	n/a	
S09V001482		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.177	n/a	n/a	n/a	n/a	0.0325	n/a	B
S09V001482		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	37.7	n/a	n/a	n/a	n/a	0.245	n/a	
S09V001482		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	0.760	n/a	n/a	n/a	n/a	0.0523	n/a	
S09V001482		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	31.7	n/a	n/a	n/a	n/a	0.331	n/a	
S09V001482		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482		WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	0.233	n/a	n/a	n/a	n/a	0.0824	n/a	B
S09V001482		WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.165	n/a	n/a	n/a	n/a	0.165	n/a	U
S09V001482		WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0824	n/a	n/a	n/a	n/a	0.0824	n/a	U
S09V001482		WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	0.0286	n/a	n/a	n/a	n/a	8.24E-03	n/a	B
S09V001482		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.75E-03	n/a	n/a	n/a	n/a	2.75E-03	n/a	U
S09V001482		WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001482		WV	7440-70-2	Calcium	ug/g	106	<0.0500	20.5	n/a	n/a	n/a	n/a	0.137	n/a	
S09V001482		WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482		WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0275	n/a	n/a	n/a	n/a	0.0275	n/a	U
S09V001482		WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482		WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482		WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	0.0593	n/a	n/a	n/a	n/a	0.0137	n/a	B
S09V001482		WV	7440-09-7	Potassium	ug/g	103	<0.500	7.24	n/a	n/a	n/a	n/a	1.37	n/a	B

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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090806
Core Number: C7170
Sample Depth: 150-152
Customer Sample ID: B20H48A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001482	WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	<8.24E-03	n/a	n/a	n/a	n/a	8.24E-03	n/a	U
S09V001482	WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	9.24	n/a	n/a	n/a	n/a	0.137	n/a	
S09V001482	WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	<8.24E-03	n/a	n/a	n/a	n/a	8.24E-03	n/a	U
S09V001482	WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0549	n/a	n/a	n/a	n/a	0.0549	n/a	U
S09V001482	WV	7440-23-5	Sodium	ug/g	95.0	<0.100	36.4	n/a	n/a	n/a	n/a	0.275	n/a	
S09V001482	WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0549	n/a	n/a	n/a	n/a	0.0549	n/a	U
S09V001482	WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	0.164	n/a	n/a	n/a	n/a	0.137	n/a	B
S09V001482	WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.137	n/a	n/a	n/a	n/a	0.137	n/a	U
S09V001482	WV	7704-34-9	Sulfur	ug/g	101	<0.100	10.7	n/a	n/a	n/a	n/a	0.275	n/a	
S09V001482	WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.137	n/a	n/a	n/a	n/a	0.137	n/a	U
S09V001482	WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001482	WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	10.6	n/a	n/a	n/a	n/a	0.0824	n/a	
S09V001482	WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0824	n/a	n/a	n/a	n/a	0.0824	n/a	U
S09V001482	WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	0.111	n/a	n/a	n/a	n/a	8.24E-03	n/a	
S09V001482	WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482	WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001482	WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001482	WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482	WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<5.49E-03	n/a	n/a	n/a	n/a	5.49E-03	n/a	U
S09V001482	WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482	WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001482	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	<4.12E-06	n/a	n/a	n/a	n/a	4.12E-06	n/a	U
S09V001482	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.37E-07	n/a	n/a	n/a	n/a	1.37E-07	n/a	U
S09V001482	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	3.57E-07	n/a	n/a	n/a	n/a	6.86E-08	n/a	
S09V001482	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	4.68E-05	n/a	n/a	n/a	n/a	1.51E-07	n/a	
S09V001482	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.49E-08	n/a	n/a	n/a	n/a	5.49E-08	n/a	U
S09V001482	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	6.57E-03	n/a	n/a	n/a	n/a	7.55E-06	n/a	

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M - RPD Outside Range
B - Estimated
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N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 46-48
Customer Sample ID: B206Y1A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000514			%WATERA	%WATER-APD	%	n/a	n/a	7.560	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000514			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.64E-07	n/a	n/a	n/a	n/a	4.64E-07	n/a	U
S09V000514			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.12E-06	n/a	n/a	n/a	n/a	1.12E-06	n/a	U
S09V000514			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<5.94E-07	n/a	n/a	n/a	n/a	5.94E-07	n/a	U
S09V000514			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.12E-06	n/a	n/a	n/a	n/a	2.12E-06	n/a	U
S09V000514			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.40E-06	n/a	n/a	n/a	n/a	1.40E-06	n/a	U
S09V000514			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.16E-06	n/a	n/a	n/a	n/a	1.16E-06	n/a	U
S09V000514			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.57E-06	n/a	n/a	n/a	n/a	8.21E-07	37.70	
S09V000514			WT%SOLID	Weight percent solids	%	n/a	n/a	92.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000514			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<4.74E-07	n/a	n/a	n/a	n/a	4.74E+07	n/a	U
S09V001484			CONDUCT	Conductivity	uMHO/cm	100	0.430	166	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B206Y1A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001486		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	4.39E-06	n/a	n/a	n/a	n/a	3.68E-06	108.443	B
S09V001486		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	<2.13E-05	n/a	n/a	n/a	n/a	2.13E-05	n/a	U
S09V001486		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	UN
S09V001486		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	8.44E+03	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001486		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001486		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001486		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	109	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001486		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	<0.348	n/a	n/a	n/a	n/a	0.348	n/a	U
S09V001486		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001486		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.08E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001486		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001486		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	9.21	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001486		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	13.4	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001486		AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	10.5	n/a	n/a	n/a	n/a	1.74	n/a	B

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 46-48
Customer Sample ID: B206Y1A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001486	AV	7439-89-6	Iron	ug/g	81.1	0.0140	2.13E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001486	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.29E+03	n/a	n/a	n/a	n/a	174	n/a	B
S09V001486	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	8.16	n/a	n/a	n/a	n/a	1.04	n/a	B
S09V001486	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	5.13E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001486	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	440	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001486	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.96	n/a	n/a	n/a	n/a	6.96	n/a	U
S09V001486	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	309	n/a	n/a	n/a	n/a	34.8	n/a	B
S09V001486	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	24.5	n/a	n/a	n/a	n/a	6.96	n/a	B
S09V001486	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	708	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001486	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	U
S09V001486	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	36.0	n/a	n/a	n/a	n/a	34.8	n/a	BN
S09V001486	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001486	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001486	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	15.3	n/a	n/a	n/a	n/a	10.4	n/a	CBN
S09V001486	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	UN
S09V001486	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	37.3	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001486	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	992	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001486	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	60.8	n/a	n/a	n/a	n/a	34.8	n/a	BN
S09V001486	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001486	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	39.1	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001486	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	9.54	n/a	n/a	n/a	n/a	0.696	n/a	
S09V001486	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	36.9	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001486	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	13.5	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001486	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<7.38E-05	n/a	n/a	n/a	n/a	7.38E-05	n/a	U
S09V001486	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.529	n/a	n/a	n/a	n/a	7.66E-04	n/a	
S09V001486	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<9.61E-04	n/a	n/a	n/a	n/a	9.61E-04	n/a	U
S09V001486	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.11E-04	n/a	n/a	n/a	n/a	1.11E-04	n/a	U
S09V001486	AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	<3.48E-04	n/a	n/a	n/a	n/a	3.48E-04	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 46-48

Customer Sample ID: B206Y1A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001485		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	<4.69E-07	n/a	n/a	n/a	n/a	4.69E-07	n/a	U
S09V001485		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	<1.60E-06	n/a	n/a	n/a	n/a	1.60E-06	n/a	U
S09V001485		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.899	n/a	n/a	n/a	n/a	6.52E-03	n/a	
S09V001485		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	<0.0423	n/a	n/a	n/a	n/a	0.0423	n/a	U
S09V001485		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0397	n/a	n/a	n/a	n/a	0.0251	n/a	B
S09V001485		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	3.53	n/a	n/a	n/a	n/a	0.0171	n/a	
S09V001485		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	0.208	n/a	n/a	n/a	n/a	0.0403	n/a	B
S09V001485		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	6.19	n/a	n/a	n/a	n/a	0.0232	n/a	
S09V001485		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0106	n/a	n/a	n/a	n/a	0.0106	n/a	U
S09V001485		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	6.81	n/a	n/a	n/a	n/a	0.0635	n/a	
S09V001485		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.127	n/a	n/a	n/a	n/a	0.127	n/a	U
S09V001485		WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0635	n/a	n/a	n/a	n/a	0.0635	n/a	U
S09V001485		WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0684	n/a	n/a	n/a	n/a	6.35E-03	n/a	
S09V001485		WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.12E-03	n/a	n/a	n/a	n/a	2.12E-03	n/a	U
S09V001485		WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.212	n/a	n/a	n/a	n/a	0.212	n/a	U
S09V001485		WV	7440-70-2	Calcium	ug/g	100	<0.0500	8.49	n/a	n/a	n/a	n/a	0.106	n/a	
S09V001485		WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0106	n/a	n/a	n/a	n/a	0.0106	n/a	U
S09V001485		WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0212	n/a	n/a	n/a	n/a	0.0212	n/a	U
S09V001485		WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	<0.0106	n/a	n/a	n/a	n/a	0.0106	n/a	U
S09V001485		WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0106	n/a	n/a	n/a	n/a	0.0106	n/a	U
S09V001485		WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	10.8	n/a	n/a	n/a	n/a	0.0106	n/a	
S09V001485		WV	7440-09-7	Potassium	ug/g	102	<0.500	6.12	n/a	n/a	n/a	n/a	1.06	n/a	B
S09V001485		WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	0.0141	n/a	n/a	n/a	n/a	6.35E-03	n/a	B
S09V001485		WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	3.34	n/a	n/a	n/a	n/a	0.106	n/a	
S09V001485		WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	0.136	n/a	n/a	n/a	n/a	6.35E-03	n/a	
S09V001485		WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	0.0605	n/a	n/a	n/a	n/a	0.0423	n/a	B
S09V001485		WV	7440-23-5	Sodium	ug/g	106	<0.100	26.8	n/a	n/a	n/a	n/a	0.212	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 46-48
Customer Sample ID: B206Y1A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001485	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0423	n/a	n/a	n/a	n/a	0.0423	n/a	U
S09V001485	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	<0.106	n/a	n/a	n/a	n/a	0.106	n/a	U
S09V001485	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.106	n/a	n/a	n/a	n/a	0.106	n/a	U
S09V001485	WV	7704-34-9	Sulfur	ug/g	101	<0.100	2.29	n/a	n/a	n/a	n/a	0.212	n/a	
S09V001485	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	<0.106	n/a	n/a	n/a	n/a	0.106	n/a	U
S09V001485	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.212	n/a	n/a	n/a	n/a	0.212	n/a	U
S09V001485	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	35.2	n/a	n/a	n/a	n/a	0.0635	n/a	
S09V001485	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0635	n/a	n/a	n/a	n/a	0.0635	n/a	U
S09V001485	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.0443	n/a	n/a	n/a	n/a	6.35E-03	n/a	B
S09V001485	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	0.455	n/a	n/a	n/a	n/a	0.0106	n/a	
S09V001485	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.212	n/a	n/a	n/a	n/a	0.212	n/a	U
S09V001485	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.212	n/a	n/a	n/a	n/a	0.212	n/a	U
S09V001485	WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	0.0554	n/a	n/a	n/a	n/a	0.0106	n/a	B
S09V001485	WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<4.23E-03	n/a	n/a	n/a	n/a	4.23E-03	n/a	U
S09V001485	WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	0.0260	n/a	n/a	n/a	n/a	0.0106	n/a	B
S09V001485	WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	0.0201	n/a	n/a	n/a	n/a	0.0106	n/a	B
S09V001485	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	<3.17E-06	n/a	n/a	n/a	n/a	3.17E-06	n/a	U
S09V001485	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.06E-07	n/a	n/a	n/a	n/a	1.06E-07	n/a	U
S09V001485	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	5.71E-08	n/a	n/a	n/a	n/a	5.29E-08	n/a	
S09V001485	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.28E-05	n/a	n/a	n/a	n/a	1.16E-07	n/a	
S09V001485	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<4.23E-08	n/a	n/a	n/a	n/a	4.23E-08	n/a	U
S09V001485	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	1.76E-03	n/a	n/a	n/a	n/a	5.82E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807

Core Number: C7172

Sample Depth: 75.5-77.5

Customer Sample ID: B206Y3A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000520			%WATERA	%WATER-APD	%	n/a	n/a	10.88	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000520			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.28E-05	n/a	n/a	n/a	n/a	8.46E-06	42.90	
S09V000520			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<3.77E-07	n/a	n/a	n/a	n/a	3.77E-07	n/a	U
S09V000520			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.04E-06	n/a	n/a	n/a	n/a	1.04E-06	n/a	U
S09V000520			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<5.80E-07	n/a	n/a	n/a	n/a	5.80E-07	n/a	U
S09V000520			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.01E-06	n/a	n/a	n/a	n/a	2.01E-06	n/a	U
S09V000520			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.27E-06	n/a	n/a	n/a	n/a	1.27E-06	n/a	U
S09V000520			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.06E-06	n/a	n/a	n/a	n/a	1.06E-06	n/a	U
S09V000520			WT%SOLID	Weight percent solids	%	n/a	n/a	89.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000520			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<1.46E-07	n/a	n/a	n/a	n/a	1.46E-07	n/a	U
S09V001487			CONDUCT	Conductivity	uMHO/cm	100	0.430	205	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B206Y3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001489		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.09E-05	n/a	n/a	n/a	n/a	3.69E-06	48.642	B
S09V001489		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	<2.14E-05	n/a	n/a	n/a	n/a	2.14E-05	n/a	U
S09V001489		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	UN
S09V001489		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	7.59E+03	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001489		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001489		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001489		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	79.0	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001489		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	<0.350	n/a	n/a	n/a	n/a	0.350	n/a	U
S09V001489		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001489		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	8.33E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001489		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001489		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	7.06	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001489		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	17.1	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001489		AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	7.78	n/a	n/a	n/a	n/a	1.75	n/a	B

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B - Blank Contamination

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 75.5-77.5
Customer Sample ID: B206Y3A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001489		AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.40E+04	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001489		AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.39E+03	n/a	n/a	n/a	n/a	175	n/a	B
S09V001489		AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	9.55	n/a	n/a	n/a	n/a	1.05	n/a	B
S09V001489		AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	4.72E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001489		AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	285	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001489		AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.99	n/a	n/a	n/a	n/a	6.99	n/a	U
S09V001489		AV	7440-23-5	Sodium	ug/g	90.5	<0.100	207	n/a	n/a	n/a	n/a	35.0	n/a	B
S09V001489		AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	15.9	n/a	n/a	n/a	n/a	6.99	n/a	B
S09V001489		AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	445	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001489		AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	U
S09V001489		AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001489		AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001489		AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001489		AV	7440-21-3	Silicon	ug/g	87.9	0.0305	22.0	n/a	n/a	n/a	n/a	10.5	n/a	CBN
S09V001489		AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001489		AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	30.8	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001489		AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	603	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001489		AV	7440-28-0	Thallium	ug/g	86.7	<0.100	38.1	n/a	n/a	n/a	n/a	35.0	n/a	BN
S09V001489		AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001489		AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	24.9	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001489		AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	5.74	n/a	n/a	n/a	n/a	0.699	n/a	B
S09V001489		AV	7440-66-6	Zinc	ug/g	86.4	0.0140	32.3	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001489		AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.17	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001489		AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<7.41E-05	n/a	n/a	n/a	n/a	7.41E-05	n/a	U
S09V001489		AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.463	n/a	n/a	n/a	n/a	7.69E-04	n/a	
S09V001489		AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<9.65E-04	n/a	n/a	n/a	n/a	9.65E-04	n/a	U
S09V001489		AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.12E-04	n/a	n/a	n/a	n/a	1.12E-04	n/a	U
S09V001489		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	2.26E-04	n/a	n/a	n/a	n/a	2.10E-04	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 75.5-77.5

Customer Sample ID: B206Y3A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001488		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	<3.99E-07	n/a	n/a	n/a	n/a	3.99E-07	n/a	U
S09V001488		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	<1.57E-06	n/a	n/a	n/a	n/a	1.57E-06	n/a	U
S09V001488		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.601	n/a	n/a	n/a	n/a	6.99E-03	n/a	
S09V001488		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	0.365	n/a	n/a	n/a	n/a	0.0454	n/a	
S09V001488		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0403	n/a	n/a	n/a	n/a	0.0269	n/a	B
S09V001488		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	17.7	n/a	n/a	n/a	n/a	0.0184	n/a	
S09V001488		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	0.121	n/a	n/a	n/a	n/a	0.0433	n/a	B
S09V001488		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	11.8	n/a	n/a	n/a	n/a	0.0249	n/a	
S09V001488		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0114	n/a	n/a	n/a	n/a	0.0114	n/a	U
S09V001488		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	3.10	n/a	n/a	n/a	n/a	0.0681	n/a	
S09V001488		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.136	n/a	n/a	n/a	n/a	0.136	n/a	U
S09V001488		WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0681	n/a	n/a	n/a	n/a	0.0681	n/a	U
S09V001488		WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0331	n/a	n/a	n/a	n/a	6.81E-03	n/a	B
S09V001488		WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.27E-03	n/a	n/a	n/a	n/a	2.27E-03	n/a	U
S09V001488		WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.227	n/a	n/a	n/a	n/a	0.227	n/a	U
S09V001488		WV	7440-70-2	Calcium	ug/g	100	<0.0500	6.07	n/a	n/a	n/a	n/a	0.114	n/a	
S09V001488		WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0114	n/a	n/a	n/a	n/a	0.0114	n/a	U
S09V001488		WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0227	n/a	n/a	n/a	n/a	0.0227	n/a	U
S09V001488		WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	<0.0114	n/a	n/a	n/a	n/a	0.0114	n/a	U
S09V001488		WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0114	n/a	n/a	n/a	n/a	0.0114	n/a	U
S09V001488		WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	3.83	n/a	n/a	n/a	n/a	0.0114	n/a	
S09V001488		WV	7440-09-7	Potassium	ug/g	102	<0.500	4.15	n/a	n/a	n/a	n/a	1.14	n/a	B
S09V001488		WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	0.0103	n/a	n/a	n/a	n/a	6.81E-03	n/a	B
S09V001488		WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	1.75	n/a	n/a	n/a	n/a	0.114	n/a	
S09V001488		WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	0.0634	n/a	n/a	n/a	n/a	6.81E-03	n/a	B
S09V001488		WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	0.0703	n/a	n/a	n/a	n/a	0.0454	n/a	B
S09V001488		WV	7440-23-5	Sodium	ug/g	106	<0.100	41.8	n/a	n/a	n/a	n/a	0.227	n/a	

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30 - Aug - 2011 14:41:57
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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 75.5-77.5
Customer Sample ID: B206Y3A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001488	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0454	n/a	n/a	n/a	n/a	0.0454	n/a	U
S09V001488	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	<0.114	n/a	n/a	n/a	n/a	0.114	n/a	U
S09V001488	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.114	n/a	n/a	n/a	n/a	0.114	n/a	U
S09V001488	WV	7704-34-9	Sulfur	ug/g	101	<0.100	3.99	n/a	n/a	n/a	n/a	0.227	n/a	
S09V001488	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	<0.114	n/a	n/a	n/a	n/a	0.114	n/a	U
S09V001488	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.227	n/a	n/a	n/a	n/a	0.227	n/a	U
S09V001488	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	19.8	n/a	n/a	n/a	n/a	0.0681	n/a	
S09V001488	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0681	n/a	n/a	n/a	n/a	0.0681	n/a	U
S09V001488	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.0357	n/a	n/a	n/a	n/a	6.81E-03	n/a	B
S09V001488	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	0.151	n/a	n/a	n/a	n/a	0.0114	n/a	
S09V001488	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.227	n/a	n/a	n/a	n/a	0.227	n/a	U
S09V001488	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.227	n/a	n/a	n/a	n/a	0.227	n/a	U
S09V001488	WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	0.0666	n/a	n/a	n/a	n/a	0.0114	n/a	B
S09V001488	WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<4.54E-03	n/a	n/a	n/a	n/a	4.54E-03	n/a	U
S09V001488	WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	0.0154	n/a	n/a	n/a	n/a	0.0114	n/a	B
S09V001488	WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	<0.0114	n/a	n/a	n/a	n/a	0.0114	n/a	U
S09V001488	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	1.08E-05	n/a	n/a	n/a	n/a	3.41E-06	n/a	
S09V001488	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.14E-07	n/a	n/a	n/a	n/a	1.14E-07	n/a	U
S09V001488	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	7.04E-08	n/a	n/a	n/a	n/a	5.68E-08	n/a	
S09V001488	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	9.59E-06	n/a	n/a	n/a	n/a	1.25E-07	n/a	
S09V001488	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<4.54E-08	n/a	n/a	n/a	n/a	4.54E-08	n/a	U
S09V001488	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	1.31E-03	n/a	n/a	n/a	n/a	6.24E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807

Core Number: C7172

Sample Depth: 97.5-99.5

Customer Sample ID: B206Y5A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000671			%WATERA	%WATER-APD	%	n/a	n/a	16.61	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000671			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.55E-05	n/a	n/a	n/a	n/a	9.25E-06	39.33	
S09V000671			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.81E-07	<4.59E-07	n/a	n/a	n/a	4.81E-07	n/a	U
S09V000671			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.23E-06	<1.26E-06	n/a	n/a	n/a	1.23E-06	n/a	U
S09V000671			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<6.52E-07	<6.50E-07	n/a	n/a	n/a	6.52E-07	n/a	U
S09V000671			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.39E-06	<2.05E-06	n/a	n/a	n/a	2.39E-06	n/a	U
S09V000671			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.47E-06	<1.44E-06	n/a	n/a	n/a	1.47E-06	n/a	U
S09V000671			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.25E-06	<1.29E-06	n/a	n/a	n/a	1.25E-06	n/a	U
S09V000671			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.72E-06	1.33E-06	1.52E-06	25.3	n/a	8.12E-07	35.12	
S09V000671			WT%SOLID	Weight percent solids	%	n/a	n/a	83.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000671			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<1.37E-07	n/a	n/a	n/a	n/a	1.37E-07	n/a	U
S09V001490			CONDUCT	Conductivity	uMHO/cm	100	0.430	738	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B206Y5A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001492		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.45E-05	n/a	n/a	n/a	n/a	3.69E-06	38.427	B
S09V001492		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	4.64E-05	n/a	n/a	n/a	n/a	2.14E-05	56.354	
S09V001492		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	UN
S09V001492		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.42E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001492		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001492		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001492		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	104	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001492		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.488	n/a	n/a	n/a	n/a	0.350	n/a	B
S09V001492		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001492		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.35E+04	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001492		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001492		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	9.33	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001492		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	29.9	n/a	n/a	n/a	n/a	1.75	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 97.5-99.5
Customer Sample ID: B206Y5A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001492	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	17.9	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001492	AV	7439-89-6	Iron	ug/g	81.1	0.0140	2.05E+04	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001492	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	2.30E+03	n/a	n/a	n/a	n/a	175	n/a	
S09V001492	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	16.5	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001492	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	7.26E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001492	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	453	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001492	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.99	n/a	n/a	n/a	n/a	6.99	n/a	U
S09V001492	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	483	n/a	n/a	n/a	n/a	35.0	n/a	
S09V001492	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	14.3	n/a	n/a	n/a	n/a	6.99	n/a	B
S09V001492	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	519	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001492	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	26.3	n/a	n/a	n/a	n/a	17.5	n/a	B
S09V001492	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	35.8	n/a	n/a	n/a	n/a	35.0	n/a	BN
S09V001492	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001492	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001492	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	20.6	n/a	n/a	n/a	n/a	10.5	n/a	CBN
S09V001492	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001492	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	35.3	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001492	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	528	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001492	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001492	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001492	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	29.3	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001492	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	10.8	n/a	n/a	n/a	n/a	0.699	n/a	
S09V001492	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	51.8	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001492	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	6.80	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001492	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<1.85E-04	n/a	n/a	n/a	n/a	1.85E-04	n/a	U
S09V001492	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	1.05	n/a	n/a	n/a	n/a	1.92E-03	n/a	
S09V001492	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<2.41E-03	n/a	n/a	n/a	n/a	2.41E-03	n/a	U
S09V001492	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<2.80E-04	n/a	n/a	n/a	n/a	2.80E-04	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090807

Core Number: C7172

Sample Depth: 97.5-99.5

Customer Sample ID: B206Y5A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001492		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	2.18E-03	n/a	n/a	n/a	n/a	3.50E-04	n/a	

Customer Sample ID: B206Y5A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001491		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	2.77E-06	n/a	n/a	n/a	n/a	4.51E-07	25.325	
S09V001491		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	5.65E-05	n/a	n/a	n/a	n/a	1.94E-06	5.449	
S09V001491		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.720	n/a	n/a	n/a	n/a	7.90E-03	n/a	
S09V001491		WV	16887-00-6	Chloride	ug/g	102	<3.10E-03	5.23	n/a	n/a	n/a	n/a	3.97E-03	n/a	
S09V001491		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	0.460	n/a	n/a	n/a	n/a	0.0513	n/a	
S09V001491		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0650	n/a	n/a	n/a	n/a	0.0304	n/a	B
S09V001491		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	303	n/a	n/a	n/a	n/a	0.228	n/a	
S09V001491		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	<0.0488	n/a	n/a	n/a	n/a	0.0488	n/a	U
S09V001491		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	58.8	n/a	n/a	n/a	n/a	0.309	n/a	
S09V001491		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	0.586	n/a	n/a	n/a	n/a	0.0769	n/a	B
S09V001491		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.154	n/a	n/a	n/a	n/a	0.154	n/a	U
S09V001491		WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0769	n/a	n/a	n/a	n/a	0.0769	n/a	U
S09V001491		WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0261	n/a	n/a	n/a	n/a	7.69E-03	n/a	B
S09V001491		WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.56E-03	n/a	n/a	n/a	n/a	2.56E-03	n/a	U
S09V001491		WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.256	n/a	n/a	n/a	n/a	0.256	n/a	U
S09V001491		WV	7440-70-2	Calcium	ug/g	100	<0.0500	14.2	n/a	n/a	n/a	n/a	0.128	n/a	
S09V001491		WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491		WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0256	n/a	n/a	n/a	n/a	0.0256	n/a	U
S09V001491		WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	6.20	n/a	n/a	n/a	n/a	0.0128	n/a	
S09V001491		WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491		WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	0.510	n/a	n/a	n/a	n/a	0.0128	n/a	
S09V001491		WV	7440-09-7	Potassium	ug/g	102	<0.500	5.22	n/a	n/a	n/a	n/a	1.28	n/a	B
S09V001491		WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	<7.69E-03	n/a	n/a	n/a	n/a	7.69E-03	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 97.5-99.5
Customer Sample ID: B206Y5A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001491	WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	3.27	n/a	n/a	n/a	n/a	0.128	n/a	
S09V001491	WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	<7.69E-03	n/a	n/a	n/a	n/a	7.69E-03	n/a	U
S09V001491	WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	<0.0513	n/a	n/a	n/a	n/a	0.0513	n/a	U
S09V001491	WV	7440-23-5	Sodium	ug/g	106	<0.100	172	n/a	n/a	n/a	n/a	0.256	n/a	
S09V001491	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0513	n/a	n/a	n/a	n/a	0.0513	n/a	U
S09V001491	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001491	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001491	WV	7704-34-9	Sulfur	ug/g	101	<0.100	20.0	n/a	n/a	n/a	n/a	0.256	n/a	
S09V001491	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	<0.128	n/a	n/a	n/a	n/a	0.128	n/a	U
S09V001491	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.256	n/a	n/a	n/a	n/a	0.256	n/a	U
S09V001491	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	10.4	n/a	n/a	n/a	n/a	0.0769	n/a	
S09V001491	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0769	n/a	n/a	n/a	n/a	0.0769	n/a	U
S09V001491	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.0808	n/a	n/a	n/a	n/a	7.69E-03	n/a	
S09V001491	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	0.0338	n/a	n/a	n/a	n/a	0.0128	n/a	B
S09V001491	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.256	n/a	n/a	n/a	n/a	0.256	n/a	U
S09V001491	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.256	n/a	n/a	n/a	n/a	0.256	n/a	U
S09V001491	WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491	WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<5.13E-03	n/a	n/a	n/a	n/a	5.13E-03	n/a	U
S09V001491	WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491	WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	<0.0128	n/a	n/a	n/a	n/a	0.0128	n/a	U
S09V001491	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	2.54E-03	n/a	n/a	n/a	n/a	3.85E-06	n/a	
S09V001491	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.28E-07	n/a	n/a	n/a	n/a	1.28E-07	n/a	U
S09V001491	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	9.36E-08	n/a	n/a	n/a	n/a	6.41E-08	n/a	
S09V001491	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.61E-05	n/a	n/a	n/a	n/a	1.41E-07	n/a	
S09V001491	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.13E-08	n/a	n/a	n/a	n/a	5.13E-08	n/a	U
S09V001491	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	2.30E-03	n/a	n/a	n/a	n/a	7.05E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 126-128
Customer Sample ID: B20H52A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001495		AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001495		AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	36.7	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001495		AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	641	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001495		AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001495		AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001495		AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	32.2	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001495		AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	9.11	n/a	n/a	n/a	n/a	0.698	n/a	
S09V001495		AV	7440-66-6	Zinc	ug/g	86.4	0.0140	50.4	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001495		AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.25	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001495		AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<1.85E-04	n/a	n/a	n/a	n/a	1.85E-04	n/a	U
S09V001495		AV	U-238	Uranium-238	ug/g	110	<2.20E-04	1.30	n/a	n/a	n/a	n/a	1.92E-03	n/a	
S09V001495		AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<2.41E-03	n/a	n/a	n/a	n/a	2.41E-03	n/a	U
S09V001495		AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<2.79E-04	n/a	n/a	n/a	n/a	2.79E-04	n/a	U
S09V001495		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	4.85E-03	n/a	n/a	n/a	n/a	3.49E-04	n/a	

Customer Sample ID: B20H52A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001494		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	6.46E-06	n/a	n/a	n/a	n/a	4.84E-07	14.217	
S09V001494		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	1.21E-04	n/a	n/a	n/a	n/a	2.08E-06	3.282	
S09V001494		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.935	n/a	n/a	n/a	n/a	0.0932	n/a	
S09V001494		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	<0.0550	n/a	n/a	n/a	n/a	0.0550	n/a	U
S09V001494		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0853	n/a	n/a	n/a	n/a	0.0326	n/a	B
S09V001494		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	619	n/a	n/a	n/a	n/a	0.913	n/a	
S09V001494		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	<0.0524	n/a	n/a	n/a	n/a	0.0524	n/a	U
S09V001494		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	68.2	n/a	n/a	n/a	n/a	0.331	n/a	
S09V001494		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	0.205	n/a	n/a	n/a	n/a	0.0825	n/a	B
S09V001494		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.165	n/a	n/a	n/a	n/a	0.165	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
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M - RPD Outside Range
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X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 126-128
Customer Sample ID: B20H52A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001495	AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.55E-05	n/a	n/a	n/a	n/a	3.69E-06	36.277	B
S09V001495	AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	7.57E-05	n/a	n/a	n/a	n/a	2.14E-05	35.117	
S09V001495	AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	2.21	n/a	n/a	n/a	n/a	1.75	n/a	CBN
S09V001495	AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.29E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001495	AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001495	AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001495	AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	99.9	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001495	AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.402	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001495	AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001495	AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.31E+04	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001495	AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001495	AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	8.78	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001495	AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	33.3	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001495	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	18.3	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001495	AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.98E+04	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001495	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.73E+03	n/a	n/a	n/a	n/a	175	n/a	B
S09V001495	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	13.9	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001495	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	6.79E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001495	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	328	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001495	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001495	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	519	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001495	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	20.6	n/a	n/a	n/a	n/a	6.98	n/a	B
S09V001495	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	517	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001495	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	19.9	n/a	n/a	n/a	n/a	17.5	n/a	B
S09V001495	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	35.4	n/a	n/a	n/a	n/a	34.9	n/a	BN
S09V001495	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001495	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001495	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	29.2	n/a	n/a	n/a	n/a	10.5	n/a	CBN

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M - RPD Outside Range
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X - Comment
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SX Barrier
Data Summary Report

Sample Group: 20090807
Core Number: C7172
Sample Depth: 126-128
Customer Sample ID: B20H52A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001494	WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0825	n/a	n/a	n/a	n/a	0.0825	n/a	U
S09V001494	WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0296	n/a	n/a	n/a	n/a	8.25E-03	n/a	B
S09V001494	WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.75E-03	n/a	n/a	n/a	n/a	2.75E-03	n/a	U
S09V001494	WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001494	WV	7440-70-2	Calcium	ug/g	100	<0.0500	24.2	n/a	n/a	n/a	n/a	0.137	n/a	
S09V001494	WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494	WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0275	n/a	n/a	n/a	n/a	0.0275	n/a	U
S09V001494	WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	12.8	n/a	n/a	n/a	n/a	0.0137	n/a	
S09V001494	WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494	WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	0.0688	n/a	n/a	n/a	n/a	0.0137	n/a	B
S09V001494	WV	7440-09-7	Potassium	ug/g	102	<0.500	6.91	n/a	n/a	n/a	n/a	1.37	n/a	B
S09V001494	WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	<8.25E-03	n/a	n/a	n/a	n/a	8.25E-03	n/a	U
S09V001494	WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	5.04	n/a	n/a	n/a	n/a	0.137	n/a	
S09V001494	WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	<8.25E-03	n/a	n/a	n/a	n/a	8.25E-03	n/a	U
S09V001494	WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	<0.0550	n/a	n/a	n/a	n/a	0.0550	n/a	U
S09V001494	WV	7440-23-5	Sodium	ug/g	106	<0.100	273	n/a	n/a	n/a	n/a	0.275	n/a	
S09V001494	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0550	n/a	n/a	n/a	n/a	0.0550	n/a	U
S09V001494	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	0.149	n/a	n/a	n/a	n/a	0.137	n/a	B
S09V001494	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.137	n/a	n/a	n/a	n/a	0.137	n/a	U
S09V001494	WV	7704-34-9	Sulfur	ug/g	101	<0.100	23.0	n/a	n/a	n/a	n/a	0.275	n/a	
S09V001494	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	<0.137	n/a	n/a	n/a	n/a	0.137	n/a	U
S09V001494	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001494	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	10.7	n/a	n/a	n/a	n/a	0.0825	n/a	
S09V001494	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0825	n/a	n/a	n/a	n/a	0.0825	n/a	U
S09V001494	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.123	n/a	n/a	n/a	n/a	8.25E-03	n/a	
S09V001494	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U
S09V001494	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.275	n/a	n/a	n/a	n/a	0.275	n/a	U

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X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090807

Core Number: C7172

Sample Depth: 126-128

Customer Sample ID: B20H52A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001494		WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494		WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<5.50E-03	n/a	n/a	n/a	n/a	5.50E-03	n/a	U
S09V001494		WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494		WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	<0.0137	n/a	n/a	n/a	n/a	0.0137	n/a	U
S09V001494		WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	7.08E-03	n/a	n/a	n/a	n/a	4.12E-06	n/a	
S09V001494		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.37E-07	n/a	n/a	n/a	n/a	1.37E-07	n/a	U
S09V001494		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	1.15E-07	n/a	n/a	n/a	n/a	6.87E-08	n/a	
S09V001494		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.72E-05	n/a	n/a	n/a	n/a	1.51E-07	n/a	
S09V001494		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.50E-08	n/a	n/a	n/a	n/a	5.50E-08	n/a	U
S09V001494		WV	U-238	Uranium-238	ug/g	102	<5.50E-06	2.45E-03	n/a	n/a	n/a	n/a	7.56E-06	n/a	

Customer Sample ID: B20H52A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000677			%WATERA	%WATER-APD	%	n/a	n/a	19.68	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000677			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.76E-05	n/a	n/a	n/a	n/a	9.61E-06	36.28	
S09V000677			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.59E-07	n/a	n/a	n/a	n/a	4.59E-07	n/a	U
S09V000677			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.26E-06	n/a	n/a	n/a	n/a	1.26E-06	n/a	U
S09V000677			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<6.49E-07	n/a	n/a	n/a	n/a	6.49E-07	n/a	U
S09V000677			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.32E-06	n/a	n/a	n/a	n/a	2.32E-06	n/a	U
S09V000677			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.51E-06	n/a	n/a	n/a	n/a	1.51E-06	n/a	U
S09V000677			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.27E-06	n/a	n/a	n/a	n/a	1.27E-06	n/a	U
S09V000677			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.62E-06	n/a	n/a	n/a	n/a	9.70E-07	41.65	
S09V000677			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.22E-06	n/a	n/a	n/a	n/a	1.08E-06	44.03	
S09V000677			WT%SOLID	Weight percent solids	%	n/a	n/a	80.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000677			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<7.50E-08	<1.66E-07	n/a	n/a	n/a	7.50E-08	n/a	U
S09V001493			CONDUCT	Conductivity	uMHO/cm	100	0.430	1.12E+03	n/a	n/a	n/a	n/a	0.200	n/a	

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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 89-91
Customer Sample ID: B20709A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000681			%WATERA	%WATER-APD	%	n/a	n/a	6.220	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000681			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.32E-05	n/a	n/a	n/a	n/a	9.93E-06	48.37	
S09V000681			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.70E-07	n/a	n/a	n/a	n/a	4.70E-07	n/a	U
S09V000681			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.16E-06	n/a	n/a	n/a	n/a	1.16E-06	n/a	U
S09V000681			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<6.39E-07	n/a	n/a	n/a	n/a	6.39E-07	n/a	U
S09V000681			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.36E-06	n/a	n/a	n/a	n/a	2.36E-06	n/a	U
S09V000681			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.57E-06	n/a	n/a	n/a	n/a	1.57E-06	n/a	U
S09V000681			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.23E-06	n/a	n/a	n/a	n/a	1.23E-06	n/a	U
S09V000681			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.92E-06	n/a	n/a	n/a	n/a	1.28E-06	36.43	
S09V000681			WT%SOLID	Weight percent solids	%	n/a	n/a	93.8	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000681			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	1.44E-06	n/a	n/a	n/a	n/a	1.94E-07	11.2	
S09V001496			CONDUCT	Conductivity	uMHO/cm	100	0.430	6.19	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B20709A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001498		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	2.36E-05	n/a	n/a	n/a	n/a	3.67E-06	26.116	B
S09V001498		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	7.81E-04	n/a	n/a	n/a	n/a	2.13E-05	4.555	
S09V001498		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	UN
S09V001498		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	8.55E+03	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001498		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001498		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001498		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	72.2	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001498		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	<0.347	n/a	n/a	n/a	n/a	0.347	n/a	U
S09V001498		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	U
S09V001498		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	8.29E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001498		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001498		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	9.37	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001498		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	159	n/a	n/a	n/a	n/a	1.74	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 89-91
Customer Sample ID: B20709A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001498	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	10.3	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001498	AV	7439-89-6	Iron	ug/g	81.1	0.0140	1.50E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001498	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.58E+03	n/a	n/a	n/a	n/a	174	n/a	B
S09V001498	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	11.1	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001498	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	5.41E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001498	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	322	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001498	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.95	n/a	n/a	n/a	n/a	6.95	n/a	U
S09V001498	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	1.69E+03	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001498	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	23.6	n/a	n/a	n/a	n/a	6.95	n/a	B
S09V001498	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	556	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001498	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	U
S09V001498	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	55.4	n/a	n/a	n/a	n/a	34.7	n/a	BN
S09V001498	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001498	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001498	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	18.7	n/a	n/a	n/a	n/a	10.4	n/a	CBN
S09V001498	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	12.9	n/a	n/a	n/a	n/a	10.4	n/a	BN
S09V001498	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	34.4	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001498	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	659	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001498	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001498	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001498	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	28.6	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001498	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	6.31	n/a	n/a	n/a	n/a	0.695	n/a	B
S09V001498	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	35.4	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001498	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	5.01	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001498	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<7.37E-05	n/a	n/a	n/a	n/a	7.37E-05	n/a	U
S09V001498	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.574	n/a	n/a	n/a	n/a	7.64E-04	n/a	
S09V001498	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<9.59E-04	n/a	n/a	n/a	n/a	9.59E-04	n/a	U
S09V001498	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.11E-04	n/a	n/a	n/a	n/a	1.11E-04	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090808

Core Number: C7178

Sample Depth: 89-91

Customer Sample ID: B20709A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001498		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	0.0466	n/a	n/a	n/a	n/a	3.47E-04	n/a	

Customer Sample ID: B20709A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001497		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	2.88E-05	n/a	n/a	n/a	n/a	3.63E-07	4.785	
S09V001497		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	9.10E-04	n/a	n/a	n/a	n/a	1.56E-06	0.834	
S09V001497		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.698	n/a	n/a	n/a	n/a	0.0699	n/a	
S09V001497		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	120	n/a	n/a	n/a	n/a	0.454	n/a	
S09V001497		WV	24959-67-9	Bromide	ug/g	102	<0.0237	<0.0244	n/a	n/a	n/a	n/a	0.0244	n/a	U
S09V001497		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	3.15E+03	n/a	n/a	n/a	n/a	3.36	n/a	
S09V001497		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	<0.0393	n/a	n/a	n/a	n/a	0.0393	n/a	U
S09V001497		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	94.0	n/a	n/a	n/a	n/a	0.248	n/a	
S09V001497		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	<0.0619	n/a	n/a	n/a	n/a	0.0619	n/a	U
S09V001497		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.124	n/a	n/a	n/a	n/a	0.124	n/a	U
S09V001497		WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0619	n/a	n/a	n/a	n/a	0.0619	n/a	U
S09V001497		WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0412	n/a	n/a	n/a	n/a	6.19E-03	n/a	B
S09V001497		WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.06E-03	n/a	n/a	n/a	n/a	2.06E-03	n/a	U
S09V001497		WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.206	n/a	n/a	n/a	n/a	0.206	n/a	U
S09V001497		WV	7440-70-2	Calcium	ug/g	100	<0.0500	76.9	n/a	n/a	n/a	n/a	0.103	n/a	
S09V001497		WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497		WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0206	n/a	n/a	n/a	n/a	0.0206	n/a	U
S09V001497		WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	114	n/a	n/a	n/a	n/a	0.0103	n/a	
S09V001497		WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497		WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497		WV	7440-09-7	Potassium	ug/g	102	<0.500	23.0	n/a	n/a	n/a	n/a	1.03	n/a	
S09V001497		WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	0.0197	n/a	n/a	n/a	n/a	6.19E-03	n/a	B
S09V001497		WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	20.7	n/a	n/a	n/a	n/a	0.103	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 89-91
Customer Sample ID: B20709A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001497	WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	<6.19E-03	n/a	n/a	n/a	n/a	6.19E-03	n/a	U
S09V001497	WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	0.0916	n/a	n/a	n/a	n/a	0.0412	n/a	B
S09V001497	WV	7440-23-5	Sodium	ug/g	106	<0.100	1.18E+03	n/a	n/a	n/a	n/a	0.206	n/a	
S09V001497	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0412	n/a	n/a	n/a	n/a	0.0412	n/a	U
S09V001497	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	<0.103	n/a	n/a	n/a	n/a	0.103	n/a	U
S09V001497	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.103	n/a	n/a	n/a	n/a	0.103	n/a	U
S09V001497	WV	7704-34-9	Sulfur	ug/g	101	<0.100	30.1	n/a	n/a	n/a	n/a	0.206	n/a	
S09V001497	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	0.168	n/a	n/a	n/a	n/a	0.103	n/a	B
S09V001497	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.206	n/a	n/a	n/a	n/a	0.206	n/a	U
S09V001497	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	5.90	n/a	n/a	n/a	n/a	0.0619	n/a	
S09V001497	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0619	n/a	n/a	n/a	n/a	0.0619	n/a	U
S09V001497	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.519	n/a	n/a	n/a	n/a	6.19E-03	n/a	
S09V001497	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	0.0204	n/a	n/a	n/a	n/a	0.0103	n/a	B
S09V001497	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.206	n/a	n/a	n/a	n/a	0.206	n/a	U
S09V001497	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.206	n/a	n/a	n/a	n/a	0.206	n/a	U
S09V001497	WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497	WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<4.12E-03	n/a	n/a	n/a	n/a	4.12E-03	n/a	U
S09V001497	WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	<0.0103	n/a	n/a	n/a	n/a	0.0103	n/a	U
S09V001497	WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	0.0121	n/a	n/a	n/a	n/a	0.0103	n/a	B
S09V001497	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	0.0581	n/a	n/a	n/a	n/a	3.09E-05	n/a	
S09V001497	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.06E-07	n/a	n/a	n/a	n/a	2.06E-07	n/a	U
S09V001497	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.03E-07	n/a	n/a	n/a	n/a	1.03E-07	n/a	U
S09V001497	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	3.76E-06	n/a	n/a	n/a	n/a	2.27E-07	n/a	
S09V001497	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<8.25E-08	n/a	n/a	n/a	n/a	8.25E-08	n/a	U
S09V001497	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	5.36E-04	n/a	n/a	n/a	n/a	1.13E-05	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090808

Core Number: C7178

Sample Depth: 127-129

Customer Sample ID: B20711A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000711			%WATERA	%WATER-APD	%	n/a	n/a	19.26	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000711			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.24E-05	n/a	n/a	n/a	n/a	9.39E-06	48.50	
S09V000711			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.25E-07	n/a	n/a	n/a	n/a	4.25E-07	n/a	U
S09V000711			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.21E-06	n/a	n/a	n/a	n/a	1.21E-06	n/a	U
S09V000711			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<5.95E-07	n/a	n/a	n/a	n/a	5.95E-07	n/a	U
S09V000711			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.08E-06	n/a	n/a	n/a	n/a	2.08E-06	n/a	U
S09V000711			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.47E-06	n/a	n/a	n/a	n/a	1.47E-06	n/a	U
S09V000711			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.24E-06	n/a	n/a	n/a	n/a	1.24E-06	n/a	U
S09V000711			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.58E-06	n/a	n/a	n/a	n/a	8.82E-07	39.47	
S09V000711			WT%SOLID	Weight percent solids	%	n/a	n/a	80.7	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000711			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<1.55E-07	n/a	n/a	n/a	n/a	1.55E-07	n/a	U
S09V001499			CONDUCT	Conductivity	uMHO/cm	100	0.430	12.5	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B20711A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001501		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	5.13E-05	n/a	n/a	n/a	n/a	3.68E-06	15.154	B
S09V001501		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	1.82E-03	n/a	n/a	n/a	n/a	2.13E-05	2.526	
S09V001501		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	2.04	n/a	n/a	n/a	n/a	1.74	n/a	CBN
S09V001501		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.71E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001501		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001501		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001501		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	132	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001501		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.584	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001501		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001501		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.74E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001501		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001501		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	10.7	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001501		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	23.5	n/a	n/a	n/a	n/a	1.74	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 127-129
Customer Sample ID: B20711A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001501	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	20.7	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001501	AV	7439-89-6	Iron	ug/g	81.1	0.0140	2.36E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001501	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	2.06E+03	n/a	n/a	n/a	n/a	174	n/a	
S09V001501	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	17.1	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001501	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	8.57E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001501	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	424	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001501	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.97	n/a	n/a	n/a	n/a	6.97	n/a	U
S09V001501	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	947	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001501	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	21.0	n/a	n/a	n/a	n/a	6.97	n/a	B
S09V001501	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	544	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001501	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	26.5	n/a	n/a	n/a	n/a	17.4	n/a	B
S09V001501	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001501	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001501	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001501	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	23.8	n/a	n/a	n/a	n/a	10.5	n/a	CBN
S09V001501	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	UN
S09V001501	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	50.2	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001501	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	648	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001501	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	37.4	n/a	n/a	n/a	n/a	34.9	n/a	BN
S09V001501	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001501	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	35.7	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001501	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	11.2	n/a	n/a	n/a	n/a	0.697	n/a	
S09V001501	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	59.5	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001501	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	9.11	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001501	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<1.85E-04	n/a	n/a	n/a	n/a	1.85E-04	n/a	U
S09V001501	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	1.20	n/a	n/a	n/a	n/a	1.92E-03	n/a	
S09V001501	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<2.40E-03	n/a	n/a	n/a	n/a	2.40E-03	n/a	U
S09V001501	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<2.79E-04	n/a	n/a	n/a	n/a	2.79E-04	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090808

Core Number: C7178

Sample Depth: 127-129

Customer Sample ID: B20711A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001501		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	0.109	n/a	n/a	n/a	n/a	3.49E-04	n/a	

Customer Sample ID: B20711A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001500		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	1.03E-04	n/a	n/a	n/a	n/a	4.78E-07	2.812	
S09V001500		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	1.97E-03	n/a	n/a	n/a	n/a	2.05E-06	0.643	
S09V001500		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	48.1	n/a	n/a	n/a	n/a	0.0920	n/a	
S09V001500		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	51.7	n/a	n/a	n/a	n/a	0.597	n/a	
S09V001500		WV	24959-67-9	Bromide	ug/g	102	<0.0237	<0.0322	n/a	n/a	n/a	n/a	0.0322	n/a	U
S09V001500		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	1.07E+04	n/a	n/a	n/a	n/a	11.0	n/a	
S09V001500		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	18.5	n/a	n/a	n/a	n/a	0.0517	n/a	
S09V001500		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	29.1	n/a	n/a	n/a	n/a	0.327	n/a	
S09V001500		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<0.0136	n/a	n/a	n/a	85.8	0.0136	n/a	U
S09V001500		WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	<0.0815	n/a	n/a	n/a	102	0.0815	n/a	U
S09V001500		WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.163	n/a	n/a	n/a	99.7	0.163	n/a	U
S09V001500		WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0815	n/a	n/a	n/a	96.0	0.0815	n/a	U
S09V001500		WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	1.93	n/a	n/a	n/a	93.2	8.15E-03	n/a	
S09V001500		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.72E-03	n/a	n/a	n/a	87.1	2.72E-03	n/a	U
S09V001500		WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.272	n/a	n/a	n/a	99.4	0.272	n/a	U
S09V001500		WV	7440-70-2	Calcium	ug/g	106	<0.0500	2.15E+03	n/a	n/a	n/a	83.8	0.136	n/a	
S09V001500		WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<0.0136	n/a	n/a	n/a	91.4	0.0136	n/a	U
S09V001500		WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0272	n/a	n/a	n/a	90.7	0.0272	n/a	U
S09V001500		WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	0.591	n/a	n/a	n/a	90.5	0.0136	n/a	
S09V001500		WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<0.0136	n/a	n/a	n/a	99.7	0.0136	n/a	U
S09V001500		WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	<0.0136	n/a	n/a	n/a	89.3	0.0136	n/a	U
S09V001500		WV	7440-09-7	Potassium	ug/g	103	<0.500	35.0	n/a	n/a	n/a	103	1.36	n/a	
S09V001500		WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	0.0298	n/a	n/a	n/a	95.1	8.15E-03	n/a	B
S09V001500		WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	379	n/a	n/a	n/a	77.7	0.136	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 127-129
Customer Sample ID: B20711A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001500	WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	0.218	n/a	n/a	n/a	91.9	8.15E-03	n/a	
S09V001500	WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0543	n/a	n/a	n/a	92.9	0.0543	n/a	U
S09V001500	WV	7440-23-5	Sodium	ug/g	95.0	<0.100	878	n/a	n/a	n/a	79.6	0.272	n/a	
S09V001500	WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0543	n/a	n/a	n/a	90.0	0.0543	n/a	U
S09V001500	WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	0.399	n/a	n/a	n/a	100	0.136	n/a	B
S09V001500	WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.136	n/a	n/a	n/a	99.3	0.136	n/a	U
S09V001500	WV	7704-34-9	Sulfur	ug/g	101	<0.100	6.66	n/a	n/a	n/a	105	0.272	n/a	
S09V001500	WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.136	n/a	n/a	n/a	99.7	0.136	n/a	U
S09V001500	WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.272	n/a	n/a	n/a	101	0.272	n/a	U
S09V001500	WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	9.54	n/a	n/a	n/a	91.6	0.0815	n/a	
S09V001500	WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0815	n/a	n/a	n/a	100	0.0815	n/a	U
S09V001500	WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	9.32	n/a	n/a	n/a	91.2	8.15E-03	n/a	
S09V001500	WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	<0.0136	n/a	n/a	n/a	92.2	0.0136	n/a	U
S09V001500	WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.272	n/a	n/a	n/a	92.1	0.272	n/a	U
S09V001500	WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.272	n/a	n/a	n/a	93.5	0.272	n/a	U
S09V001500	WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	<0.0136	n/a	n/a	n/a	91.5	0.0136	n/a	U
S09V001500	WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<5.43E-03	n/a	n/a	n/a	95.0	5.43E-03	n/a	U
S09V001500	WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<0.0136	n/a	n/a	n/a	94.7	0.0136	n/a	U
S09V001500	WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<0.0136	n/a	n/a	n/a	85.1	0.0136	n/a	U
S09V001500	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	0.126	n/a	n/a	n/a	n/a	4.07E-05	n/a	
S09V001500	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.72E-07	n/a	n/a	n/a	n/a	2.72E-07	n/a	U
S09V001500	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.36E-07	n/a	n/a	n/a	n/a	1.36E-07	n/a	U
S09V001500	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.36E-05	n/a	n/a	n/a	n/a	2.99E-07	n/a	
S09V001500	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<1.09E-07	n/a	n/a	n/a	n/a	1.09E-07	n/a	U
S09V001500	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	1.88E-03	n/a	n/a	n/a	n/a	1.49E-05	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090808

Core Number: C7178

Sample Depth: 151-153

Customer Sample ID: B20713A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000717			%WATERA	%WATER-APD	%	n/a	n/a	17.40	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000717			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.33E-05	n/a	n/a	n/a	n/a	9.39E-06	45.60	
S09V000717			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.42E-07	n/a	n/a	n/a	n/a	4.42E-07	n/a	U
S09V000717			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.20E-06	n/a	n/a	n/a	n/a	1.20E-06	n/a	U
S09V000717			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<6.49E-07	n/a	n/a	n/a	n/a	6.49E-07	n/a	U
S09V000717			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.02E-06	n/a	n/a	n/a	n/a	2.02E-06	n/a	U
S09V000717			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.64E-06	n/a	n/a	n/a	n/a	1.64E-06	n/a	U
S09V000717			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.26E-06	n/a	n/a	n/a	n/a	1.26E-06	n/a	U
S09V000717			15067-28-4	Lead-214	uCi/g	n/a	n/a	1.66E-06	n/a	n/a	n/a	n/a	1.23E-06	36.99	
S09V000717			WT%SOLID	Weight percent solids	%	n/a	n/a	82.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000717			15046-84-1	Iodine-129	uCi/g	94.6	<1.44E-07	<1.48E-07	n/a	n/a	n/a	n/a	1.48E-07	n/a	U
S09V001502			CONDUCT	Conductivity	uMHO/cm	100	0.430	379	n/a	n/a	n/a	n/a	0.200	n/a	

Customer Sample ID: B20713A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001504		AV	12587-46-1	Gross alpha	uCi/g	98.3	7.55E-06	1.44E-05	n/a	n/a	n/a	n/a	3.67E-06	38.427	B
S09V001504		AV	12587-47-2	Gross beta	uCi/g	93.9	<1.78E-06	<2.12E-05	n/a	n/a	n/a	n/a	2.12E-05	n/a	U
S09V001504		AV	7440-22-4	Silver	ug/g	82.5	<5.00E-03	1.75	n/a	n/a	n/a	n/a	1.74	n/a	CBN
S09V001504		AV	7429-90-5	Aluminum	ug/g	93.1	<0.0300	1.27E+04	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001504		AV	7440-38-2	Arsenic	ug/g	92.0	<0.0500	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001504		AV	7440-42-8	Boron	ug/g	93.1	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001504		AV	7440-39-3	Barium	ug/g	96.7	<3.00E-03	117	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001504		AV	7440-41-7	Beryllium	ug/g	81.3	<1.00E-03	0.457	n/a	n/a	n/a	n/a	0.347	n/a	B
S09V001504		AV	7440-69-9	Bismuth	ug/g	96.8	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	U
S09V001504		AV	7440-70-2	Calcium	ug/g	95.9	<0.0500	1.18E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001504		AV	7440-43-9	Cadmium	ug/g	96.7	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001504		AV	7440-48-4	Cobalt	ug/g	94.0	<0.0100	8.33	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001504		AV	7440-47-3	Chromium	ug/g	95.7	<5.00E-03	16.9	n/a	n/a	n/a	n/a	1.74	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 151-153
Customer Sample ID: B20713A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001504	AV	7440-50-8	Copper	ug/g	84.9	<5.00E-03	16.6	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001504	AV	7439-89-6	Iron	ug/g	81.1	0.0140	2.02E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001504	AV	7440-09-7	Potassium	ug/g	97.8	<0.500	1.72E+03	n/a	n/a	n/a	n/a	174	n/a	B
S09V001504	AV	7439-93-2	Lithium	ug/g	98.7	<3.00E-03	13.3	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001504	AV	7439-95-4	Magnesium	ug/g	86.1	<0.0500	7.33E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001504	AV	7439-96-5	Manganese	ug/g	95.5	<3.00E-03	348	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001504	AV	7439-98-7	Molybdenum	ug/g	84.5	<0.0200	<6.94	n/a	n/a	n/a	n/a	6.94	n/a	U
S09V001504	AV	7440-23-5	Sodium	ug/g	90.5	<0.100	205	n/a	n/a	n/a	n/a	34.7	n/a	B
S09V001504	AV	7440-02-0	Nickel	ug/g	93.7	<0.0200	21.6	n/a	n/a	n/a	n/a	6.94	n/a	B
S09V001504	AV	7723-14-0	Phosphorus	ug/g	89.6	<0.0500	562	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001504	AV	7439-92-1	Lead	ug/g	85.5	<0.0500	27.9	n/a	n/a	n/a	n/a	17.4	n/a	B
S09V001504	AV	7704-34-9	Sulfur	ug/g	87.4	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001504	AV	7440-36-0	Antimony	ug/g	81.5	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001504	AV	7782-49-2	Selenium	ug/g	92.2	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001504	AV	7440-21-3	Silicon	ug/g	87.9	0.0305	18.5	n/a	n/a	n/a	n/a	10.4	n/a	CBN
S09V001504	AV	7440-31-5	Tin	ug/g	85.0	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	UN
S09V001504	AV	7440-24-6	Strontium	ug/g	96.9	<3.00E-03	36.7	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001504	AV	7440-32-6	Titanium	ug/g	85.8	<5.00E-03	699	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001504	AV	7440-28-0	Thallium	ug/g	86.7	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001504	AV	7440-61-1	Uranium	ug/g	94.0	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001504	AV	7440-62-2	Vanadium	ug/g	84.3	<5.00E-03	32.2	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001504	AV	7440-65-5	Yttrium	ug/g	88.2	<2.00E-03	9.25	n/a	n/a	n/a	n/a	0.694	n/a	
S09V001504	AV	7440-66-6	Zinc	ug/g	86.4	0.0140	51.5	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001504	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.96	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001504	AV	13994-20-2	Neptunium-237	ug/g	114	<2.12E-05	<9.20E-05	n/a	n/a	n/a	n/a	9.20E-05	n/a	U
S09V001504	AV	U-238	Uranium-238	ug/g	110	<2.20E-04	0.983	n/a	n/a	n/a	n/a	9.55E-04	n/a	
S09V001504	AV	15117-48-3	Plutonium-239	ug/g	105	<2.76E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001504	AV	14596-10-2	Americium-241	ug/g	104	<3.20E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090808

Core Number: C7178

Sample Depth: 151-153

Customer Sample ID: B20713A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001504		AV	14133-76-7	Technetium-99	ug/g	108	<6.00E-05	<3.47E-04	n/a	n/a	n/a	n/a	3.47E-04	n/a	U

Customer Sample ID: B20713A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001503		WV	12587-46-1	Gross alpha	uCi/g	100	<3.45E-07	<3.66E-07	n/a	n/a	n/a	n/a	3.66E-07	n/a	U
S09V001503		WV	12587-47-2	Gross beta	uCi/g	96.4	<1.64E-06	<2.32E-06	n/a	n/a	n/a	n/a	2.32E-06	n/a	U
S09V001503		WV	16984-48-8	Fluoride	ug/g	95.6	<6.16E-03	0.517	n/a	n/a	n/a	n/a	8.04E-03	n/a	
S09V001503		WV	14797-65-0	Nitrite	ug/g	93.2	<0.0400	1.01	n/a	n/a	n/a	n/a	0.0522	n/a	
S09V001503		WV	24959-67-9	Bromide	ug/g	102	<0.0237	0.0963	n/a	n/a	n/a	n/a	0.0309	n/a	B
S09V001503		WV	14797-55-8	Nitrate	ug/g	101	<0.0162	57.5	n/a	n/a	n/a	n/a	0.232	n/a	
S09V001503		WV	14265-44-2	Phosphate	ug/g	99.4	<0.0381	0.832	n/a	n/a	n/a	n/a	0.0497	n/a	
S09V001503		WV	14808-79-8	Sulfate	ug/g	101	<0.0219	20.2	n/a	n/a	n/a	n/a	0.314	n/a	
S09V001503		WV	7440-22-4	Silver	ug/g	90.7	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001503		WV	7429-90-5	Aluminum	ug/g	97.6	<0.0300	0.611	n/a	n/a	n/a	n/a	0.0783	n/a	B
S09V001503		WV	7440-38-2	Arsenic	ug/g	96.9	<0.0500	<0.157	n/a	n/a	n/a	n/a	0.157	n/a	U
S09V001503		WV	7440-42-8	Boron	ug/g	99.2	<0.0300	<0.0783	n/a	n/a	n/a	n/a	0.0783	n/a	U
S09V001503		WV	7440-39-3	Barium	ug/g	96.3	<3.00E-03	0.0503	n/a	n/a	n/a	n/a	7.83E-03	n/a	B
S09V001503		WV	7440-41-7	Beryllium	ug/g	93.5	<1.00E-03	<2.61E-03	n/a	n/a	n/a	n/a	2.61E-03	n/a	U
S09V001503		WV	7440-69-9	Bismuth	ug/g	95.5	<0.100	<0.261	n/a	n/a	n/a	n/a	0.261	n/a	U
S09V001503		WV	7440-70-2	Calcium	ug/g	100	<0.0500	19.2	n/a	n/a	n/a	n/a	0.130	n/a	
S09V001503		WV	7440-43-9	Cadmium	ug/g	93.1	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001503		WV	7440-48-4	Cobalt	ug/g	92.9	<0.0100	<0.0261	n/a	n/a	n/a	n/a	0.0261	n/a	U
S09V001503		WV	7440-47-3	Chromium	ug/g	93.0	<5.00E-03	0.0152	n/a	n/a	n/a	n/a	0.0130	n/a	B
S09V001503		WV	7440-50-8	Copper	ug/g	97.9	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001503		WV	7439-89-6	Iron	ug/g	93.1	<5.00E-03	0.227	n/a	n/a	n/a	n/a	0.0130	n/a	
S09V001503		WV	7440-09-7	Potassium	ug/g	102	<0.500	6.47	n/a	n/a	n/a	n/a	1.30	n/a	B
S09V001503		WV	7439-93-2	Lithium	ug/g	107	<3.00E-03	<7.83E-03	n/a	n/a	n/a	n/a	7.83E-03	n/a	U
S09V001503		WV	7439-95-4	Magnesium	ug/g	95.8	<0.0500	9.30	n/a	n/a	n/a	n/a	0.130	n/a	

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X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090808
Core Number: C7178
Sample Depth: 151-153
Customer Sample ID: B20713A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001503	WV	7439-96-5	Manganese	ug/g	92.8	<3.00E-03	<7.83E-03	n/a	n/a	n/a	n/a	7.83E-03	n/a	U
S09V001503	WV	7439-98-7	Molybdenum	ug/g	99.2	<0.0200	<0.0522	n/a	n/a	n/a	n/a	0.0522	n/a	U
S09V001503	WV	7440-23-5	Sodium	ug/g	106	<0.100	30.0	n/a	n/a	n/a	n/a	0.261	n/a	
S09V001503	WV	7440-02-0	Nickel	ug/g	92.1	<0.0200	<0.0522	n/a	n/a	n/a	n/a	0.0522	n/a	U
S09V001503	WV	7723-14-0	Phosphorus	ug/g	96.4	<0.0500	0.146	n/a	n/a	n/a	n/a	0.130	n/a	B
S09V001503	WV	7439-92-1	Lead	ug/g	96.3	<0.0500	<0.130	n/a	n/a	n/a	n/a	0.130	n/a	U
S09V001503	WV	7704-34-9	Sulfur	ug/g	101	<0.100	7.10	n/a	n/a	n/a	n/a	0.261	n/a	
S09V001503	WV	7440-36-0	Antimony	ug/g	96.4	<0.0500	<0.130	n/a	n/a	n/a	n/a	0.130	n/a	U
S09V001503	WV	7782-49-2	Selenium	ug/g	98.9	<0.100	<0.261	n/a	n/a	n/a	n/a	0.261	n/a	U
S09V001503	WV	7440-21-3	Silicon	ug/g	96.0	<0.0300	12.5	n/a	n/a	n/a	n/a	0.0783	n/a	
S09V001503	WV	7440-31-5	Tin	ug/g	98.6	<0.0300	<0.0783	n/a	n/a	n/a	n/a	0.0783	n/a	U
S09V001503	WV	7440-24-6	Strontium	ug/g	95.8	<3.00E-03	0.107	n/a	n/a	n/a	n/a	7.83E-03	n/a	
S09V001503	WV	7440-32-6	Titanium	ug/g	98.8	<5.00E-03	0.0237	n/a	n/a	n/a	n/a	0.0130	n/a	B
S09V001503	WV	7440-28-0	Thallium	ug/g	94.3	<0.100	<0.261	n/a	n/a	n/a	n/a	0.261	n/a	U
S09V001503	WV	7440-61-1	Uranium	ug/g	102	<0.100	<0.261	n/a	n/a	n/a	n/a	0.261	n/a	U
S09V001503	WV	7440-62-2	Vanadium	ug/g	95.7	<5.00E-03	0.0221	n/a	n/a	n/a	n/a	0.0130	n/a	B
S09V001503	WV	7440-65-5	Yttrium	ug/g	94.2	<2.00E-03	<5.22E-03	n/a	n/a	n/a	n/a	5.22E-03	n/a	U
S09V001503	WV	7440-66-6	Zinc	ug/g	94.6	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001503	WV	7440-67-7	Zirconium	ug/g	96.6	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001503	WV	14133-76-7	Technetium-99	ug/g	112	<3.00E-06	1.81E-04	n/a	n/a	n/a	n/a	3.91E-06	n/a	
S09V001503	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.30E-07	n/a	n/a	n/a	n/a	1.30E-07	n/a	U
S09V001503	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	2.14E-07	n/a	n/a	n/a	n/a	6.52E-08	n/a	
S09V001503	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	3.10E-05	n/a	n/a	n/a	n/a	1.44E-07	n/a	
S09V001503	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.22E-08	n/a	n/a	n/a	n/a	5.22E-08	n/a	U
S09V001503	WV	U-238	Uranium-238	ug/g	102	<5.50E-06	4.20E-03	n/a	n/a	n/a	n/a	7.17E-06	n/a	

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 93-95
Customer Sample ID: B20715A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000765			%WATERA	%WATER-APD	%	n/a	n/a	4.870	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000765			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.57E-05	n/a	n/a	n/a	n/a	1.07E-05	44.04	
S09V000765			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<5.30E-07	n/a	n/a	n/a	n/a	5.30E-07	n/a	U
S09V000765			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.19E-06	n/a	n/a	n/a	n/a	1.19E-06	n/a	U
S09V000765			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<7.12E-07	n/a	n/a	n/a	n/a	7.12E-07	n/a	U
S09V000765			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.43E-06	n/a	n/a	n/a	n/a	2.43E-06	n/a	U
S09V000765			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.45E-06	n/a	n/a	n/a	n/a	1.45E-06	n/a	U
S09V000765			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.29E-06	n/a	n/a	n/a	n/a	1.29E-06	n/a	U
S09V000765			WT%SOLID	Weight percent solids	%	n/a	n/a	95.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001505			CONDUCT	Conductivity	uMHO/cm	94.2	<1.00	5.48	5.78	5.63	5.33	n/a	1.00	n/a	

Customer Sample ID: B20715A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001507		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	2.55	<1.74	n/a	n/a	79.7	1.74	n/a	CB
S09V001507		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	7.97E+03	8.15E+03	8.06E+03	2.24	4.06E+03	10.5	n/a	
S09V001507		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<20.9	<20.9	n/a	n/a	81.5	20.9	n/a	U
S09V001507		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.5	<10.5	n/a	n/a	85.8	10.5	n/a	U
S09V001507		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	75.4	77.5	76.5	2.83	68.3	1.05	n/a	N
S09V001507		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	<0.349	0.356	0.352	1.93	84.3	0.349	n/a	U
S09V001507		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<34.9	<34.9	n/a	n/a	0.0	34.9	n/a	UN
S09V001507		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	8.62E+03	9.00E+03	8.81E+03	4.26	128	17.4	n/a	
S09V001507		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.74	<1.74	n/a	n/a	82.6	1.74	n/a	U
S09V001507		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	5.65	6.10	5.87	7.69	81.2	3.49	n/a	B
S09V001507		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	79.2	81.4	80.3	2.79	81.0	1.74	n/a	
S09V001507		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	10.4	10.6	10.5	2.06	75.5	1.74	n/a	B
S09V001507		AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.47E+04	1.51E+04	1.49E+04	2.20	1.64E+03	1.74	n/a	
S09V001507		AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.60E+03	1.74E+03	1.67E+03	8.11	238	174	n/a	B
S09V001507		AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	10.1	11.3	10.7	10.5	78.2	1.05	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 93-95
Customer Sample ID: B20715A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001507		AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	5.37E+03	5.61E+03	5.49E+03	4.30	807	17.4	n/a	
S09V001507		AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	305	320	313	4.70	-305	1.05	n/a	
S09V001507		AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.97	<6.98	n/a	n/a	83.3	6.97	n/a	U
S09V001507		AV	7440-23-5	Sodium	ug/g	97.4	<0.100	894	990	942	10.2	220	34.9	n/a	
S09V001507		AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	15.0	21.8	18.4	36.6	81.4	6.97	n/a	B
S09V001507		AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	472	472	472	0.142	-523	17.4	n/a	
S09V001507		AV	7439-92-1	Lead	ug/g	89.3	<0.0500	<17.4	<17.4	n/a	n/a	87.4	17.4	n/a	U
S09V001507		AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	36.7	37.1	36.9	0.995	20.1	34.9	n/a	BN
S09V001507		AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.4	<17.4	n/a	n/a	0.0	17.4	n/a	UN
S09V001507		AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<34.9	<34.9	n/a	n/a	0.0	34.9	n/a	UN
S09V001507		AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	25.5	22.7	24.1	11.8	1.40	10.5	n/a	BN
S09V001507		AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.5	<10.5	n/a	n/a	89.3	10.5	n/a	U
S09V001507		AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	34.6	35.5	35.0	2.61	81.5	1.05	n/a	
S09V001507		AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	606	606	606	0.0457	-670	1.74	n/a	
S09V001507		AV	7440-28-0	Thallium	ug/g	96.3	<0.100	39.5	<34.9	n/a	n/a	83.6	34.9	n/a	B
S09V001507		AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<34.9	<34.9	n/a	n/a	101	34.9	n/a	U
S09V001507		AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	26.5	27.6	27.1	4.03	84.7	1.74	n/a	
S09V001507		AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	5.69	5.66	5.67	0.697	84.0	0.697	n/a	B
S09V001507		AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	35.5	36.8	36.1	3.71	86.4	1.74	n/a	C
S09V001507		AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	3.51	3.84	3.68	8.85	76.1	1.74	n/a	B
S09V001507		AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<7.39E-05	<7.40E-05	n/a	n/a	92.8	7.39E-05	n/a	U
S09V001507		AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.544	0.585	0.564	7.34	81.2	7.67E-04	n/a	
S09V001507		AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.63E-04	<9.63E-04	n/a	n/a	84.0	9.63E-04	n/a	U
S09V001507		AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.12E-04	<1.12E-04	n/a	n/a	84.0	1.12E-04	n/a	U
S09V001507		AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	0.0498	0.0503	0.0501	0.955	87.5	2.09E-04	n/a	

Customer Sample ID: B20715A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 93-95
Customer Sample ID: B20715A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001506	WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	8.60E-05	9.32E-05	8.96E-05	8.09	76.1	7.67E-07	2.808	
S09V001506	WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	7.08E-04	7.74E-04	7.41E-04	8.93	105	1.34E-06	0.934	
S09V001506	WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.277	0.272	0.274	2.00	82.3	1.62E-03	n/a	
S09V001506	WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	44.3	58.2	51.2	27.2	99.1	11.1	n/a	
S09V001506	WV	14797-65-0	Nitrite	ug/g	101	<0.0192	36.9	38.6	37.8	4.50	99.1	0.212	n/a	
S09V001506	WV	14808-79-8	Sulfate	ug/g	101	<0.0187	41.9	45.4	43.6	8.08	93.3	0.207	n/a	
S09V001506	WV	24959-67-9	Bromide	ug/g	101	<0.0580	<64.8	<65.4	n/a	n/a	102	64.8	n/a	U
S09V001506	WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	3.84E+03	4.15E+03	4.00E+03	7.66	102	23.2	n/a	
S09V001506	WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	<0.0168	<0.0170	n/a	n/a	92.7	0.0168	n/a	U
S09V001506	WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506	WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	<0.0603	<0.0609	n/a	n/a	n/a	0.0603	n/a	U
S09V001506	WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.121	<0.122	n/a	n/a	n/a	0.121	n/a	U
S09V001506	WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0603	<0.0609	n/a	n/a	n/a	0.0603	n/a	U
S09V001506	WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.152	0.156	0.154	2.44	n/a	6.03E-03	n/a	
S09V001506	WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.01E-03	<2.03E-03	n/a	n/a	n/a	2.01E-03	n/a	U
S09V001506	WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.201	<0.203	n/a	n/a	n/a	0.201	n/a	U
S09V001506	WV	7440-70-2	Calcium	ug/g	102	<0.0500	503	556	530	10.1	n/a	0.100	n/a	
S09V001506	WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506	WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0201	<0.0203	n/a	n/a	n/a	0.0201	n/a	U
S09V001506	WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	22.7	24.3	23.5	6.79	n/a	0.0100	n/a	
S09V001506	WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506	WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506	WV	7440-09-7	Potassium	ug/g	108	<0.500	23.6	23.5	23.5	0.419	n/a	1.00	n/a	
S09V001506	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	0.0301	0.0298	0.0300	1.02	n/a	6.03E-03	n/a	B
S09V001506	WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	101	111	106	9.12	n/a	0.100	n/a	
S09V001506	WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	0.0230	0.0244	0.0237	6.07	n/a	6.03E-03	n/a	B
S09V001506	WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0402	<0.0406	n/a	n/a	n/a	0.0402	n/a	U
S09V001506	WV	7440-23-5	Sodium	ug/g	99.6	<0.100	771	784	777	1.66	n/a	0.201	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 93-95
Customer Sample ID: B20715A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001506		WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0402	0.0482	n/a	n/a	n/a	0.0402	n/a	U
S09V001506		WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	0.125	n/a	n/a	n/a	n/a	0.100	n/a	B
S09V001506		WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.100	<0.102	n/a	n/a	n/a	0.100	n/a	U
S09V001506		WV	7704-34-9	Sulfur	ug/g	102	<0.100	15.0	16.3	15.7	8.72	n/a	0.201	n/a	
S09V001506		WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.100	<0.102	n/a	n/a	n/a	0.100	n/a	U
S09V001506		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.201	<0.203	n/a	n/a	n/a	0.201	n/a	U
S09V001506		WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	6.67	6.52	6.60	2.25	n/a	0.0603	n/a	
S09V001506		WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0603	<0.0609	n/a	n/a	n/a	0.0603	n/a	U
S09V001506		WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	2.70	3.00	2.85	10.8	n/a	6.03E-03	n/a	
S09V001506		WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506		WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.201	<0.203	n/a	n/a	n/a	0.201	n/a	U
S09V001506		WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.201	<0.203	n/a	n/a	n/a	0.201	n/a	U
S09V001506		WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506		WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<4.02E-03	<4.06E-03	n/a	n/a	n/a	4.02E-03	n/a	U
S09V001506		WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506		WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0100	<0.0102	n/a	n/a	n/a	0.0100	n/a	U
S09V001506		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	0.0495	0.0519	0.0507	4.85	99.2	3.01E-05	n/a	
S09V001506		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<5.02E-07	<5.08E-07	n/a	n/a	n/a	5.02E-07	n/a	U
S09V001506		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<2.51E-07	<2.54E-07	n/a	n/a	n/a	2.51E-07	n/a	U
S09V001506		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	5.10E-06	5.50E-06	5.30E-06	7.58	96.5	5.53E-07	n/a	
S09V001506		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<2.01E-07	<2.03E-07	n/a	n/a	n/a	2.01E-07	n/a	U
S09V001506		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	7.49E-04	7.47E-04	7.48E-04	0.269	96.0	2.76E-05	n/a	

Customer Sample ID: B20715B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000766			%WATERA	%WATER-APD	%	n/a	n/a	3.800	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000766			WT%SOLID	Weight percent solids	%	n/a	n/a	96.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000766			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	5.28E-07	n/a	n/a	n/a	n/a	1.93E-07	24.5	

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 93-95

Customer Sample ID: B20715B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V000219		AV	12587-46-1	Gross alpha	uCi/g	100	<1.16E-06	2.50E-05	2.99E-05	2.75E-05	17.7	n/a	3.97E-06	3038846	
S10V000219		AV	12587-47-2	Gross beta	uCi/g	96.3	<6.05E-06	6.57E-04	6.66E-04	6.61E-04	1.32	n/a	2.07E-05	8048794	

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U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
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SX Barrier
Data Summary Report

Sample Group: 20090809

Core Number: C7180

Sample Depth: 104-106

Customer Sample ID: B20717A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000771			%WATERA	%WATER-APD	%	n/a	n/a	4.420	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000771			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.41E-05	n/a	n/a	n/a	n/a	9.19E-06	42.47	
S09V000771			10198-40-0	Cobalt-60	uCi/g	97.9	<3.74E-07	<4.39E-07	n/a	n/a	n/a	n/a	4.39E-07	n/a	U
S09V000771			14234-35-6	Antimony-125	uCi/g	n/a	<9.55E-07	<1.17E-06	n/a	n/a	n/a	n/a	1.17E-06	n/a	U
S09V000771			10045-97-3	Cesium-137	uCi/g	102	<5.88E-07	<5.70E-07	n/a	n/a	n/a	n/a	5.70E-07	n/a	U
S09V000771			14683-23-9	Europium-152	uCi/g	n/a	<1.79E-06	<2.06E-06	n/a	n/a	n/a	n/a	2.06E-06	n/a	U
S09V000771			15585-10-1	Europium-154	uCi/g	n/a	<1.25E-06	<1.29E-06	n/a	n/a	n/a	n/a	1.29E-06	n/a	U
S09V000771			14391-16-3	Europium-155	uCi/g	n/a	<1.02E-06	<1.14E-06	n/a	n/a	n/a	n/a	1.14E-06	n/a	U
S09V000771			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.39E-06	n/a	n/a	n/a	n/a	8.71E-07	43.08	
S09V000771			WT%SOLID	Weight percent solids	%	n/a	n/a	95.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000771			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<3.39E-07	n/a	n/a	n/a	n/a	3.39E-07	n/a	U
S09V001508			CONDUCT	Conductivity	uMHO/cm	102	<1.00	1.87E+03	1.88E+03	1.88E+03	0.267	n/a	1.00	n/a	

Customer Sample ID: B20717A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001510		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001510		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	8.19E+03	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001510		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001510		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001510		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	90.8	n/a	n/a	n/a	n/a	1.05	n/a	N
S09V001510		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	<0.350	n/a	n/a	n/a	n/a	0.350	n/a	U
S09V001510		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001510		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	9.47E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001510		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001510		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	6.95	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001510		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	16.9	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001510		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	10.3	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001510		AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.51E+04	n/a	n/a	n/a	n/a	1.75	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 104-106
Customer Sample ID: B20717A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001510	AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.63E+03	n/a	n/a	n/a	n/a	175	n/a	B
S09V001510	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	11.6	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001510	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	5.50E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001510	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	326	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001510	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.99	n/a	n/a	n/a	n/a	6.99	n/a	U
S09V001510	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	200	n/a	n/a	n/a	n/a	35.0	n/a	B
S09V001510	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	15.9	n/a	n/a	n/a	n/a	6.99	n/a	B
S09V001510	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	504	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001510	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	U
S09V001510	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001510	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001510	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001510	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	19.5	n/a	n/a	n/a	n/a	10.5	n/a	BN
S09V001510	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001510	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	34.2	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001510	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	649	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001510	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001510	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001510	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	26.4	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001510	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	6.08	n/a	n/a	n/a	n/a	0.699	n/a	B
S09V001510	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	36.7	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001510	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	5.77	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001510	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<7.41E-05	n/a	n/a	n/a	n/a	7.41E-05	n/a	U
S09V001510	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.514	n/a	n/a	n/a	n/a	7.69E-04	n/a	
S09V001510	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.65E-04	n/a	n/a	n/a	n/a	9.65E-04	n/a	U
S09V001510	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.12E-04	n/a	n/a	n/a	n/a	1.12E-04	n/a	U
S09V001510	AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	0.0142	n/a	n/a	n/a	n/a	2.10E-04	n/a	
S10V001188	AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	3.64E-05	n/a	n/a	n/a	n/a	1.03E-05	419.413	B

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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090809

Core Number: C7180

Sample Depth: 104-106

Customer Sample ID: B20717A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001188		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	2.76E-04	n/a	n/a	n/a	n/a	5.64E-05	7.423	

Customer Sample ID: B20717A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001509		WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	1.96E-05	n/a	n/a	n/a	n/a	7.63E-07	7.134	
S09V001509		WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	1.36E-04	n/a	n/a	n/a	n/a	1.34E-06	2.367	
S09V001509		WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.347	n/a	n/a	n/a	n/a	1.59E-03	n/a	
S09V001509		WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	14.1	n/a	n/a	n/a	n/a	0.109	n/a	
S09V001509		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	1.74	n/a	n/a	n/a	n/a	0.0190	n/a	
S09V001509		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	4.12	n/a	n/a	n/a	n/a	0.204	n/a	
S09V001509		WV	24959-67-9	Bromide	ug/g	101	<0.0580	<0.632	n/a	n/a	n/a	n/a	0.632	n/a	U
S09V001509		WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	955	n/a	n/a	n/a	n/a	22.9	n/a	
S09V001509		WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	<0.0165	n/a	n/a	n/a	n/a	0.0165	n/a	U
S09V001509		WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	<0.0594	n/a	n/a	n/a	n/a	0.0594	n/a	U
S09V001509		WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.119	n/a	n/a	n/a	n/a	0.119	n/a	U
S09V001509		WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0594	n/a	n/a	n/a	n/a	0.0594	n/a	U
S09V001509		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.213	n/a	n/a	n/a	n/a	5.94E-03	n/a	
S09V001509		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<1.98E-03	n/a	n/a	n/a	n/a	1.98E-03	n/a	U
S09V001509		WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.198	n/a	n/a	n/a	n/a	0.198	n/a	U
S09V001509		WV	7440-70-2	Calcium	ug/g	102	<0.0500	204	n/a	n/a	n/a	n/a	0.0990	n/a	
S09V001509		WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0198	n/a	n/a	n/a	n/a	0.0198	n/a	U
S09V001509		WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-09-7	Potassium	ug/g	108	<0.500	21.2	n/a	n/a	n/a	n/a	0.990	n/a	
S09V001509		WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	0.0216	n/a	n/a	n/a	n/a	5.94E-03	n/a	B

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M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 104-106
Customer Sample ID: B20717A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001509		WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	47.6	n/a	n/a	n/a	n/a	0.0990	n/a	
S09V001509		WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	0.0253	n/a	n/a	n/a	n/a	5.94E-03	n/a	B
S09V001509		WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0396	n/a	n/a	n/a	n/a	0.0396	n/a	U
S09V001509		WV	7440-23-5	Sodium	ug/g	99.6	<0.100	54.7	n/a	n/a	n/a	n/a	0.198	n/a	
S09V001509		WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0396	n/a	n/a	n/a	n/a	0.0396	n/a	U
S09V001509		WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	<0.0990	n/a	n/a	n/a	n/a	0.0990	n/a	U
S09V001509		WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.0990	n/a	n/a	n/a	n/a	0.0990	n/a	U
S09V001509		WV	7704-34-9	Sulfur	ug/g	102	<0.100	1.63	n/a	n/a	n/a	n/a	0.198	n/a	B
S09V001509		WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.0990	n/a	n/a	n/a	n/a	0.0990	n/a	U
S09V001509		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.198	n/a	n/a	n/a	n/a	0.198	n/a	U
S09V001509		WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	8.21	n/a	n/a	n/a	n/a	0.0594	n/a	
S09V001509		WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0594	n/a	n/a	n/a	n/a	0.0594	n/a	U
S09V001509		WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	1.02	n/a	n/a	n/a	n/a	5.94E-03	n/a	
S09V001509		WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.198	n/a	n/a	n/a	n/a	0.198	n/a	U
S09V001509		WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.198	n/a	n/a	n/a	n/a	0.198	n/a	U
S09V001509		WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<3.96E-03	n/a	n/a	n/a	n/a	3.96E-03	n/a	U
S09V001509		WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<9.90E-03	n/a	n/a	n/a	n/a	9.90E-03	n/a	U
S09V001509		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	9.03E-03	9.31E-03	9.17E-03	3.00	116	2.97E-06	n/a	
S09V001509		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.98E-07	n/a	n/a	n/a	n/a	1.98E-07	n/a	U
S09V001509		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<9.90E-08	n/a	n/a	n/a	n/a	9.90E-08	n/a	U
S09V001509		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	2.42E-06	n/a	n/a	n/a	n/a	2.18E-07	n/a	
S09V001509		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<7.92E-08	n/a	n/a	n/a	n/a	7.92E-08	n/a	U
S09V001509		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	3.59E-04	n/a	n/a	n/a	n/a	1.09E-05	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809

Core Number: C7180

Sample Depth: 127-129

Customer Sample ID: B20719A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000777			%WATERA	%WATER-APD	%	n/a	n/a	11.83	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000777			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.21E-05	n/a	n/a	n/a	n/a	7.40E-06	39.88	
S09V000777			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.83E-07	n/a	n/a	n/a	n/a	3.83E-07	n/a	U
S09V000777			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<9.95E-07	n/a	n/a	n/a	n/a	9.95E-07	n/a	U
S09V000777			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.82E-07	n/a	n/a	n/a	n/a	4.82E-07	n/a	U
S09V000777			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.82E-06	n/a	n/a	n/a	n/a	1.82E-06	n/a	U
S09V000777			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.28E-06	n/a	n/a	n/a	n/a	1.28E-06	n/a	U
S09V000777			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<6.44E-07	n/a	n/a	n/a	n/a	6.44E-07	n/a	U
S09V000777			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.03E-06	n/a	n/a	n/a	n/a	6.67E-07	28.52	
S09V000777			WT%SOLID	Weight percent solids	%	n/a	n/a	88.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001511			CONDUCT	Conductivity	uMHO/cm	102	<1.00	708	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20719A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001513		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001513		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	9.41E+03	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001513		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001513		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001513		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	85.6	n/a	n/a	n/a	n/a	1.04	n/a	N
S09V001513		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	0.352	n/a	n/a	n/a	n/a	0.348	n/a	B
S09V001513		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001513		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	1.12E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001513		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001513		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	6.87	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001513		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	16.3	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001513		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	14.4	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001513		AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.58E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001513		AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.39E+03	n/a	n/a	n/a	n/a	174	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 127-129
Customer Sample ID: B20719A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001513	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	11.0	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001513	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	5.93E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001513	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	263	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001513	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.96	n/a	n/a	n/a	n/a	6.96	n/a	U
S09V001513	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	164	n/a	n/a	n/a	n/a	34.8	n/a	B
S09V001513	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	19.0	n/a	n/a	n/a	n/a	6.96	n/a	B
S09V001513	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	613	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001513	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	U
S09V001513	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001513	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001513	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001513	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	22.5	n/a	n/a	n/a	n/a	10.4	n/a	BN
S09V001513	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001513	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	36.3	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001513	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	609	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001513	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001513	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001513	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	27.4	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001513	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	7.16	n/a	n/a	n/a	n/a	0.696	n/a	
S09V001513	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	41.9	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001513	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	6.05	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001513	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<7.38E-05	n/a	n/a	n/a	n/a	7.38E-05	n/a	U
S09V001513	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.643	n/a	n/a	n/a	n/a	7.66E-04	n/a	
S09V001513	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.61E-04	n/a	n/a	n/a	n/a	9.61E-04	n/a	U
S09V001513	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.11E-04	n/a	n/a	n/a	n/a	1.11E-04	n/a	U
S09V001513	AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	3.85E-03	n/a	n/a	n/a	n/a	2.09E-04	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 127-129
Customer Sample ID: B20719A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001512	WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	6.58E-06	n/a	n/a	n/a	n/a	7.72E-07	16.843	
S09V001512	WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	4.50E-05	n/a	n/a	n/a	n/a	1.35E-06	5.077	
S09V001512	WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.396	n/a	n/a	n/a	n/a	1.88E-03	n/a	
S09V001512	WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	14.4	n/a	n/a	n/a	n/a	0.129	n/a	
S09V001512	WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.967	n/a	n/a	n/a	n/a	0.0225	n/a	
S09V001512	WV	14808-79-8	Sulfate	ug/g	101	<0.0187	10.5	n/a	n/a	n/a	n/a	0.0219	n/a	
S09V001512	WV	24959-67-9	Bromide	ug/g	101	<0.0580	21.9	n/a	n/a	n/a	n/a	0.0679	n/a	
S09V001512	WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	367	n/a	n/a	n/a	n/a	0.998	n/a	
S09V001512	WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.0722	n/a	n/a	n/a	n/a	0.0195	n/a	B
S09V001512	WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512	WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	<0.0702	n/a	n/a	n/a	n/a	0.0702	n/a	U
S09V001512	WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.140	n/a	n/a	n/a	n/a	0.140	n/a	U
S09V001512	WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0702	n/a	n/a	n/a	n/a	0.0702	n/a	U
S09V001512	WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.108	n/a	n/a	n/a	n/a	7.02E-03	n/a	
S09V001512	WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.34E-03	n/a	n/a	n/a	n/a	2.34E-03	n/a	U
S09V001512	WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.234	n/a	n/a	n/a	n/a	0.234	n/a	U
S09V001512	WV	7440-70-2	Calcium	ug/g	102	<0.0500	75.5	n/a	n/a	n/a	n/a	0.117	n/a	
S09V001512	WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512	WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0234	n/a	n/a	n/a	n/a	0.0234	n/a	U
S09V001512	WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512	WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512	WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512	WV	7440-09-7	Potassium	ug/g	108	<0.500	9.01	n/a	n/a	n/a	n/a	1.17	n/a	B
S09V001512	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	8.65E-03	n/a	n/a	n/a	n/a	7.02E-03	n/a	B
S09V001512	WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	20.2	n/a	n/a	n/a	n/a	0.117	n/a	
S09V001512	WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	<7.02E-03	n/a	n/a	n/a	n/a	7.02E-03	n/a	U
S09V001512	WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0468	n/a	n/a	n/a	n/a	0.0468	n/a	U
S09V001512	WV	7440-23-5	Sodium	ug/g	99.6	<0.100	37.4	n/a	n/a	n/a	n/a	0.234	n/a	

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C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 127-129
Customer Sample ID: B20719A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001512		WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0468	n/a	n/a	n/a	n/a	0.0468	n/a	U
S09V001512		WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	<0.117	n/a	n/a	n/a	n/a	0.117	n/a	U
S09V001512		WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.117	n/a	n/a	n/a	n/a	0.117	n/a	U
S09V001512		WV	7704-34-9	Sulfur	ug/g	102	<0.100	3.72	n/a	n/a	n/a	n/a	0.234	n/a	
S09V001512		WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.117	n/a	n/a	n/a	n/a	0.117	n/a	U
S09V001512		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.234	n/a	n/a	n/a	n/a	0.234	n/a	U
S09V001512		WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	7.77	n/a	n/a	n/a	n/a	0.0702	n/a	
S09V001512		WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0702	n/a	n/a	n/a	n/a	0.0702	n/a	U
S09V001512		WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	0.343	n/a	n/a	n/a	n/a	7.02E-03	n/a	
S09V001512		WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512		WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.234	n/a	n/a	n/a	n/a	0.234	n/a	U
S09V001512		WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.234	n/a	n/a	n/a	n/a	0.234	n/a	U
S09V001512		WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512		WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<4.68E-03	n/a	n/a	n/a	n/a	4.68E-03	n/a	U
S09V001512		WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512		WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0117	n/a	n/a	n/a	n/a	0.0117	n/a	U
S09V001512		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	2.57E-03	n/a	n/a	n/a	n/a	3.51E-06	n/a	
S09V001512		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.34E-07	n/a	n/a	n/a	n/a	2.34E-07	n/a	U
S09V001512		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.17E-07	n/a	n/a	n/a	n/a	1.17E-07	n/a	U
S09V001512		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	7.50E-06	n/a	n/a	n/a	n/a	2.58E-07	n/a	
S09V001512		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<9.36E-08	n/a	n/a	n/a	n/a	9.36E-08	n/a	U
S09V001512		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	1.02E-03	n/a	n/a	n/a	n/a	1.29E-05	n/a	

Customer Sample ID: B20719B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000778			%WATERA	%WATER-APD	%	n/a	n/a	7.730	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000778			WT%SOLID	Weight percent solids	%	n/a	n/a	92.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000778			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.79E-07	n/a	n/a	n/a	n/a	1.79E-07	n/a	U

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 127-129

Customer Sample ID: B20719B AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001184		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	2.73E-05	4.68E-05	3.70E-05	52.6	96.9	1.05E-05	179.119	B
S10V001184		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	<1.65E-05	<5.77E-05	n/a	n/a	96.7	1.65E-05	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809

Core Number: C7180

Sample Depth: 152-154

Customer Sample ID: B20H68A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000783			%WATERA	%WATER-APD	%	n/a	n/a	15.63	15.68	15.66	0.3194	n/a	0.01000	n/a	
S09V000783			13966-00-2	Potassium-40	uCi/g	n/a	n/a	9.41E-06	n/a	n/a	n/a	n/a	6.78E-06	46.30	
S09V000783			10198-40-0	Cobalt-60	uCi/g	103	<3.26E-07	<3.21E-07	n/a	n/a	n/a	n/a	3.21E-07	n/a	U
S09V000783			14234-35-6	Antimony-125	uCi/g	n/a	<8.31E-07	<8.63E-07	n/a	n/a	n/a	n/a	8.63E-07	n/a	U
S09V000783			10045-97-3	Cesium-137	uCi/g	105	<4.26E-07	<4.35E-07	n/a	n/a	n/a	n/a	4.35E-07	n/a	U
S09V000783			14683-23-9	Europium-152	uCi/g	n/a	<1.72E-06	<1.53E-06	n/a	n/a	n/a	n/a	1.53E-06	n/a	U
S09V000783			15585-10-1	Europium-154	uCi/g	n/a	<1.08E-06	<1.12E-06	n/a	n/a	n/a	n/a	1.12E-06	n/a	U
S09V000783			14391-16-3	Europium-155	uCi/g	n/a	<5.20E-07	<5.85E-07	n/a	n/a	n/a	n/a	5.85E-07	n/a	U
S09V000783			15092-94-1	Lead-212	uCi/g	n/a	n/a	9.91E-07	n/a	n/a	n/a	n/a	7.21E-07	27.90	
S09V000783			15067-28-4	Lead-214	uCi/g	n/a	n/a	7.07E-07	n/a	n/a	n/a	n/a	7.10E-07	46.11	
S09V000783			WT%SOLID	Weight percent solids	%	n/a	n/a	84.4	84.4	84.4	0.0	n/a	0.0100	n/a	
S09V000783			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.26E-07	<1.43E-07	n/a	n/a	n/a	1.26E-07	n/a	U
S09V001514			CONDUCT	Conductivity	uMHO/cm	102	<1.00	224	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20H68A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001516		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.73	n/a	n/a	n/a	n/a	1.73	n/a	U
S09V001516		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	9.53E+03	n/a	n/a	n/a	n/a	10.4	n/a	
S09V001516		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001516		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001516		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	100	n/a	n/a	n/a	n/a	1.04	n/a	N
S09V001516		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	<0.347	n/a	n/a	n/a	n/a	0.347	n/a	U
S09V001516		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001516		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	9.09E+03	n/a	n/a	n/a	n/a	17.3	n/a	
S09V001516		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.73	n/a	n/a	n/a	n/a	1.73	n/a	U
S09V001516		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	10.1	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001516		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	13.5	n/a	n/a	n/a	n/a	1.73	n/a	B
S09V001516		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	12.7	n/a	n/a	n/a	n/a	1.73	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

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SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 152-154
Customer Sample ID: B20H68A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001516	AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.76E+04	n/a	n/a	n/a	n/a	1.73	n/a	
S09V001516	AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.27E+03	n/a	n/a	n/a	n/a	173	n/a	B
S09V001516	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	10.2	n/a	n/a	n/a	n/a	1.04	n/a	B
S09V001516	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	5.69E+03	n/a	n/a	n/a	n/a	17.3	n/a	
S09V001516	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	284	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001516	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.94	n/a	n/a	n/a	n/a	6.94	n/a	U
S09V001516	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	176	n/a	n/a	n/a	n/a	34.7	n/a	B
S09V001516	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	16.4	n/a	n/a	n/a	n/a	6.94	n/a	B
S09V001516	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	571	n/a	n/a	n/a	n/a	17.3	n/a	
S09V001516	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	<17.3	n/a	n/a	n/a	n/a	17.3	n/a	U
S09V001516	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001516	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.3	n/a	n/a	n/a	n/a	17.3	n/a	UN
S09V001516	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001516	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	29.5	n/a	n/a	n/a	n/a	10.4	n/a	BN
S09V001516	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.4	n/a	n/a	n/a	n/a	10.4	n/a	U
S09V001516	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	28.3	n/a	n/a	n/a	n/a	1.04	n/a	
S09V001516	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	765	n/a	n/a	n/a	n/a	1.73	n/a	
S09V001516	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	40.8	n/a	n/a	n/a	n/a	34.7	n/a	B
S09V001516	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	U
S09V001516	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	33.9	n/a	n/a	n/a	n/a	1.73	n/a	
S09V001516	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	7.85	n/a	n/a	n/a	n/a	0.694	n/a	
S09V001516	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	38.6	n/a	n/a	n/a	n/a	1.73	n/a	C
S09V001516	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	9.94	n/a	n/a	n/a	n/a	1.73	n/a	B
S09V001516	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<7.36E-05	n/a	n/a	n/a	n/a	7.36E-05	n/a	U
S09V001516	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.560	n/a	n/a	n/a	n/a	7.63E-04	n/a	
S09V001516	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.58E-04	n/a	n/a	n/a	n/a	9.58E-04	n/a	U
S09V001516	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.11E-04	n/a	n/a	n/a	n/a	1.11E-04	n/a	U
S09V001516	AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	<3.47E-04	n/a	n/a	n/a	n/a	3.47E-04	n/a	U

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090809

Core Number: C7180

Sample Depth: 152-154

Customer Sample ID: B20H68A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001189		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	3.61E-05	n/a	n/a	n/a	n/a	1.06E-05	706.688	B
S10V001189		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	<5.78E-05	n/a	n/a	n/a	n/a	5.78E-05	n/a	U

Customer Sample ID: B20H68A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001515		WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	<8.81E-07	n/a	n/a	n/a	n/a	8.81E-07	n/a	U
S09V001515		WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	<1.77E-06	n/a	n/a	n/a	n/a	1.77E-06	n/a	U
S09V001515		WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.525	n/a	n/a	n/a	n/a	2.04E-03	n/a	
S09V001515		WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	9.62	n/a	n/a	n/a	n/a	0.139	n/a	
S09V001515		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.172	n/a	n/a	n/a	n/a	0.0244	n/a	B
S09V001515		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	18.7	n/a	n/a	n/a	n/a	0.261	n/a	
S09V001515		WV	24959-67-9	Bromide	ug/g	101	<0.0580	0.0868	n/a	n/a	n/a	n/a	0.0736	n/a	B
S09V001515		WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	39.3	n/a	n/a	n/a	n/a	0.290	n/a	
S09V001515		WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.405	n/a	n/a	n/a	n/a	0.0212	n/a	
S09V001515		WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515		WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	0.367	n/a	n/a	n/a	n/a	0.0762	n/a	B
S09V001515		WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.152	n/a	n/a	n/a	n/a	0.152	n/a	U
S09V001515		WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0762	n/a	n/a	n/a	n/a	0.0762	n/a	U
S09V001515		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0491	n/a	n/a	n/a	n/a	7.62E-03	n/a	B
S09V001515		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.54E-03	n/a	n/a	n/a	n/a	2.54E-03	n/a	U
S09V001515		WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.254	n/a	n/a	n/a	n/a	0.254	n/a	U
S09V001515		WV	7440-70-2	Calcium	ug/g	102	<0.0500	19.0	n/a	n/a	n/a	n/a	0.127	n/a	
S09V001515		WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515		WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0254	n/a	n/a	n/a	n/a	0.0254	n/a	U
S09V001515		WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515		WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515		WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	0.387	n/a	n/a	n/a	n/a	0.0127	n/a	
S09V001515		WV	7440-09-7	Potassium	ug/g	108	<0.500	5.13	n/a	n/a	n/a	n/a	1.27	n/a	B

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N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090809
Core Number: C7180
Sample Depth: 152-154
Customer Sample ID: B20H68A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001515	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	<7.62E-03	n/a	n/a	n/a	n/a	7.62E-03	n/a	U
S09V001515	WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	7.10	n/a	n/a	n/a	n/a	0.127	n/a	
S09V001515	WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	0.0146	n/a	n/a	n/a	n/a	7.62E-03	n/a	B
S09V001515	WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0508	n/a	n/a	n/a	n/a	0.0508	n/a	U
S09V001515	WV	7440-23-5	Sodium	ug/g	99.6	<0.100	24.8	n/a	n/a	n/a	n/a	0.254	n/a	
S09V001515	WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0508	n/a	n/a	n/a	n/a	0.0508	n/a	U
S09V001515	WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	0.164	n/a	n/a	n/a	n/a	0.127	n/a	B
S09V001515	WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.127	n/a	n/a	n/a	n/a	0.127	n/a	U
S09V001515	WV	7704-34-9	Sulfur	ug/g	102	<0.100	6.52	n/a	n/a	n/a	n/a	0.254	n/a	
S09V001515	WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.127	n/a	n/a	n/a	n/a	0.127	n/a	U
S09V001515	WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.254	n/a	n/a	n/a	n/a	0.254	n/a	U
S09V001515	WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	12.7	n/a	n/a	n/a	n/a	0.0762	n/a	
S09V001515	WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0762	n/a	n/a	n/a	n/a	0.0762	n/a	U
S09V001515	WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	0.0870	n/a	n/a	n/a	n/a	7.62E-03	n/a	
S09V001515	WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	0.0496	n/a	n/a	n/a	n/a	0.0127	n/a	B
S09V001515	WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.254	n/a	n/a	n/a	n/a	0.254	n/a	U
S09V001515	WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.254	n/a	n/a	n/a	n/a	0.254	n/a	U
S09V001515	WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	0.0248	n/a	n/a	n/a	n/a	0.0127	n/a	B
S09V001515	WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<5.08E-03	n/a	n/a	n/a	n/a	5.08E-03	n/a	U
S09V001515	WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515	WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0127	n/a	n/a	n/a	n/a	0.0127	n/a	U
S09V001515	WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	4.27E-05	n/a	n/a	n/a	n/a	3.81E-06	n/a	
S09V001515	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.54E-07	n/a	n/a	n/a	n/a	2.54E-07	n/a	U
S09V001515	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	1.61E-07	n/a	n/a	n/a	n/a	1.27E-07	n/a	
S09V001515	WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	1.44E-05	n/a	n/a	n/a	n/a	2.79E-07	n/a	
S09V001515	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<1.02E-07	n/a	n/a	n/a	n/a	1.02E-07	n/a	U
S09V001515	WV	U-238	Uranium-238	ug/g	100	<5.50E-06	2.00E-03	n/a	n/a	n/a	n/a	1.40E-05	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 83-85
Customer Sample ID: B20727A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000941			%WATERA	%WATER-APD	%	n/a	n/a	2.490	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000941			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<4.05E-07	n/a	n/a	n/a	n/a	4.05E-07	n/a	U
S09V000941			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<1.06E-06	n/a	n/a	n/a	n/a	1.06E-06	n/a	U
S09V000941			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<5.40E-07	n/a	n/a	n/a	n/a	5.40E-07	n/a	U
S09V000941			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<2.15E-06	n/a	n/a	n/a	n/a	2.15E-06	n/a	U
S09V000941			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.27E-06	n/a	n/a	n/a	n/a	1.27E-06	n/a	U
S09V000941			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.53E-07	n/a	n/a	n/a	n/a	6.53E-07	n/a	U
S09V000941			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.02E-06	n/a	n/a	n/a	n/a	8.07E-07	47.48	
S09V000941			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.51E-06	n/a	n/a	n/a	n/a	1.11E-06	21.89	B
S09V000941			WT%SOLID	Weight percent solids	%	n/a	n/a	97.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000941			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<7.64E-08	n/a	n/a	n/a	n/a	7.64E-08	n/a	U
S09V001517			CONDUCT	Conductivity	uMHO/cm	102	<1.00	127	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20727A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001519		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	1.96	n/a	n/a	n/a	n/a	1.66	n/a	CB
S09V001519		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	4.40E+03	n/a	n/a	n/a	n/a	9.97	n/a	
S09V001519		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<19.9	n/a	n/a	n/a	n/a	19.9	n/a	U
S09V001519		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<9.97	n/a	n/a	n/a	n/a	9.97	n/a	U
S09V001519		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	28.8	n/a	n/a	n/a	n/a	0.997	n/a	N
S09V001519		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	<0.332	n/a	n/a	n/a	n/a	0.332	n/a	U
S09V001519		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<33.2	n/a	n/a	n/a	n/a	33.2	n/a	UN
S09V001519		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	3.67E+03	n/a	n/a	n/a	n/a	16.6	n/a	
S09V001519		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.66	n/a	n/a	n/a	n/a	1.66	n/a	U
S09V001519		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	<3.32	n/a	n/a	n/a	n/a	3.32	n/a	U
S09V001519		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	4.43	n/a	n/a	n/a	n/a	1.66	n/a	B
S09V001519		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	4.44	n/a	n/a	n/a	n/a	1.66	n/a	B
S09V001519		AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	6.86E+03	n/a	n/a	n/a	n/a	1.66	n/a	

NA = Not Analyzed, ND = Not Detected

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B - Estimated
X - Comment
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 83-85
Customer Sample ID: B20727A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001519	AV	7440-09-7	Potassium	ug/g	87.2	<0.500	242	n/a	n/a	n/a	n/a	166	n/a	B
S09V001519	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	1.88	n/a	n/a	n/a	n/a	0.997	n/a	B
S09V001519	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	1.72E+03	n/a	n/a	n/a	n/a	16.6	n/a	
S09V001519	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	108	n/a	n/a	n/a	n/a	0.997	n/a	
S09V001519	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.65	n/a	n/a	n/a	n/a	6.65	n/a	U
S09V001519	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	420	n/a	n/a	n/a	n/a	33.2	n/a	
S09V001519	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	7.69	n/a	n/a	n/a	n/a	6.65	n/a	B
S09V001519	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	327	n/a	n/a	n/a	n/a	16.6	n/a	
S09V001519	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	<16.6	n/a	n/a	n/a	n/a	16.6	n/a	U
S09V001519	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<33.2	n/a	n/a	n/a	n/a	33.2	n/a	UN
S09V001519	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<16.6	n/a	n/a	n/a	n/a	16.6	n/a	UN
S09V001519	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<33.2	n/a	n/a	n/a	n/a	33.2	n/a	UN
S09V001519	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	21.7	n/a	n/a	n/a	n/a	9.97	n/a	BN
S09V001519	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<9.97	n/a	n/a	n/a	n/a	9.97	n/a	U
S09V001519	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	24.8	n/a	n/a	n/a	n/a	0.997	n/a	
S09V001519	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	396	n/a	n/a	n/a	n/a	1.66	n/a	
S09V001519	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	36.7	n/a	n/a	n/a	n/a	33.2	n/a	B
S09V001519	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<33.2	n/a	n/a	n/a	n/a	33.2	n/a	U
S09V001519	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	16.1	n/a	n/a	n/a	n/a	1.66	n/a	B
S09V001519	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	3.69	n/a	n/a	n/a	n/a	0.665	n/a	B
S09V001519	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	10.2	n/a	n/a	n/a	n/a	1.66	n/a	CB
S09V001519	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	4.34	n/a	n/a	n/a	n/a	1.66	n/a	B
S09V001519	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<3.52E-05	n/a	n/a	n/a	n/a	3.52E-05	n/a	U
S09V001519	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.119	n/a	n/a	n/a	n/a	3.66E-04	n/a	
S09V001519	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<4.59E-04	n/a	n/a	n/a	n/a	4.59E-04	n/a	U
S09V001519	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<5.32E-05	n/a	n/a	n/a	n/a	5.32E-05	n/a	U
S09V001519	AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	<9.97E-05	n/a	n/a	n/a	n/a	9.97E-05	n/a	U

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C - Blank Contamination
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M - RPD Outside Range
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 83-85
Customer Sample ID: B20727A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001518	WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	<7.69E-07	n/a	n/a	n/a	n/a	7.69E-07	n/a	U
S09V001518	WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	3.67E-06	n/a	n/a	n/a	n/a	1.35E-06	45.366	
S09V001518	WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.622	n/a	n/a	n/a	n/a	1.54E-03	n/a	
S09V001518	WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	2.06	n/a	n/a	n/a	n/a	9.57E-03	n/a	
S09V001518	WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.0444	n/a	n/a	n/a	n/a	0.0184	n/a	B
S09V001518	WV	14808-79-8	Sulfate	ug/g	101	<0.0187	8.32	n/a	n/a	n/a	n/a	0.0179	n/a	
S09V001518	WV	24959-67-9	Bromide	ug/g	101	<0.0580	<0.0556	n/a	n/a	n/a	n/a	0.0556	n/a	U
S09V001518	WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	1.85	n/a	n/a	n/a	n/a	0.0199	n/a	
S09V001518	WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.192	n/a	n/a	n/a	n/a	0.0160	n/a	B
S09V001518	WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	91.0	9.59E-03	n/a	U
S09V001518	WV	7429-90-5	Aluminum	ug/g	96.9	<0.0300	1.04	1.05	1.04	1.44	100	0.0575	n/a	
S09V001518	WV	7440-38-2	Arsenic	ug/g	99.3	<0.0500	<0.115	<0.120	n/a	n/a	102	0.115	n/a	U
S09V001518	WV	7440-42-8	Boron	ug/g	99.6	<0.0300	<0.0575	<0.0600	n/a	n/a	97.8	0.0575	n/a	U
S09V001518	WV	7440-39-3	Barium	ug/g	97.0	<3.00E-03	0.0142	0.0150	0.0146	5.79	99.8	5.75E-03	n/a	B
S09V001518	WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<1.92E-03	<2.00E-03	n/a	n/a	95.1	1.92E-03	n/a	U
S09V001518	WV	7440-69-9	Bismuth	ug/g	95.9	<0.100	<0.192	<0.200	n/a	n/a	97.8	0.192	n/a	U
S09V001518	WV	7440-70-2	Calcium	ug/g	106	<0.0500	6.80	7.04	6.92	3.51	92.2	0.0959	n/a	
S09V001518	WV	7440-43-9	Cadmium	ug/g	97.2	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	96.3	9.59E-03	n/a	U
S09V001518	WV	7440-48-4	Cobalt	ug/g	97.0	<0.0100	<0.0192	<0.0200	n/a	n/a	95.2	0.0192	n/a	U
S09V001518	WV	7440-47-3	Chromium	ug/g	97.6	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	96.2	9.59E-03	n/a	U
S09V001518	WV	7440-50-8	Copper	ug/g	96.9	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	100	9.59E-03	n/a	U
S09V001518	WV	7439-89-6	Iron	ug/g	97.3	<5.00E-03	1.32	1.37	1.34	4.10	94.5	9.59E-03	n/a	
S09V001518	WV	7440-09-7	Potassium	ug/g	103	<0.500	3.97	4.17	4.07	4.96	110	0.959	n/a	B
S09V001518	WV	7439-93-2	Lithium	ug/g	96.2	<3.00E-03	6.69E-03	6.57E-03	6.63E-03	1.87	107	5.75E-03	n/a	B
S09V001518	WV	7439-95-4	Magnesium	ug/g	95.7	<0.0500	1.94	2.03	1.98	4.71	96.8	0.0959	n/a	
S09V001518	WV	7439-96-5	Manganese	ug/g	97.1	<3.00E-03	0.0147	0.0152	0.0149	3.46	96.9	5.75E-03	n/a	B
S09V001518	WV	7439-98-7	Molybdenum	ug/g	102	<0.0200	<0.0384	<0.0400	n/a	n/a	97.9	0.0384	n/a	U
S09V001518	WV	7440-23-5	Sodium	ug/g	95.0	<0.100	13.4	13.8	13.6	2.69	113	0.192	n/a	

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X - Comment
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 83-85
Customer Sample ID: B20727A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001518		WV	7440-02-0	Nickel	ug/g	95.9	<0.0200	<0.0384	<0.0400	n/a	n/a	94.9	0.0384	n/a	U
S09V001518		WV	7723-14-0	Phosphorus	ug/g	99.6	<0.0500	<0.0959	<0.100	n/a	n/a	101	0.0959	n/a	U
S09V001518		WV	7439-92-1	Lead	ug/g	98.8	<0.0500	<0.0959	<0.100	n/a	n/a	98.3	0.0959	n/a	U
S09V001518		WV	7704-34-9	Sulfur	ug/g	101	<0.100	3.03	3.13	3.08	3.34	102	0.192	n/a	
S09V001518		WV	7440-36-0	Antimony	ug/g	97.9	<0.0500	<0.0959	<0.100	n/a	n/a	97.5	0.0959	n/a	U
S09V001518		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.192	<0.200	n/a	n/a	103	0.192	n/a	U
S09V001518		WV	7440-21-3	Silicon	ug/g	98.3	<0.0300	10.5	11.0	10.7	4.20	87.4	0.0575	n/a	
S09V001518		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0575	<0.0600	n/a	n/a	97.9	0.0575	n/a	U
S09V001518		WV	7440-24-6	Strontium	ug/g	97.0	<3.00E-03	0.0323	0.0339	0.0331	4.77	97.9	5.75E-03	n/a	B
S09V001518		WV	7440-32-6	Titanium	ug/g	101	<5.00E-03	0.0435	0.0450	0.0442	3.32	98.1	9.59E-03	n/a	B
S09V001518		WV	7440-28-0	Thallium	ug/g	96.9	<0.100	<0.192	<0.200	n/a	n/a	99.5	0.192	n/a	U
S09V001518		WV	7440-61-1	Uranium	ug/g	101	<0.100	<0.192	<0.200	n/a	n/a	101	0.192	n/a	U
S09V001518		WV	7440-62-2	Vanadium	ug/g	99.0	<5.00E-03	0.0229	0.0238	0.0234	3.68	96.7	9.59E-03	n/a	B
S09V001518		WV	7440-65-5	Yttrium	ug/g	96.8	<2.00E-03	<3.84E-03	<4.00E-03	n/a	n/a	99.5	3.84E-03	n/a	U
S09V001518		WV	7440-66-6	Zinc	ug/g	98.0	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	95.9	9.59E-03	n/a	U
S09V001518		WV	7440-67-7	Zirconium	ug/g	98.2	<5.00E-03	<9.59E-03	<1.00E-02	n/a	n/a	90.4	9.59E-03	n/a	U
S09V001518		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	3.89E-06	n/a	n/a	n/a	n/a	2.88E-06	n/a	
S09V001518		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.92E-07	n/a	n/a	n/a	n/a	1.92E-07	n/a	U
S09V001518		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<9.59E-08	n/a	n/a	n/a	n/a	9.59E-08	n/a	U
S09V001518		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	4.00E-06	n/a	n/a	n/a	n/a	2.11E-07	n/a	
S09V001518		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<7.67E-08	n/a	n/a	n/a	n/a	7.67E-08	n/a	U
S09V001518		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	5.71E-04	n/a	n/a	n/a	n/a	1.06E-05	n/a	

Customer Sample ID: B20727B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000942			%WATERA	%WATER-APD	%	n/a	n/a	4.560	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000942			WT%SOLID	Weight percent solids	%	n/a	n/a	95.4	n/a	n/a	n/a	n/a	0.0100	n/a	

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DSR.Jar v. 2.7.27

SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 83-85
Customer Sample ID: B20727B AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001185		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	4.72E-05	n/a	n/a	n/a	n/a	1.04E-05	99.349	B
S10V001185		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	8.96E-05	n/a	n/a	n/a	n/a	5.66E-05	5.445	

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X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 104-106

Customer Sample ID: B20729A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000946			%WATERA	%WATER-APD	%	n/a	n/a	14.69	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000946			13966-00-2	Potassium-40	uCi/g	n/a	n/a	2.02E-05	n/a	n/a	n/a	n/a	7.55E-06	25.90	
S09V000946			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.91E-07	n/a	n/a	n/a	n/a	3.91E-07	n/a	U
S09V000946			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<1.02E-06	n/a	n/a	n/a	n/a	1.02E-06	n/a	U
S09V000946			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.96E-07	n/a	n/a	n/a	n/a	4.96E-07	n/a	U
S09V000946			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.95E-06	n/a	n/a	n/a	n/a	1.95E-06	n/a	U
S09V000946			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.13E-06	n/a	n/a	n/a	n/a	1.13E-06	n/a	U
S09V000946			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.60E-07	n/a	n/a	n/a	n/a	6.60E-07	n/a	U
S09V000946			15092-94-1	Lead-212	uCi/g	n/a	n/a	9.26E-07	n/a	n/a	n/a	n/a	5.57E-07	29.31	
S09V000946			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	8.27E-07	n/a	n/a	n/a	n/a	9.12E-07	44.91	BU
S09V000946			WT%SOLID	Weight percent solids	%	n/a	n/a	85.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000946			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.36E-07	n/a	n/a	n/a	n/a	1.36E-07	n/a	U
S09V001520			CONDUCT	Conductivity	uMHO/cm	102	<1.00	376	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20729A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001522		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001522		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	1.25E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001522		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001522		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001522		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	141	n/a	n/a	n/a	n/a	1.05	n/a	N
S09V001522		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	0.502	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001522		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001522		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	1.33E+04	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001522		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001522		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	8.85	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001522		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	15.9	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001522		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	17.6	n/a	n/a	n/a	n/a	1.75	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 104-106
Customer Sample ID: B20729A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001522	AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	2.02E+04	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001522	AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.70E+03	n/a	n/a	n/a	n/a	175	n/a	B
S09V001522	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	14.0	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001522	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	6.88E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001522	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	595	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001522	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001522	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	146	n/a	n/a	n/a	n/a	34.9	n/a	B
S09V001522	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	22.1	n/a	n/a	n/a	n/a	6.98	n/a	B
S09V001522	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	492	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001522	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	28.0	n/a	n/a	n/a	n/a	17.5	n/a	B
S09V001522	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	35.1	n/a	n/a	n/a	n/a	34.9	n/a	BN
S09V001522	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.5	n/a	n/a	n/a	n/a	17.5	n/a	UN
S09V001522	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001522	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	23.8	n/a	n/a	n/a	n/a	10.5	n/a	BN
S09V001522	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001522	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	36.5	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001522	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	507	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001522	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001522	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001522	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	30.0	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001522	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	9.75	n/a	n/a	n/a	n/a	0.698	n/a	
S09V001522	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	50.9	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001522	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	6.23	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001522	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	<7.40E-05	n/a	n/a	n/a	n/a	7.40E-05	n/a	U
S09V001522	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.886	n/a	n/a	n/a	n/a	7.68E-04	n/a	
S09V001522	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.63E-04	n/a	n/a	n/a	n/a	9.63E-04	n/a	U
S09V001522	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.12E-04	n/a	n/a	n/a	n/a	1.12E-04	n/a	U
S09V001522	AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	9.23E-04	n/a	n/a	n/a	n/a	3.49E-04	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 104-106

Customer Sample ID: B20729A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001190		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	3.77E-05	n/a	n/a	n/a	n/a	1.02E-05	267.38	B
S10V001190		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	<5.57E-05	n/a	n/a	n/a	n/a	5.57E-05	n/a	U

Customer Sample ID: B20729A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001521		WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	1.01E-06	n/a	n/a	n/a	n/a	7.64E-07	93.251	
S09V001521		WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	1.73E-05	n/a	n/a	n/a	n/a	1.34E-06	10.876	
S09V001521		WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.506	n/a	n/a	n/a	n/a	1.98E-03	n/a	
S09V001521		WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	11.0	n/a	n/a	n/a	n/a	0.135	n/a	
S09V001521		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.831	n/a	n/a	n/a	n/a	0.0236	n/a	
S09V001521		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	32.4	n/a	n/a	n/a	n/a	0.253	n/a	
S09V001521		WV	24959-67-9	Bromide	ug/g	101	<0.0580	<0.0714	n/a	n/a	n/a	n/a	0.0714	n/a	U
S09V001521		WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	118	n/a	n/a	n/a	n/a	0.282	n/a	
S09V001521		WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.139	n/a	n/a	n/a	n/a	0.0206	n/a	B
S09V001521		WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521		WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	<0.0739	n/a	n/a	n/a	n/a	0.0739	n/a	U
S09V001521		WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.148	n/a	n/a	n/a	n/a	0.148	n/a	U
S09V001521		WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0739	n/a	n/a	n/a	n/a	0.0739	n/a	U
S09V001521		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0431	n/a	n/a	n/a	n/a	7.39E-03	n/a	B
S09V001521		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.46E-03	n/a	n/a	n/a	n/a	2.46E-03	n/a	U
S09V001521		WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.246	n/a	n/a	n/a	n/a	0.246	n/a	U
S09V001521		WV	7440-70-2	Calcium	ug/g	102	<0.0500	36.7	n/a	n/a	n/a	n/a	0.123	n/a	
S09V001521		WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521		WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0246	n/a	n/a	n/a	n/a	0.0246	n/a	U
S09V001521		WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521		WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521		WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	0.0455	n/a	n/a	n/a	n/a	0.0123	n/a	B
S09V001521		WV	7440-09-7	Potassium	ug/g	108	<0.500	7.86	n/a	n/a	n/a	n/a	1.23	n/a	B

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U - Less Than Detection Limit
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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 104-106
Customer Sample ID: B20729A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001521	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	7.58E-03	n/a	n/a	n/a	n/a	7.39E-03	n/a	B
S09V001521	WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	8.73	n/a	n/a	n/a	n/a	0.123	n/a	
S09V001521	WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	<7.39E-03	n/a	n/a	n/a	n/a	7.39E-03	n/a	U
S09V001521	WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0492	n/a	n/a	n/a	n/a	0.0492	n/a	U
S09V001521	WV	7440-23-5	Sodium	ug/g	99.6	<0.100	36.4	n/a	n/a	n/a	n/a	0.246	n/a	
S09V001521	WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0492	n/a	n/a	n/a	n/a	0.0492	n/a	U
S09V001521	WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001521	WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001521	WV	7704-34-9	Sulfur	ug/g	102	<0.100	11.2	n/a	n/a	n/a	n/a	0.246	n/a	
S09V001521	WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001521	WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.246	n/a	n/a	n/a	n/a	0.246	n/a	U
S09V001521	WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	10.1	n/a	n/a	n/a	n/a	0.0739	n/a	
S09V001521	WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0739	n/a	n/a	n/a	n/a	0.0739	n/a	U
S09V001521	WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	0.175	n/a	n/a	n/a	n/a	7.39E-03	n/a	
S09V001521	WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521	WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.246	n/a	n/a	n/a	n/a	0.246	n/a	U
S09V001521	WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.246	n/a	n/a	n/a	n/a	0.246	n/a	U
S09V001521	WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521	WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<4.92E-03	n/a	n/a	n/a	n/a	4.92E-03	n/a	U
S09V001521	WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521	WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001521	WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	5.26E-04	n/a	n/a	n/a	n/a	3.69E-06	n/a	
S09V001521	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.46E-07	n/a	n/a	n/a	n/a	2.46E-07	n/a	U
S09V001521	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.23E-07	n/a	n/a	n/a	n/a	1.23E-07	n/a	U
S09V001521	WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	9.17E-06	n/a	n/a	n/a	n/a	2.71E-07	n/a	
S09V001521	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<9.85E-08	n/a	n/a	n/a	n/a	9.85E-08	n/a	U
S09V001521	WV	U-238	Uranium-238	ug/g	100	<5.50E-06	1.23E-03	n/a	n/a	n/a	n/a	1.35E-05	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 128.5-130.5

Customer Sample ID: B20731A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001002			%WATERA	%WATER-APD	%	n/a	n/a	14.52	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001002			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.56E-05	n/a	n/a	n/a	n/a	7.47E-06	32.02	
S09V001002			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.95E-07	n/a	n/a	n/a	n/a	3.95E-07	n/a	U
S09V001002			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.40E-07	n/a	n/a	n/a	n/a	9.40E-07	n/a	U
S09V001002			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.63E-07	n/a	n/a	n/a	n/a	4.63E-07	n/a	U
S09V001002			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.72E-06	n/a	n/a	n/a	n/a	1.72E-06	n/a	U
S09V001002			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.17E-06	n/a	n/a	n/a	n/a	1.17E-06	n/a	U
S09V001002			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.25E-07	n/a	n/a	n/a	n/a	6.25E-07	n/a	U
S09V001002			15092-94-1	Lead-212	uCi/g	n/a	n/a	9.47E-07	n/a	n/a	n/a	n/a	7.03E-07	32.90	
S09V001002			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	9.09E-07	n/a	n/a	n/a	n/a	6.94E-07	46.62	
S09V001002			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.21E-06	n/a	n/a	n/a	n/a	9.18E-07	34.86	B
S09V001002			WT%SOLID	Weight percent solids	%	n/a	n/a	85.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001002			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.43E-07	n/a	n/a	n/a	n/a	1.43E-07	n/a	U
S09V001523			CONDUCT	Conductivity	uMHO/cm	102	<1.00	219	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20731A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001525		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001525		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	1.10E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001525		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001525		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001525		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	102	n/a	n/a	n/a	n/a	1.05	n/a	N
S09V001525		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	0.362	n/a	n/a	n/a	n/a	0.349	n/a	B
S09V001525		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001525		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	1.42E+04	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001525		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.74	n/a	n/a	n/a	n/a	1.74	n/a	U
S09V001525		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	9.29	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001525		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	15.2	n/a	n/a	n/a	n/a	1.74	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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DSRHardcopyWOLimits 2.7.26a
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 128.5-130.5
Customer Sample ID: B20731A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001525	AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	17.0	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001525	AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.90E+04	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001525	AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.41E+03	n/a	n/a	n/a	n/a	174	n/a	B
S09V001525	AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	12.1	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001525	AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	6.45E+03	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001525	AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	355	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001525	AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<6.98	n/a	n/a	n/a	n/a	6.98	n/a	U
S09V001525	AV	7440-23-5	Sodium	ug/g	97.4	<0.100	157	n/a	n/a	n/a	n/a	34.9	n/a	B
S09V001525	AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	20.1	n/a	n/a	n/a	n/a	6.98	n/a	B
S09V001525	AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	579	n/a	n/a	n/a	n/a	17.4	n/a	
S09V001525	AV	7439-92-1	Lead	ug/g	89.3	<0.0500	25.3	n/a	n/a	n/a	n/a	17.4	n/a	B
S09V001525	AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001525	AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	<17.4	n/a	n/a	n/a	n/a	17.4	n/a	UN
S09V001525	AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001525	AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	21.7	n/a	n/a	n/a	n/a	10.5	n/a	BN
S09V001525	AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001525	AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	39.4	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001525	AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	643	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001525	AV	7440-28-0	Thallium	ug/g	96.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001525	AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001525	AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	31.2	n/a	n/a	n/a	n/a	1.74	n/a	
S09V001525	AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	8.42	n/a	n/a	n/a	n/a	0.698	n/a	
S09V001525	AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	47.7	n/a	n/a	n/a	n/a	1.74	n/a	C
S09V001525	AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.80	n/a	n/a	n/a	n/a	1.74	n/a	B
S09V001525	AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	8.51E-05	n/a	n/a	n/a	n/a	7.40E-05	n/a	B
S09V001525	AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.809	n/a	n/a	n/a	n/a	7.67E-04	n/a	
S09V001525	AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.63E-04	n/a	n/a	n/a	n/a	9.63E-04	n/a	U
S09V001525	AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.12E-04	n/a	n/a	n/a	n/a	1.12E-04	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 128.5-130.5

Customer Sample ID: B20731A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001525		AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	<3.49E-04	n/a	n/a	n/a	n/a	3.49E-04	n/a	U
S10V001191		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	3.40E-05	n/a	n/a	n/a	n/a	1.03E-05	2334.391	B
S10V001191		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	<5.65E-05	n/a	n/a	n/a	n/a	5.65E-05	n/a	U

Customer Sample ID: B20731A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001524		WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	<1.14E-06	n/a	n/a	n/a	n/a	1.14E-06	n/a	U
S09V001524		WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	1.85E-06	n/a	n/a	n/a	n/a	1.34E-06	88.217	
S09V001524		WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.684	n/a	n/a	n/a	n/a	1.98E-03	n/a	
S09V001524		WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	10.5	n/a	n/a	n/a	n/a	0.135	n/a	
S09V001524		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.124	n/a	n/a	n/a	n/a	0.0237	n/a	B
S09V001524		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	22.2	n/a	n/a	n/a	n/a	0.254	n/a	
S09V001524		WV	24959-67-9	Bromide	ug/g	101	<0.0580	<0.0715	n/a	n/a	n/a	n/a	0.0715	n/a	U
S09V001524		WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	23.7	n/a	n/a	n/a	n/a	0.282	n/a	
S09V001524		WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.198	n/a	n/a	n/a	n/a	0.0206	n/a	B
S09V001524		WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	0.276	n/a	n/a	n/a	n/a	0.0740	n/a	B
S09V001524		WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.148	n/a	n/a	n/a	n/a	0.148	n/a	U
S09V001524		WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0740	n/a	n/a	n/a	n/a	0.0740	n/a	U
S09V001524		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0344	n/a	n/a	n/a	n/a	7.40E-03	n/a	B
S09V001524		WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.47E-03	n/a	n/a	n/a	n/a	2.47E-03	n/a	U
S09V001524		WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.247	n/a	n/a	n/a	n/a	0.247	n/a	U
S09V001524		WV	7440-70-2	Calcium	ug/g	102	<0.0500	19.7	n/a	n/a	n/a	n/a	0.123	n/a	
S09V001524		WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0247	n/a	n/a	n/a	n/a	0.0247	n/a	U
S09V001524		WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	0.219	n/a	n/a	n/a	n/a	0.0123	n/a	

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X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 128.5-130.5
Customer Sample ID: B20731A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001524		WV	7440-09-7	Potassium	ug/g	108	<0.500	5.14	n/a	n/a	n/a	n/a	1.23	n/a	B
S09V001524		WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	<7.40E-03	n/a	n/a	n/a	n/a	7.40E-03	n/a	U
S09V001524		WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	5.36	n/a	n/a	n/a	n/a	0.123	n/a	
S09V001524		WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	<7.40E-03	n/a	n/a	n/a	n/a	7.40E-03	n/a	U
S09V001524		WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0493	n/a	n/a	n/a	n/a	0.0493	n/a	U
S09V001524		WV	7440-23-5	Sodium	ug/g	99.6	<0.100	22.0	n/a	n/a	n/a	n/a	0.247	n/a	
S09V001524		WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0493	n/a	n/a	n/a	n/a	0.0493	n/a	U
S09V001524		WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001524		WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001524		WV	7704-34-9	Sulfur	ug/g	102	<0.100	7.70	n/a	n/a	n/a	n/a	0.247	n/a	
S09V001524		WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.123	n/a	n/a	n/a	n/a	0.123	n/a	U
S09V001524		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.247	n/a	n/a	n/a	n/a	0.247	n/a	U
S09V001524		WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	10.5	n/a	n/a	n/a	n/a	0.0740	n/a	
S09V001524		WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0740	n/a	n/a	n/a	n/a	0.0740	n/a	U
S09V001524		WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	0.0909	n/a	n/a	n/a	n/a	7.40E-03	n/a	
S09V001524		WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	0.0165	n/a	n/a	n/a	n/a	0.0123	n/a	B
S09V001524		WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.247	n/a	n/a	n/a	n/a	0.247	n/a	U
S09V001524		WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.247	n/a	n/a	n/a	n/a	0.247	n/a	U
S09V001524		WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	0.0124	n/a	n/a	n/a	n/a	0.0123	n/a	B
S09V001524		WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<4.93E-03	n/a	n/a	n/a	n/a	4.93E-03	n/a	U
S09V001524		WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0123	n/a	n/a	n/a	n/a	0.0123	n/a	U
S09V001524		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	1.69E-05	n/a	n/a	n/a	n/a	3.70E-06	n/a	
S09V001524		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.47E-07	n/a	n/a	n/a	n/a	2.47E-07	n/a	U
S09V001524		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.23E-07	n/a	n/a	n/a	n/a	1.23E-07	n/a	U
S09V001524		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	1.78E-05	n/a	n/a	n/a	n/a	2.71E-07	n/a	
S09V001524		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<9.86E-08	n/a	n/a	n/a	n/a	9.86E-08	n/a	U
S09V001524		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	2.51E-03	n/a	n/a	n/a	n/a	1.36E-05	n/a	

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 141-143

Customer Sample ID: B20VK7A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001040			%WATERA	%WATER-APD	%	n/a	n/a	17.06	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001040			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.26E-05	n/a	n/a	n/a	n/a	7.36E-06	38.31	
S09V001040			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.60E-07	n/a	n/a	n/a	n/a	3.60E-07	n/a	U
S09V001040			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<1.01E-06	n/a	n/a	n/a	n/a	1.01E-06	n/a	U
S09V001040			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.84E-07	n/a	n/a	n/a	n/a	4.84E-07	n/a	U
S09V001040			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.72E-06	n/a	n/a	n/a	n/a	1.72E-06	n/a	U
S09V001040			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.22E-06	n/a	n/a	n/a	n/a	1.22E-06	n/a	U
S09V001040			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.18E-07	n/a	n/a	n/a	n/a	6.18E-07	n/a	U
S09V001040			15092-94-1	Lead-212	uCi/g	n/a	n/a	7.21E-07	n/a	n/a	n/a	n/a	5.26E-07	34.76	
S09V001040			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	9.21E-07	n/a	n/a	n/a	n/a	7.78E-07	37.12	B
S09V001040			WT%SOLID	Weight percent solids	%	n/a	n/a	82.9	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001526			CONDUCT	Conductivity	uMHO/cm	102	<1.00	223	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20VK7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001528		AV	7440-22-4	Silver	ug/g	86.0	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001528		AV	7429-90-5	Aluminum	ug/g	85.9	<0.0300	1.19E+04	n/a	n/a	n/a	n/a	10.5	n/a	
S09V001528		AV	7440-38-2	Arsenic	ug/g	84.0	<0.0500	<21.0	n/a	n/a	n/a	n/a	21.0	n/a	U
S09V001528		AV	7440-42-8	Boron	ug/g	93.8	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001528		AV	7440-39-3	Barium	ug/g	80.7	<3.00E-03	121	n/a	n/a	n/a	n/a	1.05	n/a	N
S09V001528		AV	7440-41-7	Beryllium	ug/g	80.3	<1.00E-03	0.413	n/a	n/a	n/a	n/a	0.350	n/a	B
S09V001528		AV	7440-69-9	Bismuth	ug/g	92.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001528		AV	7440-70-2	Calcium	ug/g	88.4	0.0541	1.25E+04	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001528		AV	7440-43-9	Cadmium	ug/g	86.1	<5.00E-03	<1.75	n/a	n/a	n/a	n/a	1.75	n/a	U
S09V001528		AV	7440-48-4	Cobalt	ug/g	80.9	<0.0100	10.6	n/a	n/a	n/a	n/a	3.50	n/a	B
S09V001528		AV	7440-47-3	Chromium	ug/g	85.9	<5.00E-03	16.3	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001528		AV	7440-50-8	Copper	ug/g	80.0	<5.00E-03	16.8	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001528		AV	7439-89-6	Iron	ug/g	80.3	5.33E-03	1.93E+04	n/a	n/a	n/a	n/a	1.75	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 141-143
Customer Sample ID: B20VK7A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001528		AV	7440-09-7	Potassium	ug/g	87.2	<0.500	1.57E+03	n/a	n/a	n/a	n/a	175	n/a	B
S09V001528		AV	7439-93-2	Lithium	ug/g	80.8	<3.00E-03	13.1	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001528		AV	7439-95-4	Magnesium	ug/g	82.8	<0.0500	7.15E+03	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001528		AV	7439-96-5	Manganese	ug/g	83.2	<3.00E-03	439	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001528		AV	7439-98-7	Molybdenum	ug/g	81.3	<0.0200	<7.00	n/a	n/a	n/a	n/a	7.00	n/a	U
S09V001528		AV	7440-23-5	Sodium	ug/g	97.4	<0.100	153	n/a	n/a	n/a	n/a	35.0	n/a	B
S09V001528		AV	7440-02-0	Nickel	ug/g	81.9	<0.0200	21.9	n/a	n/a	n/a	n/a	7.00	n/a	B
S09V001528		AV	7723-14-0	Phosphorus	ug/g	96.1	<0.0500	525	n/a	n/a	n/a	n/a	17.5	n/a	
S09V001528		AV	7439-92-1	Lead	ug/g	89.3	<0.0500	22.0	n/a	n/a	n/a	n/a	17.5	n/a	B
S09V001528		AV	7704-34-9	Sulfur	ug/g	82.4	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001528		AV	7440-36-0	Antimony	ug/g	80.8	<0.0500	20.5	n/a	n/a	n/a	n/a	17.5	n/a	BN
S09V001528		AV	7782-49-2	Selenium	ug/g	82.5	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	UN
S09V001528		AV	7440-21-3	Silicon	ug/g	84.1	<0.0300	21.4	n/a	n/a	n/a	n/a	10.5	n/a	BN
S09V001528		AV	7440-31-5	Tin	ug/g	80.9	<0.0300	<10.5	n/a	n/a	n/a	n/a	10.5	n/a	U
S09V001528		AV	7440-24-6	Strontium	ug/g	80.4	<3.00E-03	36.2	n/a	n/a	n/a	n/a	1.05	n/a	
S09V001528		AV	7440-32-6	Titanium	ug/g	88.8	<5.00E-03	620	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001528		AV	7440-28-0	Thallium	ug/g	96.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001528		AV	7440-61-1	Uranium	ug/g	91.3	<0.100	<35.0	n/a	n/a	n/a	n/a	35.0	n/a	U
S09V001528		AV	7440-62-2	Vanadium	ug/g	83.0	<5.00E-03	30.8	n/a	n/a	n/a	n/a	1.75	n/a	
S09V001528		AV	7440-65-5	Yttrium	ug/g	81.1	<2.00E-03	8.36	n/a	n/a	n/a	n/a	0.700	n/a	
S09V001528		AV	7440-66-6	Zinc	ug/g	81.1	7.33E-03	49.9	n/a	n/a	n/a	n/a	1.75	n/a	C
S09V001528		AV	7440-67-7	Zirconium	ug/g	81.6	<5.00E-03	7.24	n/a	n/a	n/a	n/a	1.75	n/a	B
S09V001528		AV	13994-20-2	Neptunium-237	ug/g	117	<1.06E-05	7.76E-05	n/a	n/a	n/a	n/a	7.41E-05	n/a	B
S09V001528		AV	U-238	Uranium-238	ug/g	108	<1.10E-04	0.710	n/a	n/a	n/a	n/a	7.69E-04	n/a	
S09V001528		AV	15117-48-3	Plutonium-239	ug/g	107	<1.38E-04	<9.65E-04	n/a	n/a	n/a	n/a	9.65E-04	n/a	U
S09V001528		AV	14596-10-2	Americium-241	ug/g	105	<1.60E-05	<1.12E-04	n/a	n/a	n/a	n/a	1.12E-04	n/a	U
S09V001528		AV	14133-76-7	Technetium-99	ug/g	114	<3.00E-05	<3.50E-04	n/a	n/a	n/a	n/a	3.50E-04	n/a	U

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M - RPD Outside Range
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 141-143
Customer Sample ID: B20VK7A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001527	WV	12587-46-1	Gross alpha	uCi/g	105	<5.57E-07	<6.67E-07	n/a	n/a	n/a	n/a	6.67E-07	n/a	U
S09V001527	WV	12587-47-2	Gross beta	uCi/g	93.6	<1.74E-06	<1.86E-06	n/a	n/a	n/a	n/a	1.86E-06	n/a	U
S09V001527	WV	16984-48-8	Fluoride	ug/g	97.9	<1.61E-03	0.612	n/a	n/a	n/a	n/a	2.10E-03	n/a	
S09V001527	WV	16887-00-6	Chloride	ug/g	100	<9.98E-03	6.02	n/a	n/a	n/a	n/a	0.143	n/a	
S09V001527	WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.195	n/a	n/a	n/a	n/a	0.0250	n/a	B
S09V001527	WV	14808-79-8	Sulfate	ug/g	101	<0.0187	19.0	n/a	n/a	n/a	n/a	0.268	n/a	
S09V001527	WV	24959-67-9	Bromide	ug/g	101	<0.0580	0.121	n/a	n/a	n/a	n/a	0.0755	n/a	B
S09V001527	WV	14797-55-8	Nitrate	ug/g	99.1	<0.0208	42.2	n/a	n/a	n/a	n/a	0.298	n/a	
S09V001527	WV	14265-44-2	Phosphate	ug/g	98.3	<0.0167	0.269	n/a	n/a	n/a	n/a	0.0217	n/a	
S09V001527	WV	7440-22-4	Silver	ug/g	91.9	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527	WV	7429-90-5	Aluminum	ug/g	97.8	<0.0300	0.154	n/a	n/a	n/a	n/a	0.0781	n/a	B
S09V001527	WV	7440-38-2	Arsenic	ug/g	99.7	<0.0500	<0.156	n/a	n/a	n/a	n/a	0.156	n/a	U
S09V001527	WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0781	n/a	n/a	n/a	n/a	0.0781	n/a	U
S09V001527	WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0427	n/a	n/a	n/a	n/a	7.81E-03	n/a	B
S09V001527	WV	7440-41-7	Beryllium	ug/g	96.5	<1.00E-03	<2.60E-03	n/a	n/a	n/a	n/a	2.60E-03	n/a	U
S09V001527	WV	7440-69-9	Bismuth	ug/g	95.3	<0.100	<0.260	n/a	n/a	n/a	n/a	0.260	n/a	U
S09V001527	WV	7440-70-2	Calcium	ug/g	102	<0.0500	20.2	n/a	n/a	n/a	n/a	0.130	n/a	
S09V001527	WV	7440-43-9	Cadmium	ug/g	95.4	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527	WV	7440-48-4	Cobalt	ug/g	94.7	<0.0100	<0.0260	n/a	n/a	n/a	n/a	0.0260	n/a	U
S09V001527	WV	7440-47-3	Chromium	ug/g	95.0	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527	WV	7440-50-8	Copper	ug/g	98.8	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527	WV	7439-89-6	Iron	ug/g	95.1	<5.00E-03	0.0451	n/a	n/a	n/a	n/a	0.0130	n/a	B
S09V001527	WV	7440-09-7	Potassium	ug/g	108	<0.500	4.86	n/a	n/a	n/a	n/a	1.30	n/a	B
S09V001527	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	<7.81E-03	n/a	n/a	n/a	n/a	7.81E-03	n/a	U
S09V001527	WV	7439-95-4	Magnesium	ug/g	97.1	<0.0500	6.51	n/a	n/a	n/a	n/a	0.130	n/a	
S09V001527	WV	7439-96-5	Manganese	ug/g	94.7	<3.00E-03	<7.81E-03	n/a	n/a	n/a	n/a	7.81E-03	n/a	U
S09V001527	WV	7439-98-7	Molybdenum	ug/g	99.3	<0.0200	<0.0521	n/a	n/a	n/a	n/a	0.0521	n/a	U
S09V001527	WV	7440-23-5	Sodium	ug/g	99.6	<0.100	23.6	n/a	n/a	n/a	n/a	0.260	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090810

Core Number: C7184

Sample Depth: 141-143

Customer Sample ID: B20VK7A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001527		WV	7440-02-0	Nickel	ug/g	94.0	<0.0200	<0.0521	n/a	n/a	n/a	n/a	0.0521	n/a	U
S09V001527		WV	7723-14-0	Phosphorus	ug/g	96.7	<0.0500	<0.130	n/a	n/a	n/a	n/a	0.130	n/a	U
S09V001527		WV	7439-92-1	Lead	ug/g	98.0	<0.0500	<0.130	n/a	n/a	n/a	n/a	0.130	n/a	U
S09V001527		WV	7704-34-9	Sulfur	ug/g	102	<0.100	6.60	n/a	n/a	n/a	n/a	0.260	n/a	
S09V001527		WV	7440-36-0	Antimony	ug/g	97.5	<0.0500	<0.130	n/a	n/a	n/a	n/a	0.130	n/a	U
S09V001527		WV	7782-49-2	Selenium	ug/g	101	<0.100	<0.260	n/a	n/a	n/a	n/a	0.260	n/a	U
S09V001527		WV	7440-21-3	Silicon	ug/g	94.1	<0.0300	9.35	n/a	n/a	n/a	n/a	0.0781	n/a	
S09V001527		WV	7440-31-5	Tin	ug/g	98.8	<0.0300	<0.0781	n/a	n/a	n/a	n/a	0.0781	n/a	U
S09V001527		WV	7440-24-6	Strontium	ug/g	96.8	<3.00E-03	0.0992	n/a	n/a	n/a	n/a	7.81E-03	n/a	
S09V001527		WV	7440-32-6	Titanium	ug/g	99.4	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527		WV	7440-28-0	Thallium	ug/g	96.1	<0.100	<0.260	n/a	n/a	n/a	n/a	0.260	n/a	U
S09V001527		WV	7440-61-1	Uranium	ug/g	104	<0.100	<0.260	n/a	n/a	n/a	n/a	0.260	n/a	U
S09V001527		WV	7440-62-2	Vanadium	ug/g	97.6	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527		WV	7440-65-5	Yttrium	ug/g	95.3	<2.00E-03	<5.21E-03	n/a	n/a	n/a	n/a	5.21E-03	n/a	U
S09V001527		WV	7440-66-6	Zinc	ug/g	97.0	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527		WV	7440-67-7	Zirconium	ug/g	96.8	<5.00E-03	<0.0130	n/a	n/a	n/a	n/a	0.0130	n/a	U
S09V001527		WV	14133-76-7	Technetium-99	ug/g	113	<3.00E-06	<3.91E-06	n/a	n/a	n/a	n/a	3.91E-06	n/a	U
S09V001527		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.60E-07	n/a	n/a	n/a	n/a	2.60E-07	n/a	U
S09V001527		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	2.17E-07	n/a	n/a	n/a	n/a	1.30E-07	n/a	
S09V001527		WV	15117-96-1	Uranium-235	ug/g	98.7	<1.10E-07	1.85E-05	n/a	n/a	n/a	n/a	2.86E-07	n/a	
S09V001527		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<1.04E-07	n/a	n/a	n/a	n/a	1.04E-07	n/a	U
S09V001527		WV	U-238	Uranium-238	ug/g	100	<5.50E-06	2.55E-03	n/a	n/a	n/a	n/a	1.43E-05	n/a	

Customer Sample ID: B20VK7B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001041			%WATERA	%WATER-APD	%	n/a	n/a	18.98	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001041			WT%SOLID	Weight percent solids	%	n/a	n/a	81.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001041			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.51E-07	n/a	n/a	n/a	n/a	1.51E-07	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090810
Core Number: C7184
Sample Depth: 141-143

Customer Sample ID: B20VK7B AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S10V001186		AV	12587-46-1	Gross alpha	uCi/g	104	5.71E-05	3.53E-05	n/a	n/a	n/a	n/a	1.03E-05	706.688	B
S10V001186		AV	12587-47-2	Gross beta	uCi/g	96.3	<5.72E-05	<5.65E-05	n/a	n/a	n/a	n/a	5.65E-05	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090811

Core Number: C7186

Sample Depth: 105-107

Customer Sample ID: B20733A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001186			%WATERA	%WATER-APD	%	n/a	n/a	15.02	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001186			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.66E-05	n/a	n/a	n/a	n/a	6.64E-06	27.51	
S09V001186			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.51E-07	n/a	n/a	n/a	n/a	3.51E-07	n/a	U
S09V001186			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.38E-07	n/a	n/a	n/a	n/a	9.38E-07	n/a	U
S09V001186			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.30E-07	n/a	n/a	n/a	n/a	4.30E-07	n/a	U
S09V001186			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.61E-06	n/a	n/a	n/a	n/a	1.61E-06	n/a	U
S09V001186			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.14E-06	n/a	n/a	n/a	n/a	1.14E-06	n/a	U
S09V001186			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<5.67E-07	n/a	n/a	n/a	n/a	5.67E-07	n/a	U
S09V001186			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.29E-06	n/a	n/a	n/a	n/a	6.09E-07	17.55	
S09V001186			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.18E-06	n/a	n/a	n/a	n/a	7.13E-07	37.70	
S09V001186			WT%SOLID	Weight percent solids	%	n/a	n/a	85.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001186			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.28E-07	n/a	n/a	n/a	n/a	1.28E-07	n/a	U
S09V001529			CONDUCT	Conductivity	uMHO/cm	90.2	<1.00	313	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20733A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001531		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<7.28E-06	<7.23E-06	n/a	n/a	97.6	7.28E-06	n/a	U
S09V001531		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	3.79E-05	4.04E-05	3.92E-05	6.36	95.9	2.08E-05	66.870	
S09V001531		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<3.49	<3.47	n/a	n/a	0.0	3.49	n/a	UN
S09V001531		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	2.19E+04	1.96E+04	2.08E+04	11.3	-4.79E+03	20.9	n/a	
S09V001531		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<41.9	<41.6	n/a	n/a	0.0	41.9	n/a	UN
S09V001531		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<20.9	<20.8	n/a	n/a	98.1	20.9	n/a	U
S09V001531		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	132	121	127	9.08	102	2.09	n/a	
S09V001531		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	<0.698	<0.693	n/a	n/a	106	0.698	n/a	U
S09V001531		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<69.8	<69.3	n/a	n/a	0.0	69.8	n/a	UN
S09V001531		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.58E+04	1.50E+04	1.54E+04	5.31	-1.87E+03	34.9	n/a	
S09V001531		AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<3.49	<3.47	n/a	n/a	83.6	3.49	n/a	U
S09V001531		AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	12.6	8.77	10.7	36.1	83.1	6.98	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 105-107
Customer Sample ID: B20733A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001531	AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	21.5	19.8	20.6	8.58	100	3.49	n/a	CB
S09V001531	AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	21.9	19.3	20.6	12.5	99.4	3.49	n/a	B
S09V001531	AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.54E+04	2.35E+04	2.45E+04	7.48	-6.32E+03	3.49	n/a	
S09V001531	AV	7440-09-7	Potassium	ug/g	80.5	<0.500	3.25E+03	2.78E+03	3.01E+03	15.5	452	349	n/a	B
S09V001531	AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	22.6	19.9	21.2	12.7	113	2.09	n/a	
S09V001531	AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	8.50E+03	7.88E+03	8.19E+03	7.59	-1.66E+03	34.9	n/a	
S09V001531	AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	526	469	497	11.4	154	2.09	n/a	
S09V001531	AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<14.0	<13.9	n/a	n/a	84.1	14.0	n/a	U
S09V001531	AV	7440-23-5	Sodium	ug/g	85.0	<0.100	347	302	325	13.8	273	69.8	n/a	B
S09V001531	AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	23.6	26.6	25.1	11.9	98.4	14.0	n/a	B
S09V001531	AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	574	568	571	0.950	133	34.9	n/a	
S09V001531	AV	7439-92-1	Lead	ug/g	95.4	0.0619	47.0	44.3	45.7	5.89	80.3	34.9	n/a	CB
S09V001531	AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<69.8	<69.3	n/a	n/a	208	69.8	n/a	UN
S09V001531	AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<34.9	<34.7	n/a	n/a	0.0	34.9	n/a	UN
S09V001531	AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<69.8	<69.3	n/a	n/a	0.0	69.8	n/a	UN
S09V001531	AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	<20.9	<20.8	n/a	n/a	0.0	20.9	n/a	UN
S09V001531	AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<20.9	<20.8	n/a	n/a	86.3	20.9	n/a	U
S09V001531	AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	48.0	45.4	46.7	5.54	104	2.09	n/a	
S09V001531	AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	909	858	884	5.71	166	3.49	n/a	
S09V001531	AV	7440-28-0	Thallium	ug/g	92.5	<0.100	69.9	<69.3	n/a	n/a	78.8	69.8	n/a	B
S09V001531	AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<69.8	<69.3	n/a	n/a	76.5	69.8	n/a	U
S09V001531	AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	46.3	42.6	44.5	8.32	97.7	3.49	n/a	
S09V001531	AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	13.4	12.8	13.1	4.64	81.4	1.40	n/a	B
S09V001531	AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	61.2	55.7	58.4	9.33	85.7	3.49	n/a	C
S09V001531	AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	14.1	13.8	13.9	2.53	78.9	3.49	n/a	B
S09V001531	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.25E-05	<9.19E-05	n/a	n/a	116	9.25E-05	n/a	U
S09V001531	AV	U-238	Uranium-238	ug/g	113	<2.75E-04	1.12	1.03	1.07	7.98	93.9	9.60E-04	n/a	
S09V001531	AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<1.20E-03	<1.20E-03	n/a	n/a	108	1.20E-03	n/a	U

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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 105-107
Customer Sample ID: B20733A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001531		AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<1.40E-04	<1.39E-04	n/a	n/a	108	1.40E-04	n/a	U
S09V001531		AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	5.03E-04	4.09E-04	4.56E-04	20.7	119	6.98E-05	n/a	

Customer Sample ID: B20733A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001530		WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	<9.76E-07	n/a	n/a	n/a	n/a	9.76E-07	n/a	U
S09V001530		WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	1.21E-05	n/a	n/a	n/a	n/a	1.71E-06	18.463	
S09V001530		WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	0.381	n/a	n/a	n/a	n/a	2.00E-03	n/a	
S09V001530		WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	6.95	n/a	n/a	n/a	n/a	0.136	n/a	
S09V001530		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.610	n/a	n/a	n/a	n/a	0.0238	n/a	
S09V001530		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	39.7	n/a	n/a	n/a	n/a	0.255	n/a	
S09V001530		WV	24959-67-9	Bromide	ug/g	100	<0.0580	0.297	n/a	n/a	n/a	n/a	0.0719	n/a	B
S09V001530		WV	14797-55-8	Nitrate	ug/g	99.7	<0.0208	112	n/a	n/a	n/a	n/a	0.284	n/a	
S09V001530		WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	0.171	n/a	n/a	n/a	n/a	0.0207	n/a	B
S09V001530		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530		WV	7429-90-5	Aluminum	ug/g	97.5	<0.0300	0.0686	n/a	n/a	n/a	n/a	0.0465	n/a	B
S09V001530		WV	7440-38-2	Arsenic	ug/g	98.9	<0.0500	<0.0930	n/a	n/a	n/a	n/a	0.0930	n/a	U
S09V001530		WV	7440-42-8	Boron	ug/g	99.8	<0.0300	<0.0465	n/a	n/a	n/a	n/a	0.0465	n/a	U
S09V001530		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0328	n/a	n/a	n/a	n/a	4.65E-03	n/a	B
S09V001530		WV	7440-41-7	Beryllium	ug/g	98.6	<1.00E-03	<1.55E-03	n/a	n/a	n/a	n/a	1.55E-03	n/a	U
S09V001530		WV	7440-69-9	Bismuth	ug/g	96.4	<0.100	<0.155	n/a	n/a	n/a	n/a	0.155	n/a	U
S09V001530		WV	7440-70-2	Calcium	ug/g	101	<0.0500	40.7	n/a	n/a	n/a	n/a	0.0775	n/a	
S09V001530		WV	7440-43-9	Cadmium	ug/g	100	<5.00E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530		WV	7440-48-4	Cobalt	ug/g	100	<0.0100	<0.0155	n/a	n/a	n/a	n/a	0.0155	n/a	U
S09V001530		WV	7440-47-3	Chromium	ug/g	101	<5.00E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530		WV	7440-50-8	Copper	ug/g	95.6	<5.00E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530		WV	7439-89-6	Iron	ug/g	99.5	8.06E-03	0.180	n/a	n/a	n/a	n/a	7.75E-03	n/a	CM
S09V001530		WV	7440-09-7	Potassium	ug/g	91.1	<0.500	6.66	n/a	n/a	n/a	n/a	0.775	n/a	B

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U - Less Than Detection Limit
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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 105-107
Customer Sample ID: B20733A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001530	WV	7439-93-2	Lithium	ug/g	95.9	<3.00E-03	6.14E-03	n/a	n/a	n/a	n/a	4.65E-03	n/a	B
S09V001530	WV	7439-95-4	Magnesium	ug/g	96.5	<0.0500	7.67	n/a	n/a	n/a	n/a	0.0775	n/a	
S09V001530	WV	7439-96-5	Manganese	ug/g	99.8	<3.00E-03	5.50E-03	n/a	n/a	n/a	n/a	4.65E-03	n/a	B
S09V001530	WV	7439-98-7	Molybdenum	ug/g	101	<0.0200	<0.0310	n/a	n/a	n/a	n/a	0.0310	n/a	U
S09V001530	WV	7440-23-5	Sodium	ug/g	94.4	<0.100	31.5	n/a	n/a	n/a	n/a	0.155	n/a	
S09V001530	WV	7440-02-0	Nickel	ug/g	98.3	<0.0200	<0.0310	n/a	n/a	n/a	n/a	0.0310	n/a	U
S09V001530	WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	0.138	n/a	n/a	n/a	n/a	0.0775	n/a	B
S09V001530	WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0775	n/a	n/a	n/a	n/a	0.0775	n/a	U
S09V001530	WV	7704-34-9	Sulfur	ug/g	99.9	<0.100	14.4	n/a	n/a	n/a	n/a	0.155	n/a	
S09V001530	WV	7440-36-0	Antimony	ug/g	98.5	<0.0500	<0.0775	n/a	n/a	n/a	n/a	0.0775	n/a	U
S09V001530	WV	7782-49-2	Selenium	ug/g	100	<0.100	<0.155	n/a	n/a	n/a	n/a	0.155	n/a	U
S09V001530	WV	7440-21-3	Silicon	ug/g	94.2	<0.0300	11.2	n/a	n/a	n/a	n/a	0.0465	n/a	
S09V001530	WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0465	n/a	n/a	n/a	n/a	0.0465	n/a	U
S09V001530	WV	7440-24-6	Strontium	ug/g	96.0	<3.00E-03	0.173	n/a	n/a	n/a	n/a	4.65E-03	n/a	
S09V001530	WV	7440-32-6	Titanium	ug/g	98.0	<5.00E-03	7.85E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	B
S09V001530	WV	7440-28-0	Thallium	ug/g	96.0	<0.100	<0.155	n/a	n/a	n/a	n/a	0.155	n/a	U
S09V001530	WV	7440-61-1	Uranium	ug/g	98.3	<0.100	<0.155	n/a	n/a	n/a	n/a	0.155	n/a	U
S09V001530	WV	7440-62-2	Vanadium	ug/g	101	<5.00E-03	0.0119	n/a	n/a	n/a	n/a	7.75E-03	n/a	B
S09V001530	WV	7440-65-5	Yttrium	ug/g	94.6	<2.00E-03	<3.10E-03	n/a	n/a	n/a	n/a	3.10E-03	n/a	U
S09V001530	WV	7440-66-6	Zinc	ug/g	100	<5.00E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530	WV	7440-67-7	Zirconium	ug/g	97.9	5.56E-03	<7.75E-03	n/a	n/a	n/a	n/a	7.75E-03	n/a	U
S09V001530	WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	2.66E-04	n/a	n/a	n/a	n/a	3.72E-06	n/a	
S09V001530	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.24E-07	n/a	n/a	n/a	n/a	1.24E-07	n/a	U
S09V001530	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<6.20E-08	n/a	n/a	n/a	n/a	6.20E-08	n/a	U
S09V001530	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	4.26E-06	n/a	n/a	n/a	95.6	1.36E-07	n/a	
S09V001530	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	5.45E-08	n/a	n/a	n/a	n/a	4.96E-08	n/a	
S09V001530	WV	U-238	Uranium-238	ug/g	103	<5.50E-06	6.06E-04	n/a	n/a	n/a	97.7	6.82E-06	n/a	

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C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090811

Core Number: C7186

Sample Depth: 128-130

Customer Sample ID: B20735A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001201			%WATERA	%WATER-APD	%	n/a	n/a	16.10	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001201			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.55E-05	n/a	n/a	n/a	n/a	7.40E-06	31.99	
S09V001201			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.63E-07	n/a	n/a	n/a	n/a	3.63E-07	n/a	U
S09V001201			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.78E-07	n/a	n/a	n/a	n/a	9.78E-07	n/a	U
S09V001201			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.54E-07	n/a	n/a	n/a	n/a	4.54E-07	n/a	U
S09V001201			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.85E-06	n/a	n/a	n/a	n/a	1.85E-06	n/a	U
S09V001201			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.13E-06	n/a	n/a	n/a	n/a	1.13E-06	n/a	U
S09V001201			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.39E-07	n/a	n/a	n/a	n/a	6.39E-07	n/a	U
S09V001201			14913-50-9	Thallium-208	uCi/g	n/a	n/a	4.34E-07	n/a	n/a	n/a	n/a	3.11E-07	47.41	
S09V001201			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.62E-06	n/a	n/a	n/a	n/a	6.48E-07	20.10	
S09V001201			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.03E-06	n/a	n/a	n/a	n/a	7.60E-07	45.39	
S09V001201			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.13E-06	n/a	n/a	n/a	n/a	1.06E-06	38.50	B
S09V001201			WT%SOLID	Weight percent solids	%	n/a	n/a	83.9	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001201			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.35E-07	n/a	n/a	n/a	n/a	1.35E-07	n/a	U
S09V001532			CONDUCT	Conductivity	uMHO/cm	90.2	<1.00	323	298	310	8.05	n/a	1.00	n/a	

Customer Sample ID: B20735A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001534		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<7.27E-06	n/a	n/a	n/a	n/a	7.27E-06	n/a	U
S09V001534		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	4.57E-05	n/a	n/a	n/a	n/a	2.08E-05	55.734	
S09V001534		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	UN
S09V001534		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	2.02E+04	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001534		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	UN
S09V001534		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001534		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	151	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001534		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	0.742	n/a	n/a	n/a	n/a	0.697	n/a	B
S09V001534		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001534		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.60E+04	n/a	n/a	n/a	n/a	34.9	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 128-130
Customer Sample ID: B20735A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001534	AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<3.49	n/a	n/a	n/a	n/a	3.49	n/a	U
S09V001534	AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	11.5	n/a	n/a	n/a	n/a	6.97	n/a	B
S09V001534	AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	22.0	n/a	n/a	n/a	n/a	3.49	n/a	CB
S09V001534	AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	23.0	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001534	AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.48E+04	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001534	AV	7440-09-7	Potassium	ug/g	80.5	<0.500	2.57E+03	n/a	n/a	n/a	n/a	349	n/a	B
S09V001534	AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	21.2	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001534	AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	9.02E+03	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001534	AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	427	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001534	AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001534	AV	7440-23-5	Sodium	ug/g	85.0	<0.100	262	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001534	AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	28.1	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001534	AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	557	n/a	n/a	n/a	n/a	34.9	n/a	
S09V001534	AV	7439-92-1	Lead	ug/g	95.4	0.0619	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	U
S09V001534	AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001534	AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<34.9	n/a	n/a	n/a	n/a	34.9	n/a	UN
S09V001534	AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001534	AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	UN
S09V001534	AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001534	AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	47.1	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001534	AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	852	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001534	AV	7440-28-0	Thallium	ug/g	92.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001534	AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001534	AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	42.5	n/a	n/a	n/a	n/a	3.49	n/a	
S09V001534	AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	11.9	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001534	AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	63.8	n/a	n/a	n/a	n/a	3.49	n/a	C
S09V001534	AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	9.44	n/a	n/a	n/a	n/a	3.49	n/a	B
S09V001534	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.24E-05	n/a	n/a	n/a	n/a	9.24E-05	n/a	U

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B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090811

Core Number: C7186

Sample Depth: 128-130

Customer Sample ID: B20735A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001534		AV	U-238	Uranium-238	ug/g	113	<2.75E-04	1.36	n/a	n/a	n/a	n/a	9.59E-04	n/a	
S09V001534		AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001534		AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001534		AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	2.51E-04	n/a	n/a	n/a	n/a	6.97E-05	n/a	

Customer Sample ID: B20735A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001533		WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	<7.48E-07	n/a	n/a	n/a	n/a	7.48E-07	n/a	U
S09V001533		WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	1.28E-05	n/a	n/a	n/a	n/a	1.75E-06	17.935	
S09V001533		WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	0.733	n/a	n/a	n/a	n/a	2.04E-03	n/a	
S09V001533		WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	4.51	n/a	n/a	n/a	n/a	0.139	n/a	
S09V001533		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.253	n/a	n/a	n/a	n/a	0.0244	n/a	
S09V001533		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	48.6	n/a	n/a	n/a	n/a	0.261	n/a	
S09V001533		WV	24959-67-9	Bromide	ug/g	100	<0.0580	<0.0736	n/a	n/a	n/a	n/a	0.0736	n/a	U
S09V001533		WV	14797-55-8	Nitrate	ug/g	99.7	<0.0208	91.0	n/a	n/a	n/a	n/a	0.290	n/a	
S09V001533		WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	0.249	n/a	n/a	n/a	n/a	0.0212	n/a	
S09V001533		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U
S09V001533		WV	7429-90-5	Aluminum	ug/g	97.5	<0.0300	0.135	n/a	n/a	n/a	n/a	0.0476	n/a	B
S09V001533		WV	7440-38-2	Arsenic	ug/g	98.9	<0.0500	<0.0951	n/a	n/a	n/a	n/a	0.0951	n/a	U
S09V001533		WV	7440-42-8	Boron	ug/g	99.8	<0.0300	<0.0476	n/a	n/a	n/a	n/a	0.0476	n/a	U
S09V001533		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0338	n/a	n/a	n/a	n/a	4.76E-03	n/a	B
S09V001533		WV	7440-41-7	Beryllium	ug/g	98.6	<1.00E-03	<1.59E-03	n/a	n/a	n/a	n/a	1.59E-03	n/a	U
S09V001533		WV	7440-69-9	Bismuth	ug/g	96.4	<0.100	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001533		WV	7440-70-2	Calcium	ug/g	101	<0.0500	37.5	n/a	n/a	n/a	n/a	0.0793	n/a	
S09V001533		WV	7440-43-9	Cadmium	ug/g	100	<5.00E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U
S09V001533		WV	7440-48-4	Cobalt	ug/g	100	<0.0100	<0.0159	n/a	n/a	n/a	n/a	0.0159	n/a	U
S09V001533		WV	7440-47-3	Chromium	ug/g	101	<5.00E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U
S09V001533		WV	7440-50-8	Copper	ug/g	95.6	<5.00E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 128-130
Customer Sample ID: B20735A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001533	WV	7439-89-6	Iron	ug/g	99.5	8.06E-03	0.177	n/a	n/a	n/a	n/a	7.93E-03	n/a	CM
S09V001533	WV	7440-09-7	Potassium	ug/g	91.1	<0.500	5.34	n/a	n/a	n/a	n/a	0.793	n/a	B
S09V001533	WV	7439-93-2	Lithium	ug/g	95.9	<3.00E-03	6.28E-03	n/a	n/a	n/a	n/a	4.76E-03	n/a	B
S09V001533	WV	7439-95-4	Magnesium	ug/g	96.5	<0.0500	8.64	n/a	n/a	n/a	n/a	0.0793	n/a	
S09V001533	WV	7439-96-5	Manganese	ug/g	99.8	<3.00E-03	<4.76E-03	n/a	n/a	n/a	n/a	4.76E-03	n/a	U
S09V001533	WV	7439-98-7	Molybdenum	ug/g	101	<0.0200	<0.0317	n/a	n/a	n/a	n/a	0.0317	n/a	U
S09V001533	WV	7440-23-5	Sodium	ug/g	94.4	<0.100	31.2	n/a	n/a	n/a	n/a	0.159	n/a	
S09V001533	WV	7440-02-0	Nickel	ug/g	98.3	<0.0200	<0.0317	n/a	n/a	n/a	n/a	0.0317	n/a	U
S09V001533	WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	0.141	n/a	n/a	n/a	n/a	0.0793	n/a	B
S09V001533	WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0793	n/a	n/a	n/a	n/a	0.0793	n/a	U
S09V001533	WV	7704-34-9	Sulfur	ug/g	99.9	<0.100	17.1	n/a	n/a	n/a	n/a	0.159	n/a	
S09V001533	WV	7440-36-0	Antimony	ug/g	98.5	<0.0500	<0.0793	n/a	n/a	n/a	n/a	0.0793	n/a	U
S09V001533	WV	7782-49-2	Selenium	ug/g	100	<0.100	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001533	WV	7440-21-3	Silicon	ug/g	94.2	<0.0300	11.6	n/a	n/a	n/a	n/a	0.0476	n/a	
S09V001533	WV	7440-31-5	Tin	ug/g	102	<0.0300	0.0498	n/a	n/a	n/a	n/a	0.0476	n/a	B
S09V001533	WV	7440-24-6	Strontium	ug/g	96.0	<3.00E-03	0.134	n/a	n/a	n/a	n/a	4.76E-03	n/a	
S09V001533	WV	7440-32-6	Titanium	ug/g	98.0	<5.00E-03	0.0111	n/a	n/a	n/a	n/a	7.93E-03	n/a	B
S09V001533	WV	7440-28-0	Thallium	ug/g	96.0	<0.100	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001533	WV	7440-61-1	Uranium	ug/g	98.3	<0.100	<0.159	n/a	n/a	n/a	n/a	0.159	n/a	U
S09V001533	WV	7440-62-2	Vanadium	ug/g	101	<5.00E-03	0.0107	n/a	n/a	n/a	n/a	7.93E-03	n/a	B
S09V001533	WV	7440-65-5	Yttrium	ug/g	94.6	<2.00E-03	<3.17E-03	n/a	n/a	n/a	n/a	3.17E-03	n/a	U
S09V001533	WV	7440-66-6	Zinc	ug/g	100	<5.00E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U
S09V001533	WV	7440-67-7	Zirconium	ug/g	97.9	5.56E-03	<7.93E-03	n/a	n/a	n/a	n/a	7.93E-03	n/a	U
S09V001533	WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	1.41E-04	n/a	n/a	n/a	n/a	3.81E-06	n/a	
S09V001533	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.27E-07	n/a	n/a	n/a	n/a	1.27E-07	n/a	U
S09V001533	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<6.34E-08	n/a	n/a	n/a	n/a	6.34E-08	n/a	U
S09V001533	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	8.69E-06	n/a	n/a	n/a	n/a	1.40E-07	n/a	
S09V001533	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.07E-08	n/a	n/a	n/a	n/a	5.07E-08	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 128-130
Customer Sample ID: B20735A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001533		WV	U-238	Uranium-238	ug/g	103	<5.50E-06	1.17E-03	n/a	n/a	n/a	n/a	6.98E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090811

Core Number: C7186

Sample Depth: 145-147

Customer Sample ID: B20737A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001221			%WATERA	%WATER-APD	%	n/a	n/a	12.38	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001221			10198-40-0	Cobalt-60	uCi/g	99.2	<3.57E-07	<3.76E-07	<3.80E-07	n/a	n/a	n/a	3.76E-07	n/a	U
S09V001221			14234-35-6	Antimony-125	uCi/g	n/a	<8.37E-07	<1.00E-06	<1.02E-06	n/a	n/a	n/a	1.00E-06	n/a	U
S09V001221			10045-97-3	Cesium-137	uCi/g	101	<4.28E-07	<4.81E-07	<4.80E-07	n/a	n/a	n/a	4.81E-07	n/a	U
S09V001221			14683-23-9	Europium-152	uCi/g	n/a	<1.64E-06	<1.91E-06	<1.90E-06	n/a	n/a	n/a	1.91E-06	n/a	U
S09V001221			15585-10-1	Europium-154	uCi/g	n/a	<9.64E-07	<1.14E-06	<1.26E-06	n/a	n/a	n/a	1.14E-06	n/a	U
S09V001221			14391-16-3	Europium-155	uCi/g	n/a	<5.21E-07	<6.32E-07	<6.61E-07	n/a	n/a	n/a	6.32E-07	n/a	U
S09V001221			WT%SOLID	Weight percent solids	%	n/a	n/a	87.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001535			CONDUCT	Conductivity	uMHO/cm	104	<1.00	251	239	245	5.02	n/a	1.00	n/a	X

Customer Sample ID: B20737A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001537		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<7.23E-06	n/a	n/a	n/a	n/a	7.23E-06	n/a	U
S09V001537		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	4.02E-05	n/a	n/a	n/a	n/a	2.07E-05	62.808	
S09V001537		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	UN
S09V001537		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	1.64E+04	n/a	n/a	n/a	n/a	20.8	n/a	
S09V001537		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<41.6	n/a	n/a	n/a	n/a	41.6	n/a	UN
S09V001537		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001537		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	129	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001537		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	<0.694	n/a	n/a	n/a	n/a	0.694	n/a	U
S09V001537		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	UN
S09V001537		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.35E+04	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001537		AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001537		AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	<6.94	n/a	n/a	n/a	n/a	6.94	n/a	U
S09V001537		AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	18.9	n/a	n/a	n/a	n/a	3.47	n/a	CB
S09V001537		AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	18.7	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001537		AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.27E+04	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001537		AV	7440-09-7	Potassium	ug/g	80.5	<0.500	2.10E+03	n/a	n/a	n/a	n/a	347	n/a	B

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 145-147
Customer Sample ID: B20737A AE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001537	AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	17.0	n/a	n/a	n/a	n/a	2.08	n/a	B
S09V001537	AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	8.15E+03	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001537	AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	354	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001537	AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001537	AV	7440-23-5	Sodium	ug/g	85.0	<0.100	290	n/a	n/a	n/a	n/a	69.4	n/a	B
S09V001537	AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	23.2	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001537	AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	693	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001537	AV	7439-92-1	Lead	ug/g	95.4	0.0619	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	U
S09V001537	AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	UN
S09V001537	AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001537	AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	UN
S09V001537	AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	UN
S09V001537	AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001537	AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	43.9	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001537	AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	1.02E+03	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001537	AV	7440-28-0	Thallium	ug/g	92.5	<0.100	86.5	n/a	n/a	n/a	n/a	69.4	n/a	B
S09V001537	AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<69.4	n/a	n/a	n/a	n/a	69.4	n/a	U
S09V001537	AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	45.0	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001537	AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	11.3	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001537	AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	56.1	n/a	n/a	n/a	n/a	3.47	n/a	C
S09V001537	AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	11.1	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001537	AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.19E-05	n/a	n/a	n/a	n/a	9.19E-05	n/a	U
S09V001537	AV	U-238	Uranium-238	ug/g	113	<2.75E-04	0.972	n/a	n/a	n/a	n/a	9.54E-04	n/a	
S09V001537	AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001537	AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001537	AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	6.19E-04	n/a	n/a	n/a	n/a	6.94E-05	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 145-147
Customer Sample ID: B20737A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001536	WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	<9.24E-07	1.32E-06	n/a	n/a	102	9.24E-07	n/a	U
S09V001536	WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	5.25E-06	5.53E-06	5.39E-06	5.36	94.9	1.62E-06	38.353	
S09V001536	WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	0.707	0.717	0.712	1.36	93.1	1.89E-03	n/a	
S09V001536	WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	7.82	7.79	7.80	0.309	93.1	0.129	n/a	
S09V001536	WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.379	0.384	0.381	1.31	99.9	0.0225	n/a	
S09V001536	WV	14808-79-8	Sulfate	ug/g	101	<0.0187	16.7	16.5	16.6	1.02	84.6	0.0219	n/a	
S09V001536	WV	24959-67-9	Bromide	ug/g	100	<0.0580	0.164	0.165	0.165	0.564	91.1	0.0680	n/a	B
S09V001536	WV	14797-55-8	Nitrate	ug/g	99.7	<0.0208	67.7	67.6	67.6	0.0902	94.0	0.268	n/a	
S09V001536	WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	0.189	0.201	0.195	6.35	109	0.0196	n/a	B
S09V001536	WV	7440-22-4	Silver	ug/g	93.4	<5.00E-03	<7.33E-03	<7.33E-03	n/a	n/a	90.1	7.33E-03	n/a	U
S09V001536	WV	7429-90-5	Aluminum	ug/g	98.1	<0.0300	0.246	0.110	0.178	76.3	101	0.0440	n/a	B
S09V001536	WV	7440-38-2	Arsenic	ug/g	98.3	<0.0500	<0.0879	<0.0880	n/a	n/a	105	0.0879	n/a	U
S09V001536	WV	7440-42-8	Boron	ug/g	99.9	<0.0300	<0.0440	<0.0440	n/a	n/a	102	0.0440	n/a	U
S09V001536	WV	7440-39-3	Barium	ug/g	97.2	<3.00E-03	0.0425	0.0415	0.0420	2.53	99.1	4.40E-03	n/a	B
S09V001536	WV	7440-41-7	Beryllium	ug/g	97.8	<1.00E-03	<1.47E-03	<1.47E-03	n/a	n/a	100	1.47E-03	n/a	U
S09V001536	WV	7440-69-9	Bismuth	ug/g	98.9	<0.100	<0.147	<0.147	n/a	n/a	101	0.147	n/a	U
S09V001536	WV	7440-70-2	Calcium	ug/g	99.1	<0.0500	24.2	24.5	24.3	1.29	97.8	0.0733	n/a	
S09V001536	WV	7440-43-9	Cadmium	ug/g	99.4	<5.00E-03	<7.33E-03	<7.33E-03	n/a	n/a	102	7.33E-03	n/a	U
S09V001536	WV	7440-48-4	Cobalt	ug/g	98.8	<0.0100	<0.0147	<0.0147	n/a	n/a	101	0.0147	n/a	U
S09V001536	WV	7440-47-3	Chromium	ug/g	99.6	<5.00E-03	<7.33E-03	<7.33E-03	n/a	n/a	103	7.33E-03	n/a	U
S09V001536	WV	7440-50-8	Copper	ug/g	97.4	<5.00E-03	<7.33E-03	<7.33E-03	n/a	n/a	98.6	7.33E-03	n/a	U
S09V001536	WV	7439-89-6	Iron	ug/g	98.6	8.06E-03	0.310	0.155	0.232	66.8	100	7.33E-03	n/a	M
S09V001536	WV	7440-09-7	Potassium	ug/g	93.0	<0.500	4.63	4.10	4.37	12.1	82.2	0.733	n/a	B
S09V001536	WV	7439-93-2	Lithium	ug/g	101	<3.00E-03	5.02E-03	<4.40E-03	n/a	n/a	88.5	4.40E-03	n/a	B
S09V001536	WV	7439-95-4	Magnesium	ug/g	96.8	<0.0500	6.89	6.83	6.86	0.906	95.8	0.0733	n/a	
S09V001536	WV	7439-96-5	Manganese	ug/g	98.7	<3.00E-03	<4.40E-03	<4.40E-03	n/a	n/a	103	4.40E-03	n/a	U
S09V001536	WV	7439-98-7	Molybdenum	ug/g	99.7	<0.0200	<0.0293	<0.0293	n/a	n/a	102	0.0293	n/a	U
S09V001536	WV	7440-23-5	Sodium	ug/g	99.8	<0.100	24.3	23.0	23.6	5.15	87.1	0.147	n/a	

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X - Comment
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B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090811
Core Number: C7186
Sample Depth: 145-147
Customer Sample ID: B20737A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001536		WV	7440-02-0	Nickel	ug/g	97.3	<0.0200	<0.0293	<0.0293	n/a	n/a	101	0.0293	n/a	U
S09V001536		WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	0.117	0.135	0.126	14.5	104	0.0733	n/a	B
S09V001536		WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0733	<0.0733	n/a	n/a	102	0.0733	n/a	U
S09V001536		WV	7704-34-9	Sulfur	ug/g	100	<0.100	5.74	5.76	5.75	0.314	104	0.147	n/a	
S09V001536		WV	7440-36-0	Antimony	ug/g	97.0	<0.0500	<0.0733	<0.0733	n/a	n/a	101	0.0733	n/a	U
S09V001536		WV	7782-49-2	Selenium	ug/g	99.5	<0.100	<0.147	<0.147	n/a	n/a	108	0.147	n/a	U
S09V001536		WV	7440-21-3	Silicon	ug/g	92.3	<0.0300	8.98	8.94	8.96	0.511	90.0	0.0440	n/a	
S09V001536		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0440	<0.0440	n/a	n/a	108	0.0440	n/a	U
S09V001536		WV	7440-24-6	Strontium	ug/g	97.1	<3.00E-03	0.100	0.0997	0.100	0.548	98.2	4.40E-03	n/a	
S09V001536		WV	7440-32-6	Titanium	ug/g	98.2	<5.00E-03	2.05E-02	9.29E-03	1.49E-02	75.0	101	7.33E-03	n/a	B
S09V001536		WV	7440-28-0	Thallium	ug/g	95.0	<0.100	<0.147	<0.147	n/a	n/a	101	0.147	n/a	U
S09V001536		WV	7440-61-1	Uranium	ug/g	100	<0.100	<0.147	<0.147	n/a	n/a	97.2	0.147	n/a	U
S09V001536		WV	7440-62-2	Vanadium	ug/g	100	<5.00E-03	<7.33E-03	1.10E-02	n/a	n/a	101	7.33E-03	n/a	U
S09V001536		WV	7440-65-5	Yttrium	ug/g	96.9	<2.00E-03	<2.93E-03	<2.93E-03	n/a	n/a	103	2.93E-03	n/a	U
S09V001536		WV	7440-66-6	Zinc	ug/g	99.6	<5.00E-03	<7.33E-03	<7.33E-03	n/a	n/a	101	7.33E-03	n/a	U
S09V001536		WV	7440-67-7	Zirconium	ug/g	99.9	5.56E-03	<7.33E-03	<7.33E-03	n/a	n/a	96.8	7.33E-03	n/a	U
S09V001536		WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	3.58E-04	3.67E-04	3.62E-04	2.33	103	3.52E-06	n/a	
S09V001536		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<2.35E-07	<2.35E-07	n/a	n/a	n/a	2.35E-07	n/a	U
S09V001536		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	<1.17E-07	<1.17E-07	n/a	n/a	n/a	1.17E-07	n/a	U
S09V001536		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	5.51E-06	4.84E-06	5.17E-06	12.9	n/a	2.58E-07	n/a	
S09V001536		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<9.38E-08	<9.39E-08	n/a	n/a	n/a	9.38E-08	n/a	U
S09V001536		WV	U-238	Uranium-238	ug/g	103	<5.50E-06	7.63E-04	7.05E-04	7.34E-04	7.86	n/a	1.29E-05	n/a	

Customer Sample ID: B20737B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001222			%WATERA	%WATER-APD	%	n/a	n/a	13.67	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001222			WT%SOLID	Weight percent solids	%	n/a	n/a	86.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001222			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.53E-07	n/a	n/a	n/a	n/a	1.53E-07	n/a	U

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SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 100-102
Customer Sample ID: B20751A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000831			%WATERA	%WATER-APD	%	n/a	n/a	17.03	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000831			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.09E-05	n/a	n/a	n/a	n/a	6.86E-06	40.82	
S09V000831			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.41E-07	n/a	n/a	n/a	n/a	3.41E-07	n/a	U
S09V000831			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.38E-07	n/a	n/a	n/a	n/a	9.38E-07	n/a	U
S09V000831			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.41E-07	n/a	n/a	n/a	n/a	4.41E-07	n/a	U
S09V000831			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.93E-06	n/a	n/a	n/a	n/a	1.93E-06	n/a	U
S09V000831			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.10E-06	n/a	n/a	n/a	n/a	1.10E-06	n/a	U
S09V000831			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<5.99E-07	n/a	n/a	n/a	n/a	5.99E-07	n/a	U
S09V000831			14913-50-9	Thallium-208	uCi/g	n/a	n/a	4.94E-07	n/a	n/a	n/a	n/a	3.78E-07	49.59	
S09V000831			15092-94-1	Lead-212	uCi/g	n/a	n/a	9.77E-07	n/a	n/a	n/a	n/a	6.63E-07	27.73	
S09V000831			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.43E-06	n/a	n/a	n/a	n/a	7.31E-07	30.77	
S09V000831			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.39E-06	n/a	n/a	n/a	n/a	7.12E-07	23.75	B
S09V000831			15065-10-8	Thorium-234	uCi/g	n/a	n/a	2.31E-06	n/a	n/a	n/a	n/a	4.08E-06	43.04	U
S09V000831			WT%SOLID	Weight percent solids	%	n/a	n/a	83.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000831			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.75E-07	n/a	n/a	n/a	n/a	1.75E-07	n/a	U
S09V001538			CONDUCT	Conductivity	uMHO/cm	90.2	<1.00	580	n/a	n/a	n/a	n/a	1.00	n/a	

Customer Sample ID: B20751A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001540		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<7.24E-06	n/a	n/a	n/a	n/a	7.24E-06	n/a	U
S09V001540		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	7.90E-05	n/a	n/a	n/a	n/a	2.07E-05	32.745	
S09V001540		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	UN
S09V001540		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	1.82E+04	n/a	n/a	n/a	n/a	20.8	n/a	
S09V001540		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<41.7	n/a	n/a	n/a	n/a	41.7	n/a	UN
S09V001540		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001540		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	102	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001540		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	<0.695	n/a	n/a	n/a	n/a	0.695	n/a	U
S09V001540		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	UN

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SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 100-102
Customer Sample ID: B20751A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001540		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.49E+04	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001540		AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<3.47	n/a	n/a	n/a	n/a	3.47	n/a	U
S09V001540		AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	7.53	n/a	n/a	n/a	n/a	6.95	n/a	B
S09V001540		AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	29.3	n/a	n/a	n/a	n/a	3.47	n/a	CB
S09V001540		AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	16.7	n/a	n/a	n/a	n/a	3.47	n/a	B
S09V001540		AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.15E+04	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001540		AV	7440-09-7	Potassium	ug/g	80.5	<0.500	2.59E+03	n/a	n/a	n/a	n/a	347	n/a	B
S09V001540		AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	17.8	n/a	n/a	n/a	n/a	2.08	n/a	B
S09V001540		AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	7.75E+03	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001540		AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	389	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001540		AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001540		AV	7440-23-5	Sodium	ug/g	85.0	<0.100	729	n/a	n/a	n/a	n/a	69.5	n/a	
S09V001540		AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	27.3	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001540		AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	642	n/a	n/a	n/a	n/a	34.7	n/a	
S09V001540		AV	7439-92-1	Lead	ug/g	95.4	0.0619	42.5	n/a	n/a	n/a	n/a	34.7	n/a	CB
S09V001540		AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	UN
S09V001540		AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<34.7	n/a	n/a	n/a	n/a	34.7	n/a	UN
S09V001540		AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	UN
S09V001540		AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	UN
S09V001540		AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<20.8	n/a	n/a	n/a	n/a	20.8	n/a	U
S09V001540		AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	43.0	n/a	n/a	n/a	n/a	2.08	n/a	
S09V001540		AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	780	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001540		AV	7440-28-0	Thallium	ug/g	92.5	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	U
S09V001540		AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<69.5	n/a	n/a	n/a	n/a	69.5	n/a	U
S09V001540		AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	35.8	n/a	n/a	n/a	n/a	3.47	n/a	
S09V001540		AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	12.2	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001540		AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	51.9	n/a	n/a	n/a	n/a	3.47	n/a	C
S09V001540		AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	9.37	n/a	n/a	n/a	n/a	3.47	n/a	B

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SX Barrier
Data Summary Report

Sample Group: 20090812

Core Number: C7192

Sample Depth: 100-102

Customer Sample ID: B20751A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001540		AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.20E-05	n/a	n/a	n/a	n/a	9.20E-05	n/a	U
S09V001540		AV	U-238	Uranium-238	ug/g	113	<2.75E-04	1.10	n/a	n/a	n/a	n/a	9.55E-04	n/a	
S09V001540		AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001540		AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001540		AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	2.35E-03	n/a	n/a	n/a	n/a	6.95E-05	n/a	

Customer Sample ID: B20751A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001539		WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	3.77E-06	n/a	n/a	n/a	n/a	1.02E-06	35.097	
S09V001539		WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	4.86E-05	n/a	n/a	n/a	n/a	1.78E-06	5.865	
S09V001539		WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	1.42	n/a	n/a	n/a	n/a	2.08E-03	n/a	
S09V001539		WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	4.96	n/a	n/a	n/a	n/a	0.0129	n/a	
S09V001539		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.618	n/a	n/a	n/a	n/a	0.0248	n/a	
S09V001539		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	49.9	n/a	n/a	n/a	n/a	0.266	n/a	
S09V001539		WV	24959-67-9	Bromide	ug/g	100	<0.0580	<0.825	n/a	n/a	n/a	n/a	0.825	n/a	U
S09V001539		WV	14797-55-8	Nitrate	ug/g	99.7	<0.0208	216	n/a	n/a	n/a	n/a	0.296	n/a	
S09V001539		WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	0.746	n/a	n/a	n/a	n/a	0.0216	n/a	
S09V001539		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<8.09E-03	n/a	n/a	n/a	n/a	8.09E-03	n/a	U
S09V001539		WV	7429-90-5	Aluminum	ug/g	97.5	<0.0300	3.13	n/a	n/a	n/a	n/a	0.0485	n/a	
S09V001539		WV	7440-38-2	Arsenic	ug/g	98.9	<0.0500	<0.0970	n/a	n/a	n/a	n/a	0.0970	n/a	U
S09V001539		WV	7440-42-8	Boron	ug/g	99.8	<0.0300	0.0880	n/a	n/a	n/a	n/a	0.0485	n/a	B
S09V001539		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.0272	n/a	n/a	n/a	n/a	4.85E-03	n/a	B
S09V001539		WV	7440-41-7	Beryllium	ug/g	98.6	<1.00E-03	<1.62E-03	n/a	n/a	n/a	n/a	1.62E-03	n/a	U
S09V001539		WV	7440-69-9	Bismuth	ug/g	96.4	<0.100	<0.162	n/a	n/a	n/a	n/a	0.162	n/a	U
S09V001539		WV	7440-70-2	Calcium	ug/g	101	<0.0500	3.60	n/a	n/a	n/a	n/a	0.0809	n/a	
S09V001539		WV	7440-43-9	Cadmium	ug/g	100	<5.00E-03	<8.09E-03	n/a	n/a	n/a	n/a	8.09E-03	n/a	U
S09V001539		WV	7440-48-4	Cobalt	ug/g	100	<0.0100	<0.0162	n/a	n/a	n/a	n/a	0.0162	n/a	U
S09V001539		WV	7440-47-3	Chromium	ug/g	101	<5.00E-03	5.95	n/a	n/a	n/a	n/a	8.09E-03	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 100-102
Customer Sample ID: B20751A WE

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S09V001539		WV	7440-50-8	Copper	ug/g	95.6	<5.00E-03	<8.09E-03	n/a	n/a	n/a	n/a	8.09E-03	n/a	U
S09V001539		WV	7439-89-6	Iron	ug/g	99.5	8.06E-03	3.95	n/a	n/a	n/a	n/a	8.09E-03	n/a	M
S09V001539		WV	7440-09-7	Potassium	ug/g	91.1	<0.500	2.88	n/a	n/a	n/a	n/a	0.809	n/a	B
S09V001539		WV	7439-93-2	Lithium	ug/g	95.9	<3.00E-03	8.15E-03	n/a	n/a	n/a	n/a	4.85E-03	n/a	B
S09V001539		WV	7439-95-4	Magnesium	ug/g	96.5	<0.0500	1.01	n/a	n/a	n/a	n/a	0.0809	n/a	
S09V001539		WV	7439-96-5	Manganese	ug/g	99.8	<3.00E-03	0.0633	n/a	n/a	n/a	n/a	4.85E-03	n/a	
S09V001539		WV	7439-98-7	Molybdenum	ug/g	101	<0.0200	0.130	n/a	n/a	n/a	n/a	0.0323	n/a	B
S09V001539		WV	7440-23-5	Sodium	ug/g	94.4	<0.100	146	n/a	n/a	n/a	n/a	0.162	n/a	
S09V001539		WV	7440-02-0	Nickel	ug/g	98.3	<0.0200	<0.0323	n/a	n/a	n/a	n/a	0.0323	n/a	U
S09V001539		WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	0.381	n/a	n/a	n/a	n/a	0.0809	n/a	B
S09V001539		WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0809	n/a	n/a	n/a	n/a	0.0809	n/a	U
S09V001539		WV	7704-34-9	Sulfur	ug/g	99.9	<0.100	17.9	n/a	n/a	n/a	n/a	0.162	n/a	
S09V001539		WV	7440-36-0	Antimony	ug/g	98.5	<0.0500	<0.0809	n/a	n/a	n/a	n/a	0.0809	n/a	U
S09V001539		WV	7782-49-2	Selenium	ug/g	100	<0.100	<0.162	n/a	n/a	n/a	n/a	0.162	n/a	U
S09V001539		WV	7440-21-3	Silicon	ug/g	94.2	<0.0300	15.9	n/a	n/a	n/a	n/a	0.0485	n/a	
S09V001539		WV	7440-31-5	Tin	ug/g	102	<0.0300	0.0876	n/a	n/a	n/a	n/a	0.0485	n/a	B
S09V001539		WV	7440-24-6	Strontium	ug/g	96.0	<3.00E-03	0.0227	n/a	n/a	n/a	n/a	4.85E-03	n/a	B
S09V001539		WV	7440-32-6	Titanium	ug/g	98.0	<5.00E-03	0.221	n/a	n/a	n/a	n/a	8.09E-03	n/a	
S09V001539		WV	7440-28-0	Thallium	ug/g	96.0	<0.100	<0.162	n/a	n/a	n/a	n/a	0.162	n/a	U
S09V001539		WV	7440-61-1	Uranium	ug/g	98.3	<0.100	<0.162	n/a	n/a	n/a	n/a	0.162	n/a	U
S09V001539		WV	7440-62-2	Vanadium	ug/g	101	<5.00E-03	0.0365	n/a	n/a	n/a	n/a	8.09E-03	n/a	B
S09V001539		WV	7440-65-5	Yttrium	ug/g	94.6	<2.00E-03	<3.23E-03	n/a	n/a	n/a	n/a	3.23E-03	n/a	U
S09V001539		WV	7440-66-6	Zinc	ug/g	100	<5.00E-03	0.0173	n/a	n/a	n/a	n/a	8.09E-03	n/a	B
S09V001539		WV	7440-67-7	Zirconium	ug/g	97.9	5.56E-03	<8.09E-03	n/a	n/a	n/a	n/a	8.09E-03	n/a	U
S09V001539		WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	2.39E-03	n/a	n/a	n/a	n/a	3.88E-06	n/a	
S09V001539		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.29E-07	n/a	n/a	n/a	n/a	1.29E-07	n/a	U
S09V001539		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	1.37E-07	n/a	n/a	n/a	n/a	6.47E-08	n/a	
S09V001539		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.84E-05	n/a	n/a	n/a	n/a	1.42E-07	n/a	

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SX Barrier
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Sample Group: 20090812
Core Number: C7192
Sample Depth: 100-102
Customer Sample ID: B20751A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001539		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.18E-08	n/a	n/a	n/a	n/a	5.18E-08	n/a	U
S09V001539		WV	U-238	Uranium-238	ug/g	103	<5.50E-06	2.52E-03	n/a	n/a	n/a	n/a	7.12E-06	n/a	

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SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 128-130
Customer Sample ID: B20753A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000837			%WATERA	%WATER-APD	%	n/a	n/a	18.52	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000837			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.52E-05	n/a	n/a	n/a	n/a	7.91E-06	34.45	
S09V000837			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.85E-07	n/a	n/a	n/a	n/a	3.85E-07	n/a	U
S09V000837			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.86E-07	n/a	n/a	n/a	n/a	9.86E-07	n/a	U
S09V000837			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<5.07E-07	n/a	n/a	n/a	n/a	5.07E-07	n/a	U
S09V000837			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.93E-06	n/a	n/a	n/a	n/a	1.93E-06	n/a	U
S09V000837			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.25E-06	n/a	n/a	n/a	n/a	1.25E-06	n/a	U
S09V000837			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.49E-07	n/a	n/a	n/a	n/a	6.49E-07	n/a	U
S09V000837			14913-50-9	Thallium-208	uCi/g	n/a	n/a	5.51E-07	n/a	n/a	n/a	n/a	3.75E-07	44.89	
S09V000837			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.07E-06	n/a	n/a	n/a	n/a	4.95E-07	24.52	
S09V000837			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.29E-06	n/a	n/a	n/a	n/a	8.71E-07	28.60	B
S09V000837			WT%SOLID	Weight percent solids	%	n/a	n/a	81.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000837			15046-84-1	Iodine-129	uCi/g	87.5	<1.52E-07	<1.45E-07	n/a	n/a	n/a	n/a	1.45E-07	n/a	U
S09V001541			CONDUCT	Conductivity	uMHO/cm	104	<1.00	3.97E+03	n/a	n/a	n/a	n/a	1.00	n/a	X

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S09V001543		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<7.26E-06	n/a	n/a	n/a	n/a	7.26E-06	n/a	U
S09V001543		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	6.95E-04	n/a	n/a	n/a	n/a	2.08E-05	4.918	
S09V001543		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<3.48	n/a	n/a	n/a	n/a	3.48	n/a	UN
S09V001543		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	1.98E+04	n/a	n/a	n/a	n/a	20.9	n/a	
S09V001543		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<41.8	n/a	n/a	n/a	n/a	41.8	n/a	UN
S09V001543		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001543		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	120	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001543		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	<0.697	n/a	n/a	n/a	n/a	0.697	n/a	U
S09V001543		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001543		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.67E+04	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001543		AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<3.48	n/a	n/a	n/a	n/a	3.48	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 128-130
Customer Sample ID: B20753A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001543		AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	9.13	n/a	n/a	n/a	n/a	6.97	n/a	B
S09V001543		AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	24.4	n/a	n/a	n/a	n/a	3.48	n/a	CB
S09V001543		AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	22.5	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001543		AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.40E+04	n/a	n/a	n/a	n/a	3.48	n/a	
S09V001543		AV	7440-09-7	Potassium	ug/g	80.5	<0.500	2.37E+03	n/a	n/a	n/a	n/a	348	n/a	B
S09V001543		AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	19.9	n/a	n/a	n/a	n/a	2.09	n/a	B
S09V001543		AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	8.99E+03	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001543		AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	404	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001543		AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<13.9	n/a	n/a	n/a	n/a	13.9	n/a	U
S09V001543		AV	7440-23-5	Sodium	ug/g	85.0	<0.100	400	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001543		AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	27.0	n/a	n/a	n/a	n/a	13.9	n/a	B
S09V001543		AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	617	n/a	n/a	n/a	n/a	34.8	n/a	
S09V001543		AV	7439-92-1	Lead	ug/g	95.4	0.0619	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	U
S09V001543		AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001543		AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<34.8	n/a	n/a	n/a	n/a	34.8	n/a	UN
S09V001543		AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	UN
S09V001543		AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	22.7	n/a	n/a	n/a	n/a	20.9	n/a	BN
S09V001543		AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<20.9	n/a	n/a	n/a	n/a	20.9	n/a	U
S09V001543		AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	48.2	n/a	n/a	n/a	n/a	2.09	n/a	
S09V001543		AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	813	n/a	n/a	n/a	n/a	3.48	n/a	
S09V001543		AV	7440-28-0	Thallium	ug/g	92.5	<0.100	80.9	n/a	n/a	n/a	n/a	69.7	n/a	B
S09V001543		AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<69.7	n/a	n/a	n/a	n/a	69.7	n/a	U
S09V001543		AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	39.4	n/a	n/a	n/a	n/a	3.48	n/a	
S09V001543		AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	12.6	n/a	n/a	n/a	n/a	1.39	n/a	B
S09V001543		AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	61.3	n/a	n/a	n/a	n/a	3.48	n/a	C
S09V001543		AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	8.31	n/a	n/a	n/a	n/a	3.48	n/a	B
S09V001543		AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<9.23E-05	n/a	n/a	n/a	n/a	9.23E-05	n/a	U
S09V001543		AV	U-238	Uranium-238	ug/g	113	<2.75E-04	1.03	n/a	n/a	n/a	n/a	9.58E-04	n/a	

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090812

Core Number: C7192

Sample Depth: 128-130

Customer Sample ID: B20753A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001543		AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<1.20E-03	n/a	n/a	n/a	n/a	1.20E-03	n/a	U
S09V001543		AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<1.39E-04	n/a	n/a	n/a	n/a	1.39E-04	n/a	U
S09V001543		AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	0.0407	n/a	n/a	n/a	n/a	6.97E-05	n/a	

Customer Sample ID: B20753A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001542		WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	2.54E-05	n/a	n/a	n/a	n/a	1.05E-06	7.396	
S09V001542		WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	1.95E-04	n/a	n/a	n/a	n/a	1.84E-06	2.280	
S09V001542		WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	0.277	n/a	n/a	n/a	n/a	2.15E-03	n/a	
S09V001542		WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	45.3	n/a	n/a	n/a	n/a	0.0133	n/a	
S09V001542		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	3.83	n/a	n/a	n/a	n/a	0.0256	n/a	
S09V001542		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	<0.0250	n/a	n/a	n/a	n/a	0.0250	n/a	U
S09V001542		WV	24959-67-9	Bromide	ug/g	100	<0.0580	28.4	n/a	n/a	n/a	n/a	0.0774	n/a	
S09V001542		WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	<0.0223	n/a	n/a	n/a	n/a	0.0223	n/a	U
S09V001542		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7429-90-5	Aluminum	ug/g	97.5	<0.0300	<0.0501	n/a	n/a	n/a	n/a	0.0501	n/a	U
S09V001542		WV	7440-38-2	Arsenic	ug/g	98.9	<0.0500	<0.100	n/a	n/a	n/a	n/a	0.100	n/a	U
S09V001542		WV	7440-42-8	Boron	ug/g	99.8	<0.0300	0.0980	n/a	n/a	n/a	n/a	0.0501	n/a	B
S09V001542		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.656	n/a	n/a	n/a	n/a	5.01E-03	n/a	
S09V001542		WV	7440-41-7	Beryllium	ug/g	98.6	<1.00E-03	<1.67E-03	n/a	n/a	n/a	n/a	1.67E-03	n/a	U
S09V001542		WV	7440-69-9	Bismuth	ug/g	96.4	<0.100	<0.167	n/a	n/a	n/a	n/a	0.167	n/a	U
S09V001542		WV	7440-70-2	Calcium	ug/g	101	<0.0500	686	n/a	n/a	n/a	n/a	0.0834	n/a	
S09V001542		WV	7440-43-9	Cadmium	ug/g	100	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7440-48-4	Cobalt	ug/g	100	<0.0100	<0.0167	n/a	n/a	n/a	n/a	0.0167	n/a	U
S09V001542		WV	7440-47-3	Chromium	ug/g	101	<5.00E-03	0.0471	n/a	n/a	n/a	n/a	8.34E-03	n/a	B
S09V001542		WV	7440-50-8	Copper	ug/g	95.6	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7439-89-6	Iron	ug/g	99.5	8.06E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	UM
S09V001542		WV	7440-09-7	Potassium	ug/g	91.1	<0.500	18.9	n/a	n/a	n/a	n/a	0.834	n/a	

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C - Blank Contamination
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X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 128-130
Customer Sample ID: B20753A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001542		WV	7439-93-2	Lithium	ug/g	95.9	<3.00E-03	0.0167	n/a	n/a	n/a	n/a	5.01E-03	n/a	B
S09V001542		WV	7439-95-4	Magnesium	ug/g	96.5	<0.0500	145	n/a	n/a	n/a	n/a	0.0834	n/a	
S09V001542		WV	7439-96-5	Manganese	ug/g	99.8	<3.00E-03	0.215	n/a	n/a	n/a	n/a	5.01E-03	n/a	
S09V001542		WV	7439-98-7	Molybdenum	ug/g	101	<0.0200	<0.0334	n/a	n/a	n/a	n/a	0.0334	n/a	U
S09V001542		WV	7440-23-5	Sodium	ug/g	94.4	<0.100	187	n/a	n/a	n/a	n/a	0.167	n/a	
S09V001542		WV	7440-02-0	Nickel	ug/g	98.3	<0.0200	<0.0334	n/a	n/a	n/a	n/a	0.0334	n/a	U
S09V001542		WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	0.100	n/a	n/a	n/a	n/a	0.0834	n/a	B
S09V001542		WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0834	n/a	n/a	n/a	n/a	0.0834	n/a	U
S09V001542		WV	7704-34-9	Sulfur	ug/g	99.9	<0.100	6.26	n/a	n/a	n/a	n/a	0.167	n/a	
S09V001542		WV	7440-36-0	Antimony	ug/g	98.5	<0.0500	<0.0834	n/a	n/a	n/a	n/a	0.0834	n/a	U
S09V001542		WV	7782-49-2	Selenium	ug/g	100	<0.100	<0.167	n/a	n/a	n/a	n/a	0.167	n/a	U
S09V001542		WV	7440-21-3	Silicon	ug/g	94.2	<0.0300	10.1	n/a	n/a	n/a	n/a	0.0501	n/a	
S09V001542		WV	7440-31-5	Tin	ug/g	102	<0.0300	<0.0501	n/a	n/a	n/a	n/a	0.0501	n/a	U
S09V001542		WV	7440-24-6	Strontium	ug/g	96.0	<3.00E-03	2.90	n/a	n/a	n/a	n/a	5.01E-03	n/a	
S09V001542		WV	7440-32-6	Titanium	ug/g	98.0	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7440-28-0	Thallium	ug/g	96.0	<0.100	<0.167	n/a	n/a	n/a	n/a	0.167	n/a	U
S09V001542		WV	7440-61-1	Uranium	ug/g	98.3	<0.100	<0.167	n/a	n/a	n/a	n/a	0.167	n/a	U
S09V001542		WV	7440-62-2	Vanadium	ug/g	101	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7440-65-5	Yttrium	ug/g	94.6	<2.00E-03	<3.34E-03	n/a	n/a	n/a	n/a	3.34E-03	n/a	U
S09V001542		WV	7440-66-6	Zinc	ug/g	100	<5.00E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	7440-67-7	Zirconium	ug/g	97.9	5.56E-03	<8.34E-03	n/a	n/a	n/a	n/a	8.34E-03	n/a	U
S09V001542		WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	0.0126	n/a	n/a	n/a	n/a	4.01E-06	n/a	
S09V001542		WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.34E-07	n/a	n/a	n/a	n/a	1.34E-07	n/a	U
S09V001542		WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	8.81E-08	n/a	n/a	n/a	n/a	6.68E-08	n/a	
S09V001542		WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	9.44E-06	n/a	n/a	n/a	n/a	1.47E-07	n/a	
S09V001542		WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	<5.34E-08	n/a	n/a	n/a	n/a	5.34E-08	n/a	U
S09V001542		WV	U-238	Uranium-238	ug/g	103	<5.50E-06	1.35E-03	n/a	n/a	n/a	n/a	7.34E-06	n/a	

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
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SX Barrier
Data Summary Report

Sample Group: 20090812

Core Number: C7192

Sample Depth: 140-142

Customer Sample ID: B20755A

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000843			%WATERA	%WATER-APD	%	n/a	n/a	17.30	17.35	17.32	0.2886	n/a	0.01000	n/a	
S09V000843			13966-00-2	Potassium-40	uCi/g	n/a	n/a	1.52E-05	1.47E-05	1.49E-05	3.61	n/a	7.38E-06	32.41	
S09V000843			10198-40-0	Cobalt-60	uCi/g	99.9	<3.51E-07	<3.44E-07	<3.79E-07	n/a	n/a	n/a	3.44E-07	n/a	U
S09V000843			14234-35-6	Antimony-125	uCi/g	n/a	<8.75E-07	<9.44E-07	<1.01E-06	n/a	n/a	n/a	9.44E-07	n/a	U
S09V000843			10045-97-3	Cesium-137	uCi/g	102	<4.17E-07	<4.51E-07	<4.56E-07	n/a	n/a	n/a	4.51E-07	n/a	U
S09V000843			14683-23-9	Europium-152	uCi/g	n/a	<1.52E-06	<1.82E-06	<1.89E-06	n/a	n/a	n/a	1.82E-06	n/a	U
S09V000843			15585-10-1	Europium-154	uCi/g	n/a	<1.05E-06	<1.19E-06	<1.18E-06	n/a	n/a	n/a	1.19E-06	n/a	U
S09V000843			14391-16-3	Europium-155	uCi/g	n/a	<5.54E-07	<6.30E-07	<6.25E-07	n/a	n/a	n/a	6.30E-07	n/a	U
S09V000843			15092-94-1	Lead-212	uCi/g	n/a	n/a	1.16E-06	7.46E-07	9.54E-07	43.7	n/a	6.92E-07	27.27	
S09V000843			14733-03-0	Bismuth-214	uCi/g	n/a	n/a	1.52E-06	n/a	n/a	n/a	n/a	7.01E-07	28.54	
S09V000843			15067-28-4	Lead-214	uCi/g	n/a	7.72E-07	1.50E-06	2.17E-06	1.83E-06	36.4	n/a	8.63E-07	27.25	B
S09V000843			WT%SOLID	Weight percent solids	%	n/a	n/a	82.7	82.6	82.7	0.0605	n/a	0.0100	n/a	
S09V001544			CONDUCT	Conductivity	uMHO/cm	104	<1.00	700	n/a	n/a	n/a	n/a	1.00	n/a	X

Customer Sample ID: B20755A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001546		AV	12587-46-1	Gross alpha	uCi/g	105	<7.28E-06	<1.20E-04	n/a	n/a	n/a	n/a	1.20E-04	n/a	U
S09V001546		AV	12587-47-2	Gross beta	uCi/g	92.6	<2.59E-05	4.14E-04	n/a	n/a	n/a	n/a	3.42E-04	99.997	
S09V001546		AV	7440-22-4	Silver	ug/g	87.6	<5.00E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	UN
S09V001546		AV	7429-90-5	Aluminum	ug/g	91.6	0.0308	1.74E+04	n/a	n/a	n/a	n/a	344	n/a	
S09V001546		AV	7440-38-2	Arsenic	ug/g	92.6	<0.0500	<689	n/a	n/a	n/a	n/a	689	n/a	UN
S09V001546		AV	7440-42-8	Boron	ug/g	95.4	<0.0300	<344	n/a	n/a	n/a	n/a	344	n/a	U
S09V001546		AV	7440-39-3	Barium	ug/g	88.3	<3.00E-03	171	n/a	n/a	n/a	n/a	34.4	n/a	B
S09V001546		AV	7440-41-7	Beryllium	ug/g	94.5	<1.00E-03	<11.5	n/a	n/a	n/a	n/a	11.5	n/a	U
S09V001546		AV	7440-69-9	Bismuth	ug/g	89.9	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	UN
S09V001546		AV	7440-70-2	Calcium	ug/g	87.5	0.161	1.59E+04	n/a	n/a	n/a	n/a	574	n/a	
S09V001546		AV	7440-43-9	Cadmium	ug/g	89.3	<5.00E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	U
S09V001546		AV	7440-48-4	Cobalt	ug/g	83.5	<0.0100	<115	n/a	n/a	n/a	n/a	115	n/a	U

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M - RPD Outside Range
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X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 140-142
Customer Sample ID: B20755A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001546		AV	7440-47-3	Chromium	ug/g	83.7	5.39E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	U
S09V001546		AV	7440-50-8	Copper	ug/g	93.1	<5.00E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	U
S09V001546		AV	7439-89-6	Iron	ug/g	92.6	<5.00E-03	2.33E+04	n/a	n/a	n/a	n/a	57.4	n/a	
S09V001546		AV	7440-09-7	Potassium	ug/g	80.5	<0.500	<5.74E+03	n/a	n/a	n/a	n/a	5.74E+03	n/a	U
S09V001546		AV	7439-93-2	Lithium	ug/g	92.8	<3.00E-03	<34.4	n/a	n/a	n/a	n/a	34.4	n/a	U
S09V001546		AV	7439-95-4	Magnesium	ug/g	82.2	<0.0500	8.68E+03	n/a	n/a	n/a	n/a	574	n/a	
S09V001546		AV	7439-96-5	Manganese	ug/g	84.5	<3.00E-03	415	n/a	n/a	n/a	n/a	34.4	n/a	
S09V001546		AV	7439-98-7	Molybdenum	ug/g	96.1	<0.0200	<230	n/a	n/a	n/a	n/a	230	n/a	U
S09V001546		AV	7440-23-5	Sodium	ug/g	85.0	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	U
S09V001546		AV	7440-02-0	Nickel	ug/g	85.6	<0.0200	<230	n/a	n/a	n/a	n/a	230	n/a	U
S09V001546		AV	7723-14-0	Phosphorus	ug/g	87.2	<0.0500	<574	n/a	n/a	n/a	n/a	574	n/a	U
S09V001546		AV	7439-92-1	Lead	ug/g	95.4	0.0619	<574	n/a	n/a	n/a	n/a	574	n/a	U
S09V001546		AV	7704-34-9	Sulfur	ug/g	84.5	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	UN
S09V001546		AV	7440-36-0	Antimony	ug/g	84.1	<0.0500	<574	n/a	n/a	n/a	n/a	574	n/a	UN
S09V001546		AV	7782-49-2	Selenium	ug/g	94.3	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	UN
S09V001546		AV	7440-21-3	Silicon	ug/g	82.5	<0.0300	<344	n/a	n/a	n/a	n/a	344	n/a	UN
S09V001546		AV	7440-31-5	Tin	ug/g	81.4	<0.0300	<344	n/a	n/a	n/a	n/a	344	n/a	U
S09V001546		AV	7440-24-6	Strontium	ug/g	89.1	<3.00E-03	45.7	n/a	n/a	n/a	n/a	34.4	n/a	B
S09V001546		AV	7440-32-6	Titanium	ug/g	98.6	<5.00E-03	996	n/a	n/a	n/a	n/a	57.4	n/a	
S09V001546		AV	7440-28-0	Thallium	ug/g	92.5	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	U
S09V001546		AV	7440-61-1	Uranium	ug/g	97.1	<0.100	<1.15E+03	n/a	n/a	n/a	n/a	1.15E+03	n/a	U
S09V001546		AV	7440-62-2	Vanadium	ug/g	93.3	<5.00E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	U
S09V001546		AV	7440-65-5	Yttrium	ug/g	94.3	<2.00E-03	<23.0	n/a	n/a	n/a	n/a	23.0	n/a	U
S09V001546		AV	7440-66-6	Zinc	ug/g	83.8	6.56E-03	59.0	n/a	n/a	n/a	n/a	57.4	n/a	CB
S09V001546		AV	7440-67-7	Zirconium	ug/g	98.5	<5.00E-03	<57.4	n/a	n/a	n/a	n/a	57.4	n/a	U
S09V001546		AV	13994-20-2	Neptunium-237	ug/g	115	<2.65E-05	<1.52E-03	n/a	n/a	n/a	n/a	1.52E-03	n/a	U
S09V001546		AV	U-238	Uranium-238	ug/g	113	<2.75E-04	1.19	n/a	n/a	n/a	n/a	0.0158	n/a	
S09V001546		AV	15117-48-3	Plutonium-239	ug/g	107	<3.45E-04	<0.0198	n/a	n/a	n/a	n/a	0.0198	n/a	U

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 140-142
Customer Sample ID: B20755A AE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001546		AV	14596-10-2	Americium-241	ug/g	112	<4.00E-05	<2.30E-03	n/a	n/a	n/a	n/a	2.30E-03	n/a	U
S09V001546		AV	14133-76-7	Technetium-99	ug/g	120	<2.00E-05	9.47E-03	n/a	n/a	n/a	n/a	1.15E-03	n/a	

Customer Sample ID: B20755A WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001545		WV	12587-46-1	Gross alpha	uCi/g	104	<1.46E-06	1.40E-05	n/a	n/a	n/a	n/a	1.02E-06	11.400	
S09V001545		WV	12587-47-2	Gross beta	uCi/g	93.5	<1.71E-06	9.65E-05	n/a	n/a	n/a	n/a	1.79E-06	3.556	
S09V001545		WV	16984-48-8	Fluoride	ug/g	98.2	<1.61E-03	0.512	n/a	n/a	n/a	n/a	2.09E-03	n/a	
S09V001545		WV	16887-00-6	Chloride	ug/g	98.7	<9.98E-03	19.4	n/a	n/a	n/a	n/a	0.0130	n/a	
S09V001545		WV	14797-65-0	Nitrite	ug/g	101	<0.0192	0.794	n/a	n/a	n/a	n/a	0.0250	n/a	
S09V001545		WV	14808-79-8	Sulfate	ug/g	101	<0.0187	21.8	n/a	n/a	n/a	n/a	0.0243	n/a	
S09V001545		WV	24959-67-9	Bromide	ug/g	100	<0.0580	<0.830	n/a	n/a	n/a	n/a	0.830	n/a	U
S09V001545		WV	14797-55-8	Nitrate	ug/g	99.7	<0.0208	<0.0270	n/a	n/a	n/a	n/a	0.0270	n/a	U
S09V001545		WV	14265-44-2	Phosphate	ug/g	98.4	<0.0167	0.101	n/a	n/a	n/a	n/a	0.0217	n/a	B
S09V001545		WV	7440-22-4	Silver	ug/g	93.1	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545		WV	7429-90-5	Aluminum	ug/g	97.5	<0.0300	<0.0488	n/a	n/a	n/a	n/a	0.0488	n/a	U
S09V001545		WV	7440-38-2	Arsenic	ug/g	98.9	<0.0500	<0.0975	n/a	n/a	n/a	n/a	0.0975	n/a	U
S09V001545		WV	7440-42-8	Boron	ug/g	99.8	<0.0300	<0.0488	n/a	n/a	n/a	n/a	0.0488	n/a	U
S09V001545		WV	7440-39-3	Barium	ug/g	96.8	<3.00E-03	0.100	n/a	n/a	n/a	n/a	4.88E-03	n/a	
S09V001545		WV	7440-41-7	Beryllium	ug/g	98.6	<1.00E-03	<1.63E-03	n/a	n/a	n/a	n/a	1.63E-03	n/a	U
S09V001545		WV	7440-69-9	Bismuth	ug/g	96.4	<0.100	<0.163	n/a	n/a	n/a	n/a	0.163	n/a	U
S09V001545		WV	7440-70-2	Calcium	ug/g	101	<0.0500	78.5	n/a	n/a	n/a	n/a	0.0813	n/a	
S09V001545		WV	7440-43-9	Cadmium	ug/g	100	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545		WV	7440-48-4	Cobalt	ug/g	100	<0.0100	<0.0163	n/a	n/a	n/a	n/a	0.0163	n/a	U
S09V001545		WV	7440-47-3	Chromium	ug/g	101	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545		WV	7440-50-8	Copper	ug/g	95.6	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545		WV	7439-89-6	Iron	ug/g	99.5	8.06E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	UM
S09V001545		WV	7440-09-7	Potassium	ug/g	91.1	<0.500	8.05	n/a	n/a	n/a	n/a	0.813	n/a	B

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C - Blank Contamination
M - RPD Outside Range
X - Comment
N - MS/MSD Outside Range
U - Less Than Detection Limit
B - Estimated
B - Blank Contamination

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SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 140-142
Customer Sample ID: B20755A WE

Sample# R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001545	WV	7439-93-2	Lithium	ug/g	95.9	<3.00E-03	6.44E-03	n/a	n/a	n/a	n/a	4.88E-03	n/a	B
S09V001545	WV	7439-95-4	Magnesium	ug/g	96.5	<0.0500	24.7	n/a	n/a	n/a	n/a	0.0813	n/a	
S09V001545	WV	7439-96-5	Manganese	ug/g	99.8	<3.00E-03	<4.88E-03	n/a	n/a	n/a	n/a	4.88E-03	n/a	U
S09V001545	WV	7439-98-7	Molybdenum	ug/g	101	<0.0200	<0.0325	n/a	n/a	n/a	n/a	0.0325	n/a	U
S09V001545	WV	7440-23-5	Sodium	ug/g	94.4	<0.100	46.7	n/a	n/a	n/a	n/a	0.163	n/a	
S09V001545	WV	7440-02-0	Nickel	ug/g	98.3	<0.0200	<0.0325	n/a	n/a	n/a	n/a	0.0325	n/a	U
S09V001545	WV	7723-14-0	Phosphorus	ug/g	98.6	<0.0500	<0.0813	n/a	n/a	n/a	n/a	0.0813	n/a	U
S09V001545	WV	7439-92-1	Lead	ug/g	101	<0.0500	<0.0813	n/a	n/a	n/a	n/a	0.0813	n/a	U
S09V001545	WV	7704-34-9	Sulfur	ug/g	99.9	<0.100	7.71	n/a	n/a	n/a	n/a	0.163	n/a	
S09V001545	WV	7440-36-0	Antimony	ug/g	98.5	<0.0500	<0.0813	n/a	n/a	n/a	n/a	0.0813	n/a	U
S09V001545	WV	7782-49-2	Selenium	ug/g	100	<0.100	<0.163	n/a	n/a	n/a	n/a	0.163	n/a	U
S09V001545	WV	7440-21-3	Silicon	ug/g	94.2	<0.0300	9.72	n/a	n/a	n/a	n/a	0.0488	n/a	
S09V001545	WV	7440-31-5	Tin	ug/g	102	<0.0300	0.0563	n/a	n/a	n/a	n/a	0.0488	n/a	B
S09V001545	WV	7440-24-6	Strontium	ug/g	96.0	<3.00E-03	0.344	n/a	n/a	n/a	n/a	4.88E-03	n/a	
S09V001545	WV	7440-32-6	Titanium	ug/g	98.0	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545	WV	7440-28-0	Thallium	ug/g	96.0	<0.100	<0.163	n/a	n/a	n/a	n/a	0.163	n/a	U
S09V001545	WV	7440-61-1	Uranium	ug/g	98.3	<0.100	<0.163	n/a	n/a	n/a	n/a	0.163	n/a	U
S09V001545	WV	7440-62-2	Vanadium	ug/g	101	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545	WV	7440-65-5	Yttrium	ug/g	94.6	<2.00E-03	<3.25E-03	n/a	n/a	n/a	n/a	3.25E-03	n/a	U
S09V001545	WV	7440-66-6	Zinc	ug/g	100	<5.00E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545	WV	7440-67-7	Zirconium	ug/g	97.9	5.56E-03	<8.13E-03	n/a	n/a	n/a	n/a	8.13E-03	n/a	U
S09V001545	WV	14133-76-7	Technetium-99	ug/g	114	<3.00E-06	6.72E-03	n/a	n/a	n/a	n/a	3.90E-06	n/a	
S09V001545	WV	13968-55-3	Uranium-233	ug/g	n/a	<1.00E-07	<1.30E-07	n/a	n/a	n/a	n/a	1.30E-07	n/a	U
S09V001545	WV	13966-29-5	Uranium-234	ug/g	n/a	<5.00E-08	1.92E-07	n/a	n/a	n/a	n/a	6.50E-08	n/a	
S09V001545	WV	15117-96-1	Uranium-235	ug/g	104	<1.10E-07	1.49E-05	n/a	n/a	n/a	n/a	1.43E-07	n/a	
S09V001545	WV	13982-70-2	Uranium-236	ug/g	n/a	<4.00E-08	6.89E-08	n/a	n/a	n/a	n/a	5.20E-08	n/a	
S09V001545	WV	U-238	Uranium-238	ug/g	103	<5.50E-06	2.00E-03	n/a	n/a	n/a	n/a	7.15E-06	n/a	

NA = Not Analyzed, ND = Not Detected

C - Blank Contamination
U - Less Than Detection Limit
M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

SX Barrier
Data Summary Report

Sample Group: 20090812
Core Number: C7192
Sample Depth: 140-142
Customer Sample ID: B20755B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000844			%WATERA	%WATER-APD	%	n/a	n/a	17.90	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000844			WT%SOLID	Weight percent solids	%	n/a	n/a	82.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000844			15046-84-1	Iodine-129	uCi/g	93.8	<1.52E-07	<1.52E-07	<1.41E-07	n/a	n/a	n/a	1.52E-07	n/a	U

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C - Blank Contamination
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M - RPD Outside Range
B - Estimated
X - Comment
B - Blank Contamination
N - MS/MSD Outside Range

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SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7154 74-76

Customer Sample ID: B206P6

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001192			%WATERA	%WATER-APD	%	n/a	n/a	16.65	17.93	17.29	7.403	n/a	0.01000	n/a	
S09V001192			WT%SOLID	Weight percent solids	%	n/a	n/a	83.4	82.1	82.7	1.55	n/a	0.0100	n/a	
S09V001193			PH	pH	unitless	n/a	4.69	7.44	7.52	7.48	1.07	n/a	0.0100	n/a	

Customer Sample ID: B206P6 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001194		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.313	2.21	2.34	2.28	5.67	n/a	0.0103	n/a	

NA = Not Analyzed, ND = Not Detected

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SX Barrier
Data Summary of All Results

Sample Group: 20090372
Core Number: SX Barrier
Sample Depth: C7154 106-108
Customer Sample ID: B206P8

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001234			%WATERA	%WATER-APD	%	n/a	n/a	11.58	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001234			WT%SOLID	Weight percent solids	%	n/a	n/a	88.4	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001235			PH	pH	unitless	n/a	4.69	7.69	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206P8 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001236		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.313	1.51	n/a	n/a	n/a	n/a	6.92E-03	n/a	

NA = Not Analyzed, ND = Not Detected

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DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372
Core Number: SX Barrier
Sample Depth: C7156 92-94
Customer Sample ID: B206R2

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001258			%WATERA	%WATER-APD	%	n/a	n/a	12.23	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001258			WT%SOLID	Weight percent solids	%	n/a	n/a	87.8	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001259			PH	pH	unitless	n/a	5.63	7.85	7.83	7.84	0.255	n/a	0.0100	n/a	

NA = Not Analyzed, ND = Not Detected

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SX Barrier
Data Summary of All Results

Sample Group: 20090372
Core Number: SX Barrier
Sample Depth: C7156 126-128
Customer Sample ID: B206R4

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001272			%WATERA	%WATER-APD	%	n/a	n/a	17.92	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001272			WT%SOLID	Weight percent solids	%	n/a	n/a	82.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001273			PH	pH	unitless	n/a	5.63	7.73	n/a	n/a	n/a	n/a	0.0100	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372
Core Number: SX Barrier
Sample Depth: C7156 140-142
Customer Sample ID: B206R6

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001278			%WATERA	%WATER-APD	%	n/a	n/a	21.13	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001278			WT%SOLID	Weight percent solids	%	n/a	n/a	78.9	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001279			PH	pH	unitless	n/a	5.63	7.69	n/a	n/a	n/a	n/a	0.0100	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7158 87-89

Customer Sample ID: B206R8

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001240			%WATERA	%WATER-APD	%	n/a	n/a	2.160	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001240			WT%SOLID	Weight percent solids	%	n/a	n/a	97.8	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001241			PH	pH	unitless	n/a	5.35	8.46	8.58	8.52	1.41	n/a	0.0100	n/a	

Customer Sample ID: B206R8 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001242		WV	ALKALINITY	Total Alkalinity	MEQL	109	0.153	1.74	n/a	n/a	n/a	n/a	8.36E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7158 124-126

Customer Sample ID: B206T0

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001246			%WATERA	%WATER-APD	%	n/a	n/a	14.08	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001246			WT%SOLID	Weight percent solids	%	n/a	n/a	85.9	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001247			PH	pH	unitless	n/a	5.35	8.03	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206T0 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001248		WV	ALKALINITY	Total Alkalinity	MEQL	109	0.153	1.86	n/a	n/a	n/a	n/a	0.0106	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7158 141-143

Customer Sample ID: B206T2

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001252			%WATERA	%WATER-APD	%	n/a	n/a	13.89	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001252			WT%SOLID	Weight percent solids	%	n/a	n/a	86.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001253			PH	pH	unitless	n/a	5.35	7.91	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206T2 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001254		WV	ALKALINITY	Total Alkalinity	MEQL	109	0.153	1.45	2.13	1.79	37.9	n/a	9.93E-03	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7168 81-83

Customer Sample ID: B206W8

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000812			%WATERA	%WATER-APD	%	n/a	n/a	10.86	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000812			WT%SOLID	Weight percent solids	%	n/a	n/a	89.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000816			PH	pH	unitless	n/a	7.80	9.70	9.80	9.75	1.03	n/a	0.0100	n/a	

Customer Sample ID: B206W8 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000817		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.267	8.35	8.11	8.23	2.89	n/a	9.37E-03	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7168 129-131

Customer Sample ID: B206X0

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000818			%WATERA	%WATER-APD	%	n/a	n/a	13.94	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000818			WT%SOLID	Weight percent solids	%	n/a	n/a	86.1	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000822			PH	pH	unitless	n/a	7.80	7.60	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206X0 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000823		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.267	1.08	n/a	n/a	n/a	n/a	9.72E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7168 145-147

Customer Sample ID: B206X2

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000824			%WATERA	%WATER-APD	%	n/a	n/a	17.03	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000824			WT%SOLID	Weight percent solids	%	n/a	n/a	83.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000828			PH	pH	unitless	n/a	7.80	8.10	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206X2 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000829		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.267	1.90	n/a	n/a	n/a	n/a	0.0105	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

RPP-RPT-47008 Rev.0

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7170 81.5-83.5

Customer Sample ID: B206X4

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000788			%WATERA	%WATER-APD	%	n/a	n/a	2.750	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000788			WT%SOLID	Weight percent solids	%	n/a	n/a	97.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000792			PH	pH	unitless	n/a	7.40	7.90	8.00	7.95	1.26	n/a	0.0100	n/a	

Customer Sample ID: B206X4 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000793		WV	ALKALINITY	Total Alkalinity	MEQL	108	0.205	0.979	0.959	0.969	2.06	n/a	0.0116	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7170 113-115

Customer Sample ID: B206X6

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000794			%WATERA	%WATER-APD	%	n/a	n/a	5.220	5.330	5.275	2.085	n/a	n/a	n/a	
S09V000794			WT%SOLID	Weight percent solids	%	n/a	n/a	94.8	94.7	94.7	0.116	n/a	0.0100	n/a	
S09V000798			PH	pH	unitless	n/a	7.40	7.60	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206X6 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000799		WV	ALKALINITY	Total Alkalinity	MEQL	108	0.205	0.782	n/a	n/a	n/a	n/a	0.0121	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

RPP-RPT-47008 Rev.0

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7170 133-135

Customer Sample ID: B206X8

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000800			%WATERA	%WATER-APD	%	n/a	n/a	15.69	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000800			WT%SOLID	Weight percent solids	%	n/a	n/a	84.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000804			PH	pH	unitless	n/a	7.40	8.10	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206X8 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000805		WV	ALKALINITY	Total Alkalinity	MEQL	108	0.205	1.90	n/a	n/a	n/a	n/a	0.0152	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7170 150-152

Customer Sample ID: B20H47

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000806			%WATERA	%WATER-APD	%	n/a	n/a	18.67	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000806			WT%SOLID	Weight percent solids	%	n/a	n/a	81.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000810			PH	pH	unitless	n/a	7.40	8.10	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20H47 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000811		WV	ALKALINITY	Total Alkalinity	MEQL	108	0.205	2.24	n/a	n/a	n/a	n/a	0.0161	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7172 46-48

Customer Sample ID: B206Y1B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000512			PH	pH	unitless	n/a	6.30	8.20	8.24	8.22	0.487	n/a	0.0100	n/a	
S09V000515			%WATERA	%WATER-APD	%	n/a	n/a	13.84	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000515			WT%SOLID	Weight percent solids	%	n/a	n/a	86.2	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206Y1B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000513		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.214	2.42	n/a	n/a	n/a	n/a	0.0103	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7172 75.5-77.5

Customer Sample ID: B206Y3B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000518			PH	pH	unitless	n/a	6.30	8.48	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000521			%WATERA	%WATER-APD	%	n/a	n/a	14.28	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000521			WT%SOLID	Weight percent solids	%	n/a	n/a	85.7	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206Y3B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000519		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.214	2.31	2.38	2.34	3.05	n/a	0.0145	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7172 97.5-99.5

Customer Sample ID: B206Y5B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000669			PH	pH	unitless	n/a	6.30	8.24	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000672			%WATERA	%WATER-APD	%	n/a	n/a	18.96	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000672			WT%SOLID	Weight percent solids	%	n/a	n/a	81.0	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B206Y5B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000670		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.214	2.98	n/a	n/a	n/a	n/a	0.0108	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7172 126-128

Customer Sample ID: B20H52B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000675			PH	pH	unitless	n/a	6.30	8.25	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000678			%WATERA	%WATER-APD	%	n/a	n/a	20.33	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000678			WT%SOLID	Weight percent solids	%	n/a	n/a	79.7	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20H52B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000676		WV	ALKALINITY	Total Alkalinity	MEQL	115	0.214	2.70	n/a	n/a	n/a	n/a	0.0111	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7178 127-129

Customer Sample ID: B20710

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000710			%WATERA	%WATER-APD	%	n/a	n/a	17.53	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000710			WT%SOLID	Weight percent solids	%	n/a	n/a	82.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000714			PH	pH	unitless	n/a	8.01	7.44	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20710 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000715		WV	ALKALINITY	Total Alkalinity	MEQL	113	0.225	1.03	n/a	n/a	n/a	n/a	0.0104	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7178 89-91

Customer Sample ID: B20708

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000680			%WATERA	%WATER-APD	%	n/a	n/a	2.750	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000680			WT%SOLID	Weight percent solids	%	n/a	n/a	97.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000684			PH	pH	unitless	n/a	8.01	8.85	8.83	8.84	0.226	n/a	0.0100	n/a	

Customer Sample ID: B20708 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000685		WV	ALKALINITY	Total Alkalinity	MEQL	113	0.225	2.06	2.19	2.13	5.94	n/a	7.67E-03	n/a	

NA = Not Analyzed, ND = Not Detected

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DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7178 151-153

Customer Sample ID: B20712

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000716			%WATERA	%WATER-APD	%	n/a	n/a	11.03	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000716			WT%SOLID	Weight percent solids	%	n/a	n/a	89.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000720			PH	pH	unitless	n/a	8.01	8.51	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20712 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000721		WV	ALKALINITY	Total Alkalinity	MEQL	113	0.225	1.55	n/a	n/a	n/a	n/a	9.12E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7180 93-95

Customer Sample ID: B20714

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000764			%WATERA	%WATER-APD	%	n/a	n/a	5.540	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000764			WT%SOLID	Weight percent solids	%	n/a	n/a	94.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000768			PH	pH	unitless	n/a	6.65	7.67	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20714 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000769		WV	ALKALINITY	Total Alkalinity	MEQL	117	0.179	1.03	n/a	n/a	n/a	n/a	4.78E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7180 104-106

Customer Sample ID: B20716

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000770			%WATERA	%WATER-APD	%	n/a	n/a	7.770	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000770			WT%SOLID	Weight percent solids	%	n/a	n/a	92.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000774			PH	pH	unitless	n/a	6.65	7.43	7.56	7.50	1.73	n/a	0.0100	n/a	

Customer Sample ID: B20716 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000775		WV	ALKALINITY	Total Alkalinity	MEQL	117	0.179	0.854	0.828	0.841	3.03	n/a	5.23E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7180 127-129

Customer Sample ID: B20718

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000776			%WATERA	%WATER-APD	%	n/a	n/a	12.75	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000776			WT%SOLID	Weight percent solids	%	n/a	n/a	87.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000780			PH	pH	unitless	n/a	6.65	7.53	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20718 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000781		WV	ALKALINITY	Total Alkalinity	MEQL	117	0.179	1.33	n/a	n/a	n/a	n/a	5.61E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7180 152-154

Customer Sample ID: B20H67

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000782			%WATERA	%WATER-APD	%	n/a	n/a	15.31	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000782			WT%SOLID	Weight percent solids	%	n/a	n/a	84.7	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000786			PH	pH	unitless	n/a	6.65	8.16	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20H67 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000787		WV	ALKALINITY	Total Alkalinity	MEQL	117	0.179	1.67	n/a	n/a	n/a	n/a	5.92E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7184 83-85

Customer Sample ID: B20727B

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000943			PH	pH	unitless	n/a	6.05	8.14	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20727B WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000944		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.224	1.70	n/a	n/a	n/a	n/a	8.00E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7184 104-106

Customer Sample ID: B20728

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000945			%WATERA	%WATER-APD	%	n/a	n/a	12.37	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000945			WT%SOLID	Weight percent solids	%	n/a	n/a	87.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000949			PH	pH	unitless	n/a	6.05	7.84	7.80	7.82	0.512	n/a	0.0100	n/a	

Customer Sample ID: B20728 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000950		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.224	1.54	1.58	1.56	2.10	n/a	9.37E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7184 128.5-130.5

Customer Sample ID: B20730

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001001			%WATERA	%WATER-APD	%	n/a	n/a	11.66	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001001			WT%SOLID	Weight percent solids	%	n/a	n/a	88.3	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001005			PH	pH	unitless	n/a	6.05	8.00	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20730 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001006		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.224	1.71	n/a	n/a	n/a	n/a	9.34E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7184 141-143

Customer Sample ID: B20VK6

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001037			%WATERA	%WATER-APD	%	n/a	n/a	19.36	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001037			WT%SOLID	Weight percent solids	%	n/a	n/a	80.6	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001038			PH	pH	unitless	n/a	6.05	7.95	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20VK6 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001039		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.224	2.30	n/a	n/a	n/a	n/a	0.0110	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7186 105-107

Customer Sample ID: B20732

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001183			%WATERA	%WATER-APD	%	n/a	n/a	9.750	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001183			WT%SOLID	Weight percent solids	%	n/a	n/a	90.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001184			PH	pH	unitless	n/a	5.10	7.61	7.66	7.64	0.655	n/a	0.0100	n/a	

Customer Sample ID: B20732 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001185		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.298	1.42	1.42	1.42	0.108	n/a	8.87E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7186 128-130

Customer Sample ID: B20734

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001198			%WATERA	%WATER-APD	%	n/a	n/a	18.52	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001198			WT%SOLID	Weight percent solids	%	n/a	n/a	81.5	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001199			PH	pH	unitless	n/a	5.10	7.71	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20734 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001200		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.298	2.00	n/a	n/a	n/a	n/a	0.0107	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7186 145-147

Customer Sample ID: B20736

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001218			%WATERA	%WATER-APD	%	n/a	n/a	12.99	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V001218			WT%SOLID	Weight percent solids	%	n/a	n/a	87.0	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V001219			PH	pH	unitless	n/a	5.10	7.80	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20736 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V001220		WV	ALKALINITY	Total Alkalinity	MEQL	112	0.298	1.66	n/a	n/a	n/a	n/a	7.13E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7192 100-102

Customer Sample ID: B20750

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000830			%WATERA	%WATER-APD	%	n/a	n/a	15.81	n/a	n/a	n/a	n/a	n/a	n/a	
S09V000830			WT%SOLID	Weight percent solids	%	n/a	n/a	84.2	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000834			PH	pH	unitless	n/a	n/a	8.35	8.43	8.39	0.954	n/a	0.0100	n/a	

Customer Sample ID: B20750 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000835		WV	ALKALINITY	Total Alkalinity	MEQL	114	0.227	2.94	1.00	1.97	98.3	n/a	0.0101	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7192 128-130

Customer Sample ID: B20752

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000836			%WATERA	%WATER-APD	%	n/a	n/a	18.34	n/a	n/a	n/a	n/a	0.01000	n/a	
S09V000836			WT%SOLID	Weight percent solids	%	n/a	n/a	81.7	n/a	n/a	n/a	n/a	0.0100	n/a	
S09V000840			PH	pH	unitless	n/a	n/a	7.57	7.58	7.58	0.132	n/a	0.0100	n/a	

Customer Sample ID: B20752 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000841		WV	ALKALINITY	Total Alkalinity	MEQL	114	0.238	1.08	3.09	2.08	96.5	n/a	8.00E-03	n/a	

NA = Not Analyzed, ND = Not Detected

30 - Aug - 2011 14:19:27
DSRHardcopyWOLimits 2.7.26a
DSR.Jar v. 2.7.27

SX Barrier
Data Summary of All Results

Sample Group: 20090372

Core Number: SX Barrier

Sample Depth: C7192 140-142

Customer Sample ID: B20754

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000842			%WATERA	%WATER-APD	%	n/a	n/a	17.64	17.40	17.52	1.370	n/a	0.01000	n/a	
S09V000842			WT%SOLID	Weight percent solids	%	n/a	n/a	82.4	82.6	82.5	0.291	n/a	0.0100	n/a	
S09V000846			PH	pH	unitless	n/a	n/a	8.02	n/a	n/a	n/a	n/a	0.0100	n/a	

Customer Sample ID: B20754 WE

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S09V000847		WV	ALKALINITY	Total Alkalinity	MEQL	114	0.238	1.58	n/a	n/a	n/a	n/a	7.85E-03	n/a	

NA = Not Analyzed, ND = Not Detected

Attachment 2

DATA SUMMARY REPORT-TECHNETIUM-99 & NITRATE

RPP-RPT-47008 Rev.0

"Quick TAT" Results for Tc-99 and Nitrate

Customer Sample ID	Sample Depth	Lab Sample ID	Analyte	Units	LCS % Rec.	Blank	Result	RPD	MS % Rec.	Detection Limit	Result Qualifier
B206P6	C7154 74-76	S09V001194	Nitrate	ug/g	98.9	<0.0162	11.5	0.147	122	0.125	
B206P6	C7154 74-76	S09V001194	Technetium-99	pCi/g	101	<0.068	>0.0876	n/a	103	0.0876	U
B206P8	C7154 106-108	S09V001236	Nitrate	ug/g	98.9	<0.0162	8.80	n/a	n/a	0.112	
B206P8	C7154 106-108	S09V001236	Technetium-99	pCi/g	101	<0.068	>0.0784	n/a	n/a	0.0784	U
B206R2	C7156 92-94	S09V001260	Nitrate	ug/g	98.5	0.200	8.94	14.2	109	0.0189	
B206R2	C7156 92-94	S09V001260	Technetium-99	pCi/g	114	<0.068	>0.0794	n/a	110	0.0794	U
B206R4	C7156 126-128	S09V001274	Nitrate	ug/g	98.5	0.200	165	n/a	n/a	0.877	B
B206R4	C7156 126-128	S09V001274	Technetium-99	pCi/g	114	<0.068	32.0	n/a	n/a	0.0898	
B206R6	C7156 140-142	S09V001280	Nitrate	ug/g	98.5	0.200	479	n/a	n/a	0.252	E
B206R6	C7156 140-142	S09V001280	Technetium-99	pCi/g	114	<0.068	92.5	n/a	n/a	0.0961	
B206R8	C7158 87-89	S09V001242	Nitrate	ug/g	101	<0.0162	2.12	n/a	n/a	0.0169	
B206R8	C7158 87-89	S09V001242	Technetium-99	pCi/g	98.6	<0.068	>0.0711	n/a	98.5	0.0711	U
B206T0	C7158 124-126	S09V001248	Nitrate	ug/g	101	<0.0162	17.3	n/a	n/a	0.0214	
B206T0	C7158 124-126	S09V001248	Technetium-99	pCi/g	98.6	<0.068	0.456	n/a	n/a	0.0898	J
B206T2	C7158 141-143	S09V001254	Nitrate	ug/g	101	<0.0162	54.1	0.888	101	1.03	
B206T2	C7158 141-143	S09V001254	Technetium-99	pCi/g	98.6	<0.068	4.01	n/a	n/a	0.0845	c
B206W8	C7168 81-83	S09V000817	Nitrate	ug/g	103	0.114	958	2.00	109	1.92	
B206W8	C7168 81-83	S09V000817	Technetium-99	pCi/g	114	<0.051	65.8	5.38	109	0.0597	
B206X0	C7168 129-131	S09V000823	Nitrate	ug/g	103	0.114	1.95E+03	n/a	n/a	1.99	
B206X0	C7168 129-131	S09V000823	Technetium-99	pCi/g	114	<0.051	137	n/a	n/a	0.0621	
B206X2	C7168 145-147	S09V000829	Nitrate	ug/g	103	0.114	66.2	n/a	n/a	0.233	
B206X2	C7168 145-147	S09V000829	Technetium-99	pCi/g	114	<0.051	2.48	n/a	n/a	0.0666	
B206X4	C7170 81.5-83.5	S09V000793	Nitrate	ug/g	101	<0.0162	174	5.30	102	0.212	
B206X4	C7170 81.5-83.5	S09V000793	Technetium-99	pCi/g	100	<0.102	14.3	0.0152	102	0.0495	
B206X6	C7170 113-115	S09V000799	Nitrate	ug/g	101	<0.0162	990	n/a	n/a	1.65	
B206X6	C7170 113-115	S09V000799	Technetium-99	pCi/g	100	<0.102	76.8	n/a	n/a	0.0513	
B206X8	C7170 133-135	S09V000805	Nitrate	ug/g	101	<0.0162	27.0	n/a	n/a	0.0410	
B206X8	C7170 133-135	S09V000805	Technetium-99	pCi/g	100	<0.102	0.530	n/a	n/a	0.0129	
B206Y1B	C7172 46-48	S09V000513	Nitrate	ug/g	109	<0.0162	5.51	n/a	n/a	0.0209	
B206Y1B	C7172 46-48	S09V000513	Technetium-99	pCi/g	104	<0.051	>0.0656	n/a	n/a	0.0656	U
B206Y3B	C7172 75.5-77.5	S09V000519	Nitrate	ug/g	109	<0.0162	51.8	7.81	n/a	0.0195	E
B206Y3B	C7172 75.5-77.5	S09V000519	Technetium-99	pCi/g	104	<0.051	1.02	7.21	101	0.0615	
B206Y5B	C7172 97.5-99.5	S09V000670	Nitrate	ug/g	109	<0.0162	266	n/a	121	2.20	
B206Y5B	C7172 97.5-99.5	S09V000670	Technetium-99	pCi/g	104	<0.051	50.3	n/a	n/a	0.0687	
B20708	C7178 89-91	S09V000685	Nitrate	ug/g	96.8	<0.0162	1.49E+03	0.273	102	1.57	
B20708	C7178 89-91	S09V000685	Technetium-99	pCi/g	103	<0.051	291	1.03	99.1	0.0488	
B20710	C7178 127-129	S09V000715	Nitrate	ug/g	96.8	<0.0162	7.06E+03	0.0407	n/a	2.13	
B20710	C7178 127-129	S09V000715	Technetium-99	pCi/g	103	<0.051	1560	n/a	n/a	0.663	
B20712	C7178 151-153	S09V000721	Nitrate	ug/g	96.8	<0.0162	35.8	2.95	n/a	1.86	
B20712	C7178 151-153	S09V000721	Technetium-99	pCi/g	103	<0.051	0.135	n/a	n/a	0.0581	J
B20714	C7180 93-95	S09V000769	Nitrate	ug/g	96.0	<0.0162	216	n/a	n/a	0.178	
B20714	C7180 93-95	S09V000769	Technetium-99	pCi/g	100	<0.498	36.9	n/a	n/a	0.102	
B20716	C7180 104-106	S09V000775	Nitrate	ug/g	96.0	<0.0162	1.77E+03	n/a	n/a	1.78	
B20716	C7180 104-106	S09V000775	Technetium-99	pCi/g	100	<0.498	270	1.21	97.8	0.111	
B20718	C7180 127-129	S09V000781	Nitrate	ug/g	96.0	<0.0162	6.20E+03	n/a	96.1	21.0	
B20718	C7180 127-129	S09V000781	Technetium-99	pCi/g	100	<0.498	1090	n/a	n/a	0.597	
B20727B	C7184 83-85	S09V000944	Nitrate	ug/g	97.9	<0.0162	8.11	n/a	n/a	0.0486	
B20727B	C7184 83-85	S09V000944	Technetium-99	pCi/g	105	<0.068	>0.068	n/a	n/a	0.0680	U
B20728	C7184 104-106	S09V000950	Nitrate	ug/g	97.9	<0.0162	102	2.41	103	0.114	
B20728	C7184 104-106	S09V000950	Technetium-99	pCi/g	105	<0.068	8.53	4.21	98.0	0.0796	
B20730	C7184 128.5-130.5	S09V001006	Nitrate	ug/g	97.9	<0.0162	20.3	n/a	n/a	0.0568	
B20730	C7184 128.5-130.5	S09V001006	Technetium-99	pCi/g	105	<0.068	0.231	n/a	n/a	0.0794	J

RPP-RPT-47008 Rev.0

"Quick TAT" Results for Tc-99 and Nitrate

Customer Sample ID	Sample Depth	Lab Sample ID	Analyte	Units	LCS % Rec.	Blank	Result	RPD	MS % Rec.	Detection Limit	Result Qualifier
B20732	C7186 105-107	S09V001185	Nitrate	ug/g	98.1	<0.0162	71.2	1.04	104	0.198	
B20732	C7186 105-107	S09V001185	Technetium-99	pCi/g	104	<0.068	1.99	1.80	103	0.0755	
B20734	C7186 128-130	S09V001200	Nitrate	ug/g	98.1	<0.0162	103	n/a	n/a	0.238	
B20734	C7186 128-130	S09V001200	Technetium-99	pCi/g	104	<0.068	2.75	n/a	n/a	0.0910	
B20736	C7186 145-147	S09V001220	Nitrate	ug/g	98.1	<0.0162	72.6	n/a	n/a	0.212	
B20736	C7186 145-147	S09V001220	Technetium-99	pCi/g	104	<0.068	7.02	n/a	n/a	0.0808	
B20750	C7192 100-102	S09V000835	Nitrate	ug/g	105	0.0572	177	1.34	103	0.428	
B20750	C7192 100-102	S09V000835	Technetium-99	pCi/g	118	<0.068	29.2	4.02	93.2	0.0855	
B20752	C7192 128-130	S09V000841	Nitrate	ug/g	98.2	0.0412	3.04E+03	0.195	104	4.34	
B20752	C7192 128-130	S09V000841	Technetium-99	pCi/g	99.7	<0.068	706	3.62	104	0.454	
B20754	C7192 140-142	S09V000847	Nitrate	ug/g	98.2	0.0412	269	n/a	n/a	1.08	
B20754	C7192 140-142	S09V000847	Technetium-99	pCi/g	99.7	<0.068	82.8	n/a	n/a	0.0889	
B20H47	C7170 150-152	S09V000811	Nitrate	ug/g	101	<0.0162	41.2	n/a	n/a	0.0435	
B20H47	C7170 150-152	S09V000811	Technetium-99	pCi/g	100	<0.102	0.0296	n/a	n/a	0.0137	J
B20H52B	C7172 126-128	S09V000676	Nitrate	ug/g	109	<0.0162	613	n/a	n/a	2.26	
B20H52B	C7172 126-128	S09V000676	Technetium-99	pCi/g	104	<0.051	115	n/a	n/a	0.0706	
B20H67	C7180 152-154	S09V000787	Nitrate	ug/g	96.0	<0.0162	36.2	n/a	n/a	2.02	
B20H67	C7180 152-154	S09V000787	Technetium-99	pCi/g	100	<0.498	1.13	n/a	n/a	0.0126	
B20VK6	C7184 141-143	S09V001039	Nitrate	ug/g	97.9	<0.0162	54.4	n/a	n/a	0.0668	
B20VK6	C7184 141-143	S09V001039	Technetium-99	pCi/g	105	<0.068	>0.0935	n/a	n/a	0.0935	U

Attachment 3

SAMPLE BREAKDOWN DIAGRAMS

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7154 74-76

Customer ID: B206P6

Solid — Sample Portion: Shoe

S09V001192
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001193
pH

Assign: Water Digest, Vadose

S09V001194
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206P7A

Solid — Sample Portion: Liner A

S09V001437
Hold PJC

Customer ID: B206P7B

Solid — Sample Portion: Liner B

S09V001196
Hold PJC

Customer ID: B206P7C

Solid — Sample Portion: Liner C

S09V001197
Hold PJC

Core: N/A
Sample Depth: C7154 106-108

Customer ID: B206P8

Solid — Sample Portion: Shoe

S09V0001234
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001235
pH

Assign: Water Digest, Vadose

S09V001236
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206P9A

Solid — Sample Portion: Liner A

S09V001237
Hold PJC

Customer ID: B206P9B

Solid — Sample Portion: Liner B

S09V001238
Hold PJC

Customer ID: B206P9C

Solid — Sample Portion: Liner C

S09V001239
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7156 92-94

Customer ID: B206R2

Solid — Sample Portion: Shoe

S09V001258
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001259
pH

Assign: Water Digest, Vadose

S09V001260
MS-Tc-99
IC-Anions

Customer ID: B206R3A

Solid — Sample Portion: Liner A

S09V001261
Hold PJC

Customer ID: B206R3B

Solid — Sample Portion: Liner B

S09V001262
Hold PJC

Customer ID: B206R3C

Solid — Sample Portion: Liner C

S09V001263
Hold PJC

Core: N/A
Sample Depth: C7156 126-128

Customer ID: B206R4

Solid — Sample Portion: Shoe

S09V0001272
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001273
pH

Assign: Water Digest, Vadose

S09V001274
MS-Tc-99
IC-Anions

Customer ID: B206R5A

Solid — Sample Portion: Liner A

S09V001275
Hold PJC

Customer ID: B206R5B

Solid — Sample Portion: Liner B

S09V001276
Hold PJC

Customer ID: B206R5C

Solid — Sample Portion: Liner C

S09V001277
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7156 140-142

Customer ID: B206R6

Solid

Sample Portion: Shoe

S09V001278
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001279
pH

Assign: Water Digest, Vadose

S09V001280
MS-Tc-99
IC-Anions

Customer ID: B206R7A

Solid

Sample Portion: Liner A

S09V001281
Hold PJC

Customer ID: B206R7B

Solid

Sample Portion: Liner B

S09V001282
Hold PJC

Customer ID: B206R7C

Solid

Sample Portion: Liner C

S09V001283
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7158 87-89

Customer ID: B206R8

Solid — Sample Portion: Shoe

S09V001240
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001241
pH

Assign: Water Digest, Vadose

S09V001242
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206R9A

Solid — Sample Portion: Liner A

S09V001243
Hold PJC

Customer ID: B206R9B

Solid — Sample Portion: Liner B

S09V001244
Hold PJC

Customer ID: B206R9C

Solid — Sample Portion: Liner C

S09V001245
Hold PJC

Core: N/A
Sample Depth: C7158 124-126

Customer ID: B206T0

Solid — Sample Portion: Shoe

S09V0001246
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001247
pH

Assign: Water Digest, Vadose

S09V001248
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206T1A

Solid — Sample Portion: Liner A

S09V001249
Hold PJC

Customer ID: B206T1B

Solid — Sample Portion: Liner B

S09V001250
Hold PJC

Customer ID: B206T1C

Solid — Sample Portion: Liner C

S09V001251
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7158 141-143

Customer ID: B206T2

Solid

Sample Portion: Shoe

S09V001252
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001253
pH

Assign: Water Digest, Vadose

S09V001254
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206T3A

Solid

Sample Portion: Liner A

S09V001255
Hold PJC

Customer ID: B206T3B

Solid

Sample Portion: Liner B

S09V001256
Hold PJC

Customer ID: B206T3C

Solid

Sample Portion: Liner C

S09V001257
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7168 81-83

Customer ID: B206W8

Solid — Sample Portion: Shoe

S09V000812
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000816
pH

Assign: Water Digest, Vadose

S09V000817
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206W9A

Solid — Sample Portion: Liner A

S09V000813
Hold PJC

Customer ID: B206W9B

Solid — Sample Portion: Liner B

S09V000814
Hold PJC

Customer ID: B206W9C

Solid — Sample Portion: Liner C

S09V000815
Hold PJC

Core: N/A
Sample Depth: C7168 129-131

Customer ID: B206X0

Solid — Sample Portion: Shoe

S09V000818
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000822
pH

Assign: Water Digest, Vadose

S09V000823
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206X1A

Solid — Sample Portion: Liner A

S09V000819
Hold PJC

Customer ID: B206X1B

Solid — Sample Portion: Liner B

S09V000820
Hold PJC

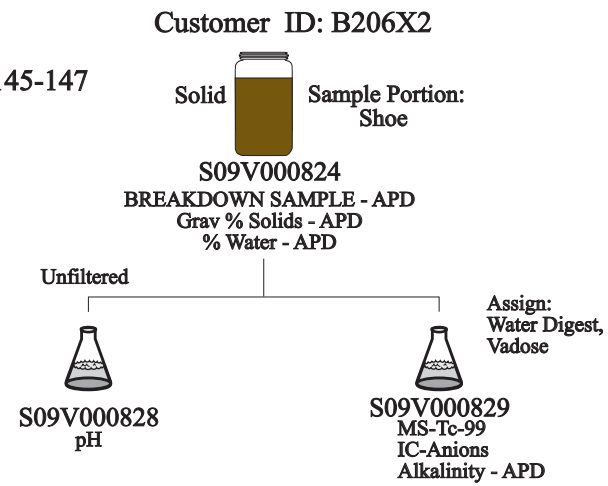
Customer ID: B206X1C

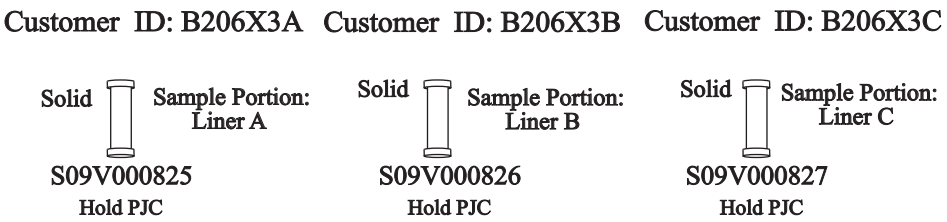
Solid — Sample Portion: Liner C

S09V000821
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7168 145-147





Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7170 81.5-83.5

Customer ID: B206X4

Solid — Sample Portion: Shoe

S09V000788
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000792
pH

Assign: Water Digest, Vadose

S09V000793
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206X5A

Solid — Sample Portion: Liner A

S09V000789
Hold PJC

Customer ID: B206X5B

Solid — Sample Portion: Liner B

S09V000790
Hold PJC

Customer ID: B206X5C

Solid — Sample Portion: Liner C

S09V000791
Hold PJC

Core: N/A
Sample Depth: C7170 113-115

Customer ID: B206X6

Solid — Sample Portion: Shoe

S09V000794
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000798
pH

Assign: Water Digest, Vadose

S09V000799
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206X7A

Solid — Sample Portion: Liner A

S09V000795
Hold PJC

Customer ID: B206X7B

Solid — Sample Portion: Liner B

S09V000796
Hold PJC

Customer ID: B206X7C

Solid — Sample Portion: Liner C

S09V000797
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7170 133-135

Customer ID: B206X8

Solid — Sample Portion: Shoe

S09V000800
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000804
pH

Assign: Water Digest, Vadose

S09V000805
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206X9A

Solid — Sample Portion: Liner A

S09V000801
Hold PJC

Customer ID: B206X9B

Solid — Sample Portion: Liner B

S09V000802
Hold PJC

Customer ID: B206X9C

Solid — Sample Portion: Liner C

S09V000803
Hold PJC

Core: N/A
Sample Depth: C7170 150-152

Customer ID: B20H47

Solid — Sample Portion: Shoe

S09V000806
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000810
pH

Assign: Water Digest, Vadose

S09V000811
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20H48A

Solid — Sample Portion: Liner A

S09V000807
Hold PJC

Customer ID: B20H48B

Solid — Sample Portion: Liner B

S09V000808
Hold PJC

Customer ID: B20H48C

Solid — Sample Portion: Liner C

S09V000809
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

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Core:N/A
Sample Depth: C7172 46-48

Customer ID: B206Y0

Solid — Sample Portion: Shoe

S09V000511
Hold PJC

Customer ID: B206Y1A

Solid — Sample Portion: Liner A

S09V000514
Hold PJC

Customer ID: B206Y1B

Solid — Sample Portion: Liner B

S09V000515
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000512
pH

Assign: Water Digest, Vadose

S09V000513
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206Y1C

Solid — Sample Portion: Liner C

S09V000516
Hold PJC

Core: N/A
Sample Depth: C7172 75.5-77.5

Customer ID: B206Y2

Solid — Sample Portion: Shoe

S09V000517
Hold PJC

Customer ID: B206Y3A

Solid — Sample Portion: Liner A

S09V000520
Hold PJC

Customer ID: B206Y3B

Solid — Sample Portion: Liner B

S09V000521
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000518
pH

Assign: Water Digest, Vadose

S09V000519
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B206Y3C

Solid — Sample Portion: Liner C

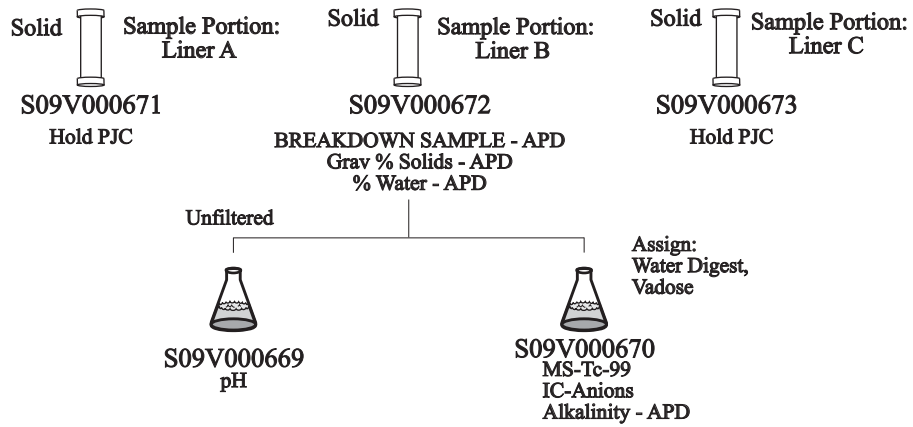
S09V000522
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7172 97.5-99.5

Customer ID: B206Y4

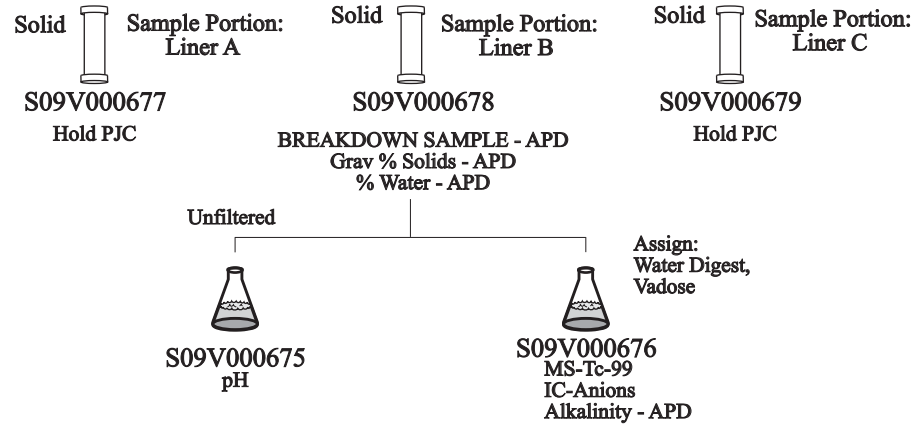
Customer ID: B206Y5A Customer ID: B206Y5B Customer ID: B206Y5C



Core: N/A
Sample Depth: C7172 126-128

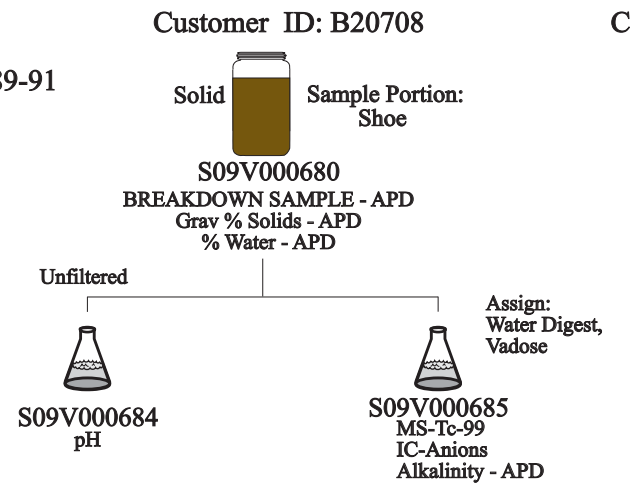
Customer ID: B20H51

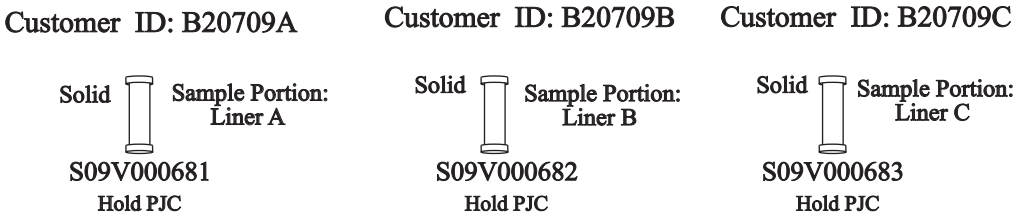
Customer ID: B20H52A Customer ID: B20H52B Customer ID: B20H52C



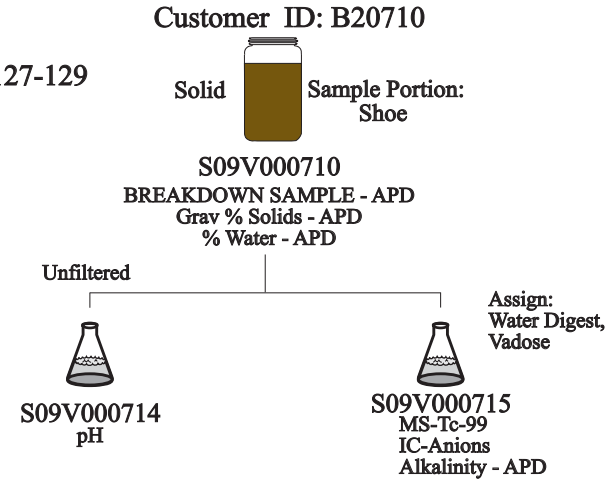
Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

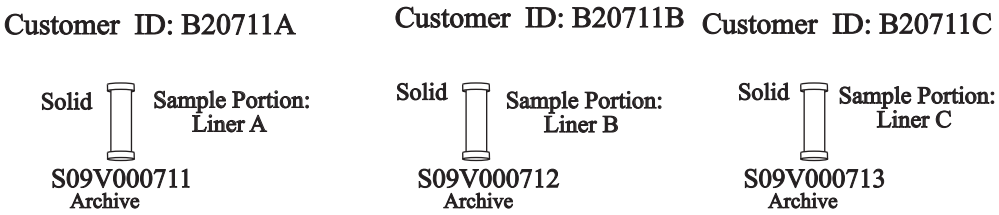
Core: N/A
Sample Depth: C7178 89-91





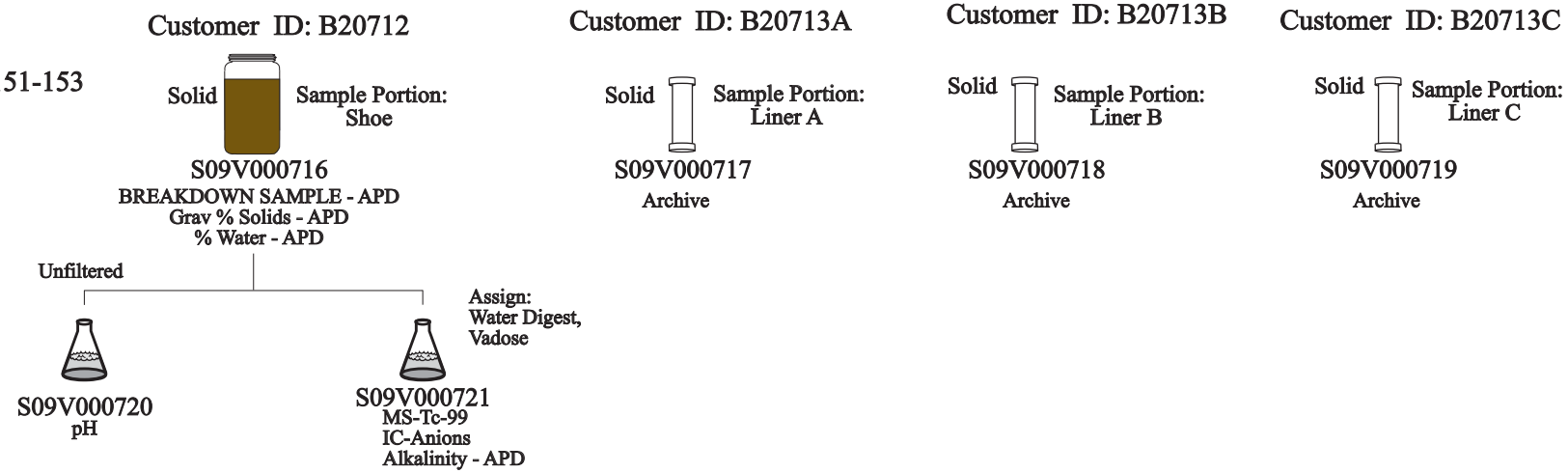
Core: N/A
Sample Depth: C7178 127-129





Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7178 151-153



Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7180 93-95

Customer ID: B20714

Solid — Sample Portion: Shoe

S09V000764
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000768
pH

Assign: Water Digest, Vadose

S09V000769
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20715A

Solid — Sample Portion: Liner A

S09V000765
Hold PJC

Customer ID: B20715B

Solid — Sample Portion: Liner B

S09V000766
Hold PJC

Customer ID: B20715C

Solid — Sample Portion: Liner C

S09V000767
Hold PJC

Core: N/A
Sample Depth: C7180 104-106

Customer ID: B20716

Solid — Sample Portion: Shoe

S09V000770
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000774
pH

Assign: Water Digest, Vadose

S09V000775
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20717A

Solid — Sample Portion: Liner A

S09V000771
Hold PJC

Customer ID: B20717B

Solid — Sample Portion: Liner B

S09V000772
Hold PJC

Customer ID: B20717C

Solid — Sample Portion: Liner C

S09V000773
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7180 127-129

Customer ID: B20718

Solid — Sample Portion: Shoe

S09V000776
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000780
pH

Assign: Water Digest, Vadose

S09V000781
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20719A

Solid — Sample Portion: Liner A

S09V000777
Hold PJC

Customer ID: B20719B

Solid — Sample Portion: Liner B

S09V000778
Hold PJC

Customer ID: B20719C

Solid — Sample Portion: Liner C

S09V000779
Hold PJC

Core: N/A
Sample Depth: C7180 152-154

Customer ID: B20H67

Solid — Sample Portion: Shoe

S09V000782
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000786
pH

Assign: Water Digest, Vadose

S09V000787
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20H68A

Solid — Sample Portion: Liner A

S09V000783
Hold PJC

Customer ID: B20H68B

Solid — Sample Portion: Liner B

S09V000784
Hold PJC

Customer ID: B20H68C

Solid — Sample Portion: Liner C

S09V000785
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7184 83-85

Customer ID: B20727A

Solid — Sample Portion: Liner A

S09V000941
Hold PJC

Customer ID: B20727B

Solid — Sample Portion: Liner B

S09V000942
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD
Hold PJC

Unfiltered

S09V000943
pH

Assign: Water Digest, Vadose

S09V000944
MS-Tc-99
IC-Anions
Alkalinity - APD

Core: N/A
Sample Depth: C7184 104-106

Customer ID: B20728

Solid — Sample Portion: Shoe

S09V000945
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000949
pH

Assign: Water Digest, Vadose

S09V000950
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20729A

Solid — Sample Portion: Liner A

S09V000946
Hold PJC

Customer ID: B20729B

Solid — Sample Portion: Liner B

S09V000947
Hold PJC

Customer ID: B20729C

Solid — Sample Portion: Liner C

S09V000948
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7184 128.5-130.5

Customer ID: B20730

Solid — Sample Portion: Shoe

S09V001001
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001005
pH

Assign: Water Digest, Vadose

S09V001006
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20731A

Solid — Sample Portion: Liner A

S09V001002
Hold PJC

Customer ID: B20731B

Solid — Sample Portion: Liner B

S09V001003
Hold PJC

Customer ID: B20731C

Solid — Sample Portion: Liner C

S09V001004
Hold PJC

Core: N/A
Sample Depth: C7184 141-143

Customer ID: B20VK6

Solid — Sample Portion: Shoe

S09V0001037
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001038
pH

Assign: Water Digest, Vadose

S09V001039
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20VK7A

Solid — Sample Portion: Liner A

S09V001040
Hold PJC

Customer ID: B20VK7B

Solid — Sample Portion: Liner B

S09V001041
Hold PJC

Customer ID: B20VK7C

Solid — Sample Portion: Liner C

S09V001042
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7186 105-107

Customer ID: B20732

Solid — Sample Portion: Shoe

S09V001183
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001184
pH

Assign: Water Digest, Vadose

S09V001185
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20733A

Solid — Sample Portion: Liner A

S09V001186
Hold PJC

Customer ID: B20733B

Solid — Sample Portion: Liner B

S09V001187
Hold PJC

Customer ID: B20733C

Solid — Sample Portion: Liner C

S09V001188
Hold PJC

Core: N/A
Sample Depth: C7186 128-130

Customer ID: B20734

Solid — Sample Portion: Shoe

S09V0001198
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001199
pH

Assign: Water Digest, Vadose

S09V001200
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20735A

Solid — Sample Portion: Liner A

S09V001201
Hold PJC

Customer ID: B20735B

Solid — Sample Portion: Liner B

S09V001202
Hold PJC

Customer ID: B20735C

Solid — Sample Portion: Liner C

S09V001203
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Due: 9/31/09

Core: N/A
Sample Depth: C7186 145-147

Customer ID: B20736

Solid

Sample Portion: Shoe

S09V001218
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V001219
pH

Assign: Water Digest, Vadose

S09V001220
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20737A

Solid

Sample Portion: Liner A

S09V001221
Hold PJC

Customer ID: B20737B

Solid

Sample Portion: Liner B

S09V001222
Hold PJC

Customer ID: B20737C

Solid

Sample Portion: Liner C

S09V001223
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7192 100-102

Customer ID: B20750

Solid — Sample Portion: Shoe

S09V000830
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000834
pH

Assign: Water Digest, Vadose

S09V000835
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20751A

Solid — Sample Portion: Liner A

S09V000831
Hold PJC

Customer ID: B20751B

Solid — Sample Portion: Liner B

S09V000832
Hold PJC

Customer ID: B20751C

Solid — Sample Portion: Liner C

S09V000833
Hold PJC

Core: N/A
Sample Depth: C7192 128-130

Customer ID: B20752

Solid — Sample Portion: Shoe

S09V000836
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000840
pH

Assign: Water Digest, Vadose

S09V000841
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20753A

Solid — Sample Portion: Liner A

S09V000837
Hold PJC

Customer ID: B20753B

Solid — Sample Portion: Liner B

S09V000838
Hold PJC

Customer ID: B20753C

Solid — Sample Portion: Liner C

S09V000839
Hold PJC

Vadose Zone: SX Barrier
Group 20090372
Nitrate & Tc-99 Expedited Analysis

Core: N/A
Sample Depth: C7192 140-142

Customer ID: B20754

Solid — Sample Portion: Shoe

S09V000842
BREAKDOWN SAMPLE - APD
Grav % Solids - APD
% Water - APD

Unfiltered

S09V000846
pH

Assign: Water Digest, Vadose

S09V000847
MS-Tc-99
IC-Anions
Alkalinity - APD

Customer ID: B20755A

Solid — Sample Portion: Liner A

S09V000843
Hold PJC

Customer ID: B20755B

Solid — Sample Portion: Liner B

S09V000844
Hold PJC

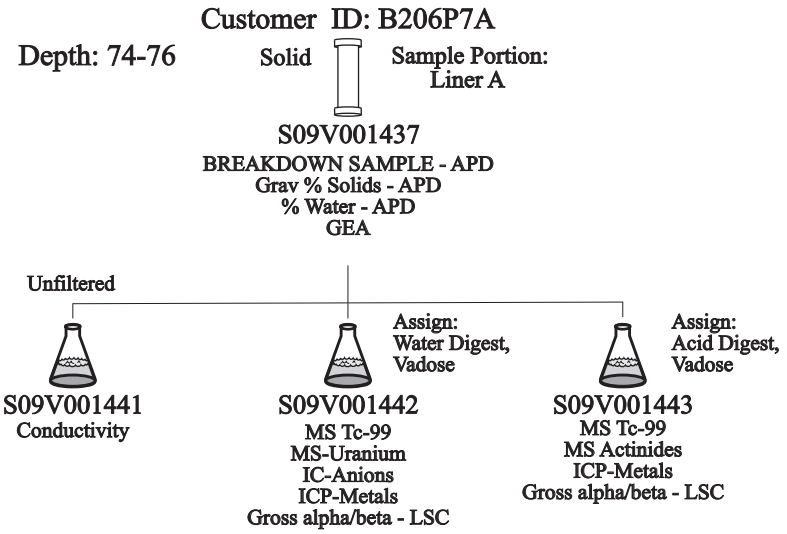
Customer ID: B20755C

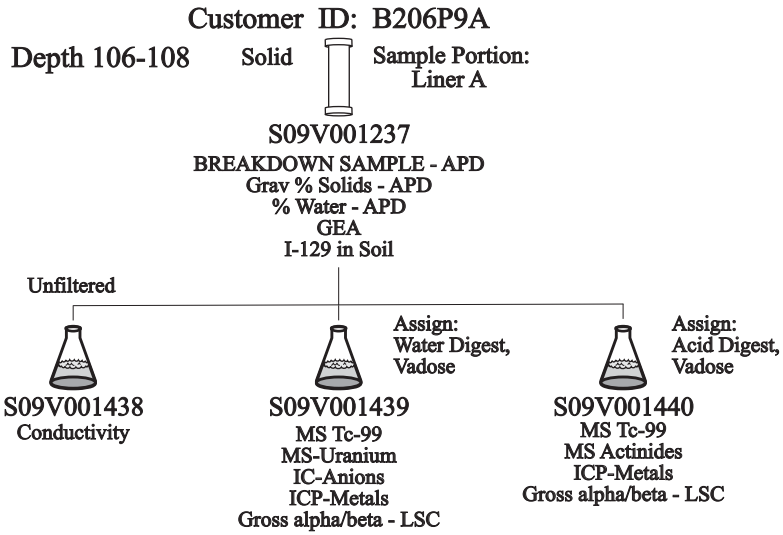
Solid — Sample Portion: Liner C

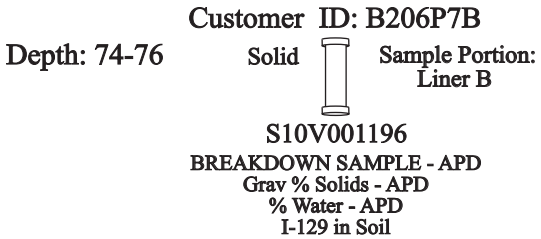
S09V000845
Hold PJC

Vadose Zone: SX Barrier
Group 20090802
Core No. C7154

RPP-RPT-47008 Rev.0

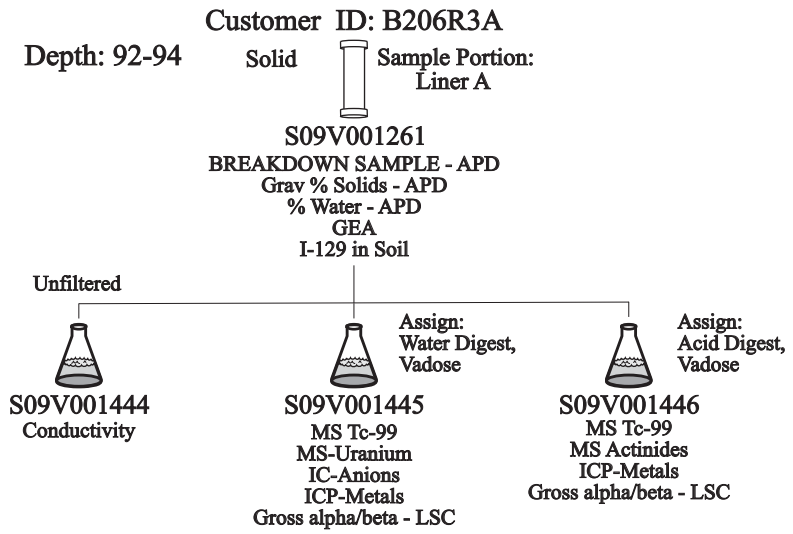


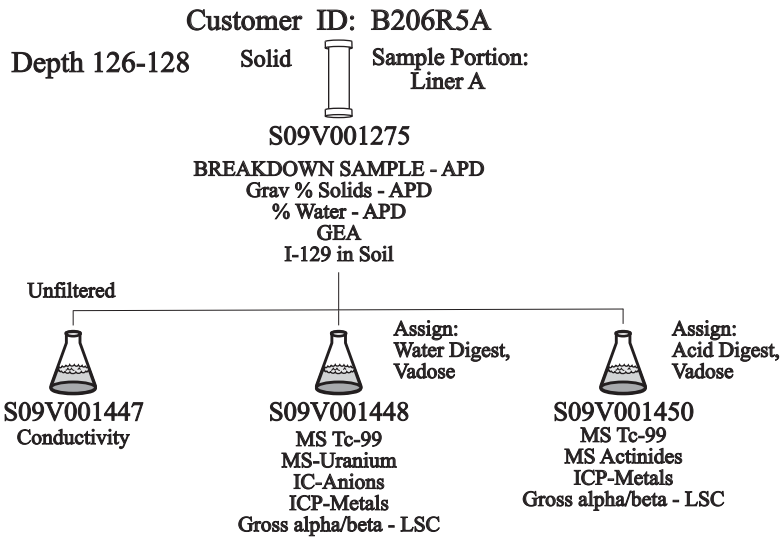


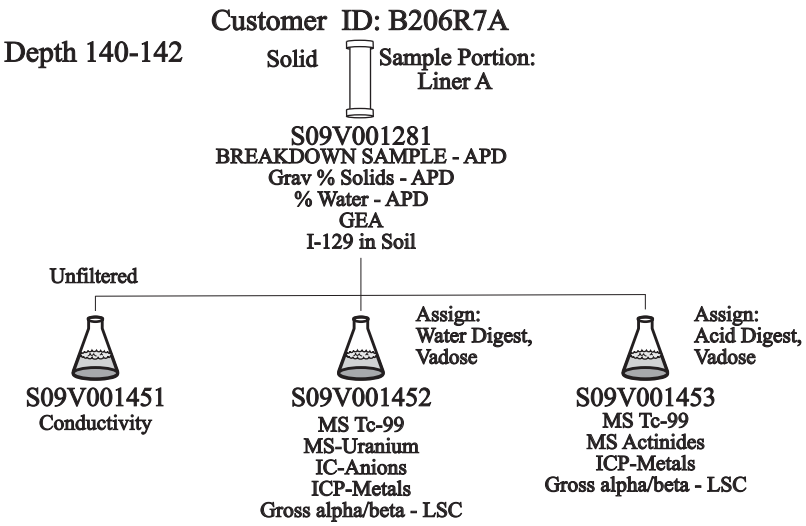


Vadose Zone: SX Barrier
Group 20090803
Core No. C7156

RPP-RPT-47008 Rev.0

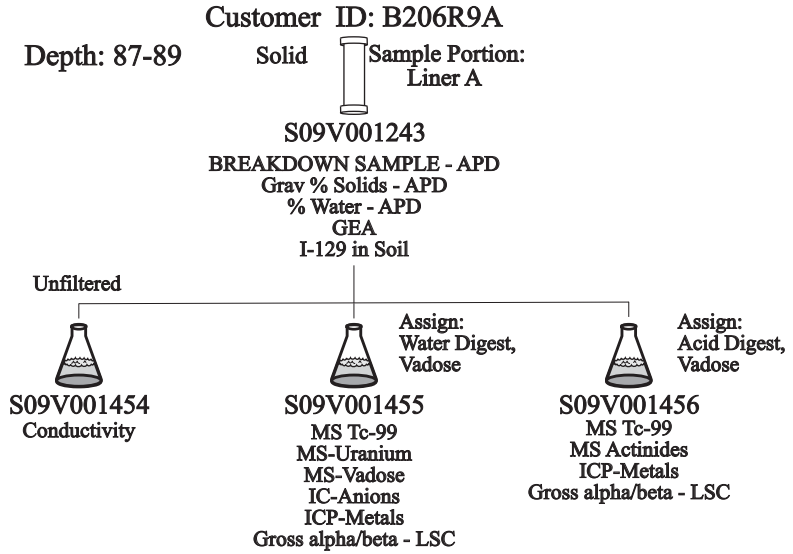


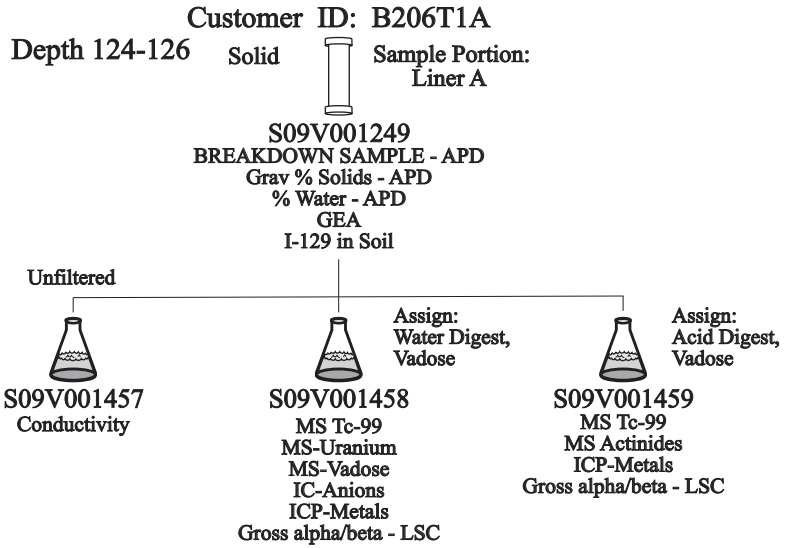


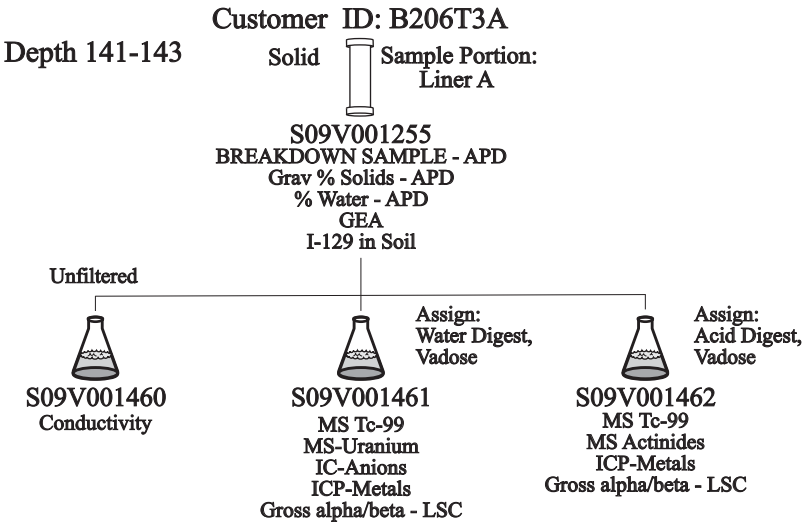


Vadose Zone: SX Barrier
Group 20090804
Core No. C7158

RPP-RPT-47008 Rev.0

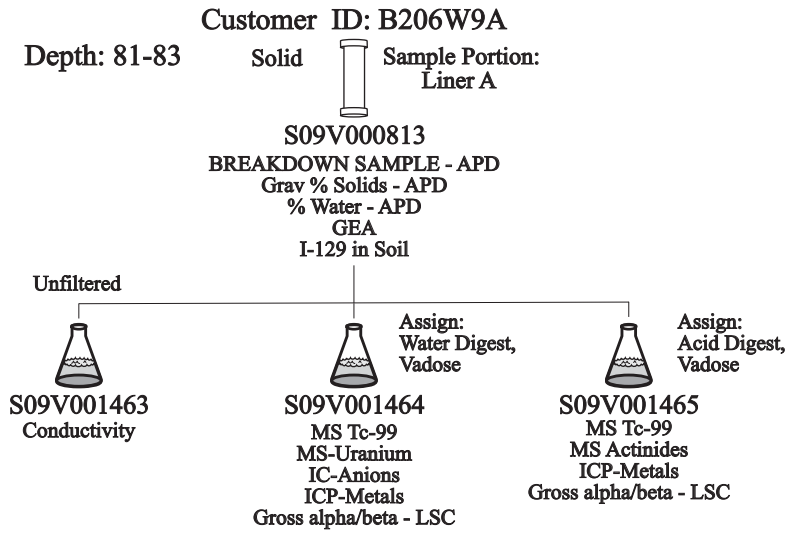


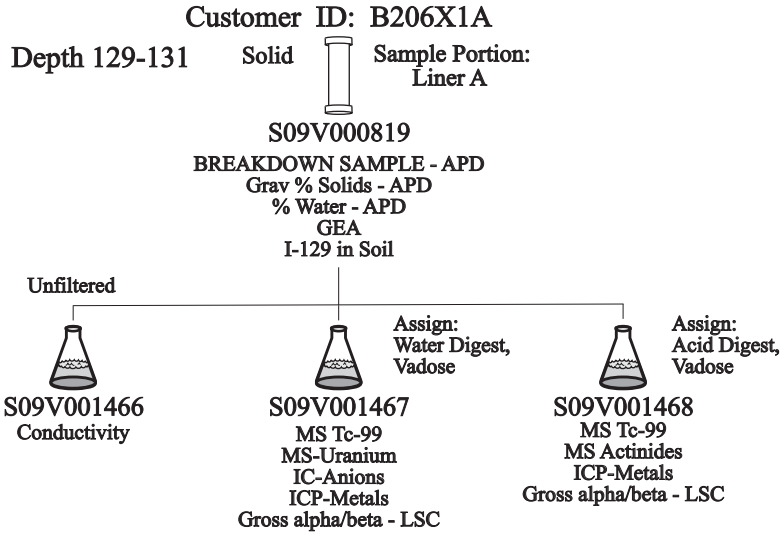


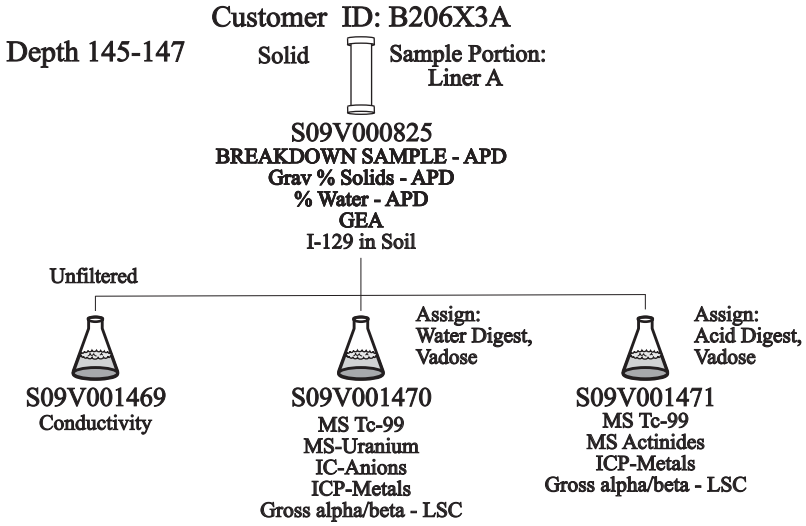


Vadose Zone: SX Barrier
Group 20090805
Core No. C7168

RPP-RPT-47008 Rev.0

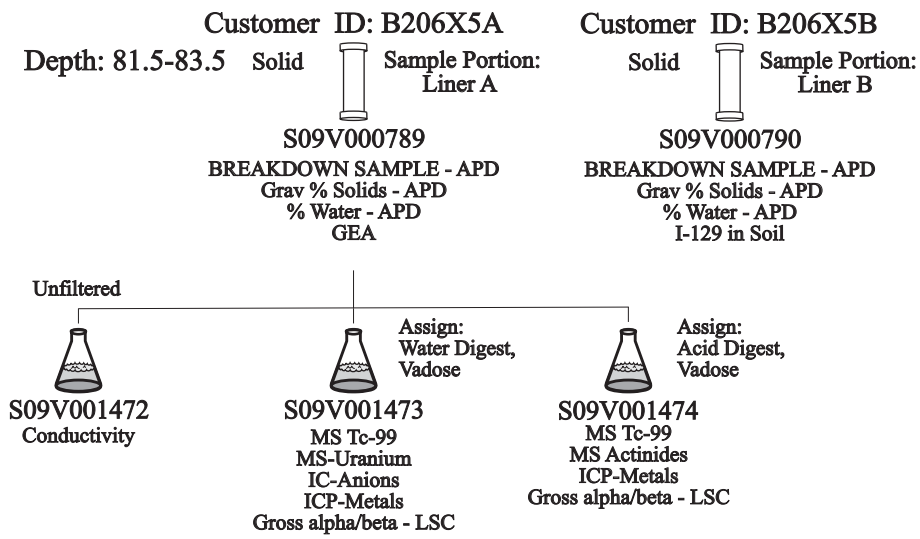


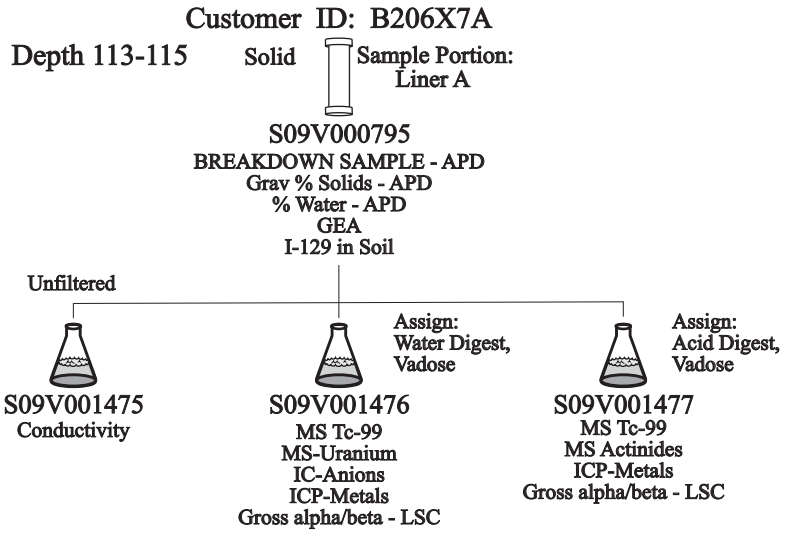


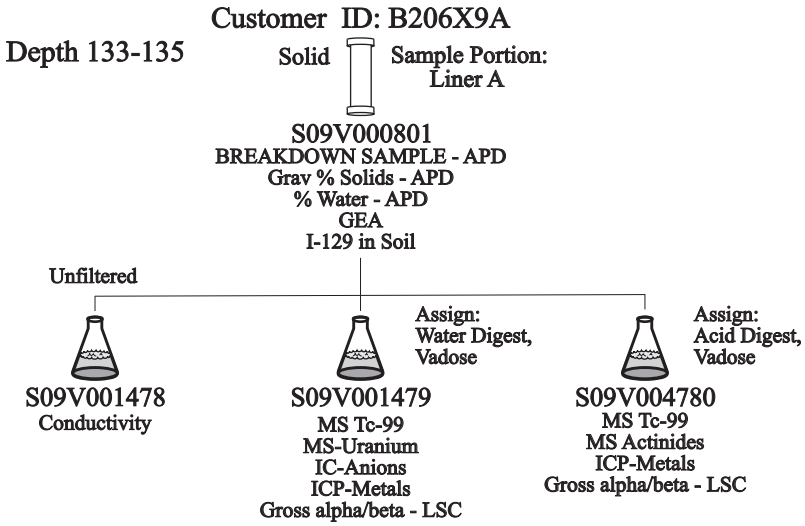


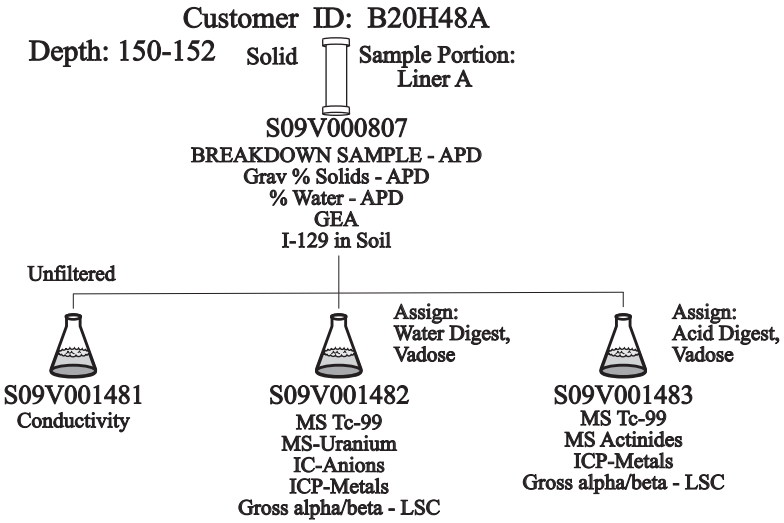
Vadose Zone: SX Barrier
Group 20090806
Core No. C7170

RPP-RPT-47008 Rev.0



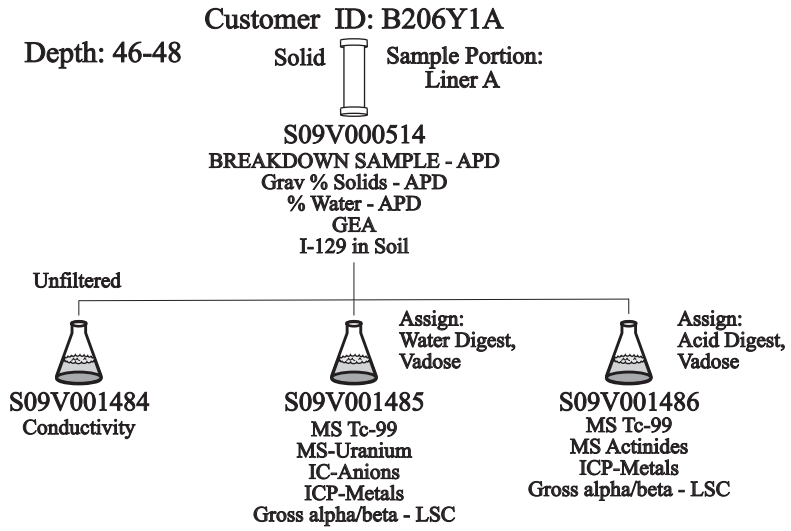


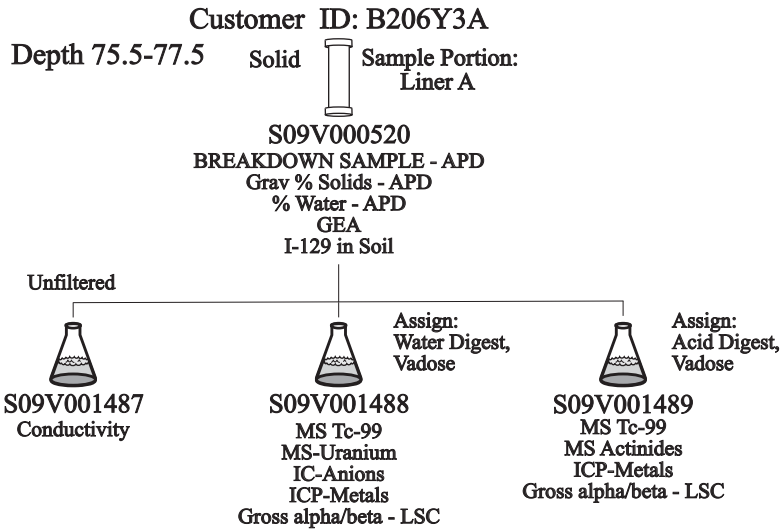


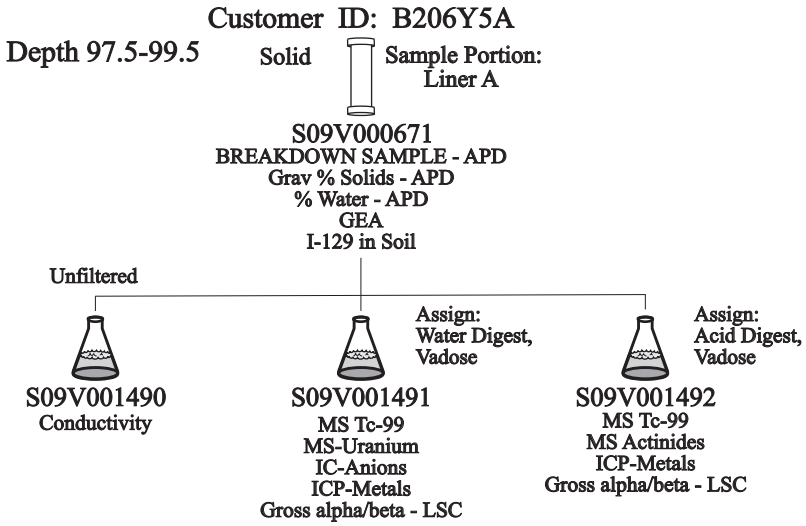


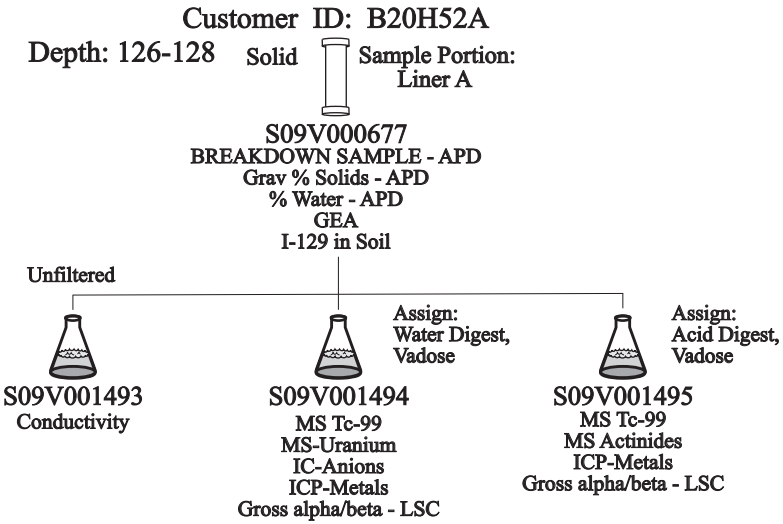
Vadose Zone: SX Barrier
Group 20090807
Core No. C7172

RPP-RPT-47008 Rev.0



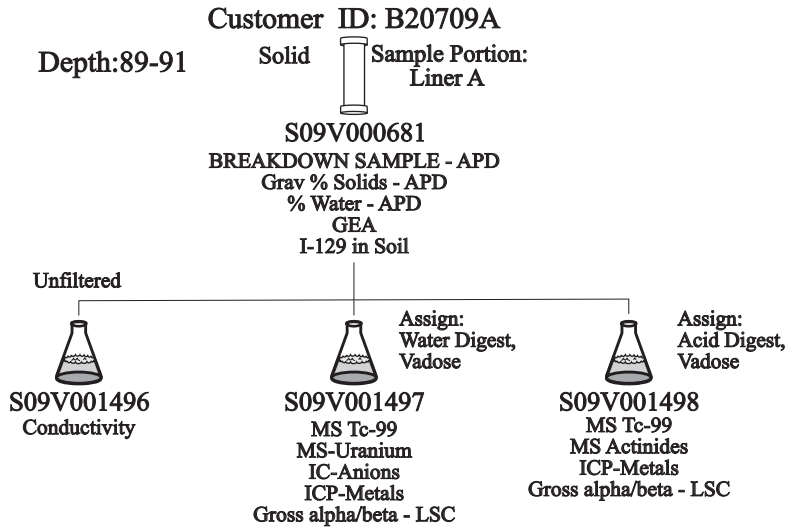


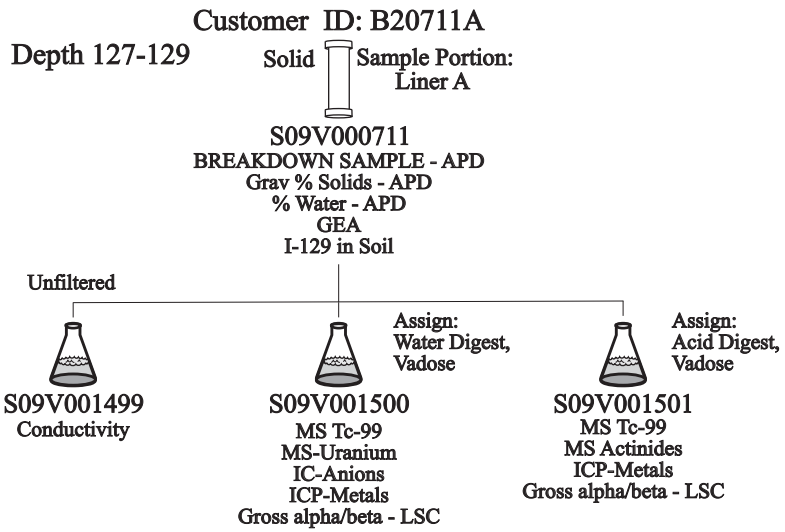


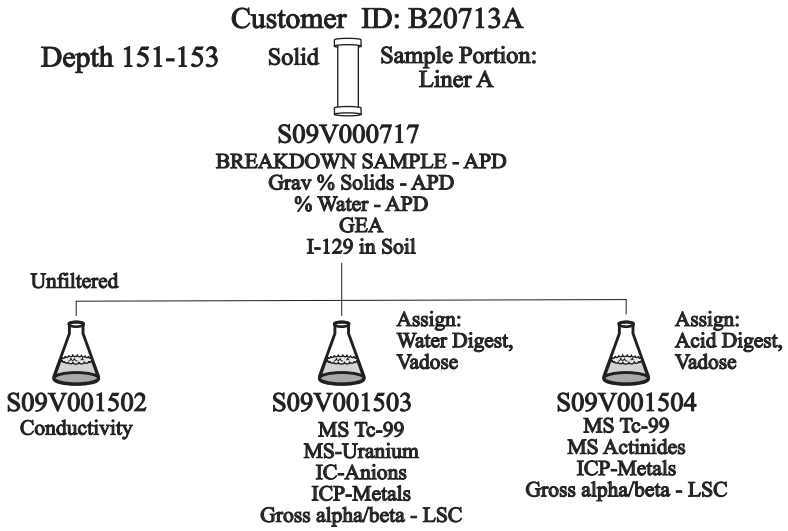


Vadose Zone: SX Barrier
Group 20090808
Core No. C7178

RPP-RPT-47008 Rev.0

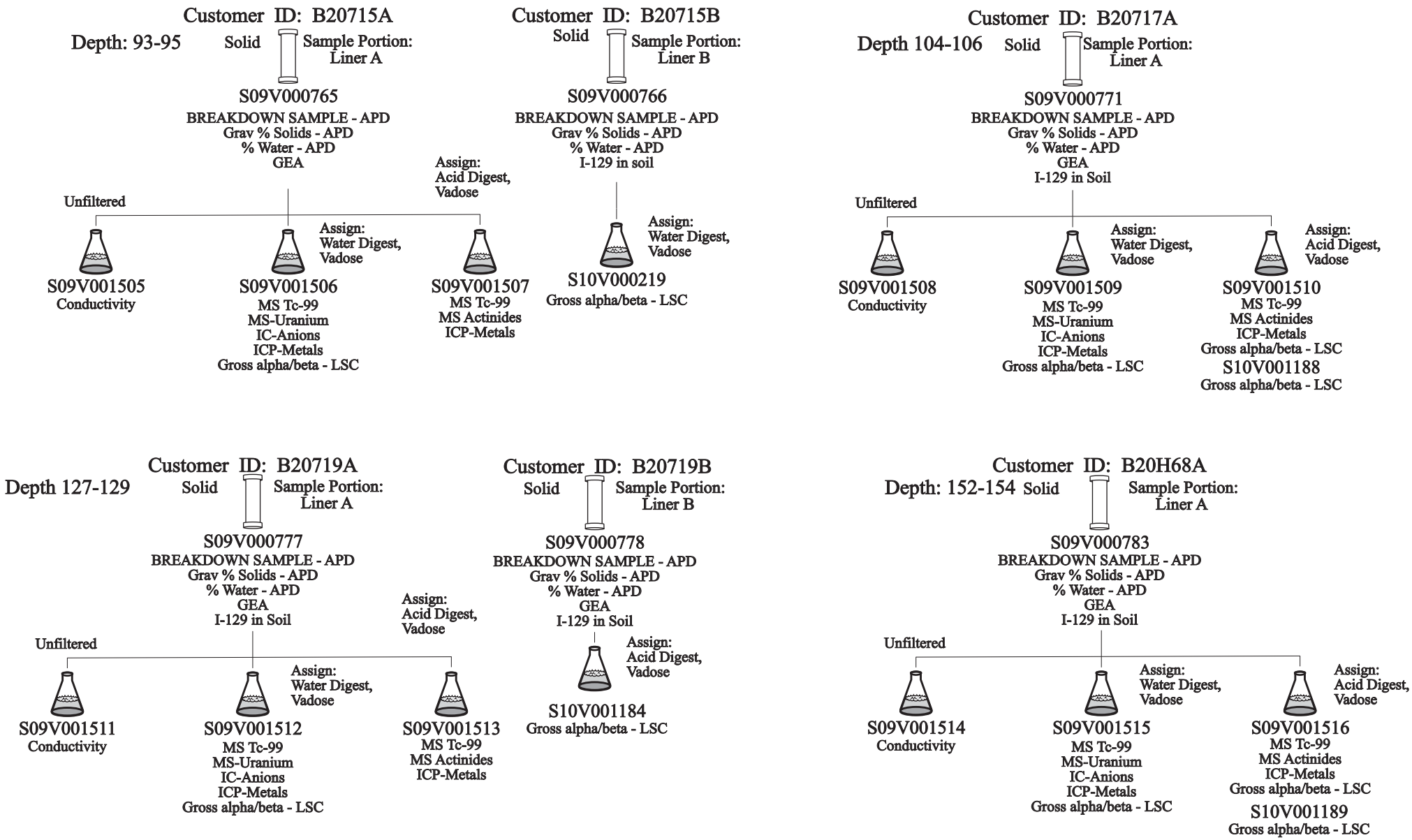






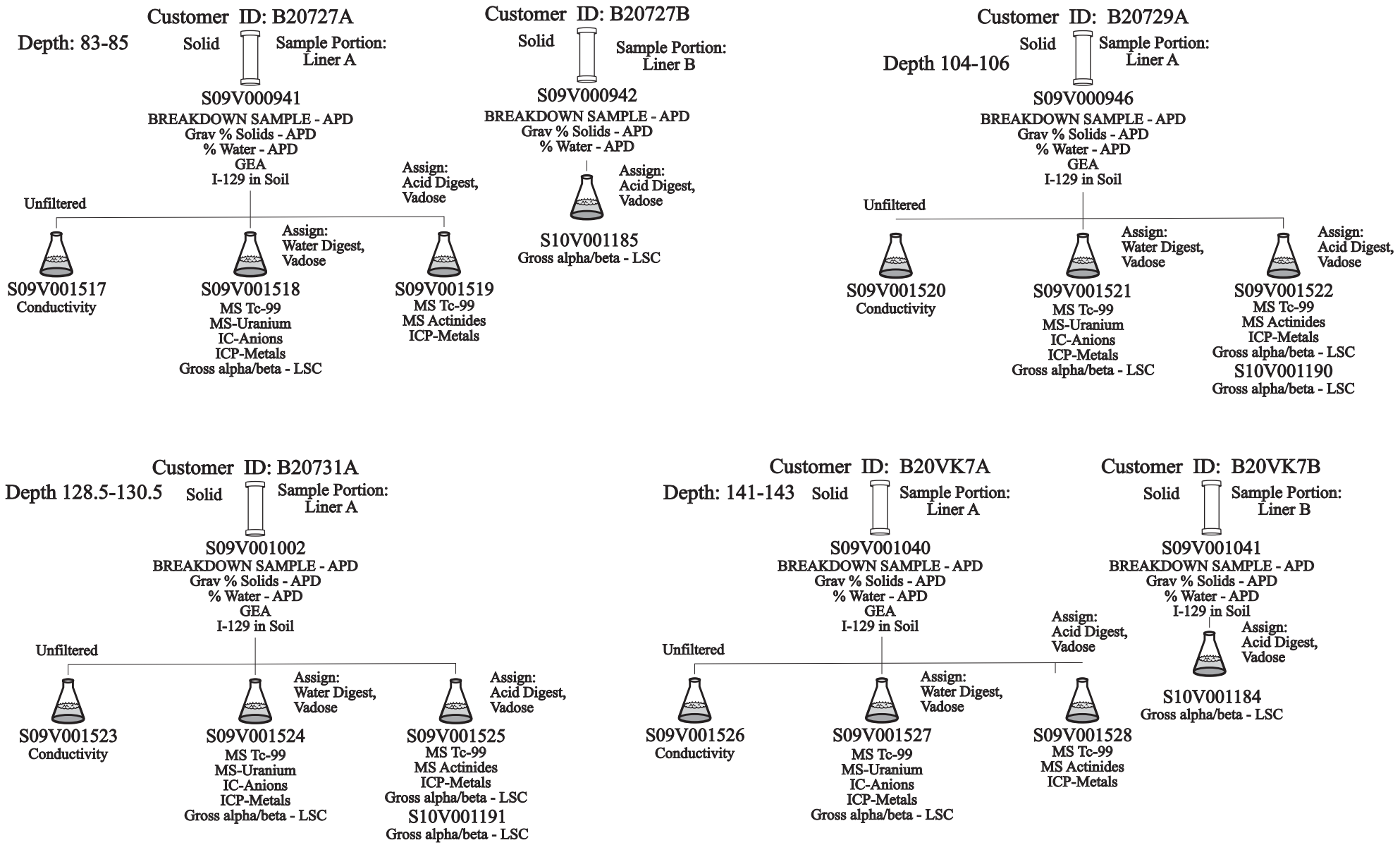
Vadose Zone: SX Barrier
Group 20090809
Core No. C7180

RPP-RPT-47008 Rev.0



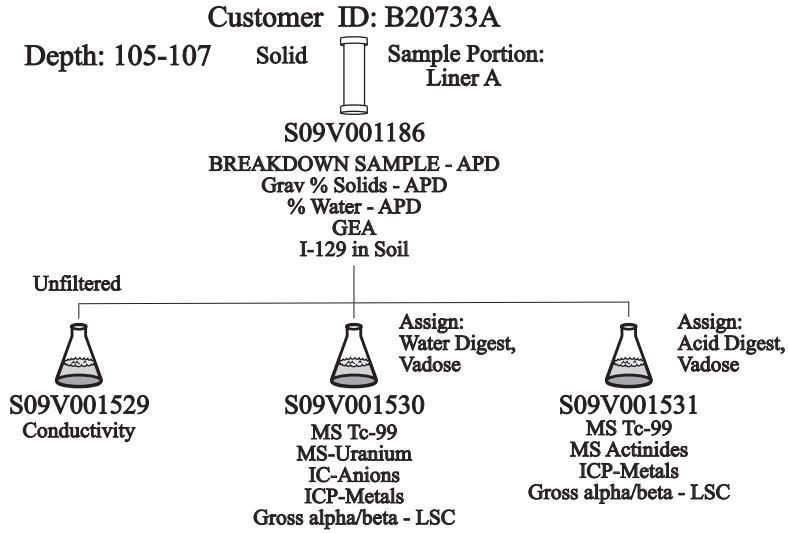
Vadose Zone: SX Barrier
Group 20090810
Core No. C7184

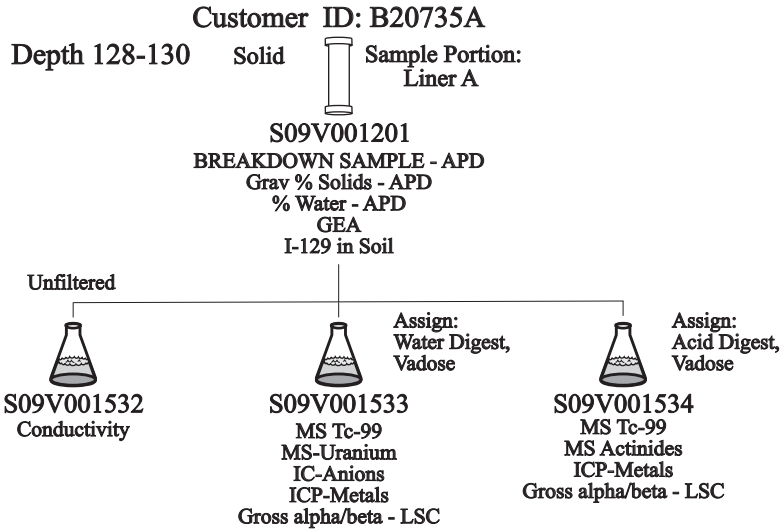
RPP-RPT-47008 Rev.0

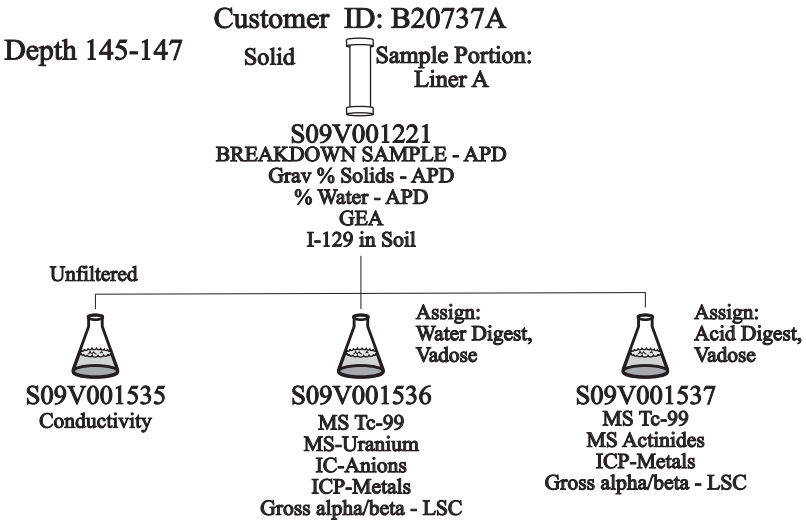


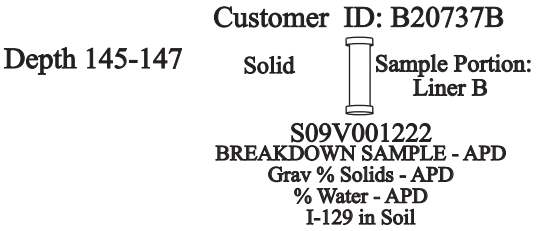
Vadose Zone: SX Barrier
Group 20090811
Core No. C7186

RPP-RPT-47008 Rev.0



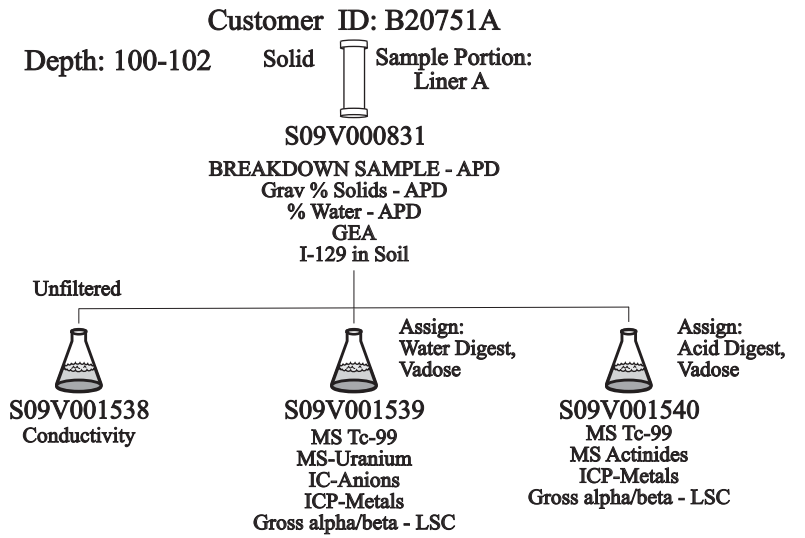


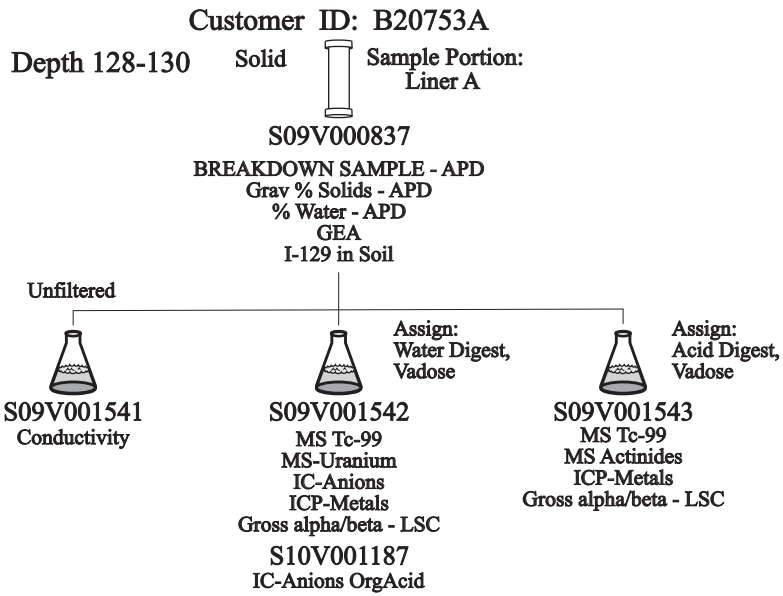


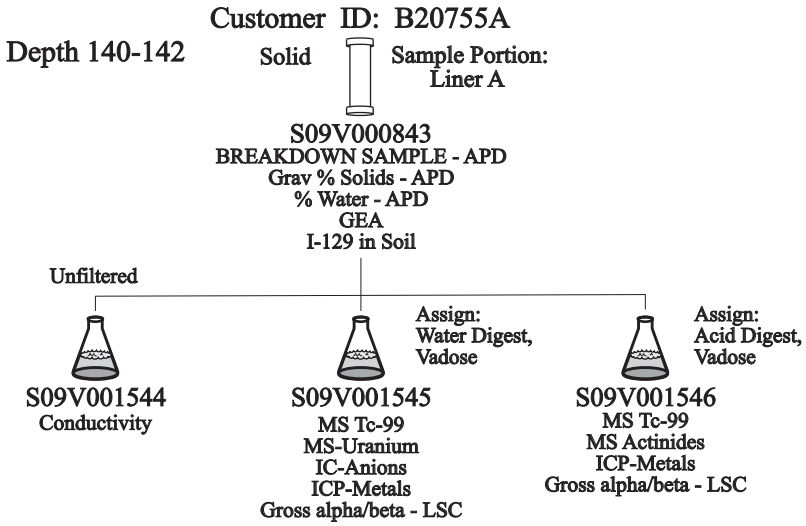


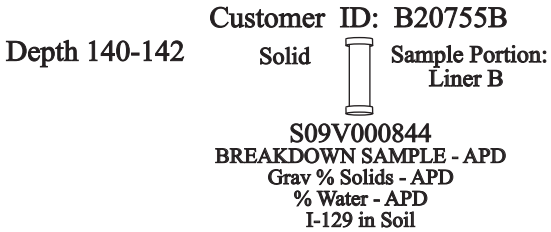
Vadose Zone: SX Barrier
Group 20090812
Core No. C7192

RPP-RPT-47008 Rev.0









Attachment 4

HOLDING TIME REPORT

Analysis Time Report pH

Sample Group	Sample	Matrix	Method	Sample Date	Received Date	Analysis Date	Lapse Time (Days)
20090372	S09V000512	SOLID	PH SOLID	05/20/09 09:05	05/20/09 15:45	06/02/09 21:19	13.5
20090372	S09V000518	SOLID	PH SOLID	05/20/09 14:50	05/20/09 15:45	06/02/09 21:19	13.3
20090372	S09V000669	SOLID	PH SOLID	05/26/09 09:45	05/26/09 15:45	06/02/09 21:19	7.5
20090372	S09V000675	SOLID	PH SOLID	05/26/09 09:45	05/26/09 15:45	06/02/09 21:19	7.5
20090372	S09V000684	SOLID	PH SOLID	06/02/09 09:56	06/02/09 10:45	06/15/09 14:20	13.2
20090372	S09V000714	SOLID	PH SOLID	06/09/09 13:45	06/09/09 14:30	06/15/09 14:20	6.0
20090372	S09V000720	SOLID	PH SOLID	06/10/09 11:00	06/10/09 14:00	06/15/09 14:20	5.1
20090372	S09V000774	SOLID	PH SOLID	06/18/09 09:30	06/18/09 14:45	06/23/09 16:10	5.3
20090372	S09V000768	SOLID	PH SOLID	06/18/09 13:27	06/18/09 14:30	06/23/09 16:10	5.1
20090372	S09V000780	SOLID	PH SOLID	06/19/09 14:10	06/19/09 14:45	06/23/09 16:10	4.1
20090372	S09V000786	SOLID	PH SOLID	06/22/09 13:10	06/22/09 14:44	06/23/09 16:10	1.1
20090372	S09V000792	SOLID	PH SOLID	06/26/09 10:40	06/26/09 12:30	07/01/09 19:27	5.4
20090372	S09V000798	SOLID	PH SOLID	06/29/09 11:05	06/29/09 14:00	07/01/09 19:27	2.3
20090372	S09V000804	SOLID	PH SOLID	06/30/09 08:42	06/30/09 14:50	07/01/09 19:27	1.4
20090372	S09V000810	SOLID	PH SOLID	06/30/09 12:20	06/30/09 14:50	07/01/09 19:27	1.3
20090372	S09V000816	SOLID	PH SOLID	07/02/09 09:40	07/02/09 11:45	07/09/09 11:32	7.1
20090372	S09V000822	SOLID	PH SOLID	07/07/09 10:04	07/07/09 14:35	07/09/09 11:32	2.1
20090372	S09V000828	SOLID	PH SOLID	07/07/09 14:02	07/07/09 14:35	07/09/09 11:32	1.9
20090372	S09V000834	SOLID	PH SOLID	07/09/09 13:15	07/09/09 14:45	07/22/09 02:09	12.5
20090372	S09V000840	SOLID	PH SOLID	07/27/09 09:45	07/27/09 14:15	07/28/09 15:00	1.2
20090372	S09V000846	SOLID	PH SOLID	07/27/09 12:50	07/27/09 14:15	07/28/09 15:00	1.1
20090372	S09V000943	SOLID	PH SOLID	08/03/09 09:45	08/03/09 14:00	08/11/09 19:29	8.4
20090372	S09V000949	SOLID	PH SOLID	08/03/09 12:00	08/03/09 14:00	08/11/09 19:29	8.3
20090372	S09V001005	SOLID	PH SOLID	08/04/09 10:50	08/04/09 15:00	08/11/09 19:29	7.4
20090372	S09V001038	SOLID	PH SOLID	08/10/09 09:10	08/10/09 13:30	08/11/09 19:29	1.4
20090372	S09V001184	SOLID	PH SOLID	08/12/09 10:30	08/12/09 11:00	08/18/09 17:00	6.3
20090635	S09V001205	LIQUID	PH LIQUID	08/12/09 13:28	08/13/09 14:00	09/08/09 15:30	**27.1**
20090372	S09V001193	SOLID	PH SOLID	08/13/09 09:45	08/13/09 14:00	08/20/09 10:36	7.0
20090372	S09V001199	SOLID	PH SOLID	08/13/09 10:00	08/13/09 14:00	08/18/09 17:00	5.3
20090372	S09V001219	SOLID	PH SOLID	08/17/09 09:05	08/17/09 14:30	08/18/09 17:00	1.3
20090372	S09V001235	SOLID	PH SOLID	08/18/09 09:20	08/18/09 14:00	08/20/09 10:36	2.1
20090372	S09V001241	SOLID	PH SOLID	08/20/09 12:00	08/20/09 14:00	08/26/09 18:43	6.3
20090372	S09V001247	SOLID	PH SOLID	08/25/09 08:50	08/25/09 14:20	08/26/09 18:43	1.4
20090372	S09V001253	SOLID	PH SOLID	08/25/09 12:10	08/25/09 14:20	08/26/09 18:43	1.3
20090372	S09V001259	SOLID	PH SOLID	08/31/09 09:15	08/31/09 13:25	09/02/09 18:27	2.4
20090635	S09V001271	LIQUID	PH LIQUID	08/31/09 12:50	08/31/09 13:25	09/01/09 09:00	0.8
20090372	S09V001273	SOLID	PH SOLID	09/01/09 08:50	09/01/09 14:10	09/02/09 18:27	1.4
20090372	S09V001279	SOLID	PH SOLID	09/01/09 13:30	09/01/09 14:10	09/02/09 18:27	1.2

Hold Time Report Alkalinity

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Prep Date	Analysis Date	Missed Holding Time
20090372	S09V000715	SOLID	SM 2320B	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	06/15/09 09:30	06/17/09 12:17	N
20090372	S09V000721	SOLID	SM 2320B	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	06/15/09 09:30	06/17/09 12:23	N
20090372	S09V000769	SOLID	SM 2320B	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	06/23/09 10:27	10/22/09 15:01	**Y**
20090372	S09V000775	SOLID	SM 2320B	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	06/23/09 10:27	10/22/09 15:07	**Y**
20090372	S09V000781	SOLID	SM 2320B	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	06/23/09 10:27	10/22/09 15:19	**Y**
20090372	S09V000787	SOLID	SM 2320B	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	06/23/09 10:27	10/22/09 15:25	**Y**
20090372	S09V000793	SOLID	SM 2320B	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	07/01/09 14:30	07/08/09 12:22	N
20090372	S09V000799	SOLID	SM 2320B	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	07/01/09 14:30	07/08/09 12:40	N
20090372	S09V000805	SOLID	SM 2320B	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	07/01/09 14:30	07/08/09 12:45	N
20090372	S09V000811	SOLID	SM 2320B	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	07/01/09 14:30	07/08/09 12:50	N
20090372	S09V000817	SOLID	SM 2320B	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	07/08/09 16:00	07/17/09 11:31	**Y**
20090372	S09V000823	SOLID	SM 2320B	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	07/08/09 16:00	07/17/09 11:46	N
20090372	S09V000829	SOLID	SM 2320B	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	07/08/09 16:00	07/17/09 11:55	N
20090372	S09V000835	SOLID	SM 2320B	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	07/22/09 11:00	07/30/09 11:45	**Y**
20090372	S09V000841	SOLID	SM 2320B	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	07/28/09 15:00	07/30/09 12:06	N
20090372	S09V000847	SOLID	SM 2320B	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	07/28/09 15:00	07/30/09 12:19	N
20090372	S09V000944	SOLID	SM 2320B	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	08/11/09 10:00	08/24/09 11:59	**Y**
20090372	S09V000950	SOLID	SM 2320B	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	08/11/09 10:00	08/24/09 12:06	**Y**
20090372	S09V001006	SOLID	SM 2320B	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	08/11/09 10:00	08/24/09 12:19	**Y**
20090372	S09V001039	SOLID	SM 2320B	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	08/11/09 10:00	08/24/09 12:35	N
20090372	S09V001185	SOLID	SM 2320B	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	08/18/09 12:37	08/24/09 15:11	N
20090372	S09V001194	SOLID	SM 2320B	WATER DIGEST VADOSE	08/13/09 09:45	08/13/09 14:00	08/19/09 01:00	08/24/09 15:43	N
20090372	S09V001200	SOLID	SM 2320B	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	08/18/09 12:37	08/24/09 15:25	N
20090372	S09V001220	SOLID	SM 2320B	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	08/18/09 12:37	08/24/09 15:30	N
20090372	S09V001236	SOLID	SM 2320B	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	08/19/09 01:00	08/24/09 15:55	N
20090372	S09V001242	SOLID	SM 2320B	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	08/26/09 11:41	09/03/09 15:19	**Y**
20090372	S09V001248	SOLID	SM 2320B	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	08/26/09 11:41	09/03/09 15:52	N
20090372	S09V001254	SOLID	SM 2320B	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	08/26/09 11:41	09/03/09 16:00	N
20090635	S09V001206	LIQUID	SM 2320B		08/12/09 13:28	08/13/09 14:00	N/A	08/24/09 16:04	N
20090635	S09V001266	LIQUID	SM 2320B		08/31/09 12:50	08/31/09 13:25	N/A	09/03/09 16:07	N

Hold Time Report IC-Anions

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Prep Date	Analysis Date	Missed Holding Time
20090372	S09V000513	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	06/02/09 09:36	06/03/09 18:26	N
20090372	S09V000519	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	06/02/09 09:36	06/03/09 18:40	N
20090372	S09V000670	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	06/02/09 09:36	06/03/09 19:08	N
20090372	S09V000676	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	06/02/09 09:36	06/03/09 19:50	N
20090372	S09V000685	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	06/15/09 09:30	06/17/09 04:18	N
20090372	S09V000715	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	06/15/09 09:30	06/17/09 05:00	N
20090372	S09V000721	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	06/15/09 09:30	06/17/09 05:28	N
20090372	S09V000769	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	06/23/09 10:27	06/24/09 02:06	N
20090372	S09V000775	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	06/23/09 10:27	06/24/09 00:14	N
20090372	S09V000781	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	06/23/09 10:27	06/23/09 22:51	N
20090372	S09V000787	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	06/23/09 10:27	06/24/09 01:38	N
20090372	S09V000793	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	07/01/09 14:30	07/01/09 22:54	N
20090372	S09V000793	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	07/01/09 14:30	07/02/09 00:45	N
20090372	S09V000799	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	07/01/09 14:30	07/01/09 23:36	N
20090372	S09V000805	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	07/01/09 14:30	07/02/09 01:27	N
20090372	S09V000805	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	07/01/09 14:30	07/01/09 23:50	N
20090372	S09V000811	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	07/01/09 14:30	07/02/09 01:41	N
20090372	S09V000811	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	07/01/09 14:30	07/02/09 00:04	N
20090372	S09V000817	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	07/08/09 16:00	07/09/09 15:23	N
20090372	S09V000823	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	07/08/09 16:00	07/09/09 16:05	N
20090372	S09V000829	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	07/08/09 16:00	07/09/09 16:19	N
20090372	S09V000835	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	07/22/09 11:00	07/23/09 13:37	N
20090372	S09V000835	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	07/22/09 11:00	07/23/09 14:19	N
20090372	S09V000841	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	07/28/09 15:00	07/28/09 18:43	N
20090372	S09V000841	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	07/28/09 15:00	07/28/09 18:02	N
20090372	S09V000847	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	07/28/09 15:00	07/28/09 17:48	N
20090372	S09V000944	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	08/11/09 10:00	08/11/09 23:30	N
20090372	S09V000950	SOLID	SW846-9056A	WATER DIGEST VADOSE	03/27/09 07:40	08/03/09 14:00	08/11/09 10:00	08/11/09 22:48	N
20090372	S09V001006	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	08/11/09 10:00	08/11/09 23:44	N
20090372	S09V001039	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	08/11/09 10:00	08/11/09 23:58	N
20090372	S09V001185	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	08/18/09 12:37	08/18/09 20:07	N
20090372	S09V001194	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/13/09 09:45	08/13/09 14:00	08/19/09 01:00	08/25/09 12:42	**Y**
20090372	S09V001200	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	08/18/09 12:37	08/18/09 20:49	N
20090372	S09V001220	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	08/18/09 12:37	08/18/09 21:03	N
20090372	S09V001236	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	08/19/09 01:00	08/25/09 13:24	**Y**
20090372	S09V001242	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	08/26/09 11:41	08/26/09 21:37	N
20090372	S09V001248	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	08/26/09 11:41	08/26/09 21:51	N
20090372	S09V001254	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	08/26/09 11:41	08/26/09 20:55	N
20090372	S09V001260	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/31/09 09:15	08/31/09 13:25	09/02/09 14:17	09/02/09 20:27	N
20090372	S09V001274	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	09/02/09 14:17	09/02/09 21:09	N
20090372	S09V001280	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	09/02/09 14:17	09/02/09 21:23	N
20090635	S09V001205	LIQUID	SW846-9056A		08/12/09 13:28	08/13/09 14:00	N/A	08/13/09 23:14	N
20090635	S09V001265	LIQUID	SW846-9056A		08/31/09 12:50	08/31/09 13:25	N/A	09/01/09 15:40	N
20090802	S09V001439	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/01/10 09:10	02/01/10 17:43	N
20090802	S09V001439	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/01/10 09:10	02/01/10 21:12	N
20090802	S09V001442	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/01/10 09:15	02/01/10 17:57	N
20090802	S09V001442	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/01/10 09:15	02/01/10 21:26	N
20090803	S09V001445	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/24/09 09:15	08/31/09 13:25	02/01/10 09:25	02/01/10 18:39	N
20090803	S09V001445	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/24/09 09:15	08/31/09 13:25	02/01/10 09:25	02/01/10 22:36	N
20090803	S09V001448	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	02/01/10 09:30	02/01/10 18:53	N
20090803	S09V001448	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	02/01/10 09:30	02/01/10 22:50	N
20090803	S09V001452	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/01/10 09:35	02/01/10 19:06	N
20090803	S09V001452	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/01/10 09:35	02/01/10 23:04	N

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Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Prep Date	Analysis Date	Missed Holding Time
20090803	S09V001452	SOLID	SW846-9056A	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/01/10 09:35	02/02/10 12:39	N
20090804	S09V001455	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	02/01/10 09:40	02/01/10 19:48	N
20090804	S09V001455	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	02/01/10 09:40	02/01/10 23:18	N
20090804	S09V001458	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	02/01/10 09:45	02/01/10 20:02	N
20090804	S09V001458	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	02/01/10 09:45	02/01/10 23:32	N
20090804	S09V001461	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	02/01/10 09:50	02/01/10 20:16	N
20090804	S09V001461	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	02/01/10 09:50	02/01/10 23:46	N
20090805	S09V001464	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/01/10 09:55	02/01/10 20:30	N
20090805	S09V001464	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/01/10 09:55	02/02/10 00:00	N
20090805	S09V001464	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/01/10 09:55	02/02/10 12:53	N
20090805	S09V001467	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/01/10 10:00	02/01/10 20:44	N
20090805	S09V001467	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/01/10 10:00	02/02/10 00:14	N
20090805	S09V001467	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/01/10 10:00	02/02/10 13:35	N
20090805	S09V001470	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	02/01/10 10:05	02/01/10 20:58	N
20090805	S09V001470	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	02/01/10 10:05	02/02/10 00:28	N
20090806	S09V001473	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/02/10 15:00	02/02/10 19:44	N
20090806	S09V001473	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/02/10 15:00	02/02/10 19:58	N
20090806	S09V001473	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/02/10 15:00	02/02/10 23:27	N
20090806	S09V001473	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/02/10 15:00	02/03/10 17:02	N
20090806	S09V001476	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/02/10 15:00	02/02/10 20:40	N
20090806	S09V001476	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/02/10 15:00	02/03/10 00:09	N
20090806	S09V001476	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/02/10 15:00	02/03/10 17:44	N
20090806	S09V001479	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	02/02/10 15:00	02/02/10 20:54	N
20090806	S09V001479	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	02/02/10 15:00	02/03/10 00:23	N
20090806	S09V001482	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	02/02/10 15:00	02/02/10 21:08	N
20090806	S09V001482	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	02/02/10 15:00	02/03/10 01:05	N
20090807	S09V001485	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	02/02/10 15:00	02/02/10 21:22	N
20090807	S09V001485	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	02/02/10 15:00	02/03/10 01:19	N
20090807	S09V001488	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	02/02/10 15:00	02/02/10 21:36	N
20090807	S09V001488	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	02/02/10 15:00	02/03/10 01:33	N
20090807	S09V001491	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/02/10 15:00	02/02/10 22:18	N
20090807	S09V001491	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/02/10 15:00	02/03/10 01:47	N
20090807	S09V001494	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/02/10 15:00	02/02/10 22:32	N
20090807	S09V001494	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/02/10 15:00	02/03/10 02:01	N
20090807	S09V001494	SOLID	SW846-9056A	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/02/10 15:00	02/03/10 17:58	N
20090808	S09V001497	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/02/10 15:00	02/02/10 22:46	N
20090808	S09V001497	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/02/10 15:00	02/03/10 02:15	N
20090808	S09V001497	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/02/10 15:00	02/03/10 18:12	N
20090808	S09V001500	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/02/10 15:00	02/02/10 23:00	N
20090808	S09V001500	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/02/10 15:00	02/03/10 02:29	N
20090808	S09V001500	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/02/10 15:00	02/03/10 18:26	N
20090808	S09V001503	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	02/02/10 15:00	02/02/10 23:14	N
20090808	S09V001503	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	02/02/10 15:00	02/03/10 02:43	N
20090809	S09V001506	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	01/26/10 10:17	01/26/10 20:27	N
20090809	S09V001506	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	01/26/10 10:17	01/27/10 03:23	N
20090809	S09V001506	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	01/26/10 10:17	01/27/10 10:59	N
20090809	S09V001509	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	01/26/10 10:17	01/26/10 22:03	N
20090809	S09V001509	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	01/26/10 10:17	01/27/10 05:00	N
20090809	S09V001509	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	01/26/10 10:17	01/27/10 12:36	N
20090809	S09V001512	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	01/26/10 10:17	01/26/10 22:36	N
20090809	S09V001512	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	01/26/10 10:17	01/27/10 05:32	N
20090809	S09V001512	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	01/26/10 10:17	01/27/10 13:08	N
20090809	S09V001515	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	01/26/10 10:17	01/26/10 23:08	N
20090809	S09V001515	SOLID	SW846-9056A	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	01/26/10 10:17	01/27/10 06:04	N
20090810	S09V001518	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	01/26/10 10:17	01/26/10 23:40	N

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Prep Date	Analysis Date	Missed Holding Time
20090810	S09V001518	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	01/26/10 10:17	01/27/10 06:36	N
20090810	S09V001521	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/03/09 12:00	08/03/09 14:00	01/26/10 10:17	01/27/10 00:12	N
20090810	S09V001521	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/03/09 12:00	08/03/09 14:00	01/26/10 10:17	01/27/10 07:08	N
20090810	S09V001524	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	01/26/10 10:17	01/27/10 02:19	N
20090810	S09V001524	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	01/26/10 10:17	01/27/10 09:47	N
20090810	S09V001527	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	01/26/10 10:17	01/27/10 02:51	N
20090810	S09V001527	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	01/26/10 10:17	01/27/10 10:19	N
20090811	S09V001530	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	01/25/10 15:00	01/25/10 20:02	N
20090811	S09V001530	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	01/25/10 15:00	01/26/10 01:54	N
20090811	S09V001533	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	01/25/10 15:00	01/25/10 20:34	N
20090811	S09V001533	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	01/25/10 15:00	01/26/10 02:26	N
20090811	S09V001536	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	01/25/10 15:00	01/25/10 21:06	N
20090811	S09V001536	SOLID	SW846-9056A	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	01/25/10 15:00	01/26/10 02:58	N
20090812	S09V001539	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	01/25/10 15:00	01/25/10 22:42	N
20090812	S09V001539	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	01/25/10 15:00	01/26/10 04:35	N
20090812	S09V001542	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	01/25/10 15:00	01/25/10 23:14	N
20090812	S09V001542	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	01/25/10 15:00	01/26/10 05:07	N
20090812	S09V001542	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	03/03/10 12:00	03/05/10 03:55	N
20090812	S09V001545	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	01/25/10 15:00	01/25/10 23:46	N
20090812	S09V001545	SOLID	SW846-9056A	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	01/25/10 15:00	01/26/10 05:39	N

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Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090802	S09V001440	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	02/12/10 13:35	N
20090802	S09V001443	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	02/12/10 10:48	N
20090803	S09V001446	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/24/09 09:15	08/31/09 13:25	02/12/10 13:39	N
20090803	S09V001450	SOLID	SW846-6010C	ACID DIGEST, VADOSE	09/01/09 08:50	09/01/09 14:10	02/12/10 13:43	N
20090803	S09V001453	SOLID	SW846-6010C	ACID DIGEST, VADOSE	09/01/09 13:30	09/01/09 14:10	02/12/10 13:45	N
20090804	S09V001456	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/20/09 12:00	08/20/09 14:00	02/12/10 13:49	N
20090804	S09V001459	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/25/09 08:50	08/25/09 14:20	02/12/10 13:52	N
20090804	S09V001462	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/25/09 12:10	08/25/09 14:20	02/12/10 14:09	N
20090805	S09V001465	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/02/09 09:40	07/02/09 11:45	02/12/10 14:12	**Y**
20090805	S09V001468	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/07/09 10:04	07/07/09 14:35	02/12/10 14:15	**Y**
20090805	S09V001471	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/07/09 14:02	07/07/09 14:35	02/12/10 14:17	**Y**
20090806	S09V001474	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/26/09 10:40	06/26/09 12:30	02/16/10 14:33	**Y**
20090806	S09V001477	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/29/09 11:05	06/29/09 14:00	02/16/10 15:33	**Y**
20090806	S09V001480	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/30/09 08:42	06/30/09 14:50	02/16/10 15:36	**Y**
20090806	S09V001483	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/30/09 12:20	06/30/09 14:50	02/16/10 15:39	**Y**
20090807	S09V001486	SOLID	SW846-6010C	ACID DIGEST, VADOSE	05/20/09 09:05	05/20/09 15:45	02/16/10 15:42	**Y**
20090807	S09V001489	SOLID	SW846-6010C	ACID DIGEST, VADOSE	05/20/09 14:50	05/20/09 15:45	02/16/10 15:45	**Y**
20090807	S09V001492	SOLID	SW846-6010C	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	02/16/10 15:48	**Y**
20090807	S09V001495	SOLID	SW846-6010C	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	02/16/10 15:51	**Y**
20090808	S09V001498	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/02/09 09:56	06/02/09 10:45	02/16/10 15:53	**Y**
20090808	S09V001501	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/09/09 13:45	06/09/09 14:30	02/16/10 16:34	**Y**
20090808	S09V001504	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/10/09 11:00	06/10/09 14:00	02/16/10 16:41	**Y**
20090809	S09V001507	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/18/09 13:27	06/18/09 14:30	02/16/10 16:47	**Y**
20090809	S09V001510	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/18/09 09:30	06/18/09 14:45	02/16/10 19:32	**Y**
20090809	S09V001513	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/19/09 14:10	06/19/09 14:45	02/16/10 19:37	**Y**
20090809	S09V001516	SOLID	SW846-6010C	ACID DIGEST, VADOSE	06/22/09 13:10	06/22/09 14:30	02/16/10 19:40	**Y**
20090810	S09V001519	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/03/09 09:45	08/03/09 14:00	02/16/10 19:44	**Y**
20090810	S09V001522	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/03/09 12:00	08/03/09 14:00	02/16/10 19:47	**Y**
20090810	S09V001525	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/04/09 10:50	08/04/09 15:00	02/16/10 19:50	**Y**
20090810	S09V001528	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/10/09 09:10	08/10/09 13:30	02/16/10 19:52	**Y**
20090811	S09V001531	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/12/09 10:30	08/12/09 11:00	02/12/10 14:38	**Y**
20090811	S09V001534	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/13/09 10:00	08/13/09 14:00	02/12/10 16:06	**Y**
20090811	S09V001537	SOLID	SW846-6010C	ACID DIGEST, VADOSE	08/17/09 09:05	08/17/09 14:30	02/12/10 16:09	N
20090812	S09V001540	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/09/09 13:15	07/09/09 14:45	02/12/10 16:14	**Y**
20090812	S09V001543	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/27/09 09:45	07/27/09 14:15	02/12/10 16:17	**Y**
20090812	S09V001546	SOLID	SW846-6010C	ACID DIGEST, VADOSE	07/27/09 12:50	07/27/09 14:15	02/12/10 16:21	**Y**
20090802	S09V001439	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/18/10 11:07	**Y**
20090802	S09V001442	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/18/10 13:31	**Y**
20090803	S09V001445	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/24/09 09:15	08/31/09 13:25	02/18/10 13:54	N
20090803	S09V001448	SOLID	SW846-6010C	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	02/18/10 13:57	N
20090803	S09V001452	SOLID	SW846-6010C	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/18/10 14:00	N
20090804	S09V001455	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	02/18/10 14:02	**Y**
20090804	S09V001458	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	02/18/10 14:05	N
20090804	S09V001461	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	02/18/10 14:08	N
20090805	S09V001464	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/18/10 14:10	**Y**
20090805	S09V001467	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/18/10 14:13	**Y**
20090805	S09V001470	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	02/18/10 14:16	**Y**
20090806	S09V001473	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/18/10 15:24	**Y**
20090806	S09V001476	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/18/10 15:32	**Y**
20090806	S09V001479	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	02/18/10 15:35	**Y**
20090806	S09V001482	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	02/18/10 15:37	**Y**
20090807	S09V001485	SOLID	SW846-6010C	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	02/18/10 16:52	**Y**
20090807	S09V001488	SOLID	SW846-6010C	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	02/18/10 16:55	**Y**
20090807	S09V001491	SOLID	SW846-6010C	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/18/10 16:57	**Y**

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090807	S09V001494	SOLID	SW846-6010C	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/18/10 17:00	**Y**
20090808	S09V001497	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/18/10 17:02	**Y**
20090808	S09V001500	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/18/10 14:57	**Y**
20090808	S09V001503	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	02/18/10 17:05	**Y**
20090809	S09V001506	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	02/18/10 17:54	**Y**
20090809	S09V001509	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	02/18/10 18:00	**Y**
20090809	S09V001512	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	02/18/10 18:03	**Y**
20090809	S09V001515	SOLID	SW846-6010C	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	02/18/10 18:06	**Y**
20090810	S09V001518	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	02/18/10 17:17	**Y**
20090810	S09V001521	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/03/09 12:00	08/03/09 14:00	02/18/10 18:08	**Y**
20090810	S09V001524	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	02/18/10 18:11	**Y**
20090810	S09V001527	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	02/18/10 18:13	**Y**
20090811	S09V001530	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	02/03/10 14:07	N
20090811	S09V001533	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	02/03/10 14:10	N
20090811	S09V001536	SOLID	SW846-6010C	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	02/03/10 13:08	N
20090812	S09V001539	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	02/03/10 14:13	**Y**
20090812	S09V001542	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	02/03/10 14:16	**Y**
20090812	S09V001545	SOLID	SW846-6010C	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	02/03/10 14:18	**Y**
20090635	S09V001204	LIQUID	SW846-6010C		08/12/09 13:28	08/13/09 14:00	02/02/10 13:56	N
20090635	S09V001264	LIQUID	SW846-6010C		08/31/09 12:50	08/31/09 13:25	02/02/10 14:40	N

Hold Time Report ICP/MS RPP-RPT-47008 Rev.0

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090802	S09V001440	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	03/01/10 21:34	Y
20090802	S09V001443	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	03/01/10 19:29	Y
20090803	S09V001446	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/24/09 09:15	08/31/09 13:25	03/01/10 19:42	Y
20090803	S09V001450	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	09/01/09 08:50	09/01/09 14:10	03/01/10 19:49	Y
20090803	S09V001453	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	09/01/09 13:30	09/01/09 14:10	03/01/10 19:55	Y
20090804	S09V001456	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/20/09 12:00	08/20/09 14:00	03/01/10 20:02	Y
20090804	S09V001459	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/25/09 08:50	08/25/09 14:20	03/01/10 21:00	Y
20090804	S09V001462	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/25/09 12:10	08/25/09 14:20	03/01/10 21:07	Y
20090805	S09V001465	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/02/09 09:40	07/02/09 11:45	03/04/10 20:56	Y
20090805	S09V001468	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/07/09 10:04	07/07/09 14:35	03/01/10 21:20	Y
20090805	S09V001471	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/07/09 14:02	07/07/09 14:35	03/01/10 21:27	Y
20090806	S09V001474	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/26/09 10:40	06/26/09 12:30	03/04/10 18:17	Y
20090806	S09V001477	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/29/09 11:05	06/29/09 14:00	03/04/10 18:31	Y
20090806	S09V001480	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/30/09 08:42	06/30/09 14:50	03/04/10 18:37	Y
20090806	S09V001483	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/30/09 12:20	06/30/09 14:50	03/04/10 18:44	Y
20090807	S09V001486	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	05/20/09 09:05	05/20/09 15:45	03/04/10 20:43	Y
20090807	S09V001489	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	05/20/09 14:50	05/20/09 15:45	03/04/10 20:49	Y
20090807	S09V001492	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	03/04/10 18:51	Y
20090807	S09V001495	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	03/04/10 18:57	Y
20090808	S09V001498	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/02/09 09:56	06/02/09 10:45	03/04/10 20:23	Y
20090808	S09V001501	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/09/09 13:45	06/09/09 14:30	03/04/10 20:29	Y
20090808	S09V001504	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/10/09 11:00	06/10/09 14:00	03/04/10 20:36	Y
20090809	S09V001507	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/18/09 13:27	06/18/09 14:30	03/05/10 17:41	Y
20090809	S09V001510	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/18/09 09:30	06/18/09 14:45	03/05/10 17:54	Y
20090809	S09V001513	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/19/09 14:10	06/19/09 14:45	03/05/10 18:01	Y
20090809	S09V001516	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	06/22/09 13:10	06/22/09 14:30	03/05/10 18:08	Y
20090810	S09V001519	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/03/09 09:45	08/03/09 14:00	03/05/10 18:14	Y
20090810	S09V001522	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/03/09 12:00	08/03/09 14:00	03/05/10 18:21	Y
20090810	S09V001525	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/04/09 10:50	08/04/09 15:00	03/05/10 19:33	Y
20090810	S09V001528	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/10/09 09:10	08/10/09 13:30	03/05/10 19:39	Y
20090811	S09V001531	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/12/09 10:30	08/12/09 11:00	03/02/10 19:23	Y
20090811	S09V001534	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/13/09 10:00	08/13/09 14:00	03/02/10 19:37	Y
20090811	S09V001537	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	08/17/09 09:05	08/17/09 14:30	03/02/10 19:43	Y
20090812	S09V001540	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/09/09 13:15	07/09/09 14:45	03/02/10 19:50	Y
20090812	S09V001543	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/27/09 09:45	07/27/09 14:15	03/02/10 19:57	Y
20090812	S09V001546	SOLID	MS ACTINIDES	ACID DIGEST, VADOSE	07/27/09 12:50	07/27/09 14:15	03/02/10 20:03	Y
20090635	S09V001208	LIQUID	MS ACTINIDES		08/12/09 13:28	08/13/09 14:00	10/09/09 10:46	N
20090635	S09V001268	LIQUID	MS ACTINIDES		08/31/09 12:50	08/31/09 13:25	10/09/09 10:59	N
20090802	S09V001440	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	02/24/10 17:18	Y
20090802	S09V001443	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/18/09 09:20	08/18/09 14:00	02/24/10 16:24	Y
20090803	S09V001446	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/24/09 09:15	08/31/09 13:25	02/24/10 17:24	Y
20090803	S09V001450	SOLID	MS TC-99	ACID DIGEST, VADOSE	09/01/09 08:50	09/01/09 14:10	02/24/10 17:31	N
20090803	S09V001453	SOLID	MS TC-99	ACID DIGEST, VADOSE	09/01/09 13:30	09/01/09 14:10	02/24/10 17:38	N
20090804	S09V001456	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/20/09 12:00	08/20/09 14:00	02/24/10 17:46	Y
20090804	S09V001459	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/25/09 08:50	08/25/09 14:20	02/24/10 17:53	Y
20090804	S09V001462	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/25/09 12:10	08/25/09 14:20	02/24/10 18:00	Y
20090805	S09V001465	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/02/09 09:40	07/02/09 11:45	02/24/10 18:07	Y
20090805	S09V001468	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/07/09 10:04	07/07/09 14:35	02/24/10 18:14	Y
20090805	S09V001471	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/07/09 14:02	07/07/09 14:35	02/24/10 18:21	Y
20090806	S09V001474	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/26/09 10:40	06/26/09 12:30	02/25/10 12:09	Y
20090806	S09V001477	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/29/09 11:05	06/29/09 14:00	02/25/10 13:20	Y
20090806	S09V001480	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/30/09 08:42	06/30/09 14:50	02/25/10 13:26	Y
20090806	S09V001483	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/30/09 12:20	06/30/09 14:50	02/25/10 13:33	Y
20090807	S09V001486	SOLID	MS TC-99	ACID DIGEST, VADOSE	05/20/09 09:05	05/20/09 15:45	02/25/10 14:39	Y

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090807	S09V001489	SOLID	MS TC-99	ACID DIGEST, VADOSE	05/20/09 14:50	05/20/09 15:45	02/25/10 14:46	**Y**
20090807	S09V001492	SOLID	MS TC-99	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	02/25/10 13:53	**Y**
20090807	S09V001495	SOLID	MS TC-99	ACID DIGEST, VADOSE	05/26/09 09:45	05/26/09 15:45	02/25/10 14:00	**Y**
20090808	S09V001498	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/02/09 09:56	06/02/09 10:45	02/25/10 14:07	**Y**
20090808	S09V001501	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/09/09 13:45	06/09/09 14:30	02/25/10 14:13	**Y**
20090808	S09V001504	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/10/09 11:00	06/10/09 14:00	02/25/10 14:20	**Y**
20090809	S09V001507	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/18/09 13:27	06/18/09 14:30	02/24/10 21:01	**Y**
20090809	S09V001510	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/18/09 09:30	06/18/09 14:45	02/24/10 21:15	**Y**
20090809	S09V001513	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/19/09 14:10	06/19/09 14:45	02/24/10 21:22	**Y**
20090809	S09V001516	SOLID	MS TC-99	ACID DIGEST, VADOSE	06/22/09 13:10	06/22/09 14:30	02/24/10 21:29	**Y**
20090810	S09V001519	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/03/09 09:45	08/03/09 14:00	02/24/10 21:36	**Y**
20090810	S09V001522	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/03/09 12:00	08/03/09 14:00	02/24/10 21:43	**Y**
20090810	S09V001525	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/04/09 10:50	08/04/09 15:00	02/24/10 21:50	**Y**
20090810	S09V001528	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/10/09 09:10	08/10/09 13:30	02/24/10 21:57	**Y**
20090811	S09V001531	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/12/09 10:30	08/12/09 11:00	01/25/10 19:19	N
20090811	S09V001534	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/13/09 10:00	08/13/09 14:00	01/25/10 19:31	N
20090811	S09V001537	SOLID	MS TC-99	ACID DIGEST, VADOSE	08/17/09 09:05	08/17/09 14:30	01/25/10 19:37	N
20090812	S09V001540	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/09/09 13:15	07/09/09 14:45	01/25/10 19:43	**Y**
20090812	S09V001543	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/27/09 09:45	07/27/09 14:15	01/25/10 19:49	**Y**
20090812	S09V001546	SOLID	MS TC-99	ACID DIGEST, VADOSE	07/27/09 12:50	07/27/09 14:15	01/25/10 19:54	**Y**
20090372	S09V000513	SOLID	MS TC-99	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	06/02/09 16:43	N
20090372	S09V000519	SOLID	MS TC-99	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	06/02/09 16:19	N
20090372	S09V000670	SOLID	MS TC-99	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	06/02/09 16:49	N
20090372	S09V000676	SOLID	MS TC-99	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	06/02/09 16:55	N
20090372	S09V000685	SOLID	MS TC-99	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	06/15/09 11:16	N
20090372	S09V000715	SOLID	MS TC-99	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	06/15/09 11:51	N
20090372	S09V000721	SOLID	MS TC-99	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	06/15/09 11:57	N
20090372	S09V000769	SOLID	MS TC-99	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	06/23/09 20:13	N
20090372	S09V000775	SOLID	MS TC-99	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	06/23/09 19:56	N
20090372	S09V000781	SOLID	MS TC-99	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	06/23/09 20:19	N
20090372	S09V000787	SOLID	MS TC-99	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	06/23/09 21:03	N
20090372	S09V000793	SOLID	MS TC-99	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	07/01/09 15:41	N
20090372	S09V000799	SOLID	MS TC-99	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	07/01/09 16:00	N
20090372	S09V000805	SOLID	MS TC-99	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	07/01/09 17:12	N
20090372	S09V000811	SOLID	MS TC-99	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	07/01/09 17:30	N
20090372	S09V000817	SOLID	MS TC-99	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	07/09/09 10:33	N
20090372	S09V000823	SOLID	MS TC-99	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	07/09/09 10:59	N
20090372	S09V000829	SOLID	MS TC-99	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	07/09/09 11:05	N
20090372	S09V000835	SOLID	MS TC-99	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	07/23/09 10:37	N
20090372	S09V000841	SOLID	MS TC-99	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	07/28/09 14:56	N
20090372	S09V000847	SOLID	MS TC-99	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	07/28/09 15:52	N
20090372	S09V000944	SOLID	MS TC-99	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	08/12/09 10:14	N
20090372	S09V000950	SOLID	MS TC-99	WATER DIGEST VADOSE	03/27/09 07:40	08/03/09 14:00	08/12/09 10:38	N
20090372	S09V001006	SOLID	MS TC-99	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	08/12/09 10:20	N
20090372	S09V001039	SOLID	MS TC-99	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	08/12/09 10:26	N
20090372	S09V001185	SOLID	MS TC-99	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	08/18/09 18:32	N
20090372	S09V001194	SOLID	MS TC-99	WATER DIGEST VADOSE	08/13/09 09:45	08/13/09 14:00	08/20/09 12:02	N
20090372	S09V001200	SOLID	MS TC-99	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	08/18/09 18:44	N
20090372	S09V001220	SOLID	MS TC-99	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	08/18/09 18:50	N
20090372	S09V001236	SOLID	MS TC-99	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	08/20/09 12:14	N
20090372	S09V001242	SOLID	MS TC-99	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	08/26/09 16:45	N
20090372	S09V001248	SOLID	MS TC-99	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	08/26/09 16:57	N
20090372	S09V001254	SOLID	MS TC-99	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	08/26/09 17:03	N
20090372	S09V001260	SOLID	MS TC-99	WATER DIGEST VADOSE	08/31/09 09:15	08/31/09 13:25	09/02/09 15:47	N
20090372	S09V001274	SOLID	MS TC-99	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	09/02/09 15:59	N
20090372	S09V001280	SOLID	MS TC-99	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	09/02/09 16:05	N

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090802	S09V001439	SOLID	MS TC-99	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/10/10 20:51	N
20090802	S09V001442	SOLID	MS TC-99	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/10/10 20:38	N
20090803	S09V001445	SOLID	MS TC-99	WATER DIGEST VADOSE	08/24/09 09:15	08/31/09 13:25	02/10/10 20:58	N
20090803	S09V001448	SOLID	MS TC-99	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	02/10/10 21:04	N
20090803	S09V001452	SOLID	MS TC-99	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/10/10 21:11	N
20090804	S09V001455	SOLID	MS TC-99	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	02/10/10 21:18	N
20090804	S09V001458	SOLID	MS TC-99	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	02/10/10 21:44	N
20090804	S09V001461	SOLID	MS TC-99	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	02/10/10 21:51	N
20090805	S09V001464	SOLID	MS TC-99	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/10/10 21:57	**Y**
20090805	S09V001467	SOLID	MS TC-99	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/10/10 22:04	**Y**
20090805	S09V001470	SOLID	MS TC-99	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	02/10/10 22:11	**Y**
20090806	S09V001473	SOLID	MS TC-99	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/19/10 15:30	**Y**
20090806	S09V001476	SOLID	MS TC-99	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/19/10 13:26	**Y**
20090806	S09V001479	SOLID	MS TC-99	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	02/19/10 13:33	**Y**
20090806	S09V001482	SOLID	MS TC-99	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	02/19/10 14:00	**Y**
20090807	S09V001485	SOLID	MS TC-99	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	02/19/10 14:07	**Y**
20090807	S09V001488	SOLID	MS TC-99	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	02/19/10 14:14	**Y**
20090807	S09V001491	SOLID	MS TC-99	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/19/10 14:21	**Y**
20090807	S09V001494	SOLID	MS TC-99	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/19/10 14:28	**Y**
20090808	S09V001497	SOLID	MS TC-99	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/19/10 15:44	**Y**
20090808	S09V001500	SOLID	MS TC-99	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/19/10 15:51	**Y**
20090808	S09V001503	SOLID	MS TC-99	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	02/19/10 14:49	**Y**
20090809	S09V001506	SOLID	MS TC-99	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	02/24/10 11:52	**Y**
20090809	S09V001509	SOLID	MS TC-99	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	02/24/10 19:52	**Y**
20090809	S09V001512	SOLID	MS TC-99	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	02/24/10 12:54	**Y**
20090809	S09V001515	SOLID	MS TC-99	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	02/24/10 13:01	**Y**
20090810	S09V001518	SOLID	MS TC-99	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	02/24/10 13:08	**Y**
20090810	S09V001521	SOLID	MS TC-99	WATER DIGEST VADOSE	08/03/09 12:00	08/03/09 14:00	02/24/10 13:15	**Y**
20090810	S09V001524	SOLID	MS TC-99	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	02/24/10 13:22	**Y**
20090810	S09V001527	SOLID	MS TC-99	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	02/24/10 13:29	**Y**
20090811	S09V001530	SOLID	MS TC-99	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	02/10/10 18:56	**Y**
20090811	S09V001533	SOLID	MS TC-99	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	02/10/10 19:03	**Y**
20090811	S09V001536	SOLID	MS TC-99	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	02/10/10 18:43	N
20090812	S09V001539	SOLID	MS TC-99	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	02/10/10 19:09	**Y**
20090812	S09V001542	SOLID	MS TC-99	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	02/10/10 19:16	**Y**
20090812	S09V001545	SOLID	MS TC-99	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	02/10/10 19:23	**Y**
20090635	S09V001208	LIQUID	MS TC-99/RE		08/12/09 13:28	08/13/09 14:00	10/07/09 11:29	N
20090635	S09V001268	LIQUID	MS TC-99/RE		08/31/09 12:50	08/31/09 13:25	10/07/09 11:35	N
20090802	S09V001439	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/23/10 12:32	**Y**
20090802	S09V001442	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/18/09 09:20	08/18/09 14:00	02/23/10 12:19	**Y**
20090803	S09V001445	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/24/09 09:15	08/31/09 13:25	02/23/10 12:39	**Y**
20090803	S09V001448	SOLID	MS URANIUM	WATER DIGEST VADOSE	09/01/09 08:50	09/01/09 14:10	02/23/10 12:46	N
20090803	S09V001452	SOLID	MS URANIUM	WATER DIGEST VADOSE	09/01/09 13:30	09/01/09 14:10	02/23/10 12:05	N
20090804	S09V001455	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/20/09 12:00	08/20/09 14:00	02/23/10 12:53	**Y**
20090804	S09V001458	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/25/09 08:50	08/25/09 14:20	02/23/10 13:53	**Y**
20090804	S09V001461	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/25/09 12:10	08/25/09 14:20	02/23/10 14:00	**Y**
20090805	S09V001464	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/02/09 09:40	07/02/09 11:45	02/23/10 14:34	**Y**
20090805	S09V001467	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/07/09 10:04	07/07/09 14:35	02/23/10 15:39	**Y**
20090805	S09V001470	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/07/09 14:02	07/07/09 14:35	02/23/10 14:21	**Y**
20090806	S09V001473	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/26/09 10:40	06/26/09 12:30	02/22/10 20:47	**Y**
20090806	S09V001476	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/29/09 11:05	06/29/09 14:00	02/22/10 21:14	**Y**
20090806	S09V001479	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/30/09 08:42	06/30/09 14:50	02/22/10 21:21	**Y**
20090806	S09V001482	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/30/09 12:20	06/30/09 14:50	02/22/10 21:28	**Y**
20090807	S09V001485	SOLID	MS URANIUM	WATER DIGEST VADOSE	05/20/09 09:05	05/20/09 15:45	02/22/10 21:34	**Y**
20090807	S09V001488	SOLID	MS URANIUM	WATER DIGEST VADOSE	05/20/09 14:50	05/20/09 15:45	02/22/10 21:41	**Y**
20090807	S09V001491	SOLID	MS URANIUM	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/22/10 21:48	**Y**

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Analysis Date	Missed Holding Time
20090807	S09V001494	SOLID	MS URANIUM	WATER DIGEST VADOSE	05/26/09 09:45	05/26/09 15:45	02/22/10 21:55	**Y**
20090808	S09V001497	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/02/09 09:56	06/02/09 10:45	02/22/10 22:02	**Y**
20090808	S09V001500	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/09/09 13:45	06/09/09 14:30	02/22/10 22:09	**Y**
20090808	S09V001503	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/10/09 11:00	06/10/09 14:00	02/22/10 22:28	**Y**
20090809	S09V001506	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/18/09 13:27	06/18/09 14:30	02/22/10 18:32	**Y**
20090809	S09V001509	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/18/09 09:30	06/18/09 14:45	02/22/10 18:46	**Y**
20090809	S09V001512	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/19/09 14:10	06/19/09 14:45	02/22/10 18:53	**Y**
20090809	S09V001515	SOLID	MS URANIUM	WATER DIGEST VADOSE	06/22/09 13:10	06/22/09 14:30	02/22/10 19:00	**Y**
20090810	S09V001518	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/03/09 09:45	08/03/09 14:00	02/22/10 19:07	**Y**
20090810	S09V001521	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/03/09 12:00	08/03/09 14:00	02/22/10 19:13	**Y**
20090810	S09V001524	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/04/09 10:50	08/04/09 15:00	02/22/10 19:40	**Y**
20090810	S09V001527	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/10/09 09:10	08/10/09 13:30	02/22/10 19:46	**Y**
20090811	S09V001530	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/12/09 10:30	08/12/09 11:00	02/23/10 18:06	**Y**
20090811	S09V001533	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/13/09 10:00	08/13/09 14:00	02/23/10 18:20	**Y**
20090811	S09V001536	SOLID	MS URANIUM	WATER DIGEST VADOSE	08/17/09 09:05	08/17/09 14:30	02/23/10 18:27	**Y**
20090812	S09V001539	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/09/09 13:15	07/09/09 14:45	02/23/10 18:40	**Y**
20090812	S09V001542	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/27/09 09:45	07/27/09 14:15	02/23/10 18:47	**Y**
20090812	S09V001545	SOLID	MS URANIUM	WATER DIGEST VADOSE	07/27/09 12:50	07/27/09 14:15	02/23/10 19:21	**Y**

Holding Time Report Radichemical Analysis

Lab ID	Customer Sample ID	Method	Prep Method	Sample Date	Receive Date	Analysis Date	Missed Holding Time
S09V001486	B206Y1A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	05/20/2009	05/20/2009	02/04/2010	Y
S09V001489	B206Y3A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	05/20/2009	05/20/2009	02/04/2010	Y
S09V001492	B206Y5A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	05/26/2009	05/26/2009	02/04/2010	Y
S09V001495	B20H52A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	05/26/2009	05/26/2009	02/04/2010	Y
S09V001498	B20709A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/02/2009	06/02/2009	02/04/2010	Y
S09V001501	B20711A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/09/2009	06/09/2009	02/04/2010	Y
S09V001504	B20713A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/10/2009	06/10/2009	02/04/2010	Y
S09V001510	B20717A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/18/2009	06/18/2009	02/09/2010	Y
S10V001188	B20717A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/18/2009	06/18/2009	06/18/2010	Y
S10V000219	B20715B	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/18/2009	06/18/2009	03/17/2010	Y
S10V001184	B20719B	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/19/2009	06/19/2009	06/18/2010	Y
S09V001516	B20H68A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/22/2009	06/22/2009	02/09/2010	Y
S10V001189	B20H68A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/22/2009	06/22/2009	06/18/2010	Y
S09V001474	B206X5A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/26/2009	06/26/2009	02/04/2010	Y
S09V001477	B206X7A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/29/2009	06/29/2009	02/04/2010	Y
S09V001480	B206X9A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/30/2009	06/30/2009	02/04/2010	Y
S09V001483	B20H48A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	06/30/2009	06/30/2009	02/04/2010	Y
S09V001465	B206W9A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/02/2009	07/02/2009	01/19/2010	Y
S09V001468	B206X1A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/07/2009	07/07/2009	01/19/2010	Y
S09V001471	B206X3A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/07/2009	07/07/2009	01/19/2010	Y
S09V001540	B20751A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/09/2009	07/09/2009	01/19/2010	Y
S09V001543	B20753A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/27/2009	07/27/2009	01/19/2010	N
S09V001546	B20755A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	07/27/2009	07/27/2009	01/19/2010	N
S10V001185	B20727B	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/03/2009	08/03/2009	06/18/2010	Y
S09V001522	B20729A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/03/2009	08/03/2009	02/09/2010	Y
S10V001190	B20729A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/03/2009	08/03/2009	06/18/2010	Y
S09V001525	B20731A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/04/2009	08/04/2009	02/09/2010	Y
S10V001191	B20731A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/04/2009	08/04/2009	06/18/2010	Y
S10V001186	B20VK7B	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/10/2009	08/10/2009	06/18/2010	Y
S09V001531	B20733A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/12/2009	08/12/2009	01/19/2010	N
S09V001534	B20735A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/13/2009	08/13/2009	01/19/2010	N
S09V001537	B20737A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/17/2009	08/17/2009	01/19/2010	N
S09V001440	B206P9A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/18/2009	08/18/2009	01/19/2010	N
S09V001443	B206P7A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/18/2009	08/18/2009	01/19/2010	N
S09V001456	B206R9A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/20/2009	08/20/2009	01/19/2010	N
S09V001446	B206R3A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/24/2009	08/31/2009	01/19/2010	N
S09V001459	B206T1A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/25/2009	08/25/2009	01/19/2010	N
S09V001462	B206T3A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	08/25/2009	08/25/2009	01/19/2010	N
S09V001450	B206R5A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	09/01/2009	09/01/2009	01/19/2010	N
S09V001453	B206R7A	ALPHA/BETA by LSC	ACID DIGEST, VADOSE	09/01/2009	09/01/2009	01/19/2010	N
S09V001485	B206Y1A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	05/20/2009	05/20/2009	02/03/2010	Y
S09V001488	B206Y3A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	05/20/2009	05/20/2009	02/03/2010	Y
S09V001491	B206Y5A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	05/26/2009	05/26/2009	02/03/2010	Y
S09V001494	B20H52A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	05/26/2009	05/26/2009	02/03/2010	Y
S09V001497	B20709A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/02/2009	06/02/2009	02/03/2010	Y
S09V001500	B20711A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/09/2009	06/09/2009	02/03/2010	Y
S09V001503	B20713A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/10/2009	06/10/2009	02/03/2010	Y
S09V001509	B20717A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/18/2009	06/18/2009	01/27/2010	Y
S09V001506	B20715A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/18/2009	06/18/2009	01/27/2010	Y
S09V001512	B20719A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/19/2009	06/19/2009	01/27/2010	Y
S09V001515	B20H68A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/22/2009	06/22/2009	01/27/2010	Y
S09V001473	B206X5A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/26/2009	06/26/2009	02/03/2010	Y
S09V001476	B206X7A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/29/2009	06/29/2009	02/03/2010	Y
S09V001479	B206X9A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/30/2009	06/30/2009	02/03/2010	Y
S09V001482	B20H48A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	06/30/2009	06/30/2009	02/03/2010	Y
S09V001464	B206W9A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/02/2009	07/02/2009	02/03/2010	Y
S09V001467	B206X1A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/07/2009	07/07/2009	02/03/2010	Y
S09V001470	B206X3A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/07/2009	07/07/2009	02/03/2010	Y
S09V001539	B20751A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/09/2009	07/09/2009	01/29/2010	Y
S09V001542	B20753A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/27/2009	07/27/2009	01/29/2010	Y
S09V001545	B20755A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	07/27/2009	07/27/2009	01/29/2010	Y
S09V001518	B20727A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/03/2009	08/03/2009	01/27/2010	N
S09V001521	B20729A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/03/2009	08/03/2009	01/27/2010	N

Lab ID	Customer Sample ID	Method	Prep Method	Sample Date	Receive Date	Analysis Date	Missed Holding Time
S09V001524	B20731A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/04/2009	08/04/2009	01/27/2010	N
S09V001527	B20VK7A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/10/2009	08/10/2009	01/27/2010	N
S09V001530	B20733A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/12/2009	08/12/2009	01/29/2010	N
S09V001533	B20735A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/13/2009	08/13/2009	01/29/2010	N
S09V001536	B20737A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/17/2009	08/17/2009	01/29/2010	N
S09V001439	B206P9A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/18/2009	08/18/2009	02/03/2010	N
S09V001442	B206P7A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/18/2009	08/18/2009	02/03/2010	N
S09V001455	B206R9A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/20/2009	08/20/2009	02/03/2010	N
S09V001445	B206R3A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/24/2009	08/31/2009	02/03/2010	N
S09V001458	B206T1A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/25/2009	08/25/2009	02/03/2010	N
S09V001461	B206T3A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	08/25/2009	08/25/2009	02/03/2010	N
S09V001448	B206R5A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	09/01/2009	09/01/2009	02/03/2010	N
S09V001452	B206R7A	ALPHA/BETA by LSC	WATER DIGEST VADOSE	09/01/2009	09/01/2009	02/03/2010	N
S09V001209	B20768	ALPHA/BETA by LSC		08/12/2009	08/13/2009	08/19/2009	N
S09V001269	B20766	ALPHA/BETA by LSC		08/31/2009	08/31/2009	12/03/2009	N
S09V000514	B206Y1A	GEA		05/20/2009	05/20/2009	11/24/2009	**Y**
S09V000520	B206Y3A	GEA		05/20/2009	05/20/2009	11/24/2009	**Y**
S09V000671	B206Y5A	GEA		05/26/2009	05/26/2009	11/24/2009	**Y**
S09V000677	B20H52A	GEA		05/26/2009	05/26/2009	11/24/2009	**Y**
S09V000681	B20709A	GEA		06/02/2009	06/02/2009	11/24/2009	N
S09V000711	B20711A	GEA		06/09/2009	06/09/2009	11/25/2009	N
S09V000717	B20713A	GEA		06/10/2009	06/10/2009	11/25/2009	N
S09V000771	B20717A	GEA		06/18/2009	06/18/2009	11/25/2009	N
S09V000765	B20715A	GEA		06/18/2009	06/18/2009	11/25/2009	N
S09V000777	B20719A	GEA		06/19/2009	06/19/2009	12/01/2009	N
S09V000783	B20H68A	GEA		06/22/2009	06/22/2009	12/01/2009	N
S09V000789	B206X5A	GEA		06/26/2009	06/26/2009	12/02/2009	N
S09V000795	B206X7A	GEA		06/29/2009	06/29/2009	12/02/2009	N
S09V000801	B206X9A	GEA		06/30/2009	06/30/2009	12/02/2009	N
S09V000807	B20H48A	GEA		06/30/2009	06/30/2009	12/02/2009	N
S09V000813	B206W9A	GEA		07/02/2009	07/02/2009	12/02/2009	N
S09V000819	B206X1A	GEA		07/07/2009	07/07/2009	12/03/2009	N
S09V000825	B206X3A	GEA		07/07/2009	07/07/2009	12/03/2009	N
S09V000831	B20751A	GEA		07/09/2009	07/09/2009	11/26/2009	N
S09V000837	B20753A	GEA		07/27/2009	07/27/2009	11/26/2009	N
S09V000843	B20755A	GEA		07/27/2009	07/27/2009	11/26/2009	N
S09V000941	B20727A	GEA		08/03/2009	08/03/2009	11/26/2009	N
S09V000946	B20729A	GEA		08/03/2009	08/03/2009	11/27/2009	N
S09V001002	B20731A	GEA		08/04/2009	08/04/2009	11/27/2009	N
S09V001040	B20VK7A	GEA		08/10/2009	08/10/2009	11/27/2009	N
S09V001186	B20733A	GEA		08/12/2009	08/12/2009	11/28/2009	N
S09V001201	B20735A	GEA		08/13/2009	08/13/2009	11/28/2009	N
S09V001221	B20737A	GEA		08/17/2009	08/17/2009	11/20/2009	N
S09V001237	B206P9A	GEA		08/18/2009	08/18/2009	11/20/2009	N
S09V001437	B206P7A	GEA		08/18/2009	08/18/2009	11/21/2009	N
S09V001243	B206R9A	GEA		08/20/2009	08/20/2009	11/20/2009	N
S09V001261	B206R3A	GEA		08/24/2009	08/31/2009	11/21/2009	N
S09V001249	B206T1A	GEA		08/25/2009	08/25/2009	11/20/2009	N
S09V001255	B206T3A	GEA		08/25/2009	08/25/2009	11/21/2009	N
S09V001275	B206R5A	GEA		09/01/2009	09/01/2009	11/21/2009	N
S09V001281	B206R7A	GEA		09/01/2009	09/01/2009	11/21/2009	N
S09V001209	B20768	GEA-HANFORD LIBRARY		08/12/2009	08/13/2009	08/19/2009	N
S09V001269	B20766	GEA-HANFORD LIBRARY		08/31/2009	08/31/2009	11/23/2009	N
S09V000514	B206Y1A	IODINE-129 in SOIL		05/20/2009	05/20/2009	03/03/2010	**Y**
S09V000520	B206Y3A	IODINE-129 in SOIL		05/20/2009	05/20/2009	03/03/2010	**Y**
S09V000671	B206Y5A	IODINE-129 in SOIL		05/26/2009	05/26/2009	03/03/2010	**Y**
S09V000677	B20H52A	IODINE-129 in SOIL		05/26/2009	05/26/2009	03/03/2010	**Y**
S09V000681	B20709A	IODINE-129 in SOIL		06/02/2009	06/02/2009	03/14/2010	**Y**
S09V000711	B20711A	IODINE-129 in SOIL		06/09/2009	06/09/2009	03/03/2010	**Y**
S09V000717	B20713A	IODINE-129 in SOIL		06/10/2009	06/10/2009	03/03/2010	**Y**
S09V000771	B20717A	IODINE-129 in SOIL		06/18/2009	06/18/2009	03/08/2010	**Y**
S09V000766	B20715B	IODINE-129 in SOIL		06/18/2009	06/18/2009	03/14/2010	**Y**
S09V000778	B20719B	IODINE-129 in SOIL		06/19/2009	06/19/2009	03/14/2010	**Y**
S09V000783	B20H68A	IODINE-129 in SOIL		06/22/2009	06/22/2009	03/08/2010	**Y**
S09V000790	B206X5B	IODINE-129 in SOIL		06/26/2009	06/26/2009	03/14/2010	**Y**

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Lab ID	Customer Sample ID	Method	Prep Method	Sample Date	Receive Date	Analysis Date	Missed Holding Time
S09V000795	B206X7A	IODINE-129 in SOIL		06/29/2009	06/29/2009	02/24/2010	Y
S09V000801	B206X9A	IODINE-129 in SOIL		06/30/2009	06/30/2009	02/24/2010	Y
S09V000807	B20H48A	IODINE-129 in SOIL		06/30/2009	06/30/2009	02/24/2010	Y
S09V000813	B206W9A	IODINE-129 in SOIL		07/02/2009	07/02/2009	02/24/2010	Y
S09V000819	B206X1A	IODINE-129 in SOIL		07/07/2009	07/07/2009	02/24/2010	Y
S09V000825	B206X3A	IODINE-129 in SOIL		07/07/2009	07/07/2009	02/24/2010	Y
S09V000831	B20751A	IODINE-129 in SOIL		07/09/2009	07/09/2009	03/08/2010	Y
S09V000837	B20753A	IODINE-129 in SOIL		07/27/2009	07/27/2009	03/08/2010	Y
S09V000844	B20755B	IODINE-129 in SOIL		07/27/2009	07/27/2009	03/14/2010	Y
S09V000941	B20727A	IODINE-129 in SOIL		08/03/2009	08/03/2009	03/14/2010	Y
S09V000946	B20729A	IODINE-129 in SOIL		08/03/2009	08/03/2009	03/08/2010	Y
S09V001002	B20731A	IODINE-129 in SOIL		08/04/2009	08/04/2009	03/08/2010	Y
S09V001041	B20VK7B	IODINE-129 in SOIL		08/10/2009	08/10/2009	03/14/2010	Y
S09V001186	B20733A	IODINE-129 in SOIL		08/12/2009	08/12/2009	03/08/2010	Y
S09V001208	B20768	IODINE-129 in SOIL		08/12/2009	08/13/2009	04/09/2010	Y
S09V001196	B206P7B	IODINE-129 in SOIL		08/13/2009	08/13/2009	03/14/2010	Y
S09V001201	B20735A	IODINE-129 in SOIL		08/13/2009	08/13/2009	03/08/2010	Y
S09V001222	B20737B	IODINE-129 in SOIL		08/17/2009	08/17/2009	03/14/2010	Y
S09V001237	B206P9A	IODINE-129 in SOIL		08/18/2009	08/18/2009	03/01/2010	Y
S09V001243	B206R9A	IODINE-129 in SOIL		08/20/2009	08/20/2009	03/01/2010	Y
S09V001261	B206R3A	IODINE-129 in SOIL		08/24/2009	08/31/2009	03/01/2010	Y
S09V001249	B206T1A	IODINE-129 in SOIL		08/25/2009	08/25/2009	03/01/2010	Y
S09V001255	B206T3A	IODINE-129 in SOIL		08/25/2009	08/25/2009	03/01/2010	Y
S09V001269	B20766	IODINE-129 in SOIL		08/31/2009	08/31/2009	04/09/2010	Y
S09V001275	B206R5A	IODINE-129 in SOIL		09/01/2009	09/01/2009	03/01/2010	Y
S09V001281	B206R7A	IODINE-129 in SOIL		09/01/2009	09/01/2009	03/01/2010	Y

Attachment 5

GEOLOGIC SAMPLE DESCRIPTIONS

SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090372	SX Barrier B206Y1B C7172 46-48	S09V000515	6/1/2009	Slightly muddy sand, (m)S, very slightly moist, well-sorted fine sand, mica present, tube is full, color: 2.5Y5/3, Moderate acid reactivity.
20090372	SX Barrier B206Y3B C7172 75.5-77.5	S09V000521	6/1/2009	Slightly muddy sand, (m)S, slightly moist, uniform very fine silty, clayey sand, slightly cohesive, mica present, tube is full, color: 2.5Y5/2, Moderate acid reactivity.
20090372	SX Barrier B206Y5B C7172 97.5-99.5	S09V000672	6/1/2009	Mud, M, slightly moist, stiff cohesive uniform fine grained material, sample was in jar as two large pieces, material broke apart easily with hackly surfaces, color: 2.5Y5/3, moderate acid reactivity.
20090372	SX Barrier B20H52B C7172 126-128	S09V000678	6/1/2009	Mud, M, slightly moist, uniform stiff cohesive clay, slight (ca. 2mm) depression on bottom of core segment, color: 2.5Y6/2, moderate acid reactivity.
20090372	SX Barrier B20708 C7178 89-91	S09V000680	6/11/2009	Sand, S, dry well-sorted fine sand with mica, small clasts break up easily, no grit or granules, small white specks may be caliche, color: 2.5Y6/2, slight to moderate acid reactivity.
20090372	SX Barrier B20710 C7178 127-129	S09V000710	6/11/2009	Mud, M, slightly moist cohesive clay, clasts break easily but exhibit slight plasticity, color: 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B20712 C7178 151-153	S09V000716	6/11/2009	Sandy mud, sM, very slightly moist, very fine sandy Mud with mud clasts, clasts crush easily, mica present, color: 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B20714 C7180 93-95	S09V000764	6/23/2009	Slightly muddy sand, (m)S, dry well-sorted fine sand with silt, some clasts that take moderate pressure to crush, trace mica, color: 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B20716 C7180 104-106	S09V000770	6/23/2009	Slightly muddy sand, (m)S, very slightly moist, some clasts that crush easily, trace mica, color: 2.5Y5/3, moderate acid reactivity.
20090372	SX Barrier B20718 C7180 127-129	S09V000776	6/23/2009	Sandy mud, sM, slightly moist, silt with fine sand, clasts are cohesive but easily crushed, some clay, trace mica, color: 2.5Y5/3, moderate to heavy acid reactivity.
20090372	SX Barrier B20H67 C7180 152-154	S09V000782	6/23/2009	Mud, M, fine-grained silt with some clay, clasts are easily broken, very little fine sand, cohesive clay is present, some mica, color: 2.5Y4/3, moderate acid reactivity.
20090372	SX Barrier B206X4 C7170 81.5-83.5	S09V000788	7/1/2009	Mud, M, dry uniform slightly sandy silt loess?, clasts break up easily, little or no clay, trace mica, color: 2.5Y7/2, moderate acid reactivity.
20090372	SX Barrier B206X6 C7170 113-115	S09V000794	7/1/2009	Mud, M, slightly moist uniform fine silt to sand, trace mica including some large (>3mm) flakes, little or no clay, color: 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B206X8 C7170 133-135	S09V000800	7/1/2009	Mud, M, slightly moist slightly cohesive silty clay, numerous clasts that break up easily, little or no sand, appears to be mostly silt, color: 2.5Y5/3, moderate acid reactivity.

SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090372	SX Barrier B20H47 C7170 150-152	S09V000806	7/1/2009	Mud, M, slightly moist (trace condensation on lid) fine-grained silt, little or no sand, clasts break up easily, one carburized plant fragment, color: 2.5Y5/3, moderate acid reactivity.
20090372	SX Barrier B206W8 C7168 81-83	S09V000812	7/8/2009	Mud, M, very slightly moist, slightly clayey, slightly sandy silt with small slightly cohesive clasts that crush easily, trace mica, color: 2.5Y5/3, slight to moderate acid reactivity.
20090372	SX Barrier B206X0 C7168 129-131	S09V000818	7/8/2009	Mud, M, very slightly moist, slightly clayey silt (loess?), slightly cohesive clay clasts, trace mica, color: 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B206X2 C7168 145-147	S09V000824	7/8/2009	Mud, M, slightly moist silt (loess?) with slightly cohesive clay clasts, color: 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B20750 C7192 100-102	S09V000830	7/22/2009	Mud, M, very slightly moist, silt with trace sand, clasts are slightly cohesive, color: 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B20752 C7192 128-130	S09V000836	7/28/2009	Mud, M, slightly moist uniform mud, mostly clasts, some quite large (>30mm), stiff, slightly cohesive silty clay, no sand or gravel, trace mica, color: 2.5Y5/3, Moderate acid reactivity.
20090372	SX Barrier B20754 C7192 140-142	S09V000842	7/28/2009	Mud, M, slightly moist uniform mud, mostly clasts, friable silty clay, no sand or gravel, trace mica, some reddish-orange stains on clasts, color: 2.5Y6/2, moderate to vigorous acid reactivity.
20090372	SX Barrier B20728 C7184 104-106	S09V000945	8/11/2009	Mud, M, slightly moist, many clasts, easily broken, dominantly silt-sized, little sand, no clay, trace mica, color: 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B20730 C7184 128.5-130.5	S09V001001	8/11/2009	Mud, M, slightly moist, small clasts, easily broken, no sand, little clay, trace mica, loess?, color: 2.5Y5/3, moderate acid reactivity.
20090372	SX Barrier B20VK6 C7184 141-143	S09V001037	8/11/2009	Mud, M, slightly moist, numerous clasts, easily broken, exhibiting slight plasticity and cohesiveness, trace mica, small plant fragments in trace amounts, color: 2.5Y5/3. Slight to moderate acid reactivity.
20090372	SX Barrier B20732 C7186 105-107	S09V001183	8/18/2009	Mud, M, very slightly moist, silt with little or no sand or clay, some clasts slightly cohesive, easily broken, trace mica, some small white specks, color: 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B206P6 C7154 74-76	S09V001192	8/19/2009	Sandy mud, sM, slightly moist, trace moisture on lid, silty clasts easily broken, only slightly cohesive, loose sand is fine-grained, coarsest grains are about 1mm diameter and angular to subangular, trace mica, color: 2.5Y5/2 silt, 2.5Y5/3 sand, lighter due to quartz grains, slight to moderate acid reactivity.
20090372	SX Barrier B20734 C7186 128-130	S09V001198	8/18/2009	Mud, M, slightly moist, some free moisture on lid, clasts are stiff and cohesive but easily broken into platy fragments, some orange-red staining, trace mica, color, 2.5Y6/3, moderate acid reactivity.
20090372	SX Barrier B20736 C7186 145-147	S09V001218	8/18/2009	Mud, M, very slightly moist, cohesive silt with minor clay, no sand, trace mica, some light orange staining, color: 2.5Y6/3, slight to moderate acid reactivity.

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SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090372	SX Barrier B206P8 C7154 106-108	S09V001234	8/19/2009	Mud, M, very slightly moist, slightly sandy silt with clay, sand is very fine with uniform texture, small clasts break easily, trace mica, color: 2.5Y5/3, moderate acid reactivity.
20090372	SX Barrier B206R8 C7158 87-89	S09V001240	8/26/2009	Slightly muddy gravelly sand (s)gS, dry, poorly sorted, 4 rock fragments excluded largest is 18mm long, some large fragments are clasts that break with moderate pressure, some are basalt, interior of clasts are orange-stained carbonate-cemented sand, largest fragments are angular to sub-angular, finest material is silt, no clay, trace mica, color: 2.5Y7/1, slight to moderate acid reactivity, clasts disaggregate.
20090372	SX Barrier B206T0 C7158 124-126	S09V001246	8/26/2009	Mud, M, slightly moist, uniform silt with some clay (loess), numerous clasts, slightly cohesive, easily broken, little or no sand, trace mica, soil color 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B206T2 C7158 141-143	S09V001252	8/26/2009	Mud, M, slightly moist, uniform silt with some clay (loess), similar to B206T0, numerous clasts, slightly cohesive, slightly plastic indicating higher clay content, trace mica, soil color 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B206R2 C7156 92-94	S09V001258	9/2/2009	Mud, M, very slightly moist, very slightly sandy (ca. 5%) silt (loess), uniform color and texture, small clasts easily broken, minor clay, trace mica, color: 2.5Y5/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B206R4 C7156 126-128	S09V001272	9/2/2009	Mud, M, slightly moist, trace moisture on lid, minor clay in silt (loess), uniform color and texture, small clasts easily broken, slight plasticity, no sand, trace mica, color: 2.5Y4/3, moderate to vigorous acid reactivity.
20090372	SX Barrier B206R6 C7156 140-142	S09V001278	9/2/2009	Mud, M, slightly moist,, mix of silt and clay (loess), no sand, uniform color and texture, clasts break easily and exhibit moderate plasticity, trace mica, color: 2.5Y5/2, moderate to vigorous acid reactivity.
20090802	C7154 B206P7B 74-76	S09V001196	2/25/2010	Bottom is full, Top has irregular depression ~1mm. Moist mud (M). Cohesive, no mica. Soil color: 2.5Y4/2. Moderate to heavy reactivity to acid.
20090802	C7154 B206P9A 106-108	S09V001237	11/9/2009	Top full, bottom has irregular gap 5mm maximum depth. Slightly moist. Not so uniform mud (M). Slightly sandy at bottom end cap. Cohesive mud, clay and silt. Some clay clasts. Some plasticity. Trace mica. Soil color: 2.5Y5/3. Mix of silt and clay clasts. Moderate acid reactivity.
20090802	C7154 B206P7A 74-76	S09V001437	11/9/2009	Top full, bottom has irregular gap 5mm deep in the center. Moist, uniform mud (M). Cohesive, 5% sand, mostly silt. Loess, Trace Mica. Soil color: 2.5Y5/2. Moderate acid reactivity.
20090803	C7156 B206R3A 92-94	S09V001261	11/9/2009	Tube full Very slightly moist mud (M), mixture of sandy silt, loess and cohesive clay clasts. Clasts exhibit moderate plasticity. Trace mica. Sand size white specks occasionally found. Soil color: 2.5Y6/3. Moderate to vigorous acid reactivity.
20090803	C7156 B206R5A 126-128	S09V001275	11/9/2009	Top full, bottom irregular depression 5mm deep. Very slightly moist uniform mud (M), very slightly cohesive. Dominantly silt (loess). Little sand or clay. Soil color: 2.5Y6/3. Little or no mica. Vigorous acid reactivity.
20090803	C7156 B206R7A 140-142	S09V001281	11/9/2009	Top irregular gap about 5mm, bottom irregular gap 1.5 cm deep. Moist mud (M) very cohesive, uniform. Stiff clay some plasticity. Trace mica. Soil color: 2.5Y6/2. Moderate acid reactivity.
20090804	C7158 B206R9A 87-89	S09V001243	11/9/2009	Top irregular 1cm deep, (looks like caliche) bottom full, hard to remove. Very slightly moist sandy gravel (sG) trace iron stained. Sandy lenses. Pebbles are sub-rounded to angular. Basalt and white rock. Soil color: 2.5Y7/2 finer grained material. Coarser pieces are highly variable in color. Very slight acid reactivity. White pieces of rock are quartz. Largest pieces are up to 25mm.

SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090804	C7158 B206T1A 124-126	S09V001249	11/9/2009	Top irregular depression 5mm deep, bottom full. Slightly moist mud (M), uniform silt with clay. Cohesive, trace mica. Soil color: 2.5Y5/2. Moderate acid reactivity.
20090804	C7158 B206T3A 141-143	S09V001255	11/9/2009	Tube full, top slightly bulging. Moist, uniform mud (M). Cohesive and slightly plastic. Silt and clay, minor sand. Trace mica. Soil color: Soil color: 2.5Y4/2. Moderate acid reactivity.
20090805	C7168 B206W9A 81-83	S09V000813	11/10/2009	Top full, bottom irregular depression 1.5cm deep. Slightly moist mud (M), cohesive, slightly plastic. Sandy lenses, trace mica. Soil color: 2.5Y6/3. Slight to moderate acid reactivity.
20090805	C7168 B206X1A 129-131	S09V000819	11/10/2009	Tube full. Slightly moist mud (M) uniform, non-cohesive, silt and clay, little or no sand. Little or no mica. Soil color: 2.5Y6/3. Moderate acid reactivity.
20090805	C7168 B206X3A 145-147	S09V000825	11/10/2009	Irregular depressions at both ends up to 5mm deep. Slightly moist uniform mud (M), Cohesive, slightly plastic, stiff clay no sand. Trace mica, more clay than silt. Soil color: 2.5Y7/4. Moderate acid reactivity.
20090806	C7170 B206X5A 81.5-83.5	S09V000789	11/10/2009	Tube full. Very slightly moist sandy mud (sM). Very fine sand and silt. Uniform. Little or no clay. Trace mica. Soil color: 2.5Y7/3. Slight to moderate acid reactivity.
20090806	C7170 B206X5B 81.5-83.5	S09V000790	2/25/2010	Tube is full. ½ mL liquid on end cap. Moist on both ends. 112mm Slightly muddy sand (m)S. Slightly moist to moist. Clay is moist. No gravel, cohesive mud Soil color, sand: 2.5Y5/2 Soil color, mud: 2.5Y5/3. Moderate acid reactivity
20090806	C7170 B206X7A 113-115	S09V000795	11/10/2009	Tube full. Slightly moist mud (M). Thin sand lens in middle. Rest is mainly silt, a few slightly cohesive clay lenses. Sand very fine. Trace mica. Soil color: 2.5Y6/3 slight to moderate acid reactivity.
20090806	C7170 B206X9A 133-135	S09V000801	11/10/2009	Top is full, bottom regular depression 4mm around. Very slightly moist sandy mud (sM). Mostly fine sand and silt, few small clay clasts non-cohesive. Minor mica few flakes >1mm. Soil color: 2.5Y6/3. Slight to moderate acid reactivity.
20090806	C7170 B20H48A 150-152	S09V000807	11/10/2009	Top full, irregular depression 4mm maximum. Moist mud (M). Uniform, cohesive slightly plastic clay. No mica. Soil color: 2.5Y5/3. Moderate acid reactivity
20090807	C7172 B206Y1A 46-48	S09V000514	11/10/2009	Tube full. Slightly moist mud (M). Uniform, mostly silt. Very little clay or sand. Trace mica. Moderate acid reactivity.
20090807	C7172 B206Y3A 75.5-77.5	S09V000520	11/10/2009	Tube full. 2mm bulge on top. Trace moisture on both end caps. Slightly moist mud (M). Clay rich top half of tube. Silty, sandy bottom half of tube. Top cohesive clay with silt. Bottom silt with fine sand (loess). Some sand grains up to 2mm. sub-angular rock fragments. Trace mica Soil color: 2.5Y5/3. Moderate acid reactivity.
20090807	C7172 B206Y5A 97.5-99.5	S09V000671	11/10/2009	Tube full. Slightly moist mud (M) slightly cohesive mixture of clay and silt. Little or no sand. Trace mica Soil color: 2.5Y6/3. Moderate acid reactivity.
20090807	C7172 B20H52A 126-128	S09V000677	11/10/2009	Top and bottom irregular gap up to 1cm deep. Moist mud (M). Cohesive and slightly plastic. Uniform, stiff. No sand. Trace mica. Soil color: 2.5Y4/3. Slight to moderate acid reactivity.

SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090808	C7178 B20709A 89-91	S09V000681	11/12/2009	Top bulging slightly, bottom slightly depressed ~3mm irregular. Slightly moist uniformed mud (M). Slightly sandy silt, trace gravel. Largest particle ~8mm diameter Trace mica. Soil color: 2.5Y5/2. Slight acid reactivity.
20090808	C7178 B20711A 127-129	S09V000711	11/12/2009	Flat on top, bottom irregular depression. Moist uniform mud (M). Cohesive slightly plastic, mostly clay, no mica. Soil color: 2.5Y4/2. Slight to moderate acid reactivity.
20090808	C7178 B20713A 151-153	S09V000717	11/12/2009	Tube full. Slightly moist mud (M), slightly cohesive. Trace mica. Mix of silt and clay seems siltier than previous sample. Trace sand. Soil color: 2.5Y5/3. Moderate acid reactivity.
20090809	C7180 B20715A 93-95	S09V000765	11/2/2009	Tube full. Very slightly moist sandy mud (sM). Dominantly silt and fine sand, little or no clay. Trace mica. (Loess). Soil color: 2.5Y6/3. Moderate acid reactivity.
20090809	C7180 B20715B 93-95	S09V000766	2/25/2010	ube is full. Very slightly moist, slightly muddy sand, (m)S. Uniform, well sorted. Some clasts, break easily. No gravel. Soil color: 2.5Y5/2. Moderate acid reactivity
20090809	C7180 B20717A 104-106	S09V000771	11/12/2009	Tube full. Very slightly moist sandy mud (sM). Dominantly silt and fine sand, little or no clay. Trace mica (Loess). Soil color: 2.5Y6/3. Moderate acid reactivity.
20090809	C7180 B20719A 127-129	S09V000777	11/12/2009	Tube full. Slightly moist mud (M), uniform silt with small amounts of sand and clay, trace mica. Slightly cohesive loess. Soil color: 2.5Y6/3. Slight to moderate acid reactivity.
20090809	C7180 B20719B 127-129	S09V000778	3/4/2010	Tube is full. Very slightly moist mud (M). Abundant silt, some friable clasts break easily. Little or no clay, no sand (loess). Uniform color and texture. Trace mica. Slightly cohesive silt. Soil color: 2.5Y6/3. Moderate to heavy reactivity to acid.
20090809	C7180 B20H68A 152-154	S09V000783	11/12/2009	Top irregular depression 2mm deep, slight depression bottom, flat, 1mm deep. Slightly moist mud (M) uniform silt with clay (loess), cohesive, trace fine sand, trace mica. Soil color: 2.5Y5/3. Moderate acid reactivity.
20090810	C7184 B20727A 83-85	S09V000941	11/12/2009	Top tube loosely filled with 25mm gap, only half full at bottom. Very slightly moist sandy gravel (sG), very poorly sorted, sub-round to angular gravel with medium to fine sand. Overall gray color with some brownish cement. Largest particle 30mm. Soil color: 2.5Y6/1 (brownish layer soil color: 2.5Y6/4). Very slight acid reactivity, except brownish cement has slight to moderate acid reactivity.
20090810	C7184 B20727B 83-85	S09V000942	8/11/2009	Gravelly Mud, gM, dry, poorly sorted mixture of silt and coarse gravel, basalt rock fragments, largest is 30 mm long, 4 pieces excluded, tube is 1/3 full, material easily removed, color: 2.5Y4/2, slight acid reactivity.
20090810	C7184 B20729A 104-106	S09V000946	11/12/2009	Tube full. Slightly moist mud (M). Mix of clay and silt slightly cohesive. Minor amount of fine sand, trace mica. Soil color: 2.5Y5/3. Slight to moderate acid reactivity.
20090810	C7184 B20731A 128.5-130.5	S09V001002	11/16/2009	Tube full. (1mm bulge on top). Slightly moist mud (M)Uniform silt and clay (loess), slightly cohesive, trace sand and mica. Soil color: 2.5Y6/3. Moderate acid reactivity.
20090810	C7184 B20VK7A 141-143	S09V001040	11/16/2009	Top 5mm depression, bottom 1cm depression. Slightly moist mud (M), stiff, uniform silt and clay, slightly cohesive. Trace mica, little or no sand. Soil color: 2.5Y5/4. Moderate acid reactivity.

SX Barrier Tier 1 & Quick Turn Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20090810	C7184 B20VK7B 141-143	S09V001041	3/4/2010	Top is full, irregular depression on bottom ~10mm deep. Slightly moist mud (M). Stiff, somewhat cohesive, friable silt clasts. Little or no clay, no sand. Uniform color and texture. Soil color: 2.5Y5/3. Moderate reactivity to acid.
20090811	C7186 B20733A 105-107	S09V001186	11/16/2009	Tube full. Rounded bulge on top 3mm high. Slightly moist mud (M). Uniform stiff silt and clay, slightly cohesive. Little or no sand, trace mica. Soil color: 2.5Y5/3. Moderate acid reactivity.
20090811	C7186 B20735A 128-130	S09V001201	11/16/2009	Top full, irregular depression on bottom 5mm deep. Slightly moist mud (M), uniform stiff silt with clay. Very slightly cohesive. Some iron staining. Trace sand and mica. Soil color: 2.5Y6/3. Moderate acid reactivity."
20090811	C7186 B20737A 145-147	S09V001221	11/16/2009	Tube full. Very slightly moist mud (M). Uniform slightly cohesive silt with clay (loess). Minor sand, trace mica. Minor iron staining. Soil color: 2.5Y5/3. Moderate acid reactivity.
20090811	C7186 B20737B 145-147	S09V001222	11/9/2009	Tube is full. Very slightly moist to slightly moist mud (M). Cohesive silt, friable clasts, trace iron-staining, trace mica, trace sand. Very fine grained uniform texture. Sample extruded the easiest of the four. Soil color 2.5Y6/3. Moderate to heavy reactivity to acid
20090812	C7192 B20751A 100-102	S09V000831	11/16/2009	Top bulges ~2mm, irregular depression on bottom ~5mm deep. Slightly moist mud (M), uniform stiff slightly cohesive silt with clay (loess). Little or no sand, trace mica. Soil color: 2.5Y5/3. Moderate acid reactivity. (Sample I.D. incorrect on core description log.)
20090812	C7192 B20753A 128-130	S09V000837	11/16/2009	Top bulges slightly, irregular depression on bottom up to 10mm deep. Free moisture in end cap. Slightly moist mud (M). Stiff cohesive silt and clay, slightly plastic, uniform. No sand, trace mica. Soil color: 2.5Y5/3. Moderate acid reactivity.
20090812	C7192 B20755A 140-142	S09V000843	11/16/2009	Top full, irregular depression in bottom. Moisture in end caps. Slightly moist mud (M), uniform cohesive silt with clay, trace sand and mica. Soil color: 2.5Y6/3. Moderate acid reactivity.
20090812	C7192 B20755B 140-142	S09V000844	3/4/2010	Tube is full. Slightly moist to moist mud (M). Stiff cohesive clay and silt no sand. Last 50mm extruded intact. Uniform color and texture. Slight iron-staining, trace mica. Soil color: 2.5Y5/3. Moderate reactivity to acid.

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SX Barrier Quick Turn Analyses Photographic Log

Figure A-1: Core 7154, Sample B206P6, Shoe

Figure A-2: Core 7154, Sample B206P8, Shoe

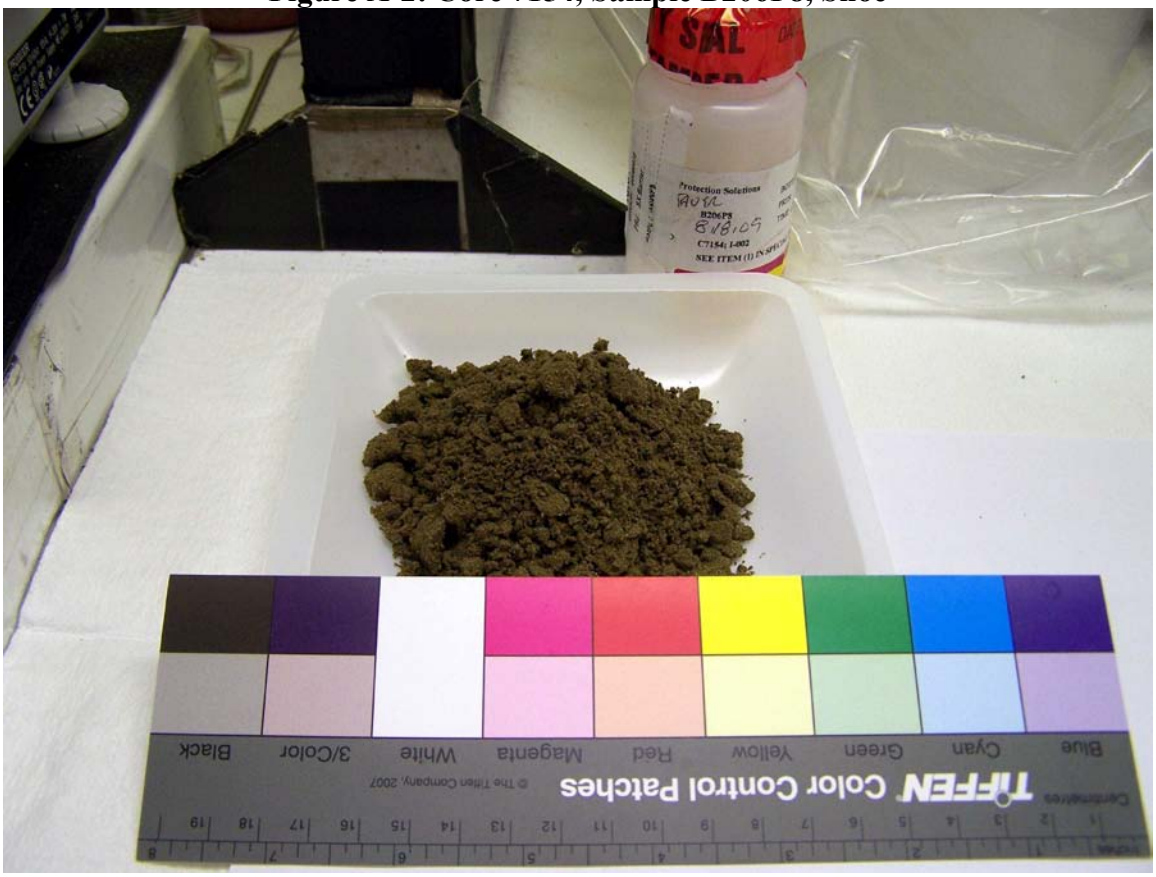

Figure A-3: Core 7156, Sample B206R2, Shoe

Figure A-4: Core 7156, Sample B206R4, Shoe

Figure A-5: Core 7156, Sample B206R6, Shoe

Figure A-6: Core 7158, Sample B206R8, Shoe

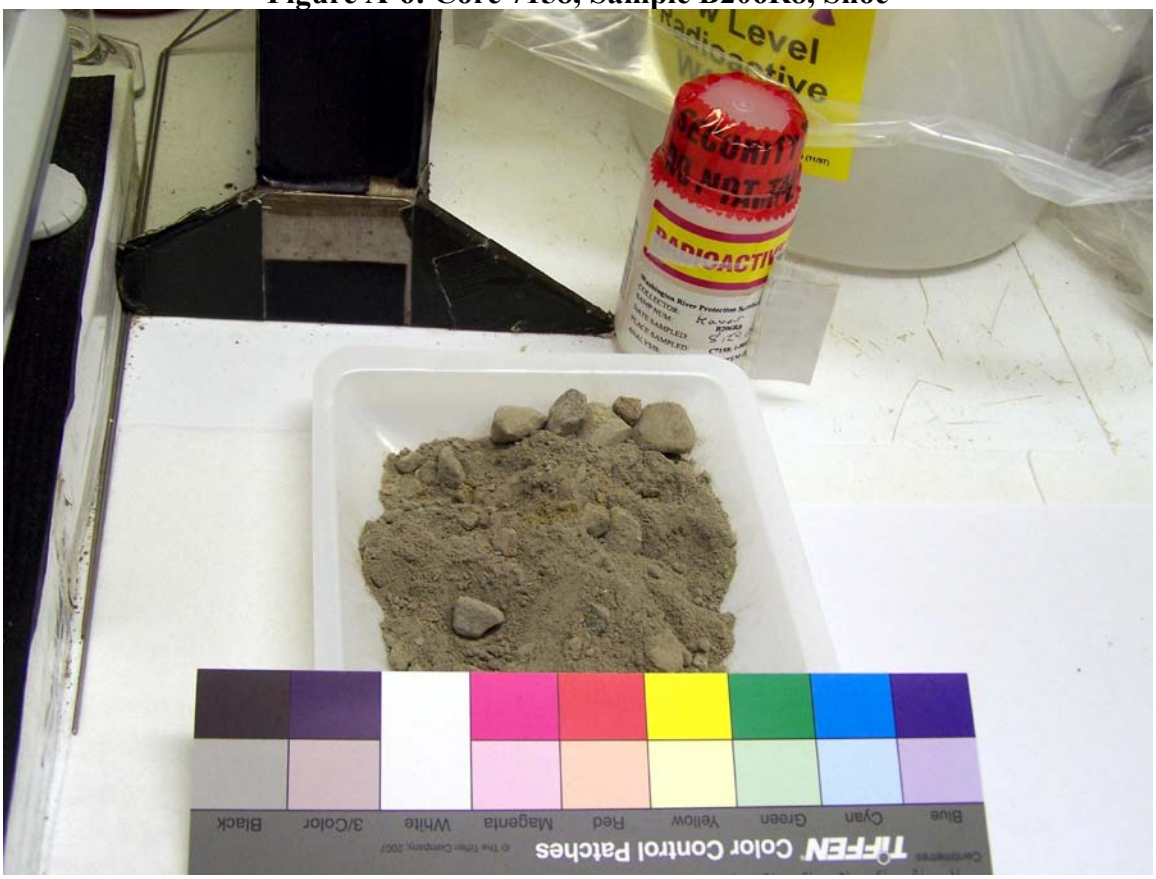

Figure A-7: Core 7158, Sample B206T0, Shoe

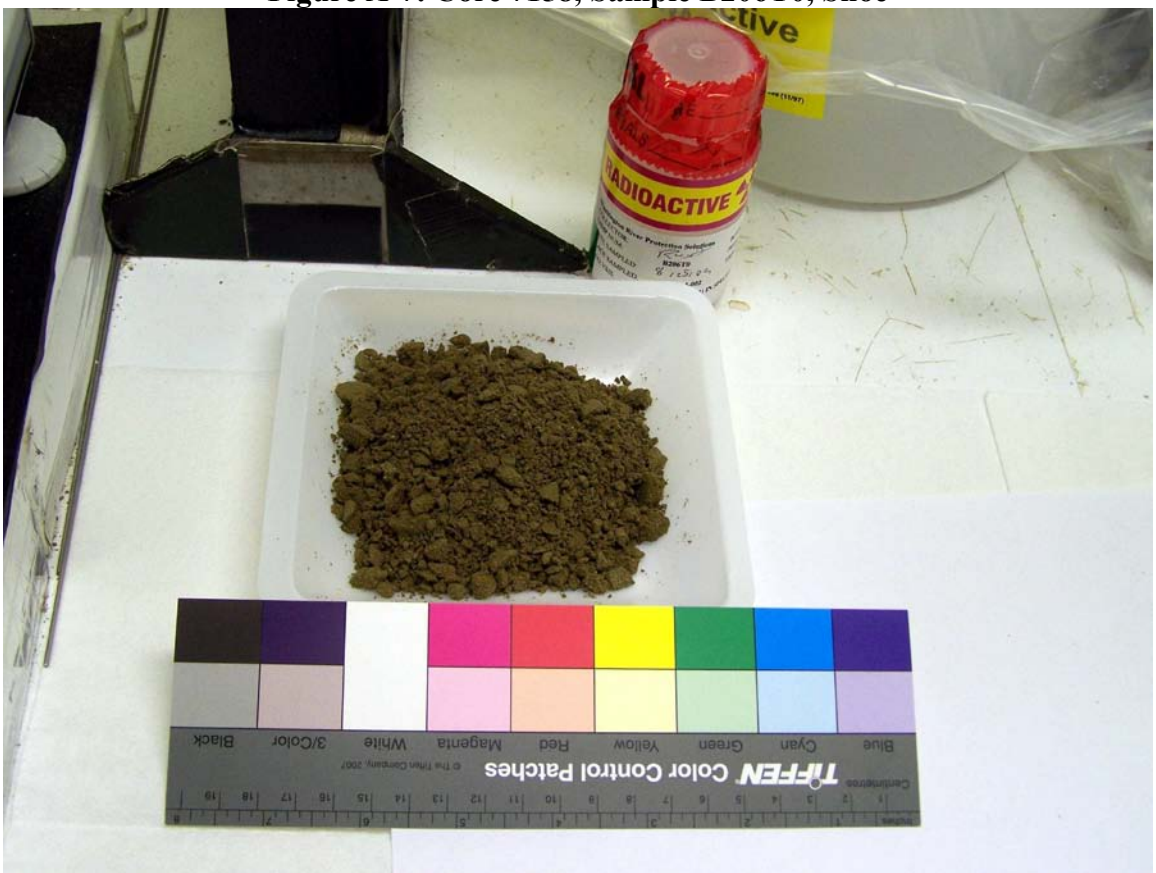

Figure A-8: Core 7158, Sample B206T2, Shoe

Figure A-9: Core 7168, Sample B206W8, Shoe

Figure A-10: Core 7168, Sample B206X0, Shoe

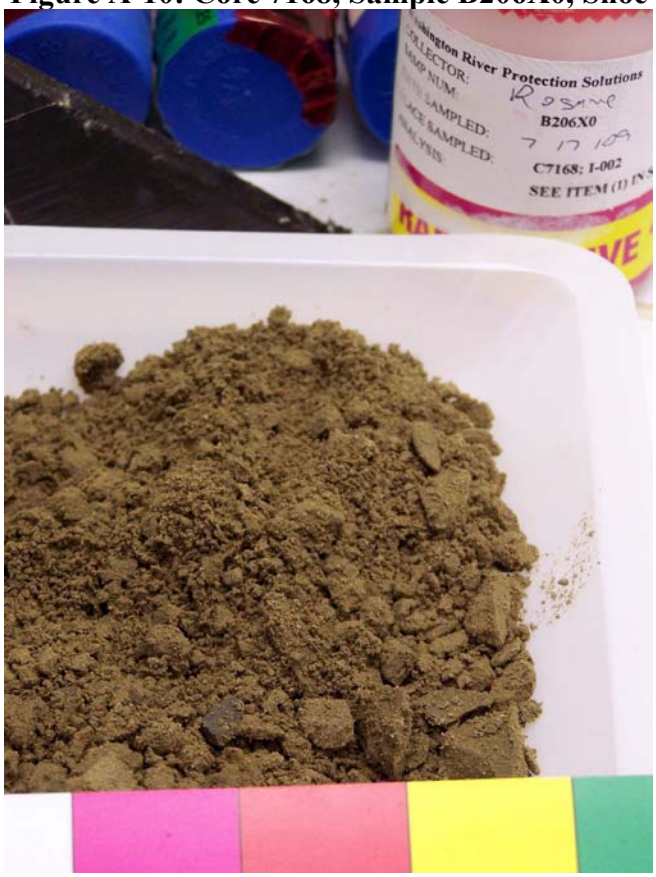

Figure A-11: Core 7168, Sample B206X2, Shoe

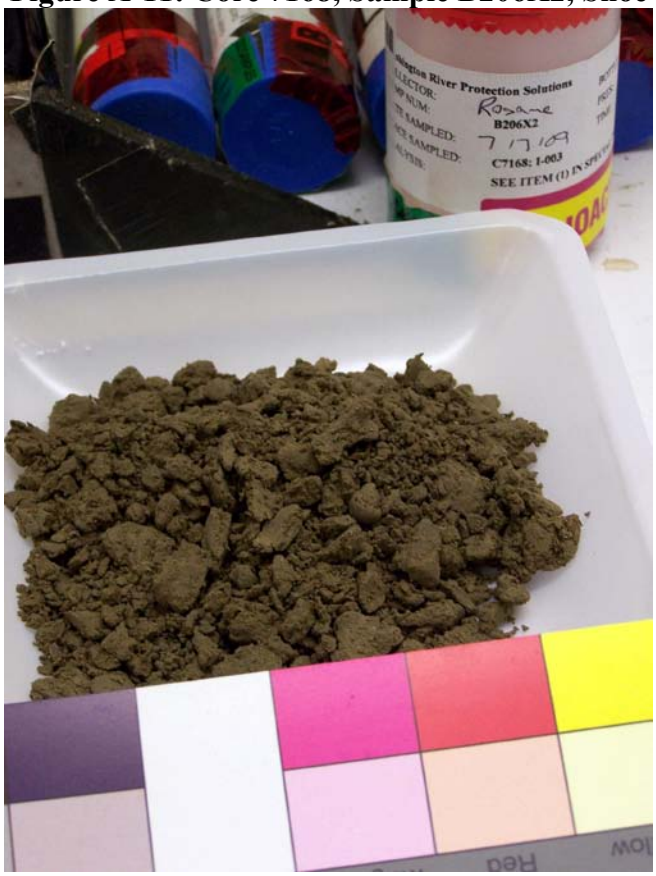

Figure A-12: Core 7170, Sample B206X4, Shoe

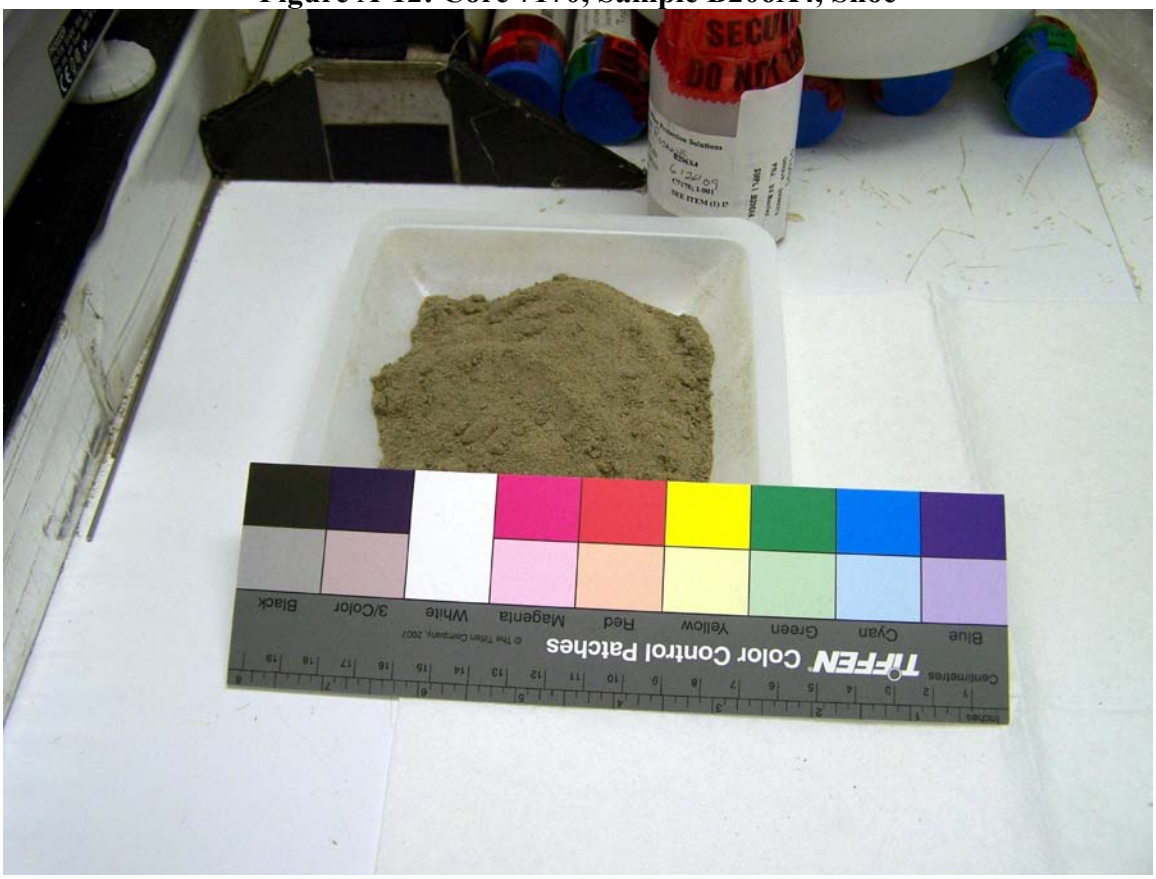

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Figure A-13: Core 7170, Sample B206X6, Shoe

Figure A-14: Core 7170, Sample B206X8, Shoe

Figure A-15: Core 7170, Sample B20H47, Shoe

Figure A-16: Core 7172, Sample B206Y0, Shoe.

Figure A-17: Core 7172, Sample B206Y2, Shoe.

Figure A-18: Core 7172, Sample B206Y4, Shoe.

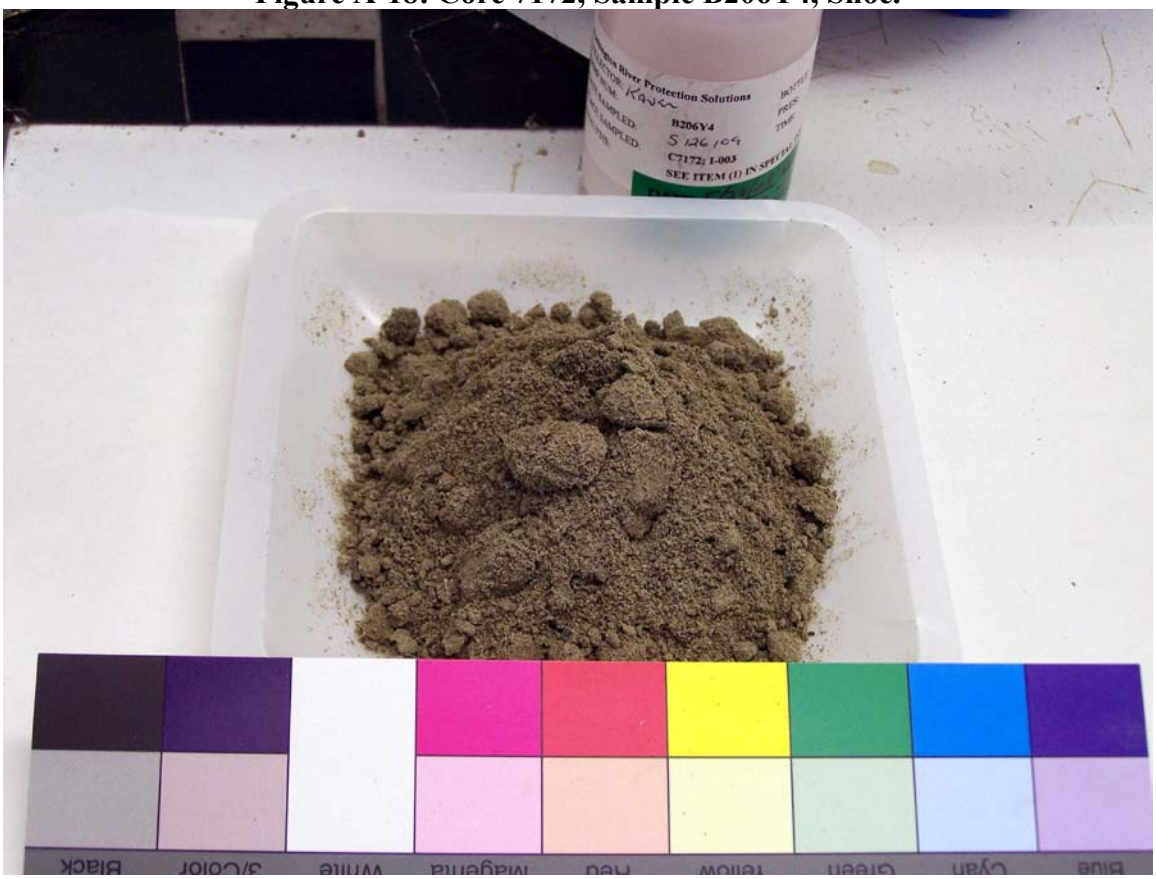

Figure A-19: Core 7172, Sample B20H51, Shoe.

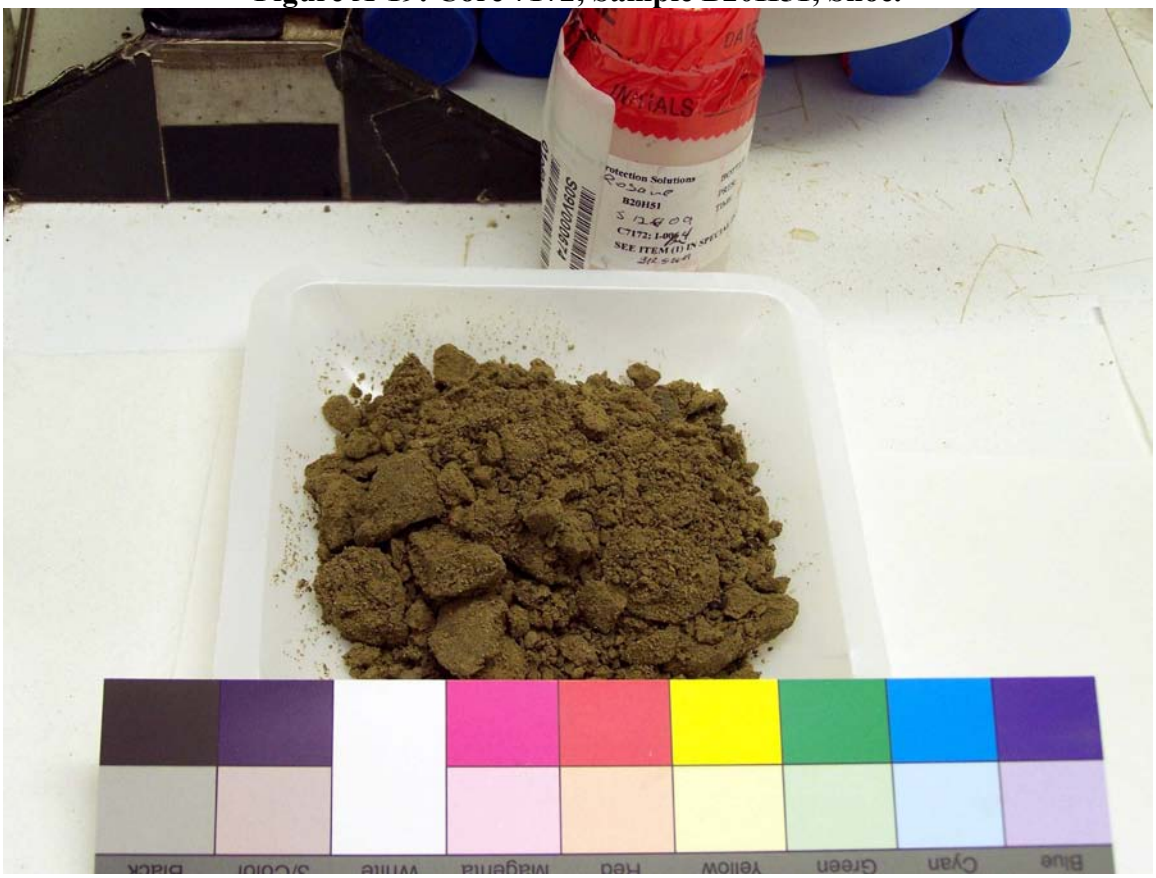

Figure A-20: Core 7172, Sample B206Y1, Liner B

Figure A-21: Core 7172, Sample B206Y3, Liner B

Figure A-22: Core 7172, Sample B206Y5, Liner B

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Figure A-23: Core 7172, Sample B20H52, Liner B

Figure A-24: Core 7178, Sample B20708, Shoe

Figure A-25: Core 7178, Sample B20710, Shoe

Figure A-26: Core 7178 Sample B20712, Shoe.

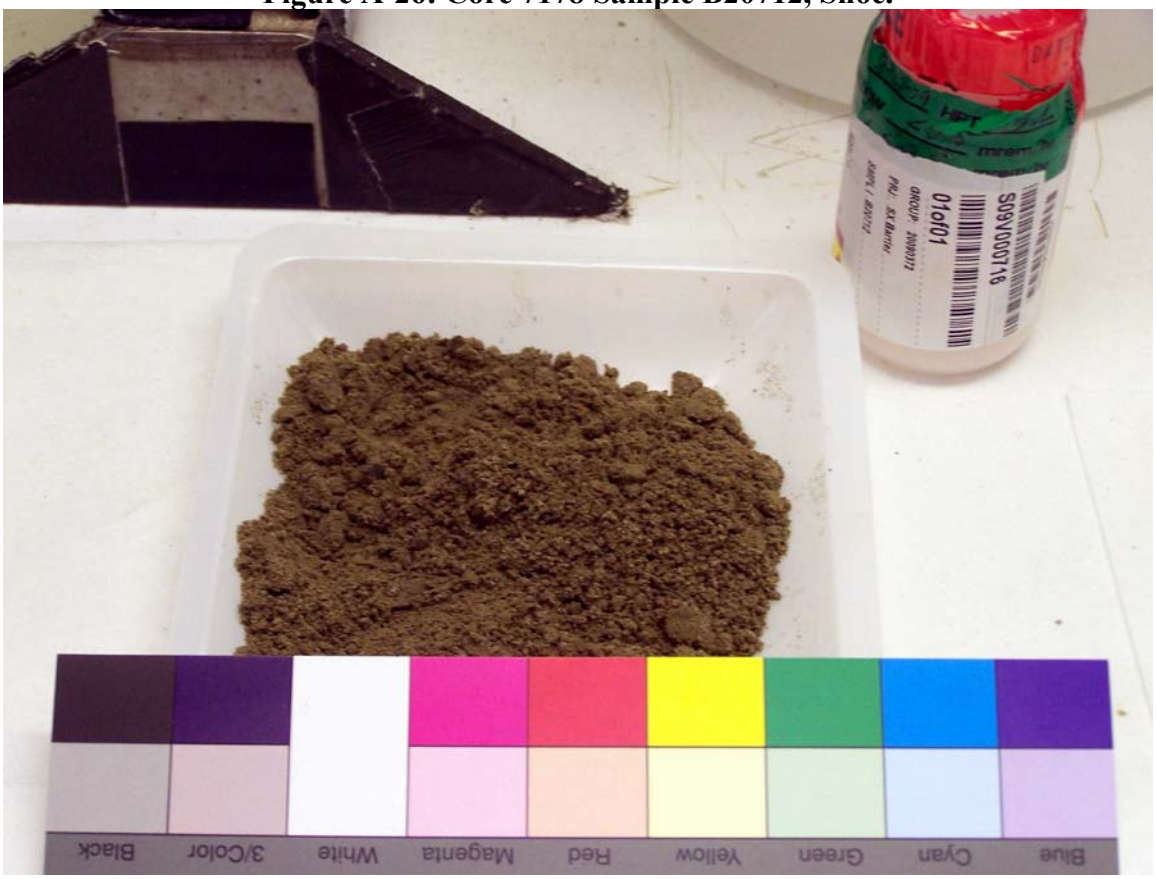

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Figure A-27: Core 7180, Sample B20714, Shoe

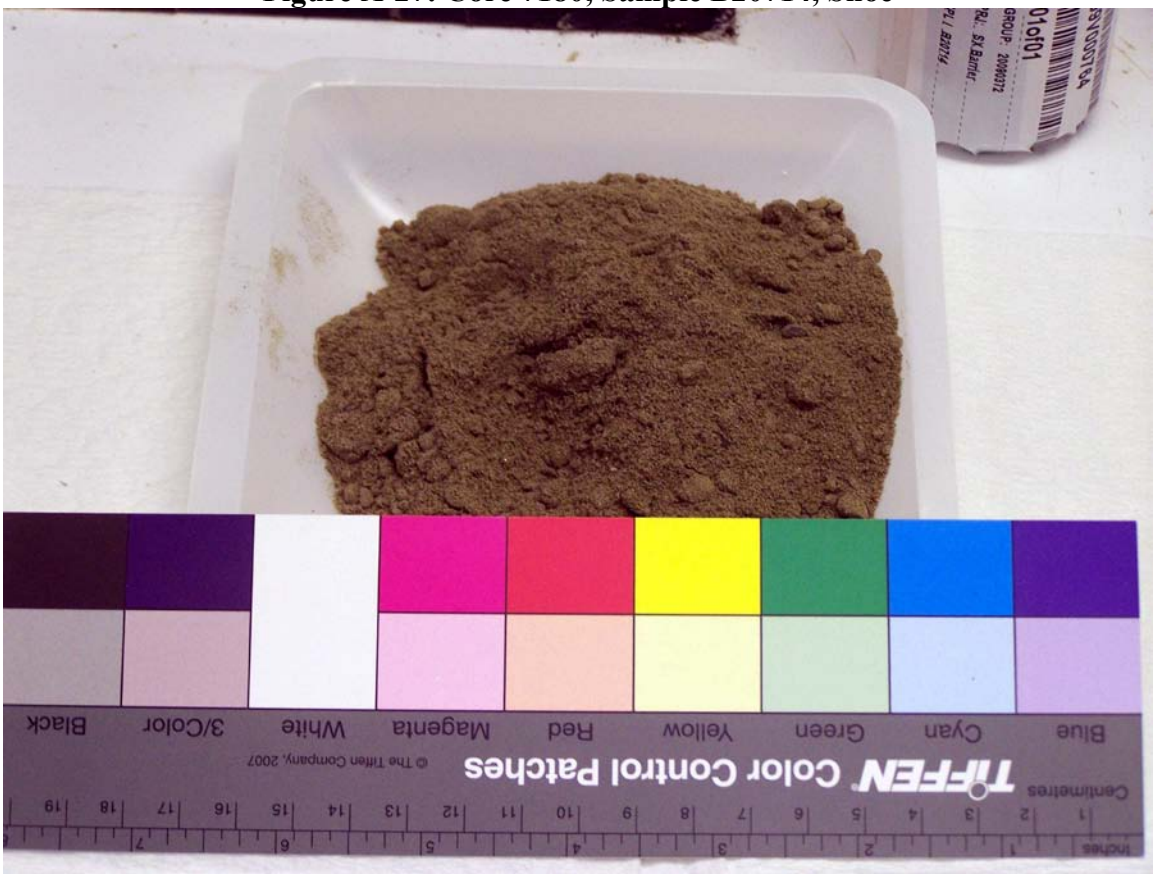

Figure A-28: Core 7180, Sample B20716, Shoe

Figure A-29: Core 7180, Sample B20718, Shoe

Figure A-30: Core 7180, Sample B20H67, Shoe

Figure A-31: Core 7184, Sample B20727, Liner B.

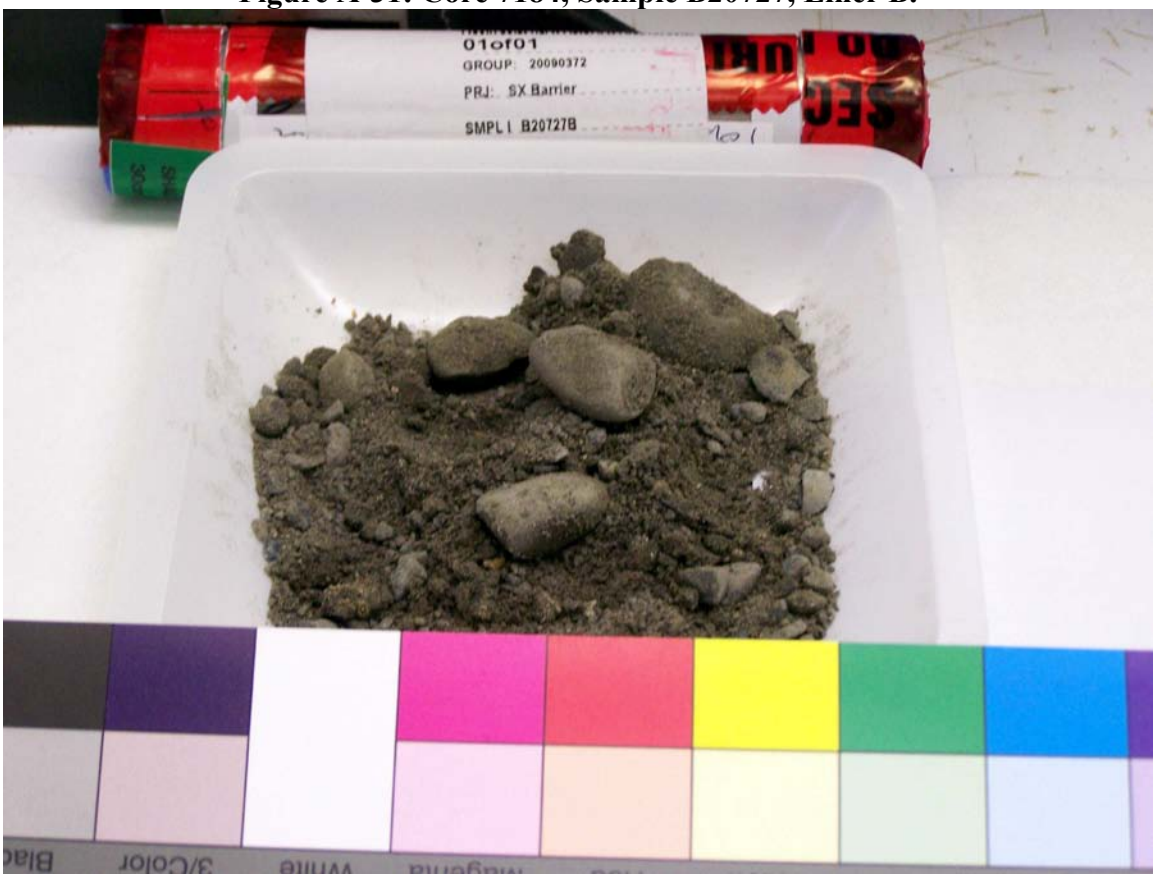

Figure A-32: Core 7184, Sample B20728, Shoe

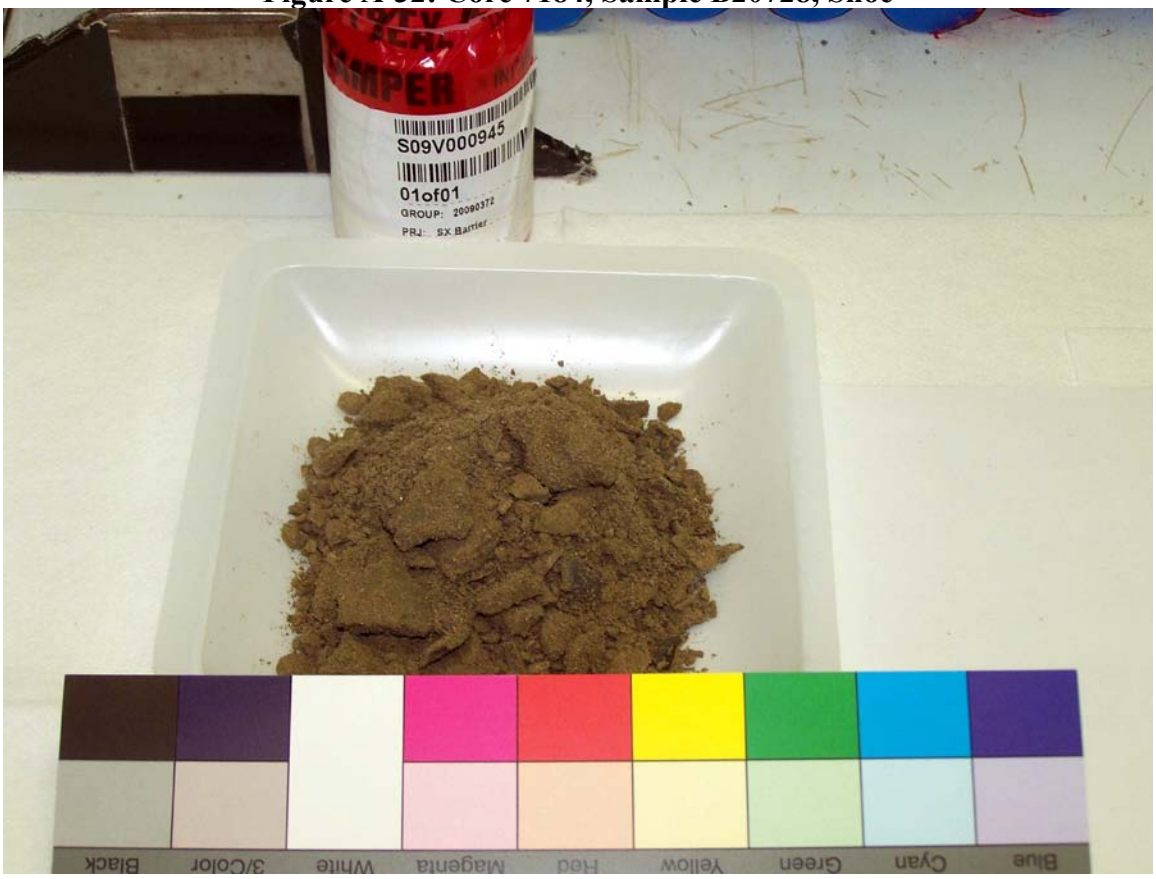

Figure A-33: Core 7184, Sample B20730, Shoe

Figure A-34: Core 7184, Sample B20VK6 Shoe

Figure A-35: Core 7186, Sample B20732, Shoe

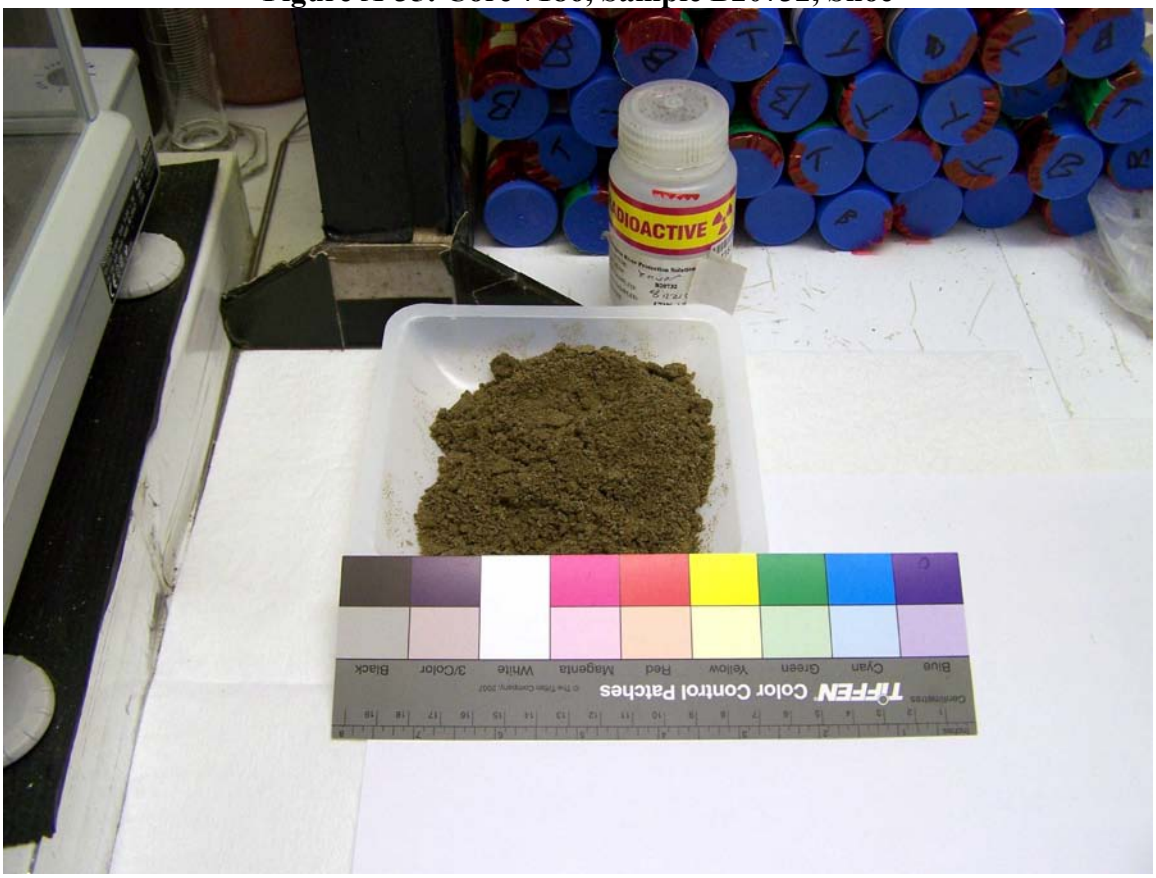

Figure A-36: Core 7186, Sample B20734, Shoe

Figure A-37: Core 7186, Sample B20736, Shoe

Figure A-38: C7192, Sample B20750, Shoe

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Figure A-39: Core 7192, Sample B20752, Shoe

Figure A-40: Core 7192, Sample B20754, Shoe

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SX Barrier Tier 1 Analyses Photographic Log

Figure A-1: Core 7154, Sample B206P7, Liner A

Figure A-2: Core 7154, Sample B206P7, Liner B

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Figure A-3: Core 7154, Sample B206P9, Liner A

Figure A-4: Core 7156, Sample B206R3, Liner A

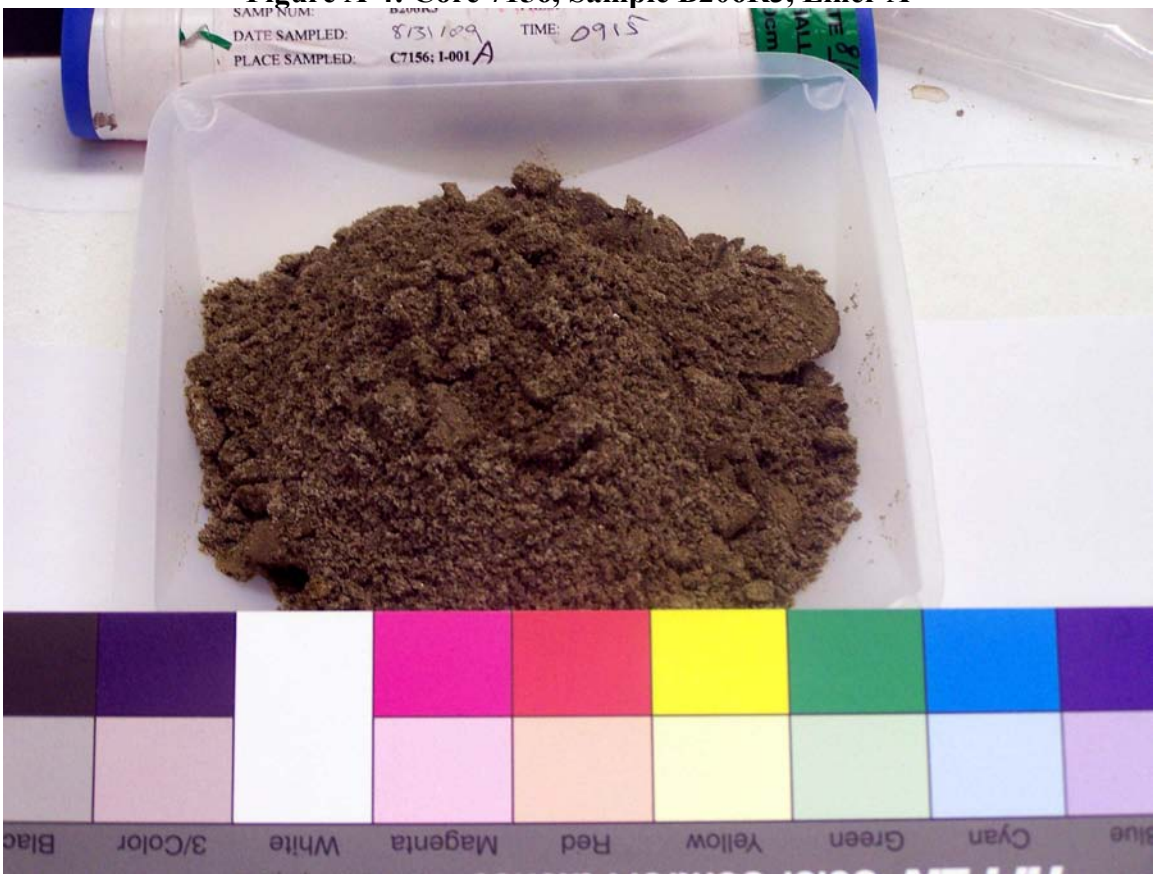

Figure A-5: Core 7156, Sample B206R5, Liner A

Figure A-6: Core 7156, Sample B206R7, Liner A

Figure A-7: Core 7158, Sample B206R9, Liner A

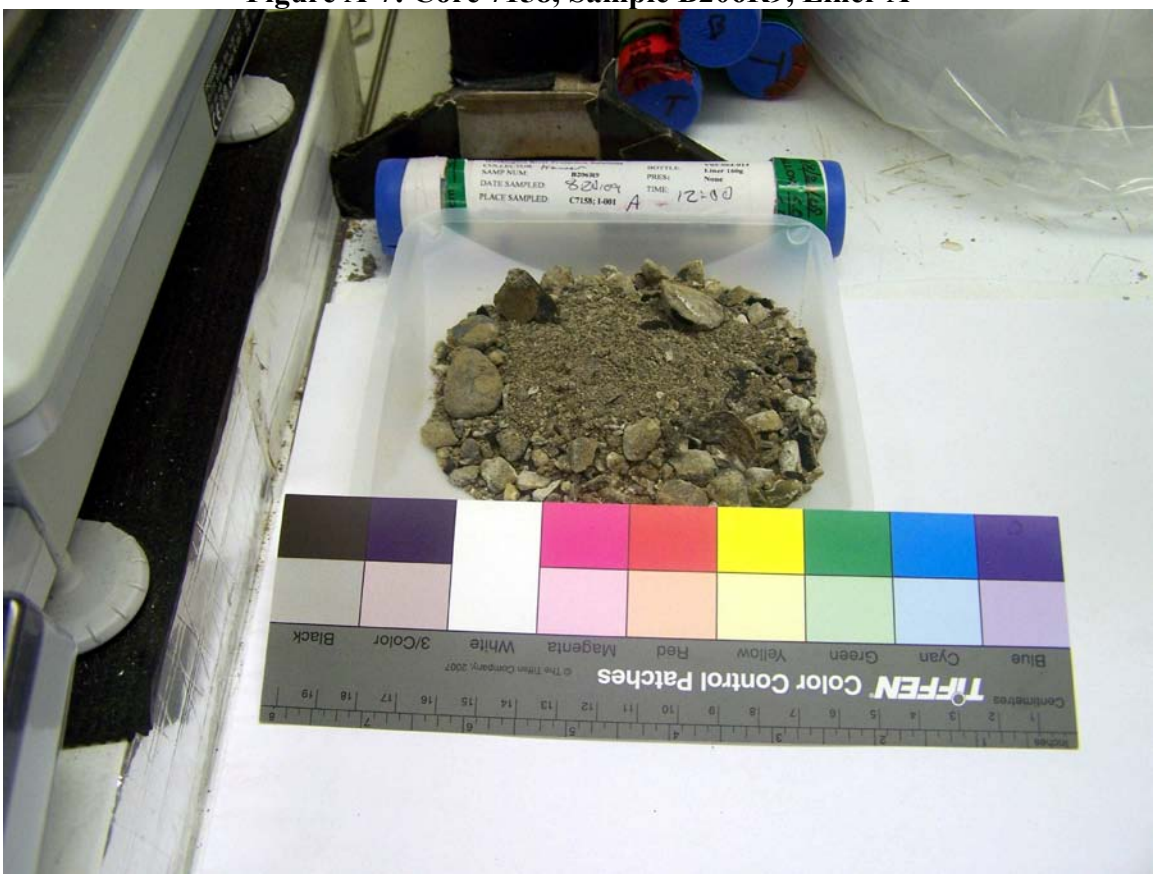

Figure A-8: Core 7158, Sample B206T1, Liner A

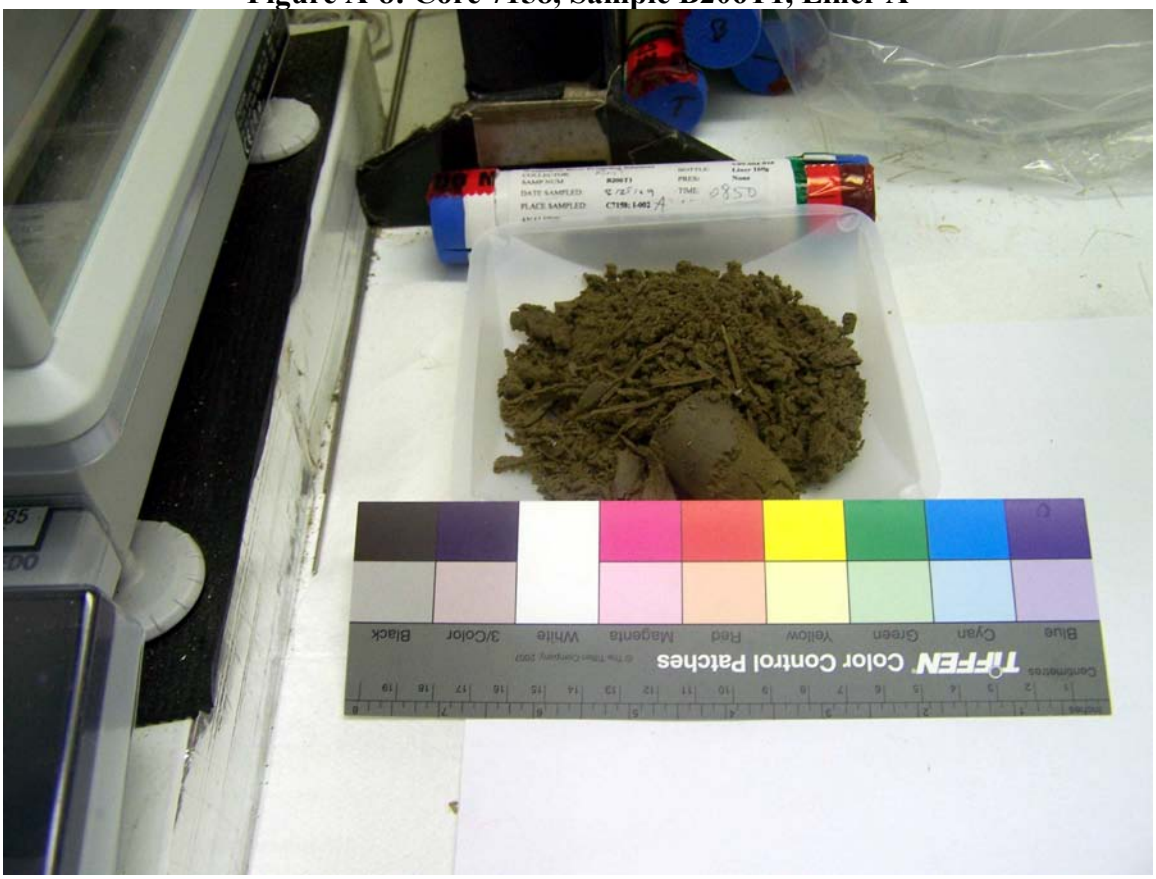

Figure A-9: Core 7158, Sample B206T3, Liner A

Figure A-10: Core 7168, Sample B206W9, Liner A

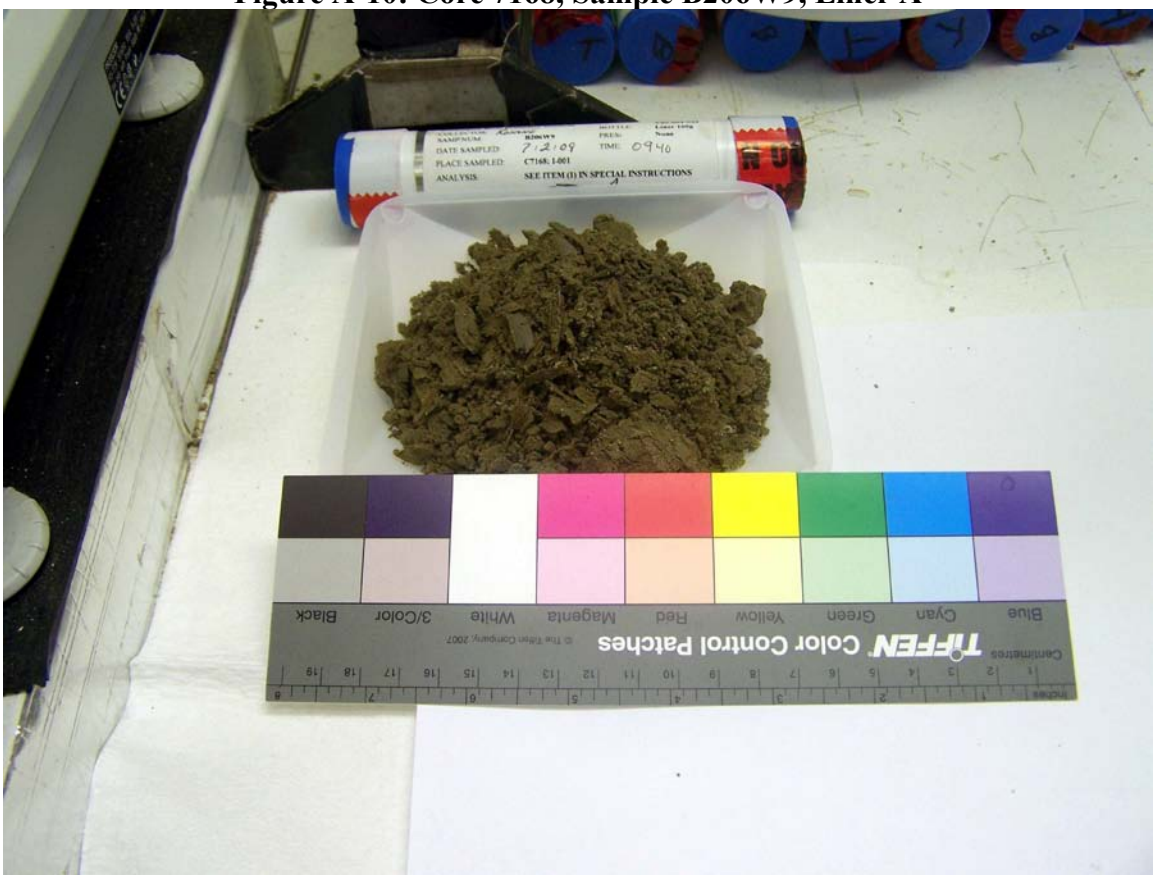

Figure A-11: Core 7168, Sample B206X1, Liner A

Figure A-12: Core 7168, Sample B206X3, Liner A

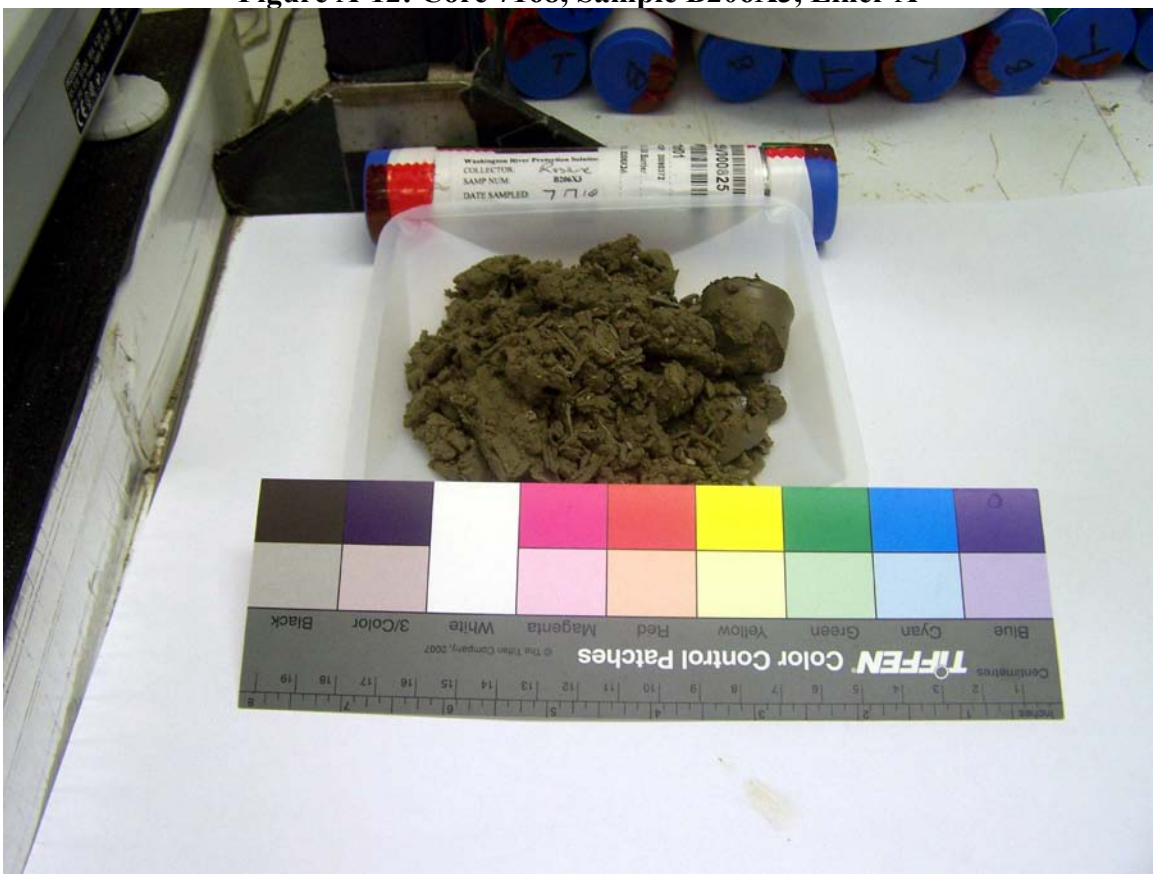

Figure A-13: Core 7170, Sample B206X5, Liner A

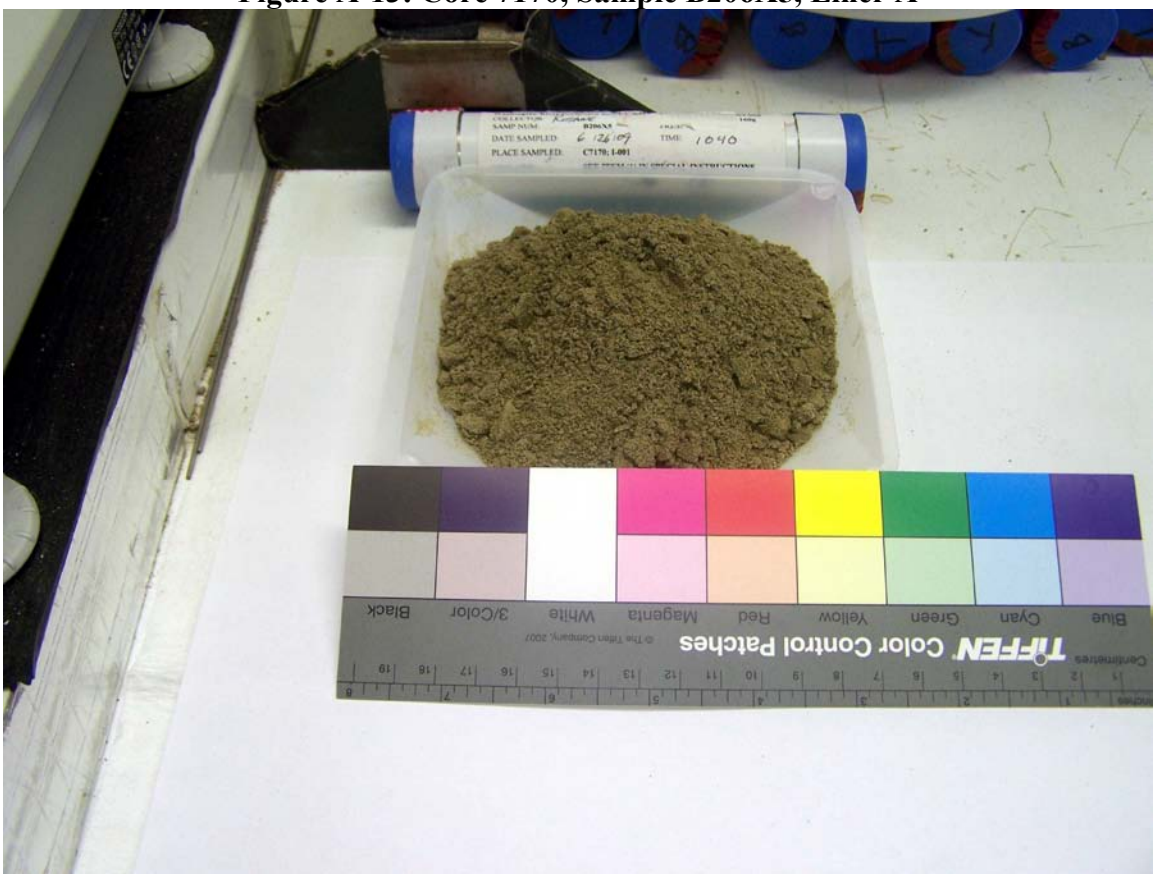

Figure A-14: Core 7170, Sample B206X5, Liner B

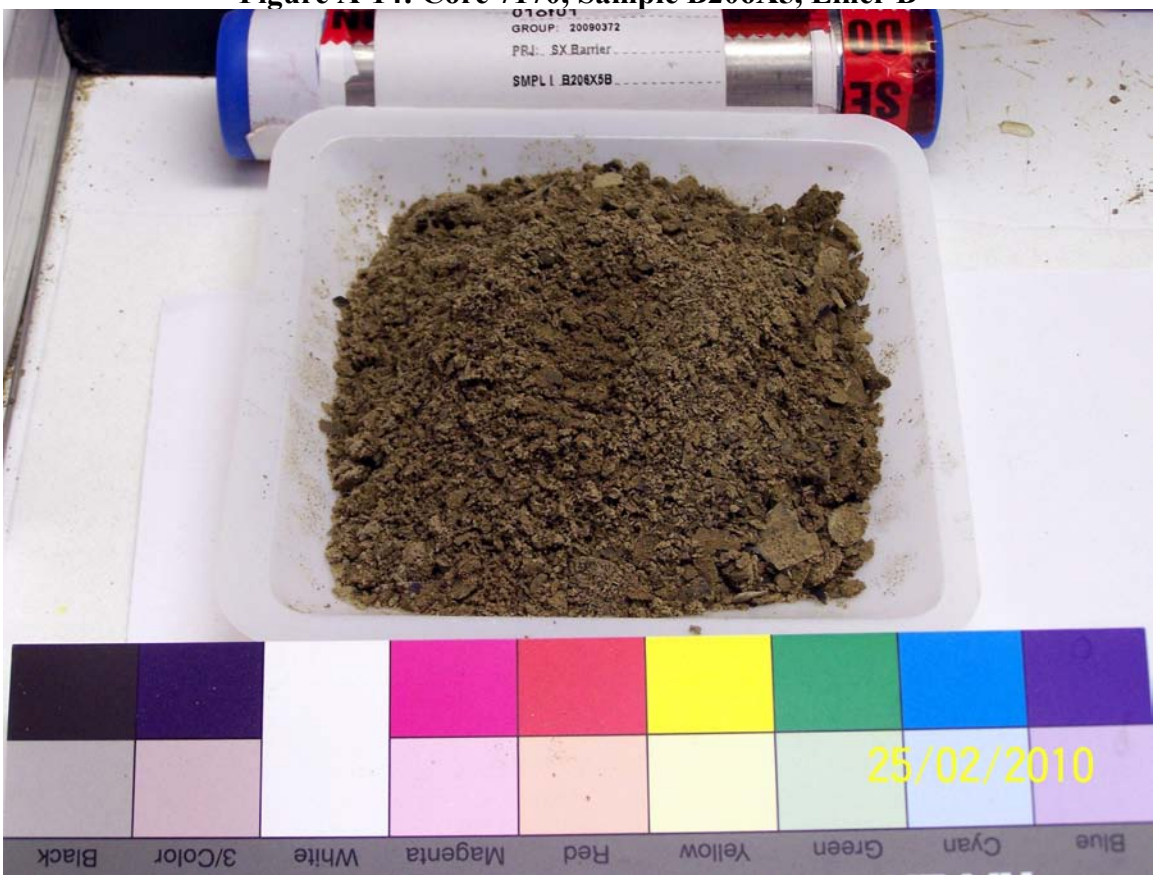

Figure A-15: Core 7170, Sample B206X7, Liner A

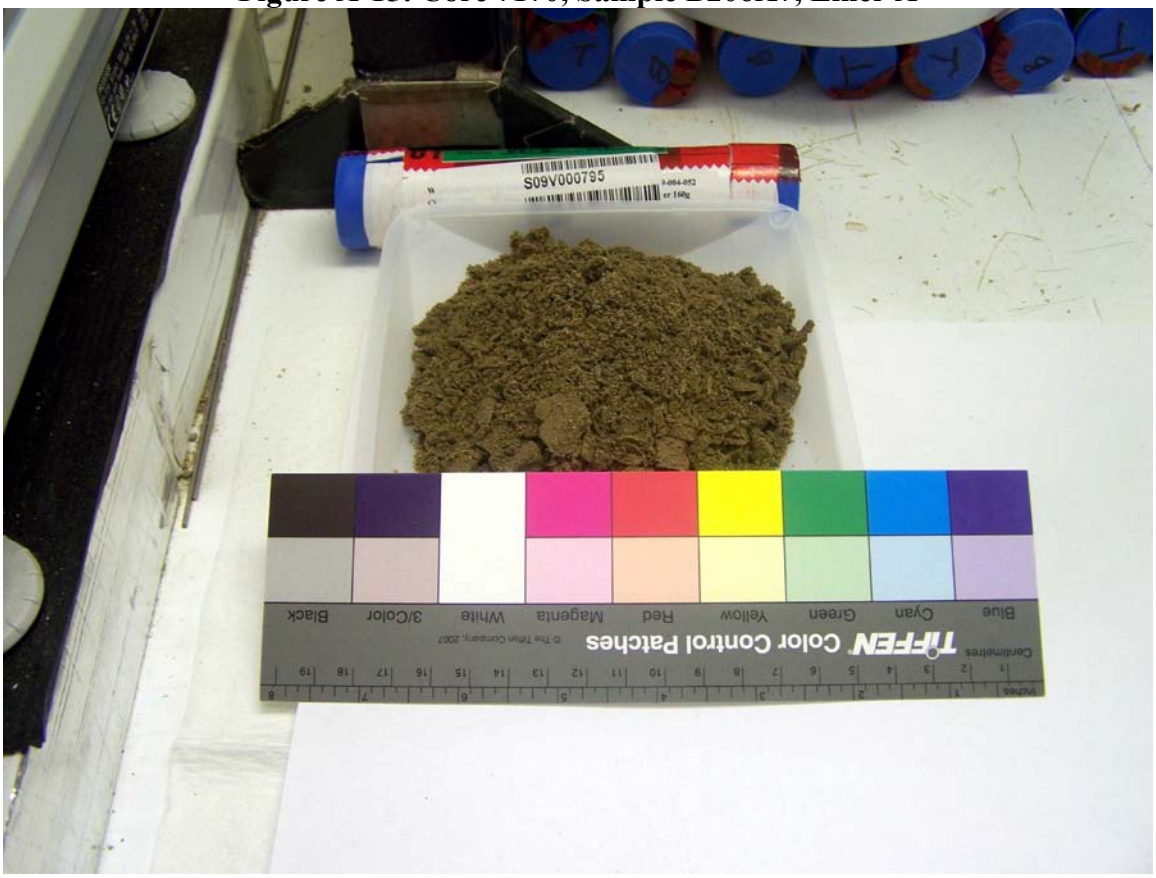

Figure A-16: Core 7170, Sample B206X9, Liner A

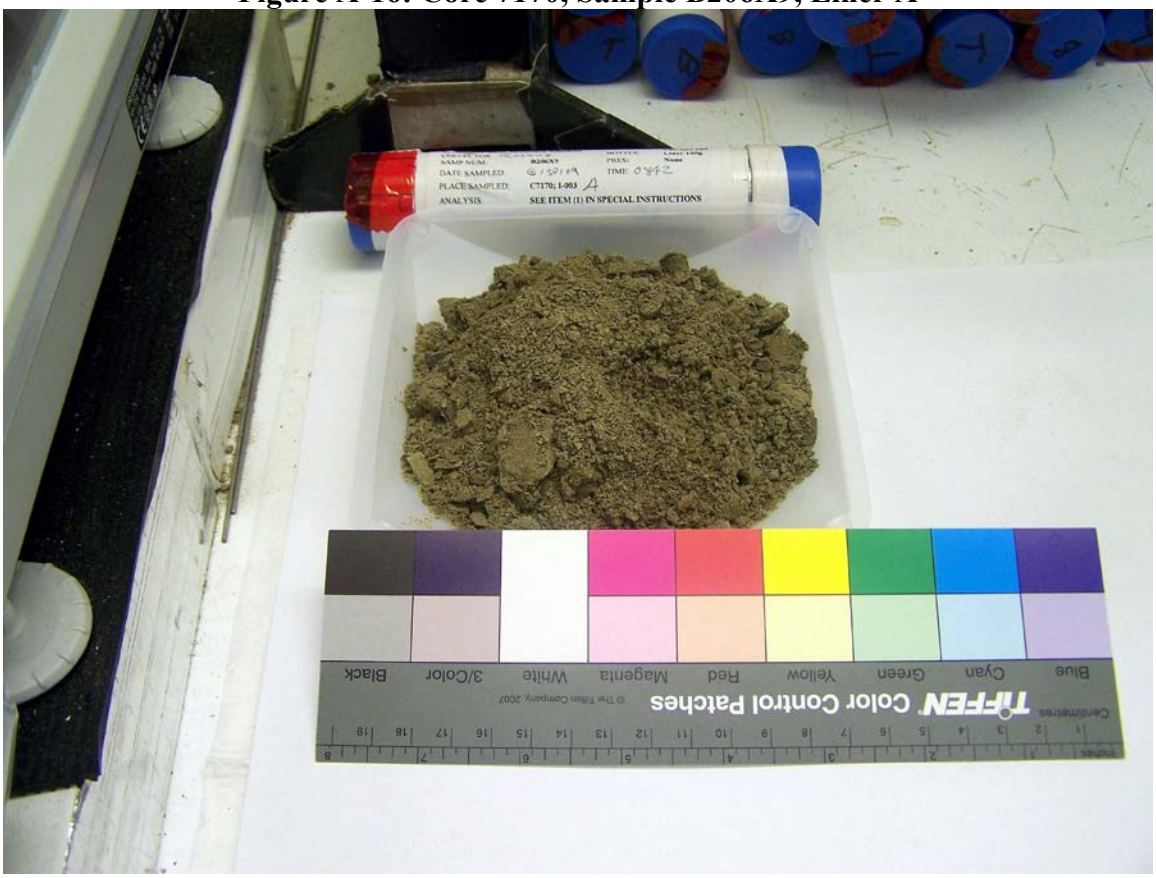

Figure A-17: Core 7170, Sample B20H48, Liner A

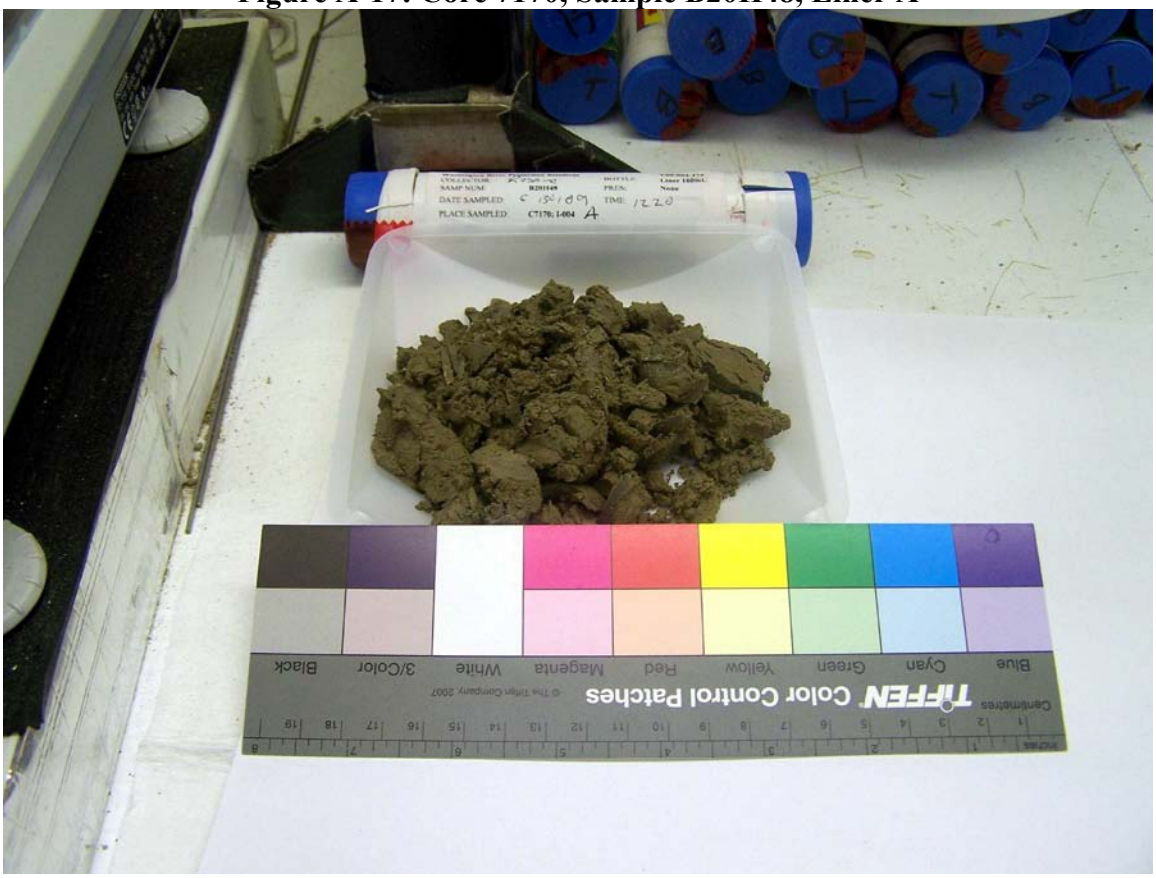

Figure A-18: Core 7172, Sample B206Y1, Liner A

Figure A-19: Core 7172, Sample B206Y3, Liner A

Figure A-20: Core 7172, Sample B206Y5, Liner A

Figure A-21: Core 7172, Sample B20H52, Liner A

Figure A-22: Core 7178, Sample B20709, Liner A

Figure A-23: Core 7178, Sample B20711, Liner A

Figure A-24: Core 7178, Sample B20713, Liner A

Figure A-25: Core 7180, Sample B20715, Liner A

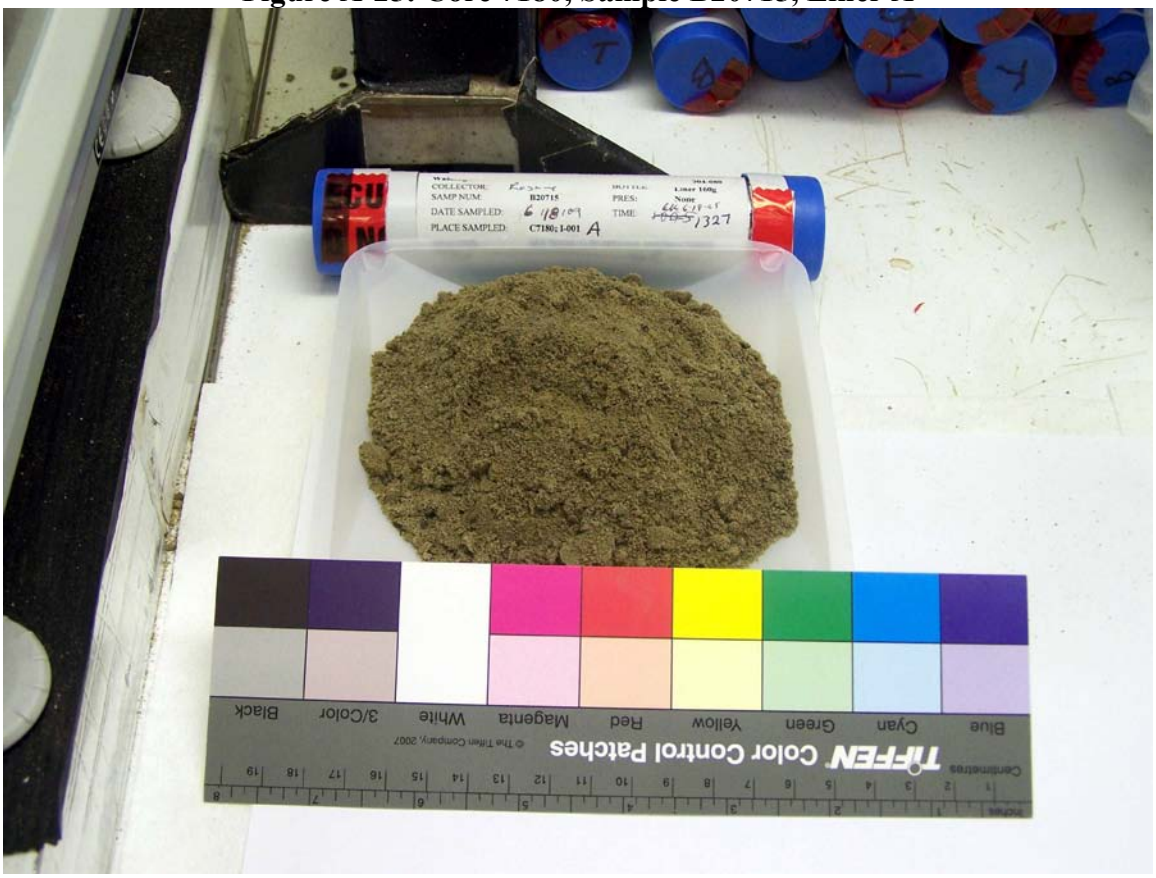

Figure A-26: Core 7180, Sample B20715, Liner B

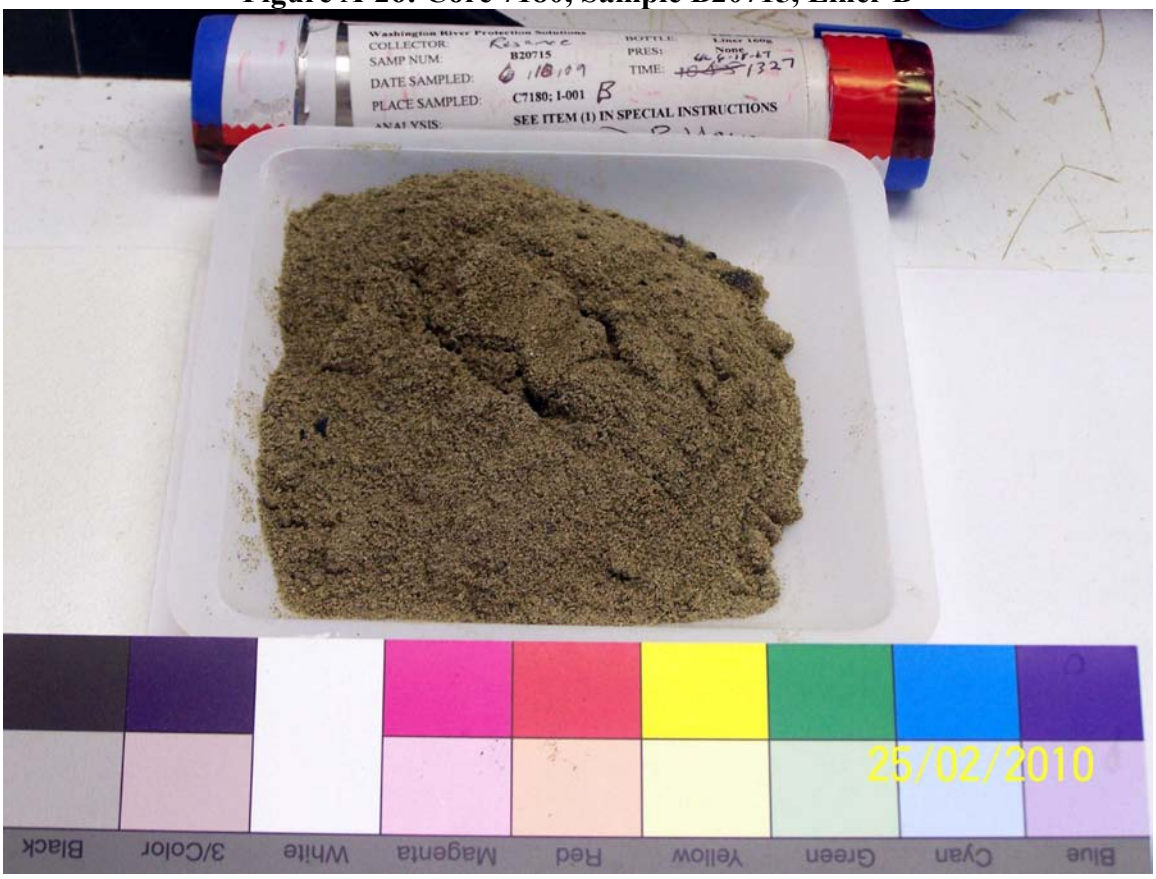

Figure A-27: Core 7180, Sample B20717, Liner A

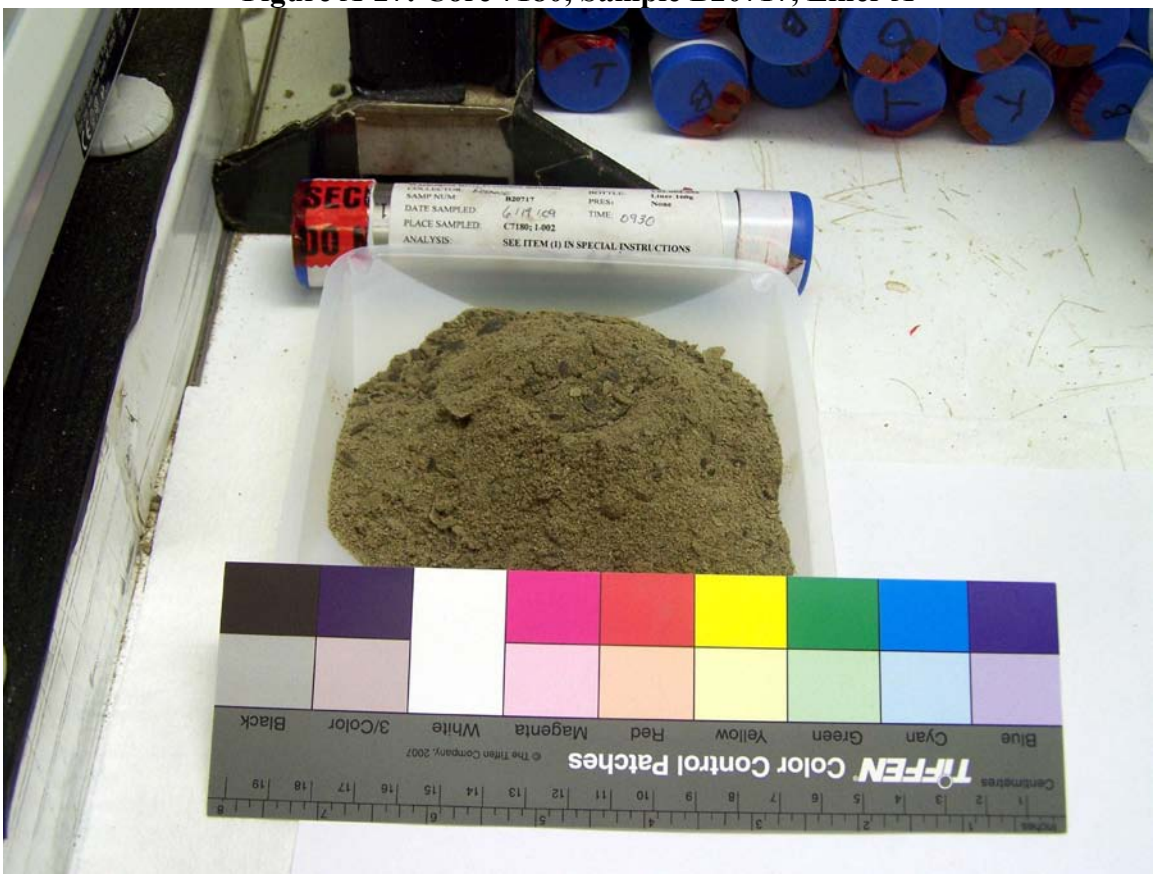

Figure A-28: Core 7180, Sample B20719, Liner A

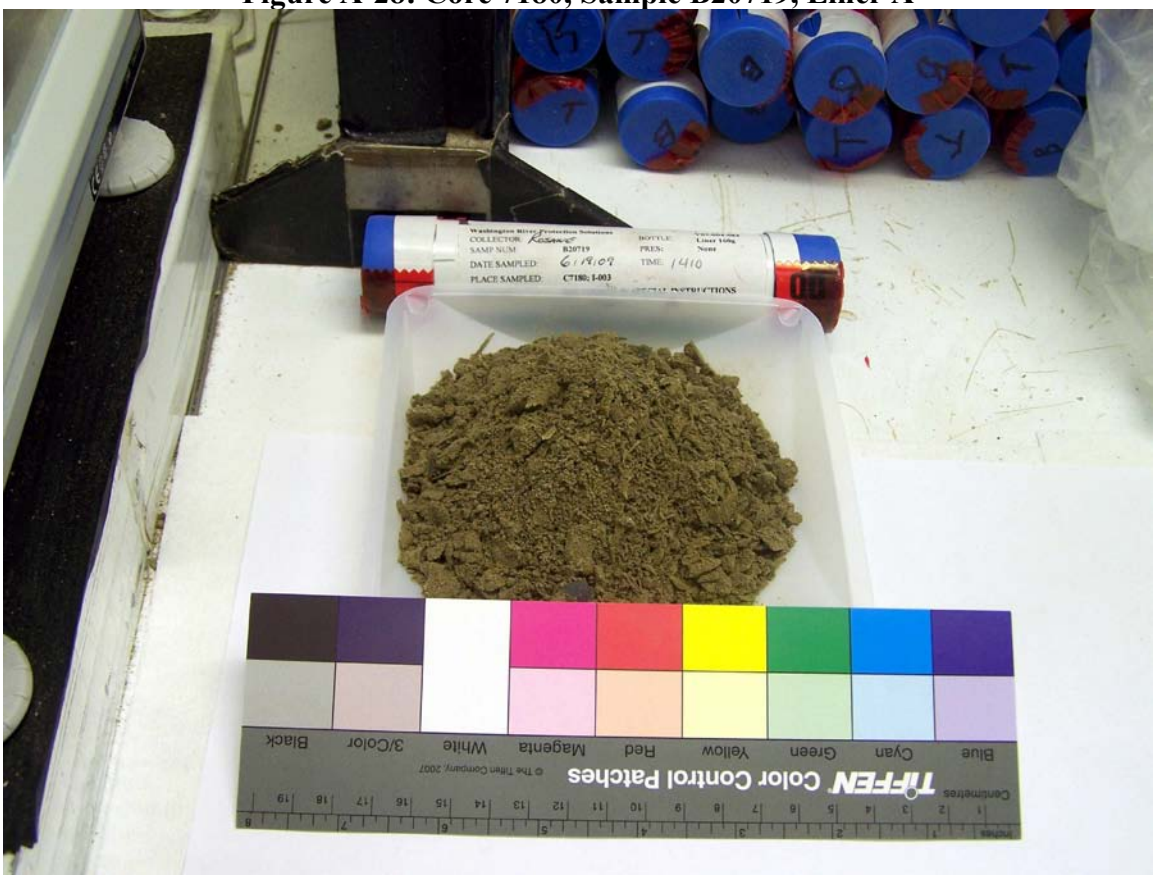

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Figure A-29: Core 7180, Sample B20719, Liner B

Figure A-30: Core 7180, Sample B20H68, Liner A

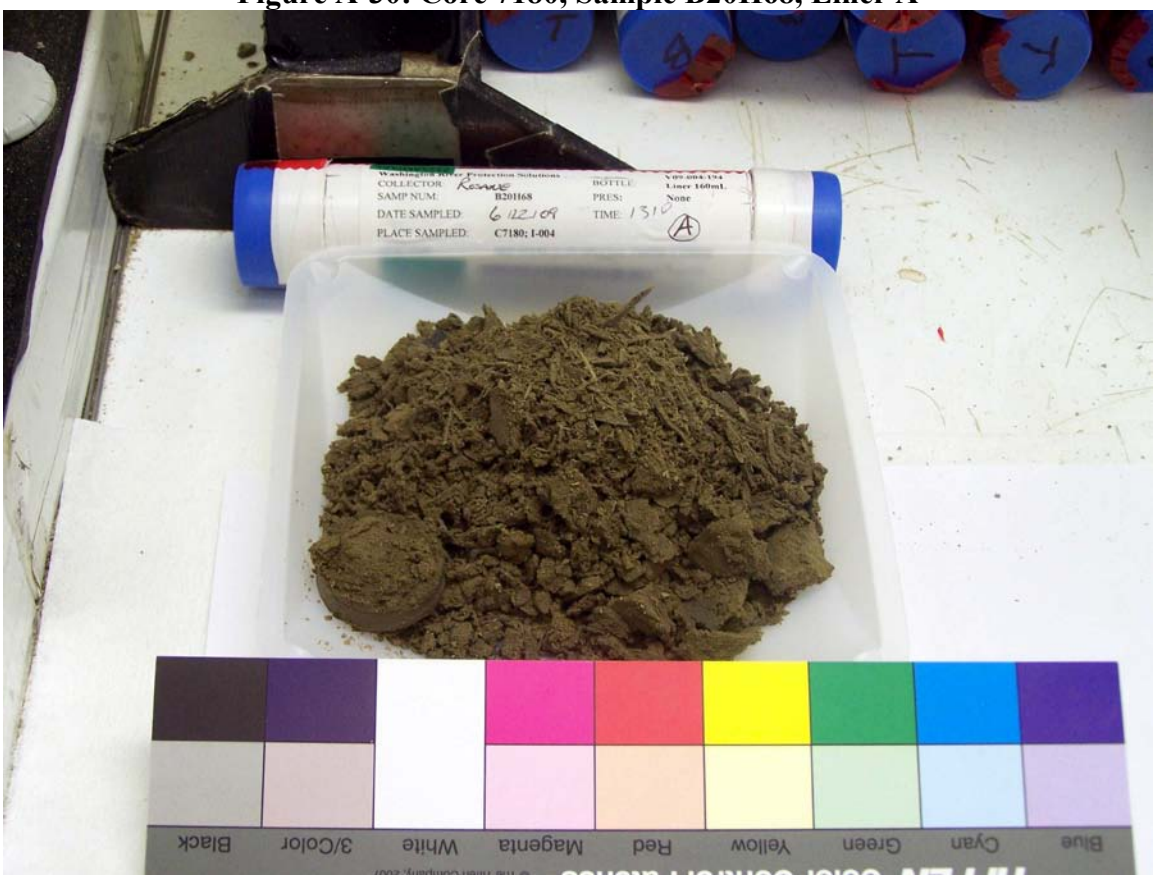

Figure A-31: Core 7184, Sample B20727, Liner A

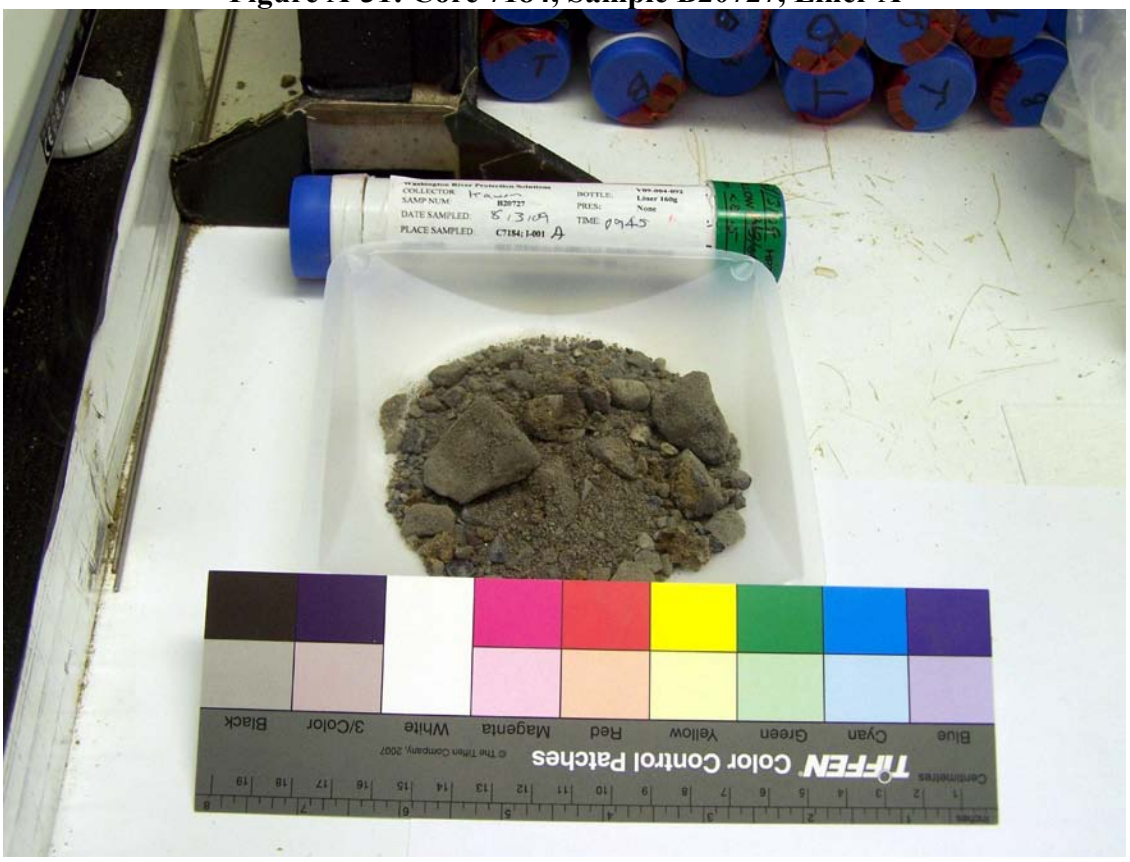

Figure A-32: Core 7184, Sample B20727, Liner B

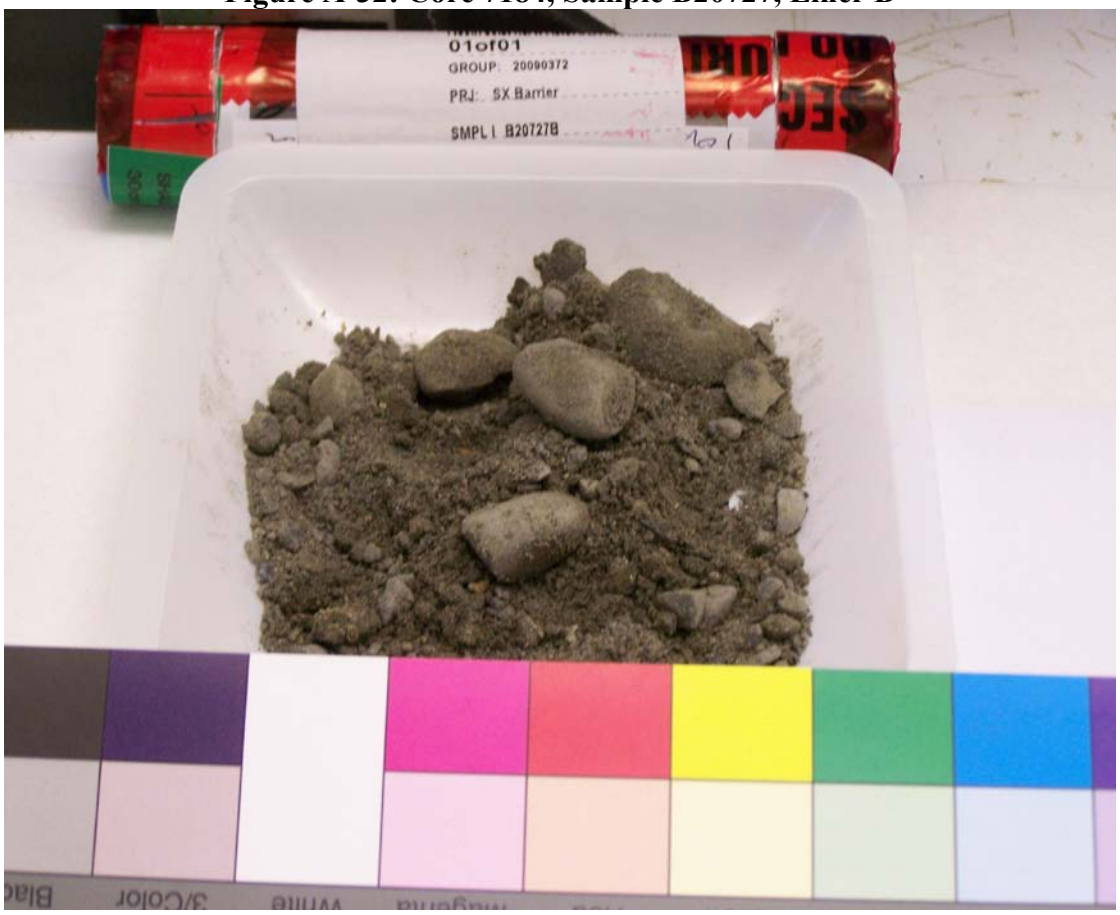

Figure A-33: Core 7184, Sample B20729, Liner A

Figure A-34: Core 7184, Sample B20731, Liner A

Figure A-35: Core 7184, Sample B20VK7, Liner A

Figure A-36: Core 7184, Sample B20VK7, Liner B

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Figure A-37: Core 7186, Sample B20733, Liner A

Figure A-38: Core 7186, Sample B20735, Liner A

Figure A-39: Core 7186, Sample B20737, Liner A

Figure A-40: Core 7186, Sample B20737, Liner B

Figure A-41: Core 7192, Sample B20751, Liner A

Figure A-42: Core 7192, Sample B20753, Liner A

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Figure A-43: Core 7192, Sample B20755, Liner A

Figure A-44: Core 7192, Sample B20755, Liner B

SX Barrier Archive Descriptions

Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B206Y1C C7172 46-48	S09V000516	1/27/2011	Bottom full, top has 3mm depression covered with mat of white fungus, M mud, very slightly moist, slightly sandy silt trace clay, clasts are non-cohesive break easily, 5-10 percent very fine sand trace mica, 2.5y 4/3, acid reactivity moderate.
20101218	B206Y3C C7172 75.5-77.5	S09V000522	1/27/2011	Top has small patches of fungus, bottom 3mm depression with imprint of end plug, M mud, very slightly moist, predominantly coarse grained silt, clasts are non-cohesive, break easily, trace very fine-grained sand, trace mica, 2.5y 4/4 acid reactivity- slight to moderate.
20101218	B206Y5C C7172 97.5-99.5	S09V000673	9/14/2011	Slightly moist, (m)S slighlty muddy sand, abundant clasts that break easily, non plastic, very fine to medium grain sand, moderately well sorted, trace mica, sample color 2.5Y5/3, acid reactivity slight to moderate.
20101218	B20H52C C7172 126-128	S09V000679	1/27/2011	Top full, bottom 15mm deep conical depression, trace fungus, M mud, very slightly moist, mix of silt and clay, silt dominates, little or no sand, non-cohesive clasts break easily, trace mica, acid reactivity, moderate to vigorous.
20101218	B20709B C7178 89-91	S09V000682	1/27/2011	Top conical depression about 6mm deep, bottom slight overfill with dark (2.5y 2.5/1) black layer organic-rich, fine-grained smooth sM sandy mud, very slightly moist mix of very fine sand and silt, non-cohesive, clasts break easily little or no clay, black skins on walls, some clasts are indurated, largest fragment 5mm,angular chert, occasional smaller gravel fragments, trace gravel, trace mica, 2.5y 5/4 acid reactivity- slight to moderate.
20101218	B20709C C7178 89-91	S09V000683	9/14/2011	Top of liner has an irregular depression of 3mm deep by 15mm long and 10mm wide, bottom is full, black skins from liner wall, 85 mm from bottom you run into gravel, 65mm in from top is (g)S slightly gravely sand, slighlty cohesive, abundant clasts that break easily, non plastic, poorly sorted in the top 65mm, well sorted for the rest of liner, bottom mS muddy sand, largest particles 22mm , 18mm, 12mm excluded, trace of mica, slighlty moist, very fine grain to fine grain sand grading to silt, sample color is 2.5Y5/3, acid reactivity is slight.
20101218	B20711B C7178 127-129	S09V000712	3/2/2011	Tube is full, M-mud, slightly moist, abundant clasts easily broken, uniform color and texture, predominantly silt, with minor clay, slightly plastic, uniform color and texture, trace mica, some black skins, 2.5y 4/3, acid reactivity - moderate.
20101218	B20711C C7178 127-129	S09V000713	3/2/2011	Tube is full, M-mud, slightly moist, abundant clasts break easily, slightly plastic, some hackley fractures, uniform color and texture, predominantly silt with minor clay and traces of very fine sand, no visible mica, 2.5y 4/3, acid reactivity-moderate.
20101218	B20713B C7178 151-153	S09V000718	12/9/2010	Top full, Bottom irregular gap up to 10mm, trace free moisture in bottom cap, M, mud, moist, little or no sand, no gravel, uniform color and texture, Largest particle <0.5mm, slightly cohesive, non-plastic, predominantly silt, trace mica, 2.5y 5/3, acid reactivity- slight to moderate.
20101218	B20713C C7178 151-153	S09V000719	12/9/2010	Tube is full, fungal growth on bottom, M mud, slightly moist, slightly cohesive, clasts break easily, dominantly silt, minor clay, trace or no sand, trace indurated brittle clasts, trace mica, 2.5y 5/4 acid reactivity moderate.

SX Barrier Archive Descriptions

Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B20715C C7180 93-95	S09V000767	3/2/2011	Bottom of liner had a 10mm gap, S-sand, slightly moist, top was full, fine to very fine sand, abundant black skins, minor clasts easily broken, uniform color and texture, trace mica, trace coarse silt and minor mud, 2.5y 5/3, acid reactivity-slight,
20101218	B20717B C7180 104-106	S09V000772	3/2/2011	Tube is full, S-sand, Very slightly moist, Black skins from liner walls, trace mica, very fine to fine grained sand, well sorted, uniform color and texture, minor amounts of silt, 2.5y 5/2, acid reactivity- slight
20101218	B20717C C7180 104-106	S09V000773	3/2/2011	Tube is full, S-sand, Very slightly moist, trace mica, very fine to fine grain sand, well sorted, uniform color and texture, minor amounts of silt, 2.5y 5/2, acid reactivity- slight.
20101218	B20719C C7180 127-129	S09V000779	3/2/2011	Tube is full, (m)S slightly muddy sand, very slightly moist, very fine grained sand, minor amounts of coarse silt, trace mica, uniform color and texture, 2.5y 5/2, acid reactivity - slight
20101218	B20H68B C7180 152-154	S09V000784	3/25/2011	Top has irregular depression of 5mm, free moisture in top cap, Bottom is full, sM sandy mud, moist, abundant clasts easily broken, slightly cohesive, slightly plastic, sand part is very fine to fine grained sand, 2.5Y4/2, acid reactivity-moderate.
20101218	B20H68C C7180 152-154	S09V000785	3/25/2011	Tube is full, mS muddy sand, slightly moist, abundant clasts easily broken, trace mica, very slightly cohesive, non plastic, well sorted, very fine grained sand, 2.5Y4/2, acid reactivity-moderate.
20101218	B206X5C C7170 81.5-83.5	S09V000791	3/25/2011	Tube is full, free moisture in bottom half of liner, M mud, for bottom, slightly moist, slightly cohesive, 2.5Y5/5, acid reactivity-slight, trace mica, clasts break easily, Top 60 mm is fine grained sand, S-sand, slightly moist, medium grain sand, trace mica, moderately well sorted, trace of silt, 2.5Y6/1, acid reactivity-very slightly.
20101218	B206X7B C7170 113-115	S09V000796	3/30/2011	Tube is full, sM sandy mud, slightly moist, trace mica, abundant clasts that are easily broken, very slightly cohesive, uniform color and texture, sand is very fine grain,ed 2.5Y4/3, acid reactivity-very slight.
20101218	B206X7C C7170 113-115	S09V000797	3/30/2011	Tube is full, black skins from liner of tube, mS muddy sand, very slightly moist, very fine to fine grained sand, very little to no clay, clasts easily broken, trace mica, 2.5Y5/3 Acid Reactivity: Slight to moderate
20101218	B206X9 C7170 133-135	S09V000802	4/26/2011	Condensate on bottom cap, black skins from liner wall, Tube is full, mS muddy sand, slightly moist, minor clasts easily broken, slightly cohesive, uniform color and texture, abundant mica, appears to be interbedded with fine to very fine grain sands throughout interval, 2.5Y5/2, acid reactivity is slight to moderate.
20101218	B206X9 C7170 133-135	S09V000803	4/26/2011	Slight condensation on top cap. mS muddy sand, Tube is full, slightly moist, black skins from liner wall, abundant clasts break easily, slightly cohesive, uniform color and texture, trace mica, moderately well sorted, very fine to fine grain sand with coarse silt, 2.5Y5/2, acid reactivity is slight to moderate.

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Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B20H48 C7170 150-152	S09V000808	4/26/2011	Tiny bit of condensation on inside of top and bottom caps, Tube is full, black skins from side of tube liner, 60mm from bottom it is becoming more sandy, 110mm from the bottom it becomes less sandy, sandy layer in middle of liner, slightly moist, abundant clasts that break easily, uniform color, non coehesive, moderately well sorted, The ends section of liner are sM sandy mud, and the sand is very fine to fine grain, little or no clay, predominately silt, The sandy layer is 50 mm of mS muddy sand, this sand is very fine to fine grain sand grading to a coarse silt, appears to be interbedded with fine to very fine grain sands throughout interval, 2.5Y6/2, acid reactivity is slight to moderate.
20101218	B20H48 C7170 150-152	S09V000809	4/26/2011	Condensate in both cap ends. Tube is full, black skins from wall of liner, mS muddy sand, slightly moist, abundant clasts easily broken, uniform color and texture, slightly cohesive, predominately very fine to fine grain sand grading to silt with little or no clay, moderately well sorted, appears to be interbedded with fine to very fine grain sands through out interval, 2.5Y5/2, acid reactivity is moderate.
20101218	B206W9B C7168 81-83	S09V000814	4/22/2011	Tube is full, (m)S slightly muddy sand, very slightly moist, black skins from liner walls, trace mica, uniform color and texture, sand is predominately very fine to medium grain, minor coarse grain, moderately well sorted, little or no clay, 2.5Y6/2, acid reactivity is slight.
20101218	B206W9C C7168 81-83	S09V000815	4/22/2011	Tube is full, S sand, slightly moist, trace mica, uniform color an texture, some clasts that break easily, moderately well sorted, trace of silt, little or no clay, sand is very fine to medium grain, occasional grain of fine gravel 4mm maximum sub-angular to sub-round, 2.5Y6/2, acid reactivity is slight.
20101218	B206X1B C7168 129-131	S09V000820	3/31/2011	Tube is full, slightly moist, sM sandy mud, well sorted predominately silt, grading to very fine grain sand, traces of clay, abundant clasts, easily broken, uniform color and texture, 2.5Y5/3, Acid Reactivity, moderate
20101218	B206X1C C7168 129-131	S09V000821	3/31/2011	Tube is full, slightly moist, mS muddy sand, well sorted little or no clay, fine to very fine grain sand, traces of mica, minor clasts, easily broken, dark skins from wall of liner present, uniform color and texture, 2.5Y5/3, Acid Reactivity, moderate
20101218	B206X3B C7168 145-147	S09V000826	4/26/2011	Condensate on both cap ends, Tube is full, black skins from liner walls, sM sandy mud, slightly moist, abundant clasts that break easily, non cohesive, uniform color and texture, predominately silt with minor amounts of very fine to fine grain sand, moderately well sorted, 2.5Y5/2, acid reactivity is slight.
20101218	B206X3C C7168 145-147	S09V000827	4/26/2011	Condensation on top cap, Tube is full, black skins from liner walls, (m)S slightly muddy sand, slightly moist, uniform color and texture, abundant clasts that are easily broken, non cohesive, appears to be interbedded with fine to very fine grain sands through out interval, moderately well sorted, 2.5Y5/2, acid reactivity is slight to moderate.
20101218	B20751B C7192 100-102	S09V000832	3/31/2011	Top of tube has an irregular bulge of about 3 mm, irregular depression in bottom of tube about 3mm, trace amounts of moisture in the endcaps, moist, M mud, non cohesive, trace amounts of very fine grain sand, abundant clasts, with some hackly fracture, trace mica, 2.5Y5/2, Acid Reactivity, moderate

SX Barrier Archive Descriptions

Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B20751C C7192 100-102	S09V000833	3/31/2011	Top of tube has an irregular depression of about 10mm, bottom of tube is full with trace amounts of moisture in the bottom cap. mS muddy sand, moist, very fine to fine grain sand, grading to silt, little or no clay, small amounts of dark skins from the walls of liner, non cohesive, abundant clast, breaks easily, non cohesive, trace of hackly fracture, trace mica, 2.5Y4/2, Acid Reactivity, moderate
20101218	B2075B C7192 128-130	S09V000838	4/26/2011	Top of tube has a sloping depression range is 5 to 10 mm, bottom of tube is full, black skins from liner walls, sM sandy mud, slightly moist, uniform color and texture, abundant clasts easily broken, moderately well sorted, slightly cohesive, predominately silt grading from very fine to fine grain sand, little no clay, 2.5Y5/2, acid reactivity is slight to moderate.
20101218	B20753C C7192 128-130	S09V000839	4/26/2011	Tube is full, black skins from liner walls, mS muddy sand, slightly moist, uniform color and texture, abundant clasts easily broken, trace mica, slightly cohesive, moderately well sorted, very fine to fine grain sand, coarse silt, little or no clay, appears to be interbedded with fine to very fine grain sands through out interval, 2.5Y5/2, acid reactivity is moderate.
20101218	B20755C C7192 140-142	S09V000845	4/22/2011	Tube is full, sM sandy mud, slightly moist, black skins from walls of liner, abundant clasts break easily, uniform color and texture, slightly cohesive, non plastic, sand is very fine grain, 2.5Y5/3, acid reactivity is slight to moderate.
20101218	B20729B C7184 104-106	S09V000947	4/27/2011	Tube is full, bottom end cap has condensation, there was 4mm layer of mud on bottom of liner then it turned to sand, sM sandy mud, for this fraction with some clasts that break easily, sand is fine to very fine grain, (m)S slightly muddy sand, very slightly moist, slight salt and pepper texture, trace mica, very fine to fine grain sand, with minor amounts of silt, little or no clay, moderately well sorted, 2.5Y6/2, acid reactivity to the mud fraction is slight, acid reactivity to the sand fraction is slight to moderate.
20101218	B20729C C7184 104-106	S09V000948	4/27/2011	Tube is full, top of tube had black skins from liner wall, S sand, very slightly moist, trace mica, uniform color and texture, very fine to coarse grain sand, with minor amounts of silt, when wetted slight salt and pepper texture appears, poorly sorted, 2.5Y6/2, acid reactivity is slight.
20101218	B20731B C7184 128.5-130.5	S09V001003	4/27/2011	Condensation on top end cap, top of liner has irregular depressions up to 3mm, bottom end of liner full, sM sandy mud, slightly moist, uniform color and texture, abundant clasts that are slightly cohesive, non plastic, trace mica, well sorted, little or no clay, 2.5Y5/2, acid reactivity is slight to moderate.
20101218	B20731C C7184 128.5-130.5	S09V001004	4/27/2011	Tube is full, sM sandy mud, slightly moist, uniform color and texture, abundant clasts, break easily, slightly cohesive, non plastic, black skins from liner walls, trace mica, little or no clay, well sorted, 2.5Y5/2, acid reactivity is slight to moderate.
20101218	B20VK7C C7184 141-143	S09V001042	4/27/2011	5 mm gap on top of liner, 3mm irregular gap on bottom, sM sandy mud. slightly moist, abundant clasts, break easily, slightly cohesive, non plastic, uniform color and texture, black skins on tube walls, well sorted, trace mica, sand fraction is very fine to fine grain, little or no clay, 2.5Y5/2, acid reactivity is slight to moderate.

SX Barrier Archive Descriptions

Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B20733B C7186 105-107	S09V001187	4/28/2011	Top end of liner is full, bottom of liner has 5 mm depression, slightly moist, 80mm from top down is S sand, minor silt, very fine to medium grain sand, trace mica, occasional mica flake is coarse grain, well sorted, uniform color and texture, 2.5Y5/2 acid reactivity is slight. The bottom 70mm of liner is sM sandy mud abundant clasts, break easily, non cohesive, uniform color ans texture, sand is very fine grained, predominately silt, trace of clay, 2.5Y5/3,acid reactivity is slight to moderate.
20101218	B20733C C7186 105-107	S09V001188	4/28/2011	Top of liner has a depression of 7mm, top of liner had trace of black skins from liner wall, bottom of liner is full, S sand, very slightly moist, very fine to medium grain sand, moderately well sorted, trace mica, occasional large mica flakes, uniform color and texture, trace amounts of silt, lilttle or no clay, 2.5Y6/2, acid reactivity is very slight.
20101218	B206P7C C7154 74-76	S09V001197	4/28/2011	Uniform 5mm depression top of tube, bottom is full. sM sandy mud, moist, abundant clasts, break easily, slightly cohesive, non plastic, uniform color and texture, trace mica, bottom portion was slightly plastic, sand is very fine to fine grained, little or no clay, 2.5Y3/1 acid reactivity slight.
20101218	B20735B C7186 128-130	S09V001202	5/3/2011	Tube is full. Slight condensation on end caps. mS muddy sand, slightly moist, abundant clasts, break easily, moderately cohesive, trace mica, uniform color and texture, well sorted, very fine to fine grain sand, little or no clay, abundant silt, 2.5Y5/3, acid reactivity is slight to moderate.
20101218	B20735C C7186 128-130	S09V001203	5/3/2011	Tube is full. black skins from liner walls, mS muddy sand, slightly moist, abundant clasts, break easily, slightly cohesive, uniform color and texture, abundant mica, very fine to fine grain sand, well sorted, minor traces of clay, 2.5Y5/3, acid reactivity is slight.
20101218	B20737C C7186 145-147	S09V001223	5/3/2011	Tube is full. mS muddy sand, slightly moist, black skins from liner walls, uniform color and texture, abundant clasts, break easily, slightly cohesive, non plastic, trace mica, very fine to fine grain sand, well sorted, minor amounts of clay, 2.5Y5/3, acid reactivity is slight to moderate.
20101218	B206P9B C7154 106-108	S09V001238	5/3/2011	Tube is full, Thin layer of mud on top, trace of moisture in top end cap, S sand, slight moist/moist, uniform color and texture, trace of mica, trace of clasts that break easily, minor amount of black skins, moderately well sorted, very fine to medium grain sand, trace of silt, 2.5Y3/1, acid reactivity is slight.
20101218	B206P9C C7154 106-108	S09V001239	5/3/2011	Tube is full, mS muddy sand, slightly moist, abundant clasts easily broken, uniform color and texture, slightly coheisve, non plastic, little or no clay, 2.5Y4/2, acid reactivity is slight.
20101218	B206R9B C7158 87-89	S09V001244	5/3/2011	Top has a 10mm depression on 3/4 of tube, bottom is full, black skins from liner wall, mS muddy sand, slightly moist, abundant clasts easily broken, uniform color and texture, abundant mica, non cohesive, very fine to fine grain sand, well sorted, little or no clay, thinly interbedded silt and sand, 2.5Y5/2, acid reactivity is slight to moderate.

SX Barrier Archive Descriptions

Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B206R9C C7158 87-89	S09V001245	5/3/2011	Tube is full, top of liner has gravel, black skins from liner wall, slightly moist from bottom end, top end is dry, the largest particle is 10mm which is basalt, on bottom abundant clasts break easily, trace mica, 20mm from top - 90 mm from bottom the remaining 40mm is sand and gravel caliche, the remaining 40mm is stuck in liner and can not be removed. put liner back in 2E on bottom shelf of rack. Bottom section, sM sandy mud, very fine grain sand, little or no clay, very fine grain sand and silt 2.5Y5/2, acid reactivity is slight. Top section, (m)gS slightly muddy gravely sand, poorly sorted, gravel is sub angular to sub round 2.5Y6/1 , acid reactivity is none.
20101218	B206T1B C7158 124-126	S09V001250	5/3/2011	Tube is full, sM sandy mud, slight moist to moist, black skins from liner walls, abundant clasts break easily, slightly cohesive, non plastic, uniform color and texture, very fine grain sand, little or no clay, 2.5Y5/3, acid reactivity is moderate.
20101218	B206T1C C7158 124-126	S09V001251	5/3/2011	Top is full, bottom has an irregular 5mm depression. sM sandy mud, slightly moist to moist, abundant clasts break easily, uniform color and texture, moderately cohesive, non plastic, large fragment of "O" ring (removed), very fine grain sand, little or no clay, 2.5Y5/3, acid reactivity is slight to moderate.
20101218	B206T3B C7158 141-143	S09V001256	5/3/2011	Top is full, bootom has an irregular 12mm depression, condensation on bottom cap and trace condensation on top cap, sM sandy mud, slightly moist/moist, very cohesive, slighty plastic, uniform color and texture, abundant clasts break easily, predominately silt, little or no clay, 2.5Y4/2, acid reactivity is slight to moderate.
20101218	B206T3C C7158 141-143	S09V001257	5/2/2011	Tube is full, sM sandy mud, moist, black skins from liner wall, abundant clasts break easily, cohesive, moderately plastic, uniform color and texture, trace mica,very fine grain sand, little or no clay, predominately silt, 2.5Y4/2, acid reactivity is slight to moderate.
20101218	B206R3B C7156 92-94	S09V001262	5/2/2011	Tube is full, 20mm in from bottom it becomes sandy, 110mm from the top is all sand, bottom 40mm is interbedded sand and silt, slightly moist, abundant clasts break easily in the mud fraction, trace mica, minor amounts of silt, sand fraction is salt and pepper texture, mud section is mS muddy sand, S sand for the sand section, very fine to very coarse grain, poorly sorted, largest grains are sub-angular to sub-rounded. 2.5Y5/2, acid reactivity is slight to moderate for the interbedded section, acid reactivity for the sand section is slight,.
20101218	B206R3C C7156 92-94	S09V001263	5/2/2011	Top cap has a little condensate, Tube is full, black skins from liner wall, (m)S slightly muddy sand, slightly moist, thin interbeds of silt/clay, uniform color and texture, minor amounts of clasts that break easily, trace mica, a bit more silt in the upper 30mm of liner, moderately well sorted, very fine to medium grain sand, little or no clay, 2.5Y5/2, acid reactivity is slight.
20101218	B206R5B C7156 126-128	S09V001276	5/2/2011	Tube is full. black skins from liner wall, mS muddy sand, slightly moist, trace mica, uniform color and texture, moderate amount of clasts, break easily, very fine to fine grain sand, well sorted, little or no clay, 2.5Y5/2, acid reactivity is moderate.

SX Barrier Archive Descriptions				
Sample Group	Sample ID	Laboratory ID	Date Examined	Description
20101218	B206R5C C7156 126-128	S09V001277	5/2/2011	Tube is full. mS muddy sand, slightly moist, uniform color and texture, abundant mica, abundant clasts break easily, very fine to fine grained sand, well sorted, little or no clay, 2.5Y5/2, acid reactivity is moderate.
20101218	B206R7B C7156 140-142	S09V001282	4/28/2011	Tube over full, 5mm extends on both ends. M mud, slightly moist, minor very fine grain sand, abundant clasts break easily, minor black skins on tube walls, slightly sticky, slightly cohesive, slightly plastic, uniform color and texture, trace mica, predominately silt, trace of clay, 2.5Y3/2, acid reactivity slight.
20101218	B206R7C C7156 140-142	S09V001283	4/28/2011	Top cap of tube has condensate, Tube is full, sM sandy mud, slightly moist, interbedded thin sands and silts, black skins on tube walls, abundant clasts, break easily, slightly cohesive, non plastic, uniform color and texture, trace mica, very fine to fine grain sand, moderately well sorted, little or no clay, 2.5Y4/2, acid reactivity is moderate to vigorous.

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SX Barrier, 2009 Archive Sample Photographs

Figure A-1: Core 7172, Sample B206Y1, Liner C

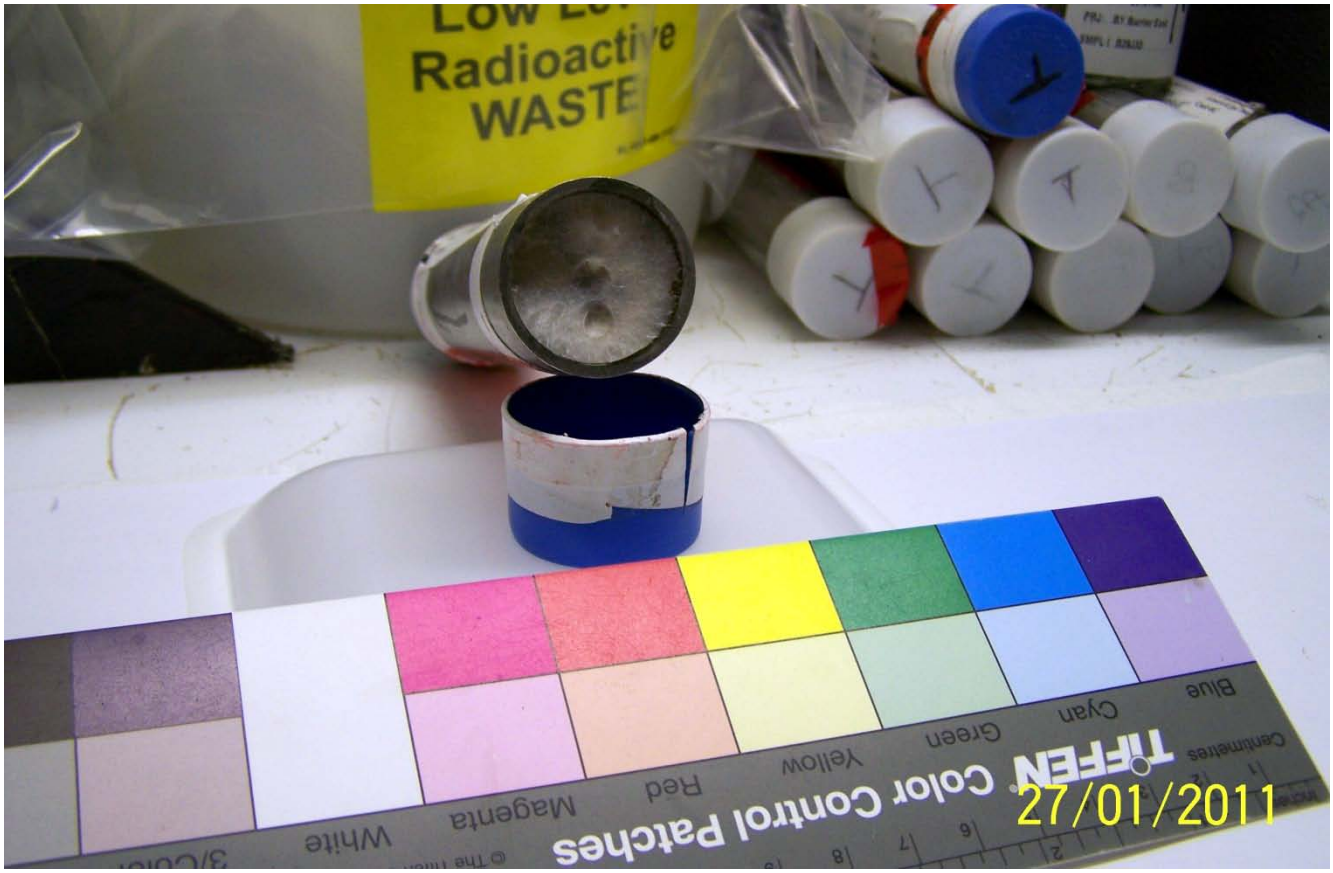

Figure A-2: Core 7172, Sample B206Y1, Liner C

Figure A-3: Core 7172, Sample B206Y3, Liner C

Figure A-4: Core 7172, Sample B206Y5, Liner C

Figure A-5: Core 7172, Sample B20H52, Liner C

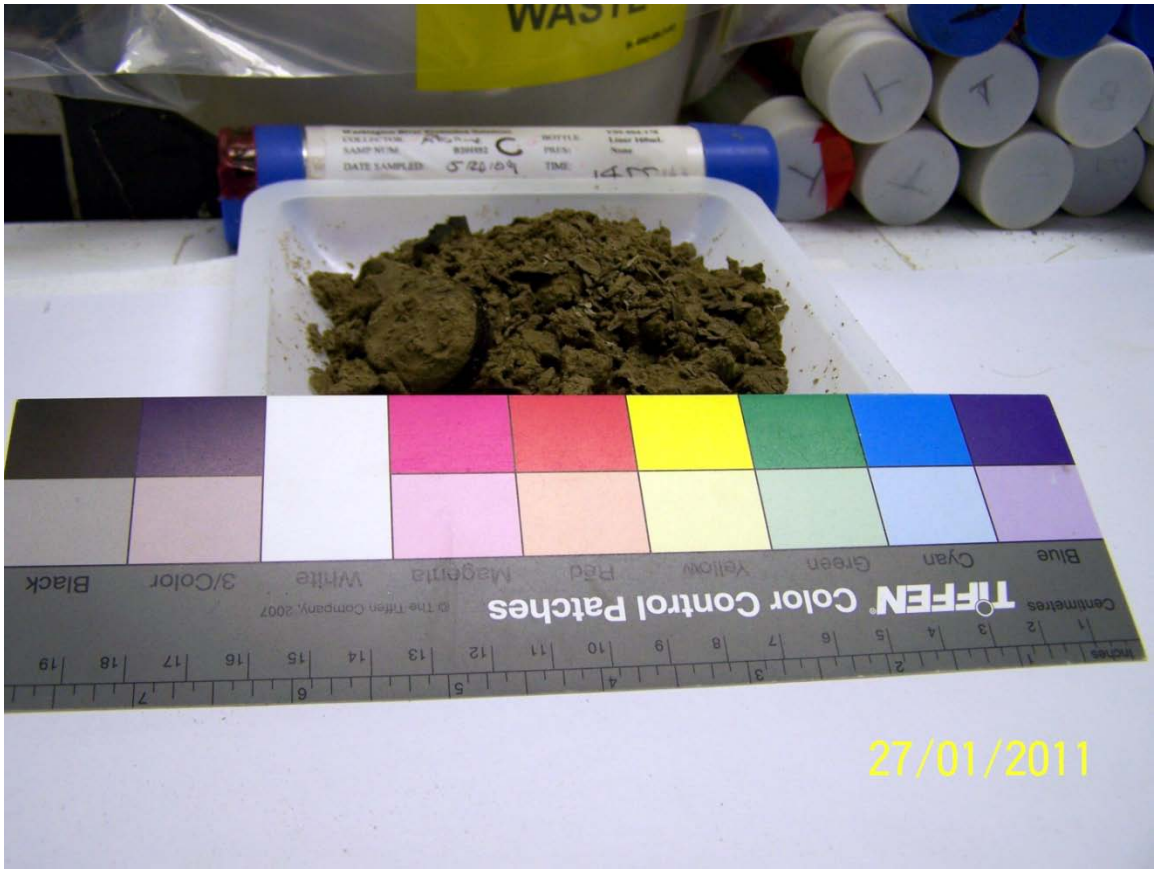

Figure A-6: Core 7178, Sample B20709, Liner B

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Figure A-7: Core 7178, Sample B20709, Liner C

Figure A-8: Core 7178, Sample B20711, Liner B

Figure A-9: Core 7178, Sample B20711, Liner C

Figure A-10: Core 7178, Sample B20713, Liner B

Figure A-11: Core 7178, Sample B20713, Liner C

Figure A-12: Core 7180, Sample B20715, Liner C

Figure A-13: Core 7180, Sample B20717, Liner B

Figure A-14: Core 7180, Sample B20717, Liner C

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Figure A-15: Core 7180, Sample B20719, Liner C

Figure A-16: Core 7180, Sample B20H68, Liner B

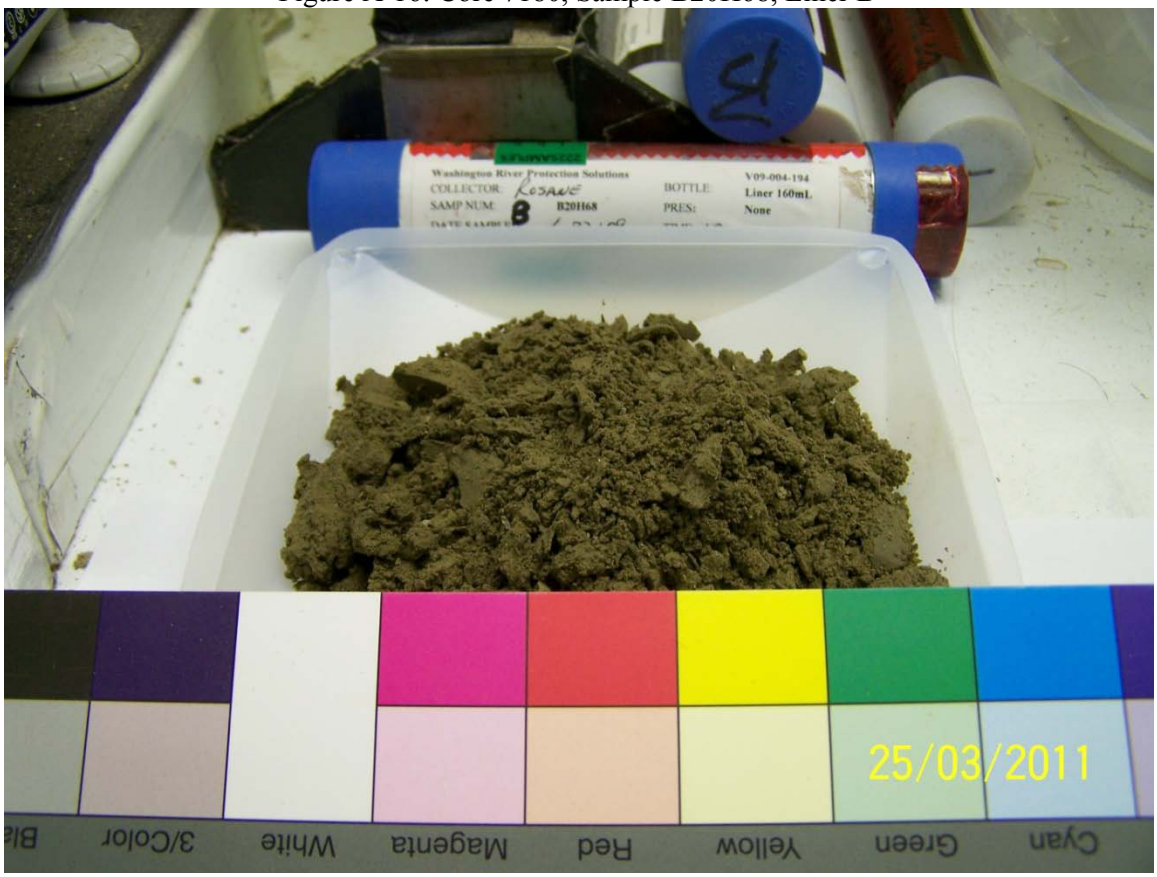

Figure A-17: Core 7180, Sample B20H68, Liner C

Figure A-18: Core 7170, Sample B206X5, Liner C

Figure A-19: Core 7170, Sample B206X7, Liner B

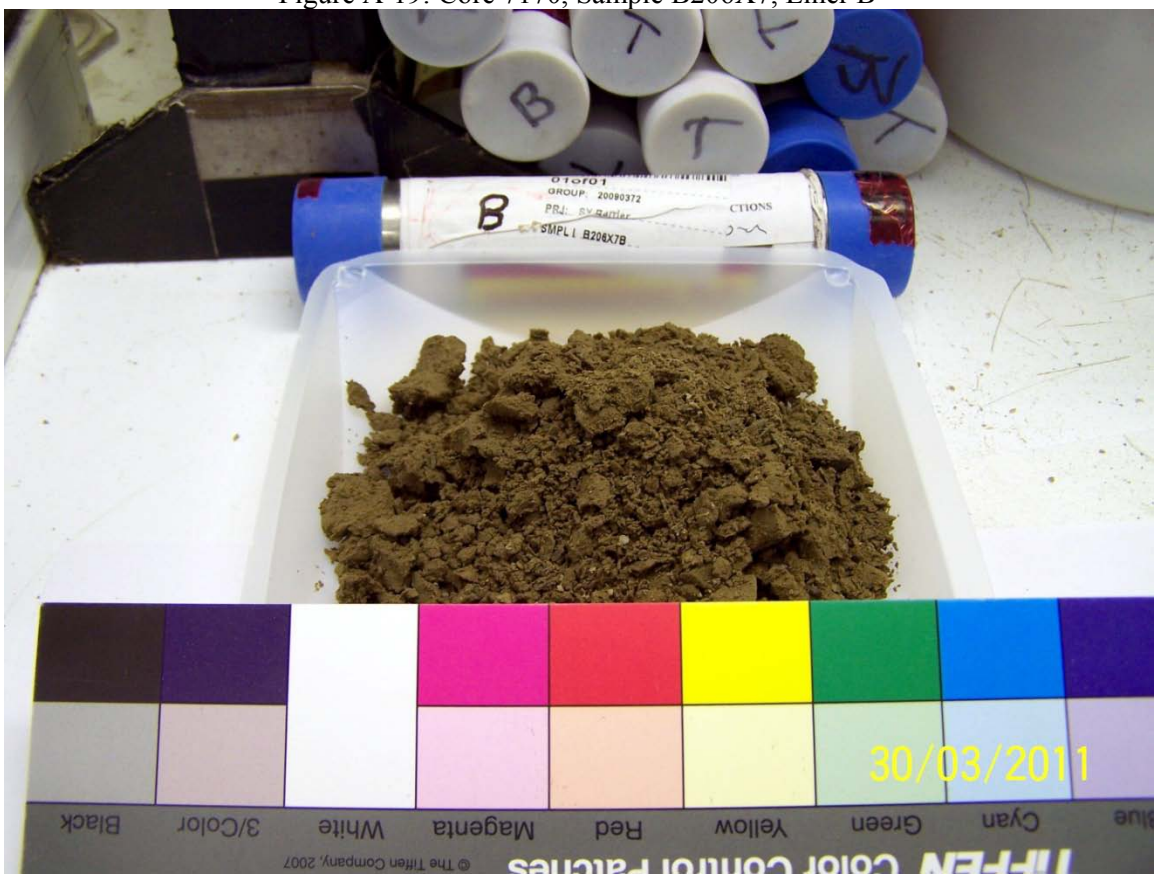

Figure A-20: Core 7170, Sample B206X7, Liner C

Figure A-21: Core 7170, Sample B206X9, Liner B

Figure A-22: Core 7170, Sample B206X9, Liner C

Figure A-23: Core 7170, Sample B20H48, Liner B

Figure A-24: Core 7170, Sample B20H48, Liner C

Figure A-25: Core 7168, Sample B206W9, Liner B

Figure A-26: Core 7168, Sample B206W9, Liner C

Figure A-27: Core 7168, Sample B206X1, Liner B

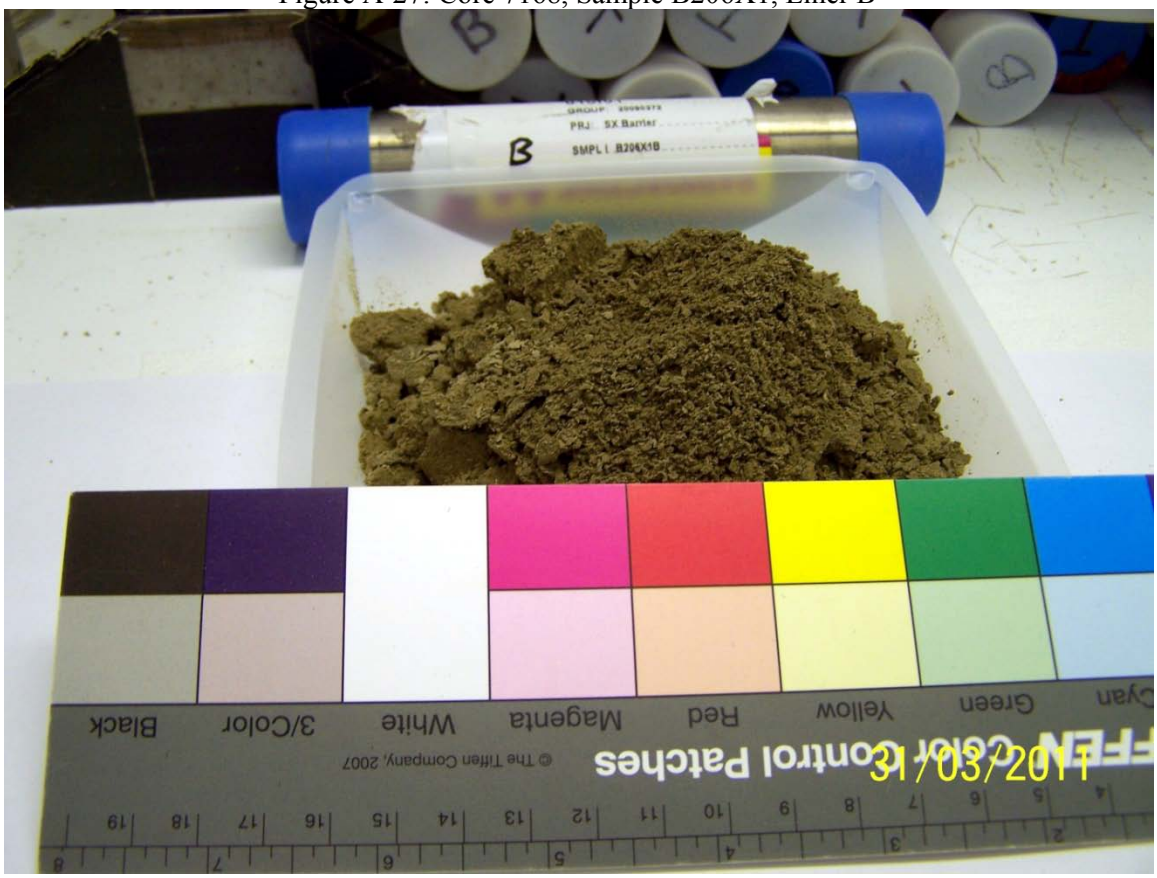

Figure A-28: Core 7168, Sample B206X1, Liner C

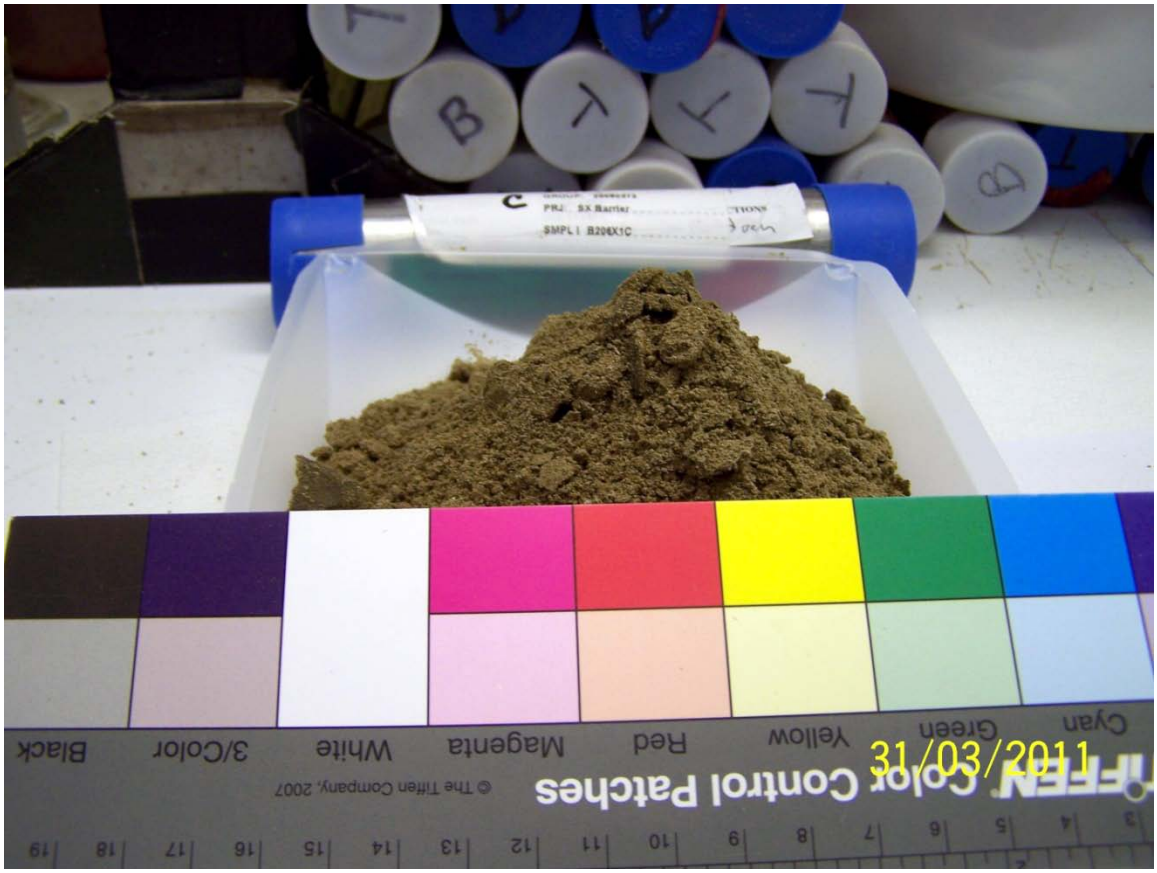

Figure A-29: Core 7168, Sample B206X3, Liner B

Figure A-30: Core 7168, Sample B206X3, Liner C

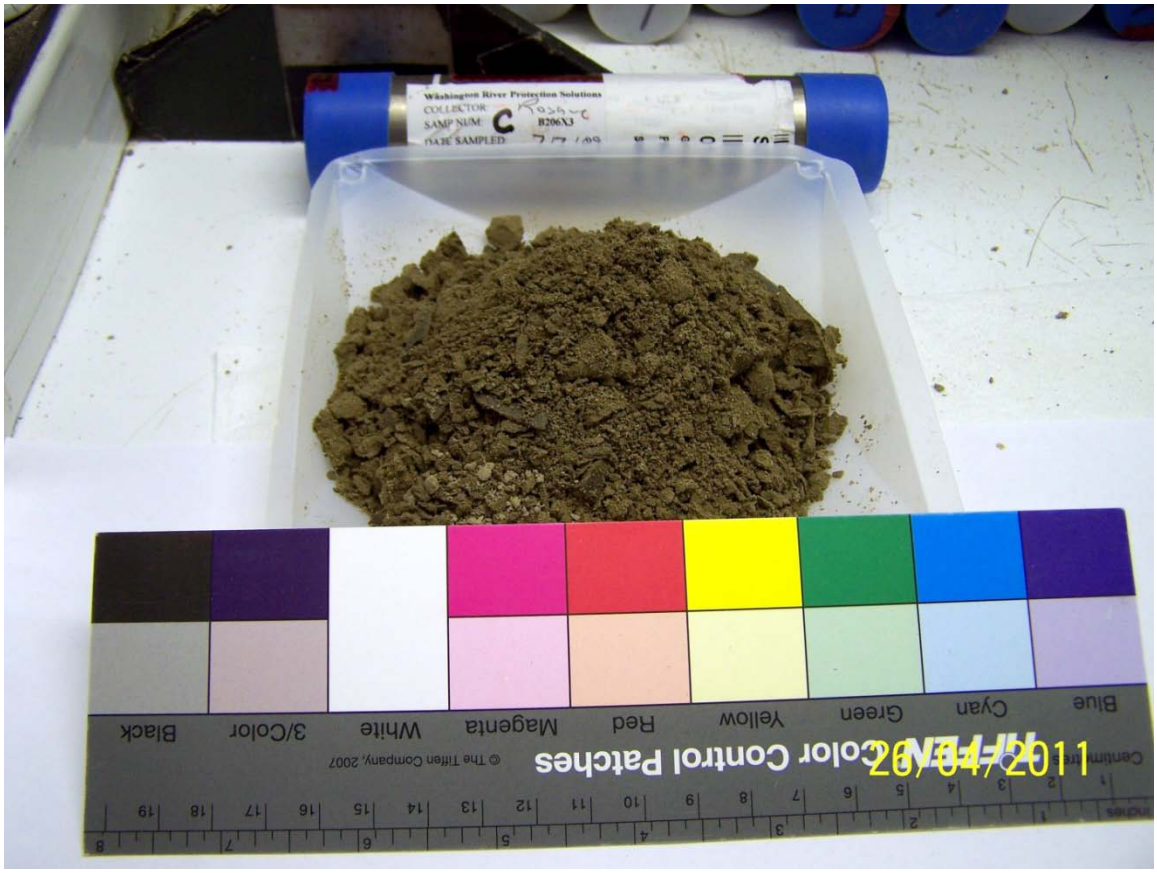

Figure A-31: Core 7192, Sample B20751, Liner B

Figure A-32: Core 7192, Sample B20751, Liner C

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Figure A-33: Core 7192, Sample B20753, Liner B

Figure A-34: Core 7192, Sample B20753, Liner C

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Figure A-35: Core 7192, Sample B20755, Liner C

Figure A-36: Core 7184, Sample B20729, Liner B

Figure A-37: Core 7184, Sample B20729, Liner C

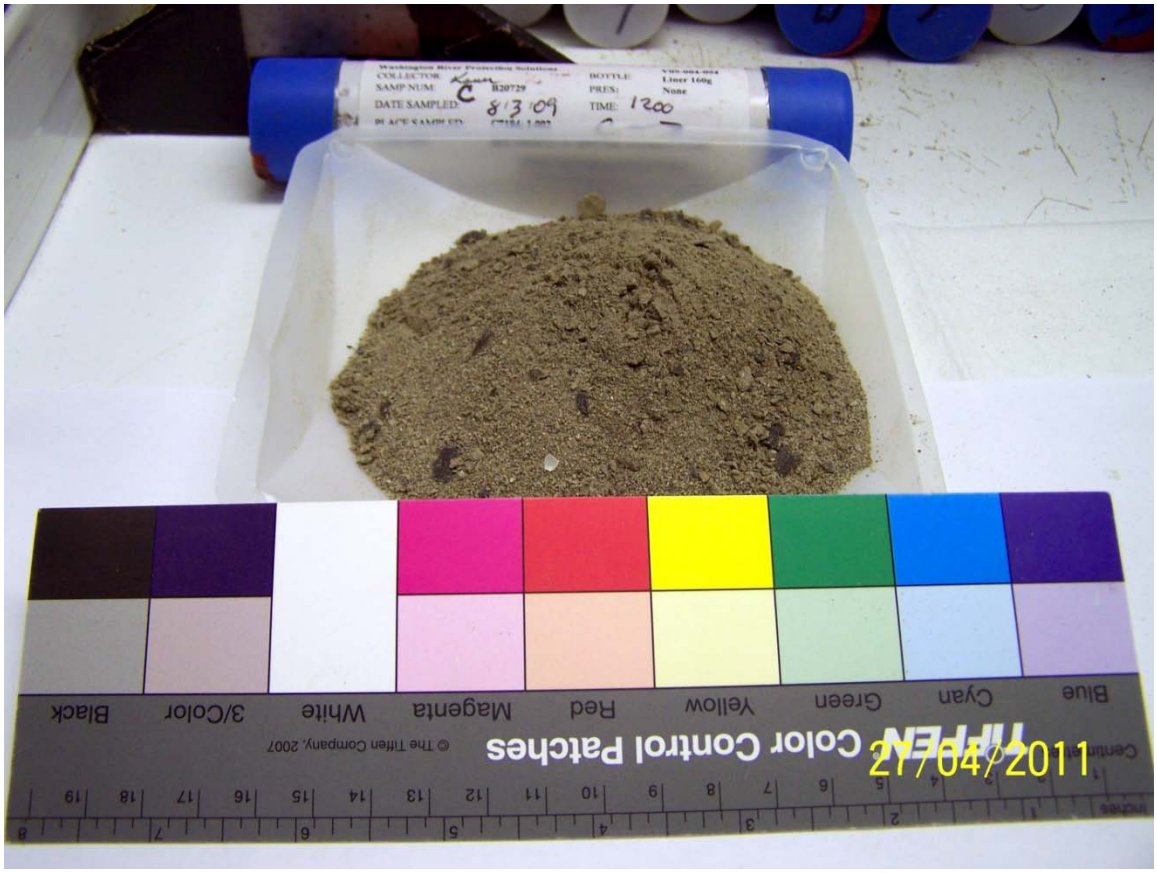

Figure A-38: Core 7184, Sample B20731, Liner B

Figure A-39: Core 7184, Sample B20731, Liner C

Figure A-40: Core 7184, Sample B20VK7, Liner C

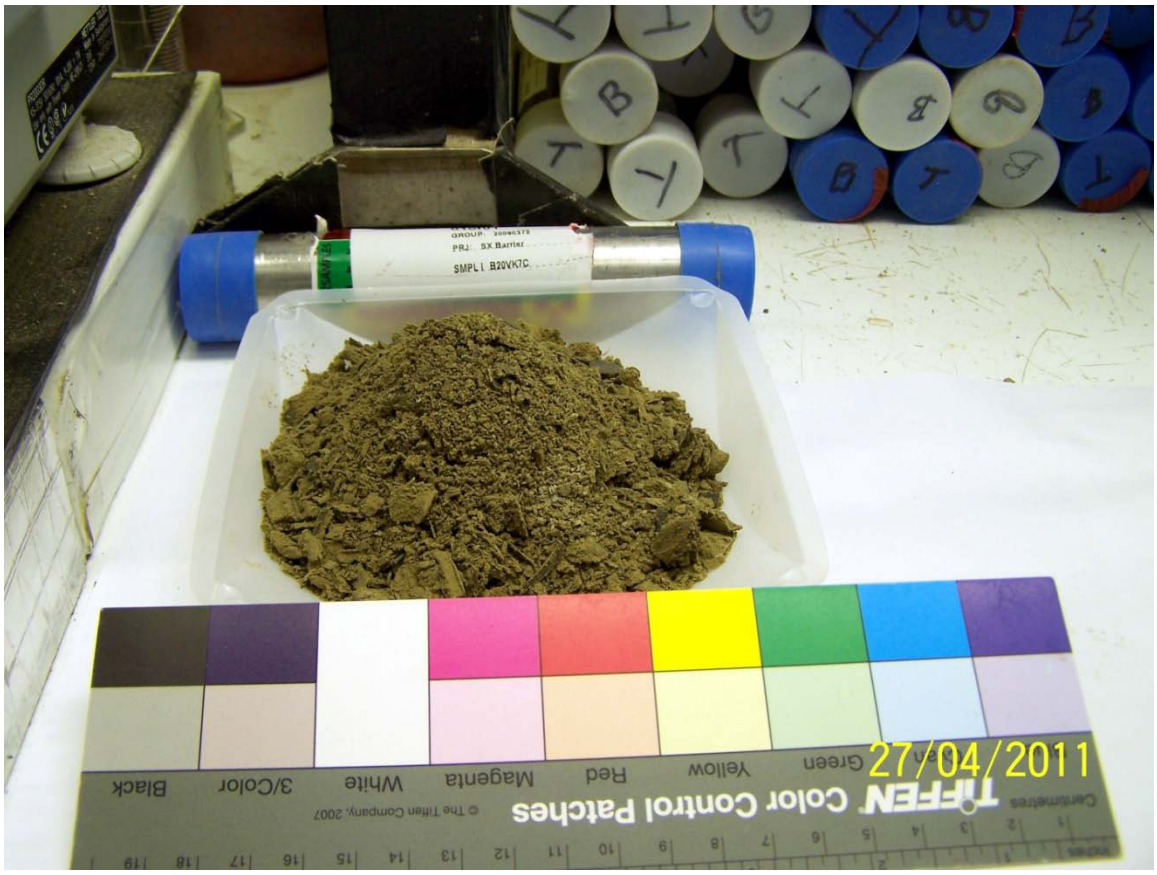

Figure A-41: Core 7186, Sample B20733, Liner B

Figure A-42: Core 7186, Sample B20733, Liner C

Figure A-43: Core 7186, Sample B20733, Liner B

Figure A-44: Core 7186, Sample B20735, Liner C

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Figure A-45: Core 7186, Sample B20737, Liner C

Figure A-46: Core 7154, Sample B206P7, Liner C

Figure A-47: Core 7154, Sample B206P9, Liner B

Figure A-48: Core 7154, Sample B206P9, Liner C

Figure A-49: Core 7158, Sample B206R9, Liner B

Figure A-50: Core 7158, Sample B206R9, Liner C

Figure A-51: Core 7158, Sample B206T1, Liner B

Figure A-52: Core 7158, Sample B206T1, Liner C

Figure A-53: Core 7158, Sample B206T3, Liner B

Figure A-54: Core 7158, Sample B206T3, Liner C

Figure A-55: Core 7156, Sample B206R3, Liner B

Figure A-56: Core 7156, Sample B206R3, Liner C

Figure A-57: Core 7156, Sample B206R5, Liner B

Figure A-58: Core 7156, Sample B206R5, Liner C

Figure A-59: Core 7156, Sample B206R7, Liner B

Figure A-60: Core 7156, Sample B206R7, Liner C

Attachment 6

CORRESPONDENCE

RPP-RPT-47008 Rev.0

REVIEW COMMENT RECORD (RCR)	1. Date 2/7/2011	2. Review No.
	3. Project No.	Page 1 of 2

5. Document Number(s)/Title(s)	6. Program/Project/Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
RPP-RPT-47008 Rev.0 **Final Analytical Report for Soil Samples in Support of an Interim Barrier at SX Farm**	WRPS	HL Anastos	Closure and Corrective Measures	1200 Jadwin/ Rm. 301 373-2616

17. Comment Submittal Approval	10. Agreement With Indicated Comment Disposition(s)	11. CLOSED
Date / Organization Manager (optional) (print and sign)	HL Anastos (Reviewer/Point of Contact (print and sign)) 8-17-11 (Date) GP Ritenour (Author/Originator (print and sign))	HL Anastos (Reviewer/Point of Contact (print and sign)) 8-17-11 (Date) GP Ritenour (Author/Originator (print and sign))

12. Item	13a. Comments	13b. Basis	13c. Recommendation	14. Reviewer Concurrence Required (Y or N)	15. Disposition (provide justification if NOT accepted)	16. Status
1	p. 2: Expand on statement "that samplers delivering the coolers were unaware of the need to refrigerate the samples; this has been corrected".	RPP-RPT-47008	Clarify – were samples not refrigerated? Did this occur in the field or lab? Which samples and for how long?	Y	Revise narrative to state only that "samples were received without refrigeration." Unable to document which samples and how long they outside of refrigeration.	Closed
2	p. 3: States gross alpha/beta (GAB) was performed using "gas liquid scintillation counting".	Professional Judgment	Based on p. 4, it appears this should be "liquid scintillation counting"	Y	Fixed as recommended	Closed
3	p. 3: Qualifiers in hard copy report (Tank Farms) do not match qualifiers in electronic data (HEIS).	RPP-RPT-47008 Rev. 0; FEAD CP-15383 Version 8	Revise report using HEIS qualifiers.	Y	Changed to HEIS Qualifiers	Closed
4	p. 4: Section 3.2.1: "Since this analysis has little or no significance…"	RPP-PLAN-41491, Rev. 0	pH is a required analysis per the FSAP. This statement does not appear accurate. Clarify or omit.	Y	Removed statement	Closed
5	p. 6: Section 3.2.4: "Batch 17910: The client was contacted and accepted the data "as is"."	RPP-RPT-47008	Provide correspondence/documentation of client acceptance.	Y	Communication was verbal, revised narrative will indicate as such	Closed
6	Geological photos are missing.	RPP-RPT-47008	Provide photos and geological report in the data package.	Y	Added photos	↓
7	B20H67 has incorrect sampling depth (151'-153') on SBD and DSR.	COC Review	Correct sampling depths – correct depth is 152'-154'.	Y	Corrected	↓
8	B20H68 has incorrect sampling depth (151'-153') on SBD, DSR and geological descriptions.	COC Review	Correct sampling depths – correct depth is 152'-154'.	Y	Corrected	↓
9	B20730 has incorrect sampling depth (128'-130') on SBD and DSR.	COC Review	Correct sampling depths – correct depth is 128.5'-130.5'.	Y	Corrected	↓

REVIEW COMMENT RECORD (RCR)	1. Date 2/7/2011	2. Review No.
	3. Project No.	Page 2 of 2

12. Item	13a. Comments	13b. Basis	13c. Recommendation	14. Reviewer Concurrence Required (Y or N)	15. Disposition (provide justification if NOT accepted)	16. Status
10	B20731 has incorrect sampling depth (128'-130') on SBD, DSR and geological descriptions.	COC Review	Correct sampling depths – correct depth is 128.5'-130.5'.	Y	Corrected	Closed
11	B20751 has incorrect sampling depth (101'-102') on geological descriptions.	COC Review	Correct sampling depths – correct depth is 100'-102'.	Y	Corrected	
12	B20755 has incorrect sampling depth (145'-147') on geological descriptions.	COC Review	Correct sampling depths – correct depth is 140'-142'.	Y	Corrected	
13	Sample Breakdown Diagrams do not correctly show which liners were analyzed.	RPP-RPT-47008	For example, B206Y5B shows anions; however, data are reported by B206Y5A.	Y	In this case the IC NO3 and ICP/MS Tc-99 were analyzed on both liner samples. The shoe was lost and the B liner was used instead for the QT analysis. This situation is true for 4 other core intervals. A detailed explanation of QT analysis and which interval used the Shoe sample and which used liner B will be add to the narrative.	
14	COC V09-004-008 does not have a relinquished time listed.	COC Review	Document discrepancy on RCR.	N	N/A	CLOSED
15	COC V09-004-094 does not have a relinquished time listed.	COC Review	Document discrepancy on RCR.	N	N/A	CLOSED

RPP-RPT-47008 Rev.0

VADOSE ZONE CHARACTERIZATION CHANGE NOTICE

Document: RPP-PLAN-41491 **Change Number:** ~~GCN-WMAC~~ SX-001 a.m.t. 2-16-09 **ECN to TSAP Required?** Y / (N)

Requestor: Andrew M. Templeton **Date:** 1-5-10

Samples Impacted: Samples collected at SX Farm in FY09 in support of an Interim Barrier.

Proposed Change: 1. Cancel the Tier I non-radioactive metal isotope analysis. The following is a list of these analytes:

^{52}Cr, ^{53}Cr, ^{63}Cu, ^{65}Cu, ^{75}As, ^{82}Se, ^{95}Mo, ^{97}Mo, ^{98}Mo, ^{101}Ru, ^{102}Ru, ^{104}Ru, ^{107}Ag, ^{109}Ag, ^{111}Cd, ^{114}Cd, ^{121}Sb, ^{123}Sb, ^{206}Pb, ^{208}Pb.

2. Cancel the Rhenium (Re) analysis for all Tier I samples.

Reason for Change: The non-radioactive metal isotope analysis is not needed for characterization for placement of an SX Barrier.

Rhenium analysis is not needed for characterization for placement of an SX Barrier. Rhenium was added to the list because when the analysis was performed at PNNL, Re was often used in a laboratory setting in lieu of using Tc (it behaves in a chemically similar manner).

Date Change Effective: 12-27-09
Schedule Impact: None

Authorization:

Vadose Zone POC (Print/Sign): A.M. Templeton **Date:** 1-12-10

Vadose Zone Quality Assurance (Print/Sign): K.J. Dunbar **Date:** 1-12-10

222-S Project Coordinator (Print/Sign): S.G. Mckinney **Date:** 1-12-10

ATL Project Coordinator (Print/Sign): G.P. Ritenour **Date:** 1-12-10

Other (Optional, Print/Sign): **Date:**

cc: S. J. Eberlein, K. M. Hall, Dana Stewart, H. Sydnor, C. Taber

VADOSE ZONE CHARACTERIZATION CHANGE NOTICE

Document: RPP-PLAN-41491, Rev 0 **Change Number:** SX-002 **ECN to TSAP Required?** Y / N

Requestor: Andrew M. Templeton **Date:** 8-13-10

Original Requirement: Perform ^{129}I analysis using ICP/MS per Table 4-1.

Samples Impacted: Samples collected at SX Farm in FY09 in support of an interim barrier.

Proposed Change: Perform ^{129}I analysis using iodine separation with Low Energy Gamma Counting.

Reason for Change: Performing the ^{129}I analysis using iodine separation with Low Energy Gamma Counting is an acceptable alternative. ATL requested that I-129 be performed using radiochemical analysis instead of ICPMS. This would take some of the burden off of the ICPMS, which currently has a huge back log and is not operational. More importantly ICPMS is not a reliable method for performing I-129 analysis. Xe-129 in the atmosphere and in the argon gas used during the analysis interfere and must be blank subtracted. When using the Vadose water leach, the detection limits are for ICP/MS and radiochemistry are basically the same for: 20pCi/g for ICPMS and 50pCi/g for GEA. The analysis would still be performed on the water leach fraction and will require about 10 g. This should help produce a more timely release of the SX Barrier report.

Date Change Effective: 1-26-10

Schedule Impact: None

Authorization:

Vadose Zone POC (Print/Sign): A.M. Templeton **Date:** 8-19-10

Vadose Zone Quality Assurance (Print/Sign): K.J. Dunbar **Date:** 8-19-10

222-S Project Coordinator (Print/Sign): S.G. Mckinney **Date:** 8-23-10

ATL Project Coordinator (Print/Sign): G.P. Ritenour **Date:** 8-19-10

Other (Optional, Print/Sign): NA **Date:**

cc: S. J. Eberlein, K. M. Hall, Dana Stewart, Dave Myers, Penny Berlin, Eric Wyse, Mike Connelly, Harold Sydnor, Cindy Tabor

Ritenour, Gerald P

From: McKinney, Steve G
Sent: Monday, July 27, 2009 12:34 PM
To: Ritenour, Gerald P; Fuller, Richard K (Keith)
Cc: Prilucik, John R
Subject: FW: Equipment rinsates

From: Sydnor, Harold A
Sent: Monday, July 27, 2009 12:30 PM
To: McKinney, Steve G
Cc: Eberlein, Susan J
Subject: RE: Equipment rinsates

I agree.

Harold Sydnor

From: McKinney, Steve G
Sent: Monday, July 27, 2009 11:24 AM
To: Sydnor, Harold A; Templeton, Andrew M
Cc: Dunbar, Kathryn J
Subject: Equipment rinsates

We have received two sets of equipment rinsate samples thus far. Per our current work instruction, we were not to perform any analyses unless we found something unusual during sample analysis. Since no unusual results have been obtained thus far, no analyses have been conducted on these equipment rinsates.

With the numbers of bottles taken each time, they are consuming significant amount of refrigerator space. Additionally, there is an ALARA concern within the laboratory that the fridges are beginning to be overcrowded and we need to do everything reasonable to cut down on sample storage in the fridges.

Per our conversation, and with your permission, we will:

a) Dispose of the first equipment rinsate (sampled 3-11-09).
b) Dispose of un-needed sample containers on the second equipment rinsate, thereby saving much needed refrigerator space. We will retain sufficient sample to perform any required analyses.

As I understand it, we are changing our work instruction on how we handle equipment rinsates, and will soon receive one for a complete analysis. Once that happens, we will dispose of the second rinsate as well. Please let us know if this works for everyone.

Thanks.

Ritenour, Gerald P

From: McKinney, Steve G
Sent: Monday, July 27, 2009 12:34 PM
To: Ritenour, Gerald P
Cc: Prilucik, John R
Subject: FW: Equipment rinsates

From: Dunbar, Kathryn J
Sent: Monday, July 27, 2009 11:34 AM
To: McKinney, Steve G
Subject: Re: Equipment rinsates

Document and dispose

From: McKinney, Steve G
To: Sydnor, Harold A; Templeton, Andrew M
Cc: Dunbar, Kathryn J
Sent: Mon Jul 27 11:23:46 2009
Subject: Equipment rinsates
We have received two sets of equipment rinsate samples thus far. Per our current work instruction, we were not to perform any analyses unless we found something unusual during sample analysis. Since no unusual results have been obtained thus far, no analyses have been conducted on these equipment rinsates.

With the numbers of bottles taken each time, they are consuming significant amount of refrigerator space. Additionally, there is an ALARA concern within the laboratory that the fridges are beginning to be overcrowded and we need to do everything reasonable to cut down on sample storage in the fridges.

Per our conversation, and with your permission, we will:

a) Dispose of the first equipment rinsate (sampled 3-11-09).
b) Dispose of un-needed sample containers on the second equipment rinsate, thereby saving much needed refrigerator space. We will retain sufficient sample to perform any required analyses.

As I understand it, we are changing our work instruction on how we handle equipment rinsates, and will soon receive one for a complete analysis. Once that happens, we will dispose of the second rinsate as well. Please let us know if this works for everyone.

Thanks.

Ritenour, Gerald P

Subject: FW: Insufficient sample for S09V001260

From: McKinney, Steve G
Sent: Wednesday, October 07, 2009 8:09 AM
To: Diaz, Leslie A
Cc: Frye, Jann M
Subject: FW: Insufficient sample for S09V001260

Please cancel the alkalinity test for samples S09V001260, S09V001274, and S09V001280.

Thanks.

From: McKinney, Steve G
Sent: Tuesday, October 06, 2009 4:32 PM
To: Frye, Jann M
Cc: Templeton, Andrew M
Subject: RE: Insufficient sample for S09V001260

…and just for documentation, this also impacts samples S09V001274, and S09V001280. The alkalinity analysis for samples S09V001260 (C7156, 92-94'), S09V001274 (C7156, 126-128'), and S09V001280 (C7156, 140-142') will be cancelled.

Thanks.

From: Templeton, Andrew M
Sent: Tuesday, October 06, 2009 3:45 PM
To: McKinney, Steve G
Cc: Ritenour, Gerald P; Sydnor, Harold A; Eberlein, Susan J; Dunbar, Kathryn J; Aruwah, Monica R; Connelly, Michael
Subject: RE: Insufficient sample for S09V001260

Steve,

In regards to the alkalinity analysis we have decided not to run the analysis on one of the liners. Depending on the outcome of additional meetings we will let you know if we want to include it in the Tier I analyses if requested.

If you have any questions please let me know.

Thanks!

Andrew Templeton

From: McKinney, Steve G
Sent: Monday, September 14, 2009 3:05 PM
To: Templeton, Andrew M

Cc: Ritenour, Gerald P
Subject: FW: Insufficient sample for S09V001260

Hi Andrew:

This is the shoe sample from C7156, 92-94' depth. Since we are have no more shoe sample, our options would be to a) wait and run alkalinity on the tier 1 sample (if this sample is selected), or to extrude one of the liners to complete the analysis. Let me know.

Thanks.

From: Frye, Jann M
Sent: Friday, September 11, 2009 1:02 PM
To: Ritenour, Gerald P; McKinney, Steve G
Cc: Toth, Richard; Parong, Samuel M; Schroeder, Robert W
Subject: Insufficient sample for S09V001260

JR and Steve,

Rick informed me that there is no sample remaining of S09V001260. There is some of the duplicate left, so I told him to run the duplicate for the total alkalinity test, but if we have enough soil it would be better to reprep the sample and rerun.

Thanks, Jann M. Frye, 376-8624

Ritenour, Gerald P

From: McKinney, Steve G
Sent: Monday, October 26, 2009 3:55 PM
To: Ritenour, Gerald P
Subject: FW: SX Farm Tier I analysis

…have breakdowns ready for Gary tomorrow…?

From: Templeton, Andrew M
Sent: Monday, October 26, 2009 3:31 PM
To: McKinney, Steve G
Cc: Connelly, Michael; Sydnor, Harold A; May, Susan M; Eberlein, Susan J; Myers, David A (Dave); Skorska, Maria B; Dunbar, Kathryn J; Quigley, Keith D; Bergeron, Marcel P
Subject: SX Farm Tier I analysis

Steve,

After multiple meetings we would like to request that the laboratory proceed with the Tier I analysis per RPP-PLAN-41491, Rev. 0 for all of the SX Farm samples that were collected in FY09. I believe that is 36 samples.

We would like the laboratory to analyze the oldest samples first to try to meeting any applicable holding times.

If you have any questions or comments.

Thanks!

Andrew Templeton
Vadose
WRPS
373-5589

Ritenour, Gerald P

From: Templeton, Andrew M
Sent: Tuesday, January 26, 2010 3:38 PM
To: McKinney, Steve G
Cc: Ritenour, Gerald P; Dunbar, Kathryn J
Subject: RE: SX Barrier I-129

Steve,

Performing the I-129 analysis using the Low Energy gamma counting is an acceptable alternative. I will fill out a CCN to document this deviation from the FSAP. We will be applying the C-farm DQO on future barrier work.

Thanks!

Andrew Templeton

From: McKinney, Steve G
Sent: Tuesday, January 26, 2010 10:46 AM
To: Templeton, Andrew M
Cc: Ritenour, Gerald P
Subject: FW: SX Barrier I-129

The main driver here is the ICP/MS that we do the I-129 on is down and there is a large backlog when it comes up. Being able to do them by rad-chem would certainly help schedules/turnarounds… For barrier work, sample availability should not be a problem, and we are already doing the I-129 in C farm by rad chem. This could be a time to make them consistent…?

Thanks.

From: Ritenour, Gerald P
Sent: Tuesday, January 26, 2010 9:33 AM
To: Ritenour, Gerald P; McKinney, Steve G
Subject: RE: SX Barrier I-129

Steve,

ATL would like to request that I-129 be performed using radiochemical analysis instead of ICPMS. This would take some of the burden off of the ICPMS, which currently has a huge back log and is not operational. More importantly ICPMS is not a reliable method for performing I-129 analysis. Xe-129 in the atmosphere and the in the argon gas used during the analysis interfere and must be blank subtracted. When using the Vadose water leach, the detection limits are for ICP/MS and radiochemistry are basically the same for: 20pCi/g for ICPMS and 50pCi/g for GEA. The analysis would still be performed on the water leach fraction and will require about 10 g. This should help produce a more timely release of the SX Barrier report.

Perhaps this may be a good time to consider switching the analysis to the standard radiochemistry I-129 analysis. This analysis uses an Iodine specific digest and has a sensitivity about 100X lower while using the same amount of sample. This method is accepted DOE site wide for I-129 analysis. I am not sure that the water leach method has ever been verified against PE sample to show that it actually works. I assume it does since these soils typically produce an alkaline leachate. If you have any questions or need additional information please let me know.

Ritenour, Gerald P

From: Templeton, Andrew M
Sent: Thursday, June 17, 2010 7:10 AM
To: Ritenour, Gerald P
Cc: McKinney, Steve G
Subject: RE: SX Barrier

JR,

Yes I would be interested in having that data reported.

Thanks!

Andrew

From: Ritenour, Gerald P
Sent: Wednesday, June 16, 2010 2:09 PM
To: Templeton, Andrew M
Cc: McKinney, Steve G
Subject: SX Barrier

Andrew,
In reviewing the ICPMS Uranium data for SX Barrier, I have found that not only was the required U-238 reported, but also 235,233,234, and 236. The data is fine and we can report it. All sample have results above the quantitation level for 238 and 235 and trace of 234, Only a few sample have 233 or 236. Are you interested?
JR

Gerald "JR" Ritenour
Project Manager
ATL International, Inc.
(509) 372-2742 office
(509) 438-8837 cell
gerald_p_ritenour@rl.gov

Ritenour, Gerald P

From: Templeton, Andrew M
Sent: Friday, June 18, 2010 1:19 PM
To: Ritenour, Gerald P; McKinney, Steve G
Subject: RE: SX Barrier Reanalysis for Nitrate

Sounds ok to me JR, I am not sure what we would gain by doing it again.

Thanks!

Andrew

From: Ritenour, Gerald P
Sent: Friday, June 18, 2010 11:15 AM
To: McKinney, Steve G; Templeton, Andrew M
Subject: SX Barrier Reanalysis for Nitrate

Steve, Andrew,
I have one sample C7192, 128-130' B20752A for which the Tier I nitrate analysis is bad. We are out of sample and would need to extrude the "B" liner. This will delay the release of the final report by about a week. The IC quick TAT analysis on the SHOE is perfectly acceptable and contains all required QC elements, even a spike. I would propose we use it for the Tier I. Let me know what you think
Thanks JR

Gerald "JR" Ritenour
Project Manager
ATL International, Inc.
(509) 372-2742 office
(509) 438-8837 cell
gerald_p_ritenour@rl.gov

Ritenour, Gerald P

From: McKinney, Steve G
Sent: Tuesday, June 22, 2010 4:38 PM
To: Ritenour, Gerald P; Templeton, Andrew M
Subject: RE: SX Barrier Chloride in Blank

Works for me.

Thanks.

From: Ritenour, Gerald P
Sent: Tuesday, June 22, 2010 11:00 AM
To: McKinney, Steve G; Templeton, Andrew M
Subject: SX Barrier Chloride in Blank

Steve, Andrew,
I have a batch of IC Anion samples with a very high CCB for Chloride. Rather than re-run at this late date, I would prefer to report from the quick TAT samples. There are minor QC issue with these batches, but nothing requiring reanalysis. Let me know what you think.
Thanks,JR

Gerald "JR" Ritenour
Project Manager
ATL International, Inc.
(509) 372-2742 office
(509) 438-8837 cell
gerald_p_ritenour@rl.gov

Ritenour, Gerald P

From: Dunbar, Kathryn J
Sent: Thursday, August 19, 2010 12:44 PM
To: Wyse, Eric J; Ritenour, Gerald P; Templeton, Andrew M; McKinney, Steve G
Subject: RE: SX Barrier, C7192, C7186

Thanks

Kathi Dunbar
Closure & Corrective Measures
Quality Assurance
(509) 376-2002 Office
1200 Jadwin (311)
Kathryn_J_Dunbar@rl.gov
washington river protection solutions

Please consider the environment before printing this email

From: Wyse, Eric J
Sent: Thursday, August 19, 2010 12:44 PM
To: Ritenour, Gerald P; Templeton, Andrew M; McKinney, Steve G
Cc: Dunbar, Kathryn J
Subject: RE: SX Barrier, C7192, C7186

I agree. Please 'Y' flag the 3 that were not rerun, as previously agreed. Thanks. -Eric

---

From: Ritenour, Gerald P
Sent: Thursday, August 19, 2010 12:30 PM
To: Templeton, Andrew M; McKinney, Steve G
Cc: Dunbar, Kathryn J; Wyse, Eric J
Subject: RE: SX Barrier, C7192, C7186

All,
Below are the results of the conductivity reanalysis for SX Barrier. I had originally said there were 7 samples in the batch in question, but there were only 6. Also one additional sample did not produce enough digestate to be reanalyzed. Based on these results I do not believe it is necessary to extrude additional sample and perform the reanalysis of the remaining three samples. I believe these can be reported from the original analysis. Let me know is this is acceptable. Thanks, JR

Core	Client Sample ID	Lab Smp No.	Orig (µMHOS/cm)	Rerun (µMHOS/cm)	RPD
C7186	B20733A	S09V001529	357	313	13.13%
C7186	B20735A	S09V001532	339	323	4.83%
C7192	B20751A	S09V001538	638	580	9.52%
C7186	B20737A	S09V001535	251	No sample	NA
C7192	B20753A	S09V001541	3970	No sample	NA
C7192	B20755A	S09V001544	700	No sample	NA

Gerald "JR" Ritenour
Project Manager
ATL International, Inc.
(509) 372-2742 office
(509) 438-8837 cell
gerald_p_ritenour@rl.gov

From: Templeton, Andrew M
Sent: Tuesday, August 17, 2010 4:55 PM
To: McKinney, Steve G
Cc: Ritenour, Gerald P; Dunbar, Kathryn J
Subject: RE: SX Barrier, C7192

Steve,

I agree if the five rerun results agree with the original results for those five samples then report the data from two original runs for the two samples for which no material remains with a "Y" flag (chemist comment flag).

Kathy do you have any concerns?

Thanks

Andrew

From: McKinney, Steve G
Sent: Tuesday, August 17, 2010 10:56 AM
To: Templeton, Andrew M
Cc: Ritenour, Gerald P
Subject: RE: SX Barrier, C7192

The issue JR is referring to below affects seven samples. Five of the samples are being rerun. Two of the samples are depleted. To rerun these would require extrusion of the "B" or "C" liner. The issue is that while the LCS run with the seven samples passed, there is poor documentation of the LCS dilution on the bench sheet.

My recommendation at this late date: report the data from two original runs for the two samples for which no material remains with a "Y" flag (chemist comment flag) provided the five rerun results agree with the original results for those five samples. We would report the five rerun sample results with the results from two original runs two for which no material remains. If, after the reruns, we have reason to suspect the two original runs, we will have no choice but to obtain new sample an rerun them.

Thanks.

From: Ritenour, Gerald P
Sent: Tuesday, August 17, 2010 9:15 AM
To: McKinney, Steve G
Subject: SX Barrier, C7192

Steve,
In reanalyzing the Conductivity for SX barrier we found 2 samples in C7192 (128-130 and 140-142) that were depleted. Do you want to extrude additional sample. The issue was that QC found the bench sheet so confusing that the exact dilution of the standard could not be confirmed. I could probably report the original results with an "a" flag for LCS failure.

Attachment 7

RECEIPT PAPERWORK

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-005-001	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7P	DATA TURNAROUND
White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7156; I-002EB	Direct Push Samples for SX Interim Barrier QC Sample		V09-005		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2	N/A	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

635 mpn 9-2-09

2225 20090377

SPECIAL HANDLING AND/OR STORAGE
64°F 18°C

PRESERVATION	HNO3 to pH <2	Cool~4C	Cool~4C	None	HNO3 to pH <2(ULTREX)	HNO3 to pH <2	Cool~4C	None		
TYPE OF CONTAINER	G/P	G/P	G/P	G/P	Nalgene	G/P	G/P	P		
NO. OF CONTAINER(S)	1	1	1	1	1	1	1	1		
VOLUME	500mL	250mL	500mL	500mL	500mL	500mL	500mL	125mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (2) IN SPECIAL INSTRUCTIONS ✓	2320_ALKALINITY (TF) {Alkalinity} ✓	ALPHA_BETA_LSC (TF) {Gross alpha, Gross beta} ✓	SEE ITEM (3) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (4) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (5) IN SPECIAL INSTRUCTIONS ✓	pH (Water) - 9040 (TF) {pH Measurement} ✓		

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B20766	WATER	8-31-09	1250	✓	✓	✓	✓	✓	✓	✓	✓		
5096001264 to 1271													

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES** 64°F

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	8-31-09 1325	TM Collock	8/31/09 @ 1325

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-005-001	PAGE 2 OF 2
COLLECTOR White	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 7P	**DATA TURNAROUND**
SAMPLING LOCATION C7156; I-002EB	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier QC Sample		**SAF NO.** V09-005	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2	**ACTUAL SAMPLE DEPTH** N/A	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.

(1)ICP Metals - 6010 (SW-846) (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium}

(2)IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}

(3)RADISO_ICPMS (TF) {Americium-241, Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Neptunium-237, Plutonium-239, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238}

(4)GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

(5)Conductivity - 9050 (Tier 1) {Specific Conductance}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-005-003	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7P	DATA TURNAROUND
STAUER, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7186; I-002EB	Direct Push Samples for SX Interim Barrier QC Sample		V09-005		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 P521	N/A	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

33° 1°C

SPECIAL HANDLING AND/OR STORAGE
222S20090635

PRESERVATION	HNO3 to pH <2	Cool~4C	Cool~4C	None	HNO3 to pH <2(ULTREX)	HNO3 to pH <2	Cool~4C	None		
TYPE OF CONTAINER	G/P	G/P	G/P	G/P	Nalgene	G/P	G/P	P		
NO. OF CONTAINER(S)	1	1	1	1	1	1	1	1		
VOLUME	500mL	250mL	500mL	500mL	500mL	500mL	500mL	125mL		
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (2) IN SPECIAL INSTRUCTIONS ✓	2320_ALKALINITY (TF) {Alkalinity} ✓	ALPHA_BETA_LSC (TF) {Gross alpha, Gross beta} ✓	SEE ITEM (3) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (4) IN SPECIAL INSTRUCTIONS ✓	SEE ITEM (5) IN SPECIAL INSTRUCTIONS ✓	pH (Water) - 9040 (TF) {pH Measurement} ✓		

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B20768	WATER	8-12-09	1328	✓	✓	✓	✓	✓	✓	✓	✓		
S09V001204	to S09V001211												

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / Ed Kauer 8-12-09	1400	RLSteele RLSteele 8.12.09	1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-005-003	PAGE 2 OF 2
COLLECTOR Kanel, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 7P	**DATA TURNAROUND**
SAMPLING LOCATION C7186; I-002EB	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier QC Sample		**SAF NO.** V09-005	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 21	**ACTUAL SAMPLE DEPTH** N/A	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.

(1)ICP Metals - 6010 (SW-846) (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium}

(2)IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}

(3)RADISO_ICPMS (TF) {Americium-241, Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Neptunium-237, Plutonium-239, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238}

(4)GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

(5)Conductivity - 9050 (Tier 1) {Specific Conductance}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-001	PAGE 1 OF 1
COLLECTOR: Kauer, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7154; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 PS 82	ACTUAL SAMPLE DEPTH: 74 to 76'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

33° 1°C

SPECIAL HANDLING AND/OR STORAGE
2225CC90372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206P6	SOIL	8-13-09	0945	✓
509V00 1192				
~~1193~~	~~SL~~			
~~1194~~				

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: Ed Kauer, Elizabeth	8-13-09 1400	RECEIVED BY/STORED IN: RHSteele	8-13-09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-002	PAGE 1 OF 2
COLLECTOR: Kauor / Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7154; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 22	ACTUAL SAMPLE DEPTH: 74' to 76'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

33° 1°C

SPECIAL HANDLING AND/OR STORAGE
222S2CC90372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206P7 1437 DPR 9-10-10	SOIL	08-13-09	0945 ✓
SOQU00 1195	A		
1196	B		
1197	C		

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Edward Shelton	8-13-09 1400	R R Steele	8.13.09 1400

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-002	PAGE 2 OF 2
COLLECTOR Rauk Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7154; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** Pg 22 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 74 to 76'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-003	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Kauer, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7154; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 24 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 106' to 108'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

53° 12°C

SPECIAL HANDLING AND/OR STORAGE
222S20090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 ~~22 mL~~ 8-17-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206P8	SOIL	8-18-09	09:20
S09V001234			
~~S09V001235~~ ~~S09V001236~~			
RtHlad			

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Shelleen	8-18-09 1400	RHlad RJSteele	8/18/09 1400

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-004	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Kauer, Rost	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7154; I-002	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 PS 24	106 to 108'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

53' 12°C

SPECIAL HANDLING AND/OR STORAGE

222S2C090372

PRESERVATION	None												
TYPE OF CONTAINER	Liner												
NO. OF CONTAINER(S)	3												
VOLUME	160g												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B206P9	SOIL	8-18-09	0920	✓										
S09V001237														
1238														
1239														

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, Ed Kauer	8-18-09 1400	RHStale RHStale	8-18-09 1400

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-004	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7154; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-563-2 PS24	**ACTUAL SAMPLE DEPTH** 106' to 108'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-007	PAGE 1 OF 1

COLLECTOR: Rust, White	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B; DATA TURNAROUND: 48 Hours / 15 Days
SAMPLING LOCATION: C7156; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 p27	ACTUAL SAMPLE DEPTH: 92-94 feet	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222SQ0090372

SPECIAL HANDLING AND/OR STORAGE
29°F -2°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R2	SOIL	8-31-09	0915	✓
509V001258				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

29°F

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust	Coula-8-31-09 1325	Tu Collach	8/31/09 @ 1325

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-008	PAGE 1 OF 2
COLLECTOR: Rust, Lewis	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7156; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 27	ACTUAL SAMPLE DEPTH: 92-94 feet	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

22252009 0372

SPECIAL HANDLING AND/OR STORAGE
-2°C 29°F

PRESERVATION	None											
TYPE OF CONTAINER	Liner											
NO. OF CONTAINER(S)	3											
VOLUME	160g											
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS											

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206R3	SOIL	8-31-09	0915
S09V001261	liner A		
1262	liner B		
1263	liner C		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust / Lewis Rodeen	8-31-09	T McCollock	8/31/09 @ 1325
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-008	PAGE 2 OF 2
COLLECTOR Rust, White	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7156; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N- 503-2 pg 27	**ACTUAL SAMPLE DEPTH** 92-94 feet	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-009	PAGE 1 OF 1
COLLECTOR: Rust, White	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7156; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 p28	ACTUAL SAMPLE DEPTH: 126-128	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222S20090372

SPECIAL HANDLING AND/OR STORAGE: 54° 12°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R4	SOIL	9-1-09	0850	✓
S09W001272				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust / Cooler	9-1-09 1410	TM Stock	9-1-09 @ 1410

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-010	PAGE 1 OF 2
COLLECTOR: Rust, White	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7156; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 p 28	ACTUAL SAMPLE DEPTH: 126-128	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222S20090372

SPECIAL HANDLING AND/OR STORAGE
12°C 54°

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R5	SOIL	9-1-09	08:50	✓
S09V001275	Liner A			
1276	Liner B			
1277	Liner C			

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust [signature]	9/1/09 1410	TM Collach [signature]	9-1-09 @ 1410

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-010	PAGE 2 OF 2
COLLECTOR Rust, White	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7156; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HMF-N-503-2 p28	**ACTUAL SAMPLE DEPTH** 126-128	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-011	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rust, White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7156; I-003	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2, p28	140 - 142 feet	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222S20090372

SPECIAL HANDLING AND/OR STORAGE
12°C 54°

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R6	SOIL	9-1-09	13:30	✓
S09V001278				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust / Cooler 9-1-09	1410	Tim Collock	9-1-09 @ 1410

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-012	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rust, White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7156; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 p28	140 - 142 feet	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222S20090372

SPECIAL HANDLING AND/OR STORAGE
12°C 54°

PRESERVATION	None												
TYPE OF CONTAINER	Liner												
NO. OF CONTAINER(S)	3												
VOLUME	160g												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R7	SOIL	9-1-09	13:30	✓
S09V001281	Liner A			
1282	Liner B			
1283	Liner C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust / Cooler	9-1-09 1410	TW Gilbert	9-1-09 @ 1410
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-012	PAGE 2 OF 2
COLLECTOR Rust, White	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P **AIR QUALITY** ☐	**DATA TURNAROUND** **75 Days / 75 Days**
SAMPLING LOCATION C7156; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-NF-503-2, p28	**ACTUAL SAMPLE DEPTH** 140-142	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-013	PAGE 1 OF 1
COLLECTOR: KAUER, RUST	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7158; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 25	ACTUAL SAMPLE DEPTH: 87' to 89'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

7°C 44°

SPECIAL HANDLING AND/OR STORAGE: 20090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500ml~~ 125ml 8-19-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R8	SOIL	8-20-09	1200	✓
509V00 1240				

CHAIN OF POSSESSION	SIGN/ PRINT NAMES
RELINQUISHED BY/REMOVED FROM: Ed Kauer / Ed Kauer DATE/TIME: 8-20-09 1400	RECEIVED BY/STORED IN: R Stegle / R Stegle DATE/TIME: 8.20.09 1400
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME
RELINQUISHED BY/REMOVED FROM DATE/TIME	RECEIVED BY/STORED IN DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 ml bottle~~. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-014	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Kauer, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7158; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** PE 25	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2	87' to 89'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

7°C 44°C

SPECIAL HANDLING AND/OR STORAGE

20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206R9	SOIL	8-26-09	1200	✓
509VC0 1243	A			
↓ 1244	B			
↓ 1245	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/ 8-20-09	1400	R Stegele	8.20.09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-014	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P **AIR QUALITY** ☐	**DATA TURNAROUND** **75 Days / 75 Days**
SAMPLING LOCATION C7158; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** Pg 25 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 87' to 89'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-015	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rust, White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7158; I-002	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 pg 26	124-126	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

-28°C 31.5°

SPECIAL HANDLING AND/OR STORAGE
222S20090012 372 DPN 8/25/09

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL 1/2 8-250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206T0	SOIL	8-25-09	0850	✓
S09V001246				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Greg Rust [signature] cooler	8-25-09 1420	TM Collect [signature]	8/25/09 1420

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-016	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rost, W Mik	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7158; I-002	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2, p.26	124-126	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

-.28°C 31.50

SPECIAL HANDLING AND/OR STORAGE
22252009037 2

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206T1	SOIL	8-25-09	0850	✓
S09V001249	A			
1250	B			
1251	C			

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
sterilized Cooler	8-25-09 1420	TM Gilock	8/25/09@1420

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-016	PAGE 2 OF 2
COLLECTOR Rust, White	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7158; I-002	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-Zp26	ACTUAL SAMPLE DEPTH 124-126	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-017	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rust, White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7158; I-003	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	P26 HNF-N-503-2	141-143 feet	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)
-.28°C 31.5°

SPECIAL HANDLING AND/OR STORAGE
222S20090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206T2	SOIL	8-25-09	12:10
S09W001252			

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Shane Rust Cooler 8-25-09	1420	TM Gilloch	8/25/09 1420

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-018	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rust, White	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7158; I-003	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 p 26	141-143 feet	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

-.28°C 31.5°

SPECIAL HANDLING AND/OR STORAGE
222S20090372

PRESERVATION	None											
TYPE OF CONTAINER	Liner											
NO. OF CONTAINER(S)	3											
VOLUME	160g											
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS											

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B206T3	SOIL	8-25-09	12:10	✓									
S09001255	A												
56	B												
57	C												

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust [signature] Lab Ops 8-25-09	1420	Tim Gollock [signature]	8/25/09 1420
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-018	PAGE 2 OF 2
COLLECTOR Rust White	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7158; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2p26	**ACTUAL SAMPLE DEPTH** 141 . 143 feet	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-043	PAGE 1 OF 1
COLLECTOR: Rosane	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7168; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: MNF-W-503-2 pg 13	ACTUAL SAMPLE DEPTH: 81'-83'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

4.5°C 40°

SPECIAL HANDLING AND/OR STORAGE
ZE090H 372 4D

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206W8	SOIL	7-2-09	0940	✓
509V000812				
↓				
816				
8167	DPR 7/06/09			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-2-09 / 1145	RtStGolG RtStGolG	7.2.09 1145
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-044	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosawe	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7168; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2-pg13	81'-83'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

4.5°C 40°

SPECIAL HANDLING AND/OR STORAGE

20090372 HD Ref

PRESERVATION	None												
TYPE OF CONTAINER	Liner												
NO. OF CONTAINER(S)	3												
VOLUME	160g												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B206W9	SOIL	7-2-09	0940	✓										
S09V000 813 A														
814 B														
815 C														

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosawe Larry Rosawe	7-2-09/ 1145	RHSteele RHSteele	7.2.09 1145
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-044	PAGE 2 OF 2
COLLECTOR ROSANE	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P	DATA TURNAROUND
SAMPLING LOCATION C7168; I-001	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 13	ACTUAL SAMPLE DEPTH 81'-83'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-045	PAGE 1 OF 1
COLLECTOR: Rosawg, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7168; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 14	ACTUAL SAMPLE DEPTH: 129-131'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

6.6°C 44°

SPECIAL HANDLING AND/OR STORAGE

2009 0372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL JJR 7-9-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X0	SOIL	7-7-09	1004	✓
S09V000818				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosawg Larry Rosawg	7-7-09 1435	Richard R Steele	7.7.09 1435

SPECIAL INSTRUCTIONS

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(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-046	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7168; I-002	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-505-2 pg 14	129'-131'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)
6.6°C 44°
2C090372

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X1	SOIL	7-7-09	1004	✓
509U000819	A			
820	B			
821	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-7-09/1435	Rhetal R Steele	7-7-09 1435
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-046	PAGE 2 OF 2
COLLECTOR Rosane Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7168; I-002	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-505-2 pg 14	ACTUAL SAMPLE DEPTH 129'-131'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-047	PAGE 1 OF 1
COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7168; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 14	ACTUAL SAMPLE DEPTH: 145'-147'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
6.6°C 440

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL JAL 7-7-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X2	SOIL	7-7-09	1402	✓
S09VCC0824				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne	7-7-09 / 1435	RASteele RASteele	7-7-09 1435
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-048	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7168; I-003	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 pg 14	145' - 147'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

6.6°C 44°

SPECIAL HANDLING AND/OR STORAGE

20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206X3	SOIL	7-7-09	1402
S09V000825	A		
826	B		
827	C		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-7-09 1435	RTHeele RTHeele	7-7-09 1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-048	PAGE 2 OF 2
COLLECTOR Rosane Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7168; I-003	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-W-503-2 pg 14	ACTUAL SAMPLE DEPTH 145'-147'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-049	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rosanne	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7170; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 10	81.5-83.5'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

4.4°C

SPECIAL HANDLING AND/OR STORAGE
20090372 40°

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 mL SAK 6-26-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X4	SOIL	6-26-09	1040	✓
509V000788				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Roanne Larry Roanne	6-26-09/1230	RL Stecle RL Stecle	6-26-09 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-050	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosanne	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7170; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg10	81.5- 83.5	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

4.4°C

SPECIAL HANDLING AND/OR STORAGE
2009 0372 46°F

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206X5	SOIL	6-26-09	1040
S09V000789	Liner A		
790	Liner B		
791	Liner C		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne, Larry Rosanne	6-26-09 1230	RJSteele RJSteele	6.26.09 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-050	PAGE 2 OF 2
COLLECTOR ROSANE	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7170; I-001	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 10	ACTUAL SAMPLE DEPTH 81.5'-83.5'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-051	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rosanne, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7170; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 11	113'-115'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

1.1°C 34°

SPECIAL HANDLING AND/OR STORAGE

20090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 mL JJR 6-29-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X6	SOIL	6-29-09	1105	✓
S09~~00~~000794				
AT GIW 6/30/09				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne	6-29-09/ 1400	RtSteele RtSteele	6.29.09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. JJR 6-29-09
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-052	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7170; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg11	113-115'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

1.1°C 34°

SPECIAL HANDLING AND/OR STORAGE
2009372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X7	SOIL	6-29-09	1105	✓
SC9V000 795	A			
796	B			
797	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane / Larry Rosane 6-29-09	1400	RK/GCL	6-29-09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-052	PAGE 2 OF 2
COLLECTOR Rosane Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7170; I-002	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 11	ACTUAL SAMPLE DEPTH 113'-115'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-053	PAGE 1 OF 1
COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7170; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 12	ACTUAL SAMPLE DEPTH: ~~135-137~~ 133-135 bgs 813kg per client	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE: 8.3°C 47°

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL 6-30-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B206X8	SOIL	6-30-09	0842
S09V000800			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne	6-30-09 1450	RtSteele RtSteele	6-30-09 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.

(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-054	PAGE 1 OF 2

COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P; DATA TURNAROUND: 75 Days / 75 Days
SAMPLING LOCATION: C7170; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 12	ACTUAL SAMPLE DEPTH: ~~135-139'~~ 133'-135' appr 8/13/09 per client	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

8.3C 47C

SPECIAL HANDLING AND/OR STORAGE

20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206X9	SOIL	6-30-09	0842	✓
509U000 301	Liner A			
302	Liner B			
303	Liner C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne 6-30-09	1450	RHStel RHSteele 6-30-09	1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-054	PAGE 2 OF 2
COLLECTOR Rosane, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7170; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 12	**ACTUAL SAMPLE DEPTH** 135-137'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-173	PAGE 1 OF 1
COLLECTOR: Rosane Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7170; I-004	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 12	ACTUAL SAMPLE DEPTH: 150'-152'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

47

2009 0372

SPECIAL HANDLING AND/OR STORAGE: 8.3°C

PRESERVATION	Cool~4C												
TYPE OF CONTAINER	G/P												
NO. OF CONTAINER(S)	1												
VOLUME	~~500mL~~ 125 mL SJR 6-30-09												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20H47	SOIL	6-30-09	1220	✓
S09V000806				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-30-09/ 1450	RKSteele RKSteele	6.30.09 1450

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-174	PAGE 1 OF 2
COLLECTOR: Rosane, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7170; I-004	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-W-503-2 pg 12	ACTUAL SAMPLE DEPTH: 150' - 152'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

47°

SPECIAL HANDLING AND/OR STORAGE: 8.3°C

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B20H48	SOIL	6-30-09	1220
509V000807 Liner A			
509V000808 Liner B			
509V000809 Liner C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-30-09 1450	RHSteele RHSteele	6-30-09 1450
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-174	PAGE 2 OF 2
COLLECTOR Rosanne Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7170; I-004	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HWF-W-503 pg 12	ACTUAL SAMPLE DEPTH 150-152'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-055	PAGE 1 OF 1
COLLECTOR: Kauer, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7172; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 (Pg 1)	ACTUAL SAMPLE DEPTH: 46' to 48'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE

Lot #

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 027994

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206Y0	SOIL	5-20-09	0905	✓
S09V000511				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	5-20-09 1545	TM Collock / [signature]	5-20-09 1545

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-056	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
KAUER, RUST	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7172; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 1	46' to 48'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
3206Y1	SOIL	5-20-09	0905	✓
S09V000514				
S09V000515				
S09V000516				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	5-20-09 1545	Tim Glock [signature]	5-20-09 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-056	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7172; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 PS1	**ACTUAL SAMPLE DEPTH** 46' to 48'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-057	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
KAUER, RUST, ROSANE	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7172; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 PS 1	75.5 to 77.5	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 250 mL 5-20-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
3206Y2	SOIL	5-20-09	1450	✓
S09V000517				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / Rosane Rust	5-20-09 1545	Tim Gollach	5-20-09 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-058	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
KAUER, Rust, Rosane	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7172; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 1	75.5 to 77.5'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
3206Y3	SOIL	5-20-09	1450
S09V000520			
S09V000521			
S09V000522			
522			

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / Ed Kauer	5-20-09 1545	TM Gilbert / TM Gilbert	5-20-09 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-058	PAGE 2 OF 2
COLLECTOR Kauzlarich, Rust, Rosane.	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7172; I-002	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. Pg 1 HNF-N-503-2	ACTUAL SAMPLE DEPTH 75.5 to 77.5	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-059	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
KAUER, ROSANE	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7172; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 B2	98.5' to 99.5'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
20090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B206Y4	SOIL	5-26-09	0945	✓
S09V000668				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
a Kauer / [signature]	5-26-09 1545	T Hollock / [signature]	5-26-09 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-060	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
KAUER, ROSANE	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7172; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 Pg 2	97.5 to 99.5	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	Liner	250mL
NO. OF CONTAINER(S)	2 / 5-26-09	2
VOLUME	160g	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	See Item (1) in special Instruction

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
3206Y5	SOIL	5-26-09	0545	✓	✓								
509V000 671-A													
672-B													
673-C													

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R. Kauer / [signature]	5-26-09 1545	T. Mollock [signature]	5-26-09 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-060	PAGE 2 OF 2
COLLECTOR Kauer, Rosanne	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7172; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** Pg 2 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 97.5 to 99.5'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-177	PAGE 1 OF 1
COLLECTOR: Rosane Rost	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7172; ~~I-006~~ I-004 DPR 6-15-10	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg2	ACTUAL SAMPLE DEPTH: 126 - 128'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
2009 0372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 mL DPR 5-26-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B20H51	SOIL	5-26-09	1455
S09V000 674			

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	5-26-09/1545	T McCollock	5-26-09 1545

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-178	PAGE 1 OF 2
COLLECTOR: Rosane Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7172; ~~I006~~ ~~I003~~ DPK 6-18-6	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	75 Days / 75 Days
ICE CHEST NO.: I004	FIELD LOGBOOK NO.: HNF-N-503-2 pg 2	ACTUAL SAMPLE DEPTH: 126-128'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20H52	SOIL	5-26-09	1455	✓
S09V000 677-A				
678-B				
679-C				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	5-26-09/1545	TM Collock	5-26-09 1545

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-178	PAGE 2 OF 2
COLLECTOR Rosane Rost	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7172; ~~I-006~~ I-004 6-18-10	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503 Rev2	**ACTUAL SAMPLE DEPTH** 126-128'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-073	PAGE 1 OF 1
COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7178; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HWF-W-503-2 pg3	ACTUAL SAMPLE DEPTH: 89'-91'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

13.3C 56

SPECIAL HANDLING AND/OR STORAGE
2009372

PRESERVATION	Cool~4C	56°		
TYPE OF CONTAINER	G/P			
NO. OF CONTAINER(S)	1			
VOLUME	~~500~~mL 125mL EA 6-2-09			
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
320708	SOIL	6-2-09	0956	✓
S09V000 686	Frg #2			

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-2-09 1045	RJSteele RJSteele	6.2.09 1045

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-074	PAGE 1 OF 2
COLLECTOR: Rosane, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7178; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 p93	ACTUAL SAMPLE DEPTH: 89'-91'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

13.3°C 56'

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
320709	SOIL	6-2-09	0956	✓
509V000 6F1	A			
6F2	B			Frg #2
↓ 683	C			Frg #3

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-2-09/1045	Allen Ristede	6-2-09 1045
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-074	PAGE 2 OF 2
COLLECTOR Rosane Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7178; I-001	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-W-503-2 pg 3	ACTUAL SAMPLE DEPTH 89'-91'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-075	PAGE 1 OF 1
COLLECTOR: KAUER, ~~[illegible]~~ Ed; ROSANE	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7178; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 4	ACTUAL SAMPLE DEPTH: 127' to 129'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

Q0090372

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL 6-6-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20710	SOIL	06-09-09	1345	✓
SQA V00710				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: Ed KAUER	DATE/TIME: 6-9-09 1430	RECEIVED BY/STORED IN: RL [illegible]	DATE/TIME: 6-9-09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-076	PAGE 1 OF 2
COLLECTOR: KAUER, ~~White~~ Ed Rosine 6-9-09	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND: 75 Days / 75 Days
SAMPLING LOCATION: C7178; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 4	ACTUAL SAMPLE DEPTH: 127' to 129'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20711	SOIL	06-09-09	1345	✓
S09V000711				
712				
713				

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	6-9-09 1436	[illegible]	6-9-09 1436
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-076	PAGE 2 OF 2
COLLECTOR KANGL, ~~[illegible]~~ Rosanne	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P **AIR QUALITY** ☐	**DATA TURNAROUND** **75 Days / 75 Days**
SAMPLING LOCATION C7178; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 Pg 4	**ACTUAL SAMPLE DEPTH** 123' to 124'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-077	PAGE 1 OF 1
COLLECTOR: Rosane, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7178; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 6	ACTUAL SAMPLE DEPTH: 151' - 153'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

9.4°C 49°

SPECIAL HANDLING AND/OR STORAGE: 2C090372

PRESERVATION	Cool-4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 mL ea 62.5g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20712	SOIL	6-10-09	1100	✓
S09V000716				
↓				
720, 721				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane 6-10-09	1400	R Steele R Steele	6-10-09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.

(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Fax sent by : 5093737334 CORR BC 222S 06-17-09 09:33 Pg: 2/2

Fax sent by : 5093737334 CORR BC 222S 06-17-09 09:34 Pg: 1/3

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-078	PAGE 1 OF 2
COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7178; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 6	ACTUAL SAMPLE DEPTH: 151'-153'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20713	SOIL	6-10-09	1100	✓
S09V000 717	Liner A			
718	Liner B			
719	Liner C			

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne 6-10-09	1400	RRTook RRTook/G	6-10-09 1400

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-078	PAGE 2 OF 2
COLLECTOR Rosanne Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE BP AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7178; I-003	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 6	ACTUAL SAMPLE DEPTH 151' - 153'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) (Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium) 6010M_ICP_WE (TF) (Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium) IC Anions - 9056 (Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate) ALPHA_BETA_LSC_AE (TF) (Gross alpha, Gross beta) ALPHA_BETA_LSC_WE (TF) (Gross alpha, Gross beta) RADISO_ICPMS_ASTM_AE (Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238) RADISO_ICPMS_WE (TF) (Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238) GAMMA ENERGY ANALYSIS (Tier 1) (Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155) Conductivity - 9050 (Tier 1) (Specific Conductance) Percent Solids (TF) (Percent Solids) Percent Water (TF) (Percent moisture (wet sample)) pH (Soil) - 9045 (Tier 1) (pH Measurement)

A-6003-618(01/06)

Fax sent by : 5053737334 CORR BC 222S 06-17-09 09:34 Pg: 2/3

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-079	PAGE 1 OF 1

COLLECTOR Rosanne Rust Kauer	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 2B; **DATA TURNAROUND**
SAMPLING LOCATION C7180; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐; **48 Hours / 15 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 7	**ACTUAL SAMPLE DEPTH** ~~86'~~ to ~~88'~~ 93 - 95	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

Q0090372

SPECIAL HANDLING AND/OR STORAGE
43° 6.1°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20714	SOIL	6-18-09	1327	✓
S09V000764				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	6-18-09 1430	[illegible]	6.18.09 1430

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-080	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosanne Rust Kauer	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7180; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
~~Rosanne Rust Kauer~~ 6-16-09	HNF-N-503-2 pg 7	~~86'~~ to ~~88'~~ 93'-95'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

Q0090372

SPECIAL HANDLING AND/OR STORAGE
6.1°C 43°

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20715	SOIL	6-16-09	1327	✓
~~S09V000765~~	A			
S09V000766	B			
S09V000767	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	6-18-09 1430	RASTEELE	6-18-09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-080	PAGE 2 OF 2
COLLECTOR Rosane Rust Kauer	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7180; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 7	**ACTUAL SAMPLE DEPTH** 93'-95'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-081	PAGE 1 OF 1
COLLECTOR: Rosane	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7180; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 8	ACTUAL SAMPLE DEPTH: 104'-106'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
340 1.1°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 mL 6/18/09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20716	SOIL	6-19-09	0930	✓
509V000770				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-19-09/1445	TM Collock	6-19-09 1445

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. 6-19-09
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-082	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7180; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 8	~~106~~ 104' - 106'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
34° 1.1°C

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20717	SOIL	6-19-09	0930	✓
S09V000 771	A			
S09V000 772	B			
S09V000 773	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-19-09/ 1445	TM Collard	6-19-09 1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-082	PAGE 2 OF 2
COLLECTOR ROSANE	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7180; I-002	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 8	ACTUAL SAMPLE DEPTH 104' - 106'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-083	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
ROSANE	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7180; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 8	127'-129'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
75° 23.8°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20718	SOIL	6-19-09	1410	✓
S09V000776				
~~S09V000~~ DPR				
~~S09V000~~ 6/22/09				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-19-09/1445	TM Tillock TM Tillock	6-19-09 1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-084	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7180; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 8	127'-129'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
83° 28.3°C

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20719	SOIL	6-19-09	1410	✓
S09V000 777	A			
S09V000 778	B			
S09V000 779	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-19-09 1445	TM Collock	6-19-09 1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-084	PAGE 2 OF 2
COLLECTOR Rosanne	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7180; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 8	**ACTUAL SAMPLE DEPTH** 127' - 129'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-193	PAGE 1 OF 1
COLLECTOR: Rosane Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7180; I-004	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 9	ACTUAL SAMPLE DEPTH: 152'-154'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
42° 5.5°C

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL 3142 6-22-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20H67	SOIL	6-22-09	1310	✓
5890000782				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane 6-22-09	1430	RRStede RRStede	6-22-09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-194	PAGE 1 OF 2

COLLECTOR: Rosanne Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P
SAMPLING LOCATION: C7180; I-004	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg9	ACTUAL SAMPLE DEPTH: 152'-154'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 75 Days / 75 Days

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE: 5.5°C 42°

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20H68	SOIL	6-22-09	1310	✓
S09V000783	A			
S09V000784	B			
S09V000785	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane 6-22-09	1430	RHHodge RHHodge	6.22.09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-194	PAGE 2 OF 2
COLLECTOR ROSANE, Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P AIR QUALITY ☐	DATA TURNAROUND 75 Days / 75 Days
SAMPLING LOCATION C7180; I-004	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 9	ACTUAL SAMPLE DEPTH 152'-154'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-092	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
KAUR, RUST, ROSAUE	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7184; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** 8917	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2	83' to 85'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
222S20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	2 8-3-09
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20727	SOIL	8-3-09	0945	✓
509V000941	(A)			
509V000942	(B)			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaur / [signature]	8-3-09 1400	[signature] / RISTEALE	8-3-09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

No Shoe Received

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-092	PAGE 2 OF 2
COLLECTOR Kauer, Rust, Rosane	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7184; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** 8717 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 83' to 85'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-093	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Kauer, Rust, Rosaove	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7184; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 P517	104 to 106	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
20090372
222S ~~DS400~~ GPR 8/11/09

PRESERVATION	Cool~4C												
TYPE OF CONTAINER	G/P												
NO. OF CONTAINER(S)	1												
VOLUME	~~500mL~~ 125												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
320728	SOIL	8-3-09	1200
S09V000945			

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	8-3-09 1400	[signature] RJSteele	8-3-09 1400

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-094	PAGE 1 OF 2

COLLECTOR Kauer, Rust, Rosane	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P; **DATA TURNAROUND**
SAMPLING LOCATION C7184; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐; **75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 Pg 17	**ACTUAL SAMPLE DEPTH** 104' to 106'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
222S20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
320729	SOIL	8-3-09	12:00
S09V000946	(A)		
947	(B)		
948	(C)		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [signature]	8-3-09	R H Steele / RHSteele	8.3.09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-094	PAGE 2 OF 2
COLLECTOR Kauer, Rust, Rosane	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7184; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS17 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 104' to 106'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-095	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Kauer, Rust, Rosane	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7184; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 Pg 18	128.5 to 130.5	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE
22252C090372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20730	SOIL	8-4-09	10:50	✓
S09U001001				
↓				
1005				
1006				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / Edward Kauer	8-4-09 1500	R A Stelle / R A Stelle	8.4.09 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-096	PAGE 1 OF 2
COLLECTOR: Kauch, Rust, Rosane	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND: 75 Days / 75 Days
SAMPLING LOCATION: C7184; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 18	ACTUAL SAMPLE DEPTH: 128.5 to 130.5	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE: 222S ZCC90572

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20731	SOIL	8-4-09	10:50	✓
SCQV001002				
↓ 1003				
↓ 1004				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauch / [illegible]	8-4-09 1500	[illegible] / RH Steele	8-4-09 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS: SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-096	PAGE 2 OF 2
COLLECTOR Kaus, Rost, Rosame	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7184; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 Pg 18	**ACTUAL SAMPLE DEPTH** 128.5 to 130.5	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-201	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
KAUSR, Rost	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7184; I-004	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 PG 19	141' to 143'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

31° - 0.5°C

SPECIAL HANDLING AND/OR STORAGE
222S 20090372 ~~20090372~~ 8/10/09

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B20VK6	SOIL	8-10-09	0910
509 Vod 1037			

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kausr, Edward	8-10-09 1330	RHSteele RHSteele	8-10-09 1330

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-202	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Kauer, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7184; I-004	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 PS19	141' to 143'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

31° -0.5°C

SPECIAL HANDLING AND/OR STORAGE

2225 2009 0372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B20VK7	SOIL	8-10-09	0910
S09U00 1040	A		
1041	B		
1042	C		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer, [illegible]	8-10-09 1330	[illegible] R/Steele	8/10/09 1330
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
All 3 Liners Full

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-202	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P **AIR QUALITY** ☐	**DATA TURNAROUND** 75 Days / 75 Days
SAMPLING LOCATION C7184; I-004	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.** 85 15 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 141' to 143'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-097	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Kanen, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7186; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 Pg 20	105 to 107'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

-2.2°C 2°

SPECIAL HANDLING AND/OR STORAGE

20090372

PRESERVATION	Cool~4C												
TYPE OF CONTAINER	G/P												
NO. OF CONTAINER(S)	1												
VOLUME	~~500mL~~ ~~250mL~~ EK 8-12-09	125mL											
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20732	SOIL	8-12-09	1030	✓
509V001183				
1184				
1185				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kanen/ 8-12-09	1100	RHLab RS/Cole	8-12-09 1100
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-098	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7186; I-001	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS 20 HNF-N-507-2	**ACTUAL SAMPLE DEPTH** 105' to 107'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-098	PAGE 1 OF 2
COLLECTOR: Kauer Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND
SAMPLING LOCATION: C7186; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 Pg 20	ACTUAL SAMPLE DEPTH: 105' to 107'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

-2.2°C 28

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None											
TYPE OF CONTAINER	Liner											
NO. OF CONTAINER(S)	3											
VOLUME	160g											
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS											

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B20733	SOIL	8-12-09	1030	✓									
S09V000 1186	A												
1187	B												
1188	C												

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer / [illegible] 8-12-09	1100	RA Steele	8-12-09 1100
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-099	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
KAUER RUST	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7186; I-002	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 Pg 22	128' to 130'	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

35° 0.5°C

SPECIAL HANDLING AND/OR STORAGE

2C090607

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20734	SOIL	08-13-09	1000	✓
5C9V001198				

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	8-13-09 1400	RF Klein KKSteele	8.13.09 1400

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-100	PAGE 1 OF 2

COLLECTOR Knoll, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL
PRICE CODE 8P	**DATA TURNAROUND** 75 Days / 75 Days	**AIR QUALITY** ☐	
SAMPLING LOCATION C7186; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier	**SAF NO.** V09-004	
ICE CHEST NO.	**FIELD LOGBOOK NO.** PS22 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 128' to 130'	**COA** 301483ES10
METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A	**BILL OF LADING/AIR BILL NO.** N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

0.5°C 33°

SPECIAL HANDLING AND/OR STORAGE

20090607

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20735	SOIL	08-13-09	10 00	✓
509V00 1201	A			
1202	B			
1203	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Knoll, [illegible]	8-13-09 1400	[illegible] RHEagle	8.13.09 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-100	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7186; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** Pg 22 1/NF-N-503-2	**ACTUAL SAMPLE DEPTH** 128' to 130'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-101	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
KAUER RUST	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7186; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 Pg 23	145 to 147'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

45° 6.1°C

SPECIAL HANDLING AND/OR STORAGE

222S20GR0372

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL 8-17-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20736	SOIL	8-17-09	0905	✓
S09V00 12/8				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/ 8-17-09	1430	R Stele R/Steele	8-17-09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a ~~500 mL~~ 125 mL 8-17-09 bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-102	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Kruse, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7186; I-003	Direct Push Samples for SX Interim Barrier	V09-004

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-503-2 Pg 23	145 to 147	301483ES10	GOVERNMENT VEHICLE

SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.
222-S Lab Operations	N/A	N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

43° 6.1°C

SPECIAL HANDLING AND/OR STORAGE
2225200 90372

PRESERVATION	None												
TYPE OF CONTAINER	Liner												
NO. OF CONTAINER(S)	3												
VOLUME	160g												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B20737	SOIL	8-17-09	0905	✓										
Soil Rods 1221														
1222														
1223														

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kruse, [signature]	8-17-09 1430	[signature] RA Steele	8.17.09 1430
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-102	PAGE 2 OF 2
COLLECTOR Kauer, Rust	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7186; I-003	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** Pg 23 HNF-N-503-2	**ACTUAL SAMPLE DEPTH** 145 to 147	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-115	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 2B	DATA TURNAROUND
Rosane, Rust	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	48 Hours / 15 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7192; I-001	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	MNF-N-503-2 pg 15	100'-102'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

222S20090372

SPECIAL HANDLING AND/OR STORAGE
65° 18.3°C

PRESERVATION	Cool~4C												
TYPE OF CONTAINER	G/P												
NO. OF CONTAINER(S)	1												
VOLUME	~~500mL~~ 1/2 125mL 7-9-09												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B20750	SOIL	7-9-09	1315	✓									
S09V000830													

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-9-09 / 1440	Rhda Rhtede	7-9-09 1440
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-116	PAGE 1 OF 2
COLLECTOR: Rosane, Rust	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8P	DATA TURNAROUND: 75 Days / 75 Days
SAMPLING LOCATION: C7192; I-001	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 15	ACTUAL SAMPLE DEPTH: 100' - 102'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE: 2C090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20751 831	SOIL MPR 9/5/10	7-9-09	1315	✓
509V000836	A			
832	B			
X 833	C			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-9-09 / 1445	R R Steele R R Steele	7-9-09 1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-116	PAGE 2 OF 2
COLLECTOR Rosane Rust	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P	DATA TURNAROUND
SAMPLING LOCATION C7192; I-001	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 15	ACTUAL SAMPLE DEPTH 100' - 102'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-117	PAGE 1 OF 1
COLLECTOR: Rosane	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B	DATA TURNAROUND
SAMPLING LOCATION: C7192; I-002	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	AIR QUALITY ☐	48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 16	ACTUAL SAMPLE DEPTH: 128'-130'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

GRP# 20090372

SPECIAL HANDLING AND/OR STORAGE: 8.8°C 48'

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125 ml JR 7-27-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20752	SOIL	7-27-09	0945	✓
509V000836				
↓				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-27-09/ 14:15	R.R. Steele R.R. Steele	7-27-09 1415

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.

(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-118	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosawe	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7192; I-002	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 16	128'-130'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

8.8°C 48°

SPECIAL HANDLING AND/OR STORAGE
20090372

PRESERVATION	None
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	3
VOLUME	160g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20753	SOIL	7-27-09	0945	✓
S09V000 837				
838				
839				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosawe Larry Rosawe	7-27-09 1415	RHHarle RHHarle	7-27-09 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-118	PAGE 2 OF 2
COLLECTOR Rosane	**COMPANY CONTACT** CONNELLY, MP	**TELEPHONE NO.** 373-3981	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8P	**DATA TURNAROUND**
SAMPLING LOCATION C7192; I-002	**PROJECT DESIGNATION** Direct Push Samples for SX Interim Barrier		**SAF NO.** V09-004	**AIR QUALITY** ☐	**75 Days / 75 Days**
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-503-2 pg 16	**ACTUAL SAMPLE DEPTH** 128-130'	**COA** 301483ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-119	PAGE 1 OF 1

COLLECTOR: Rosanne	COMPANY CONTACT: CONNELLY, MP	TELEPHONE NO.: 373-3981	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 2B AIR QUALITY: ☐
SAMPLING LOCATION: C7192; I-003	PROJECT DESIGNATION: Direct Push Samples for SX Interim Barrier		SAF NO.: V09-004	DATA TURNAROUND: 48 Hours / 15 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-503-2 pg 16	ACTUAL SAMPLE DEPTH: 140' - 142'	COA: 301483ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: 222-S Lab Operations	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

20090372

SPECIAL HANDLING AND/OR STORAGE
14.4°C 58°

PRESERVATION	Cool~4C
TYPE OF CONTAINER	G/P
NO. OF CONTAINER(S)	1
VOLUME	~~500mL~~ 125mL JLR 7-27-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B20754	SOIL	7-27-09	1250	✓
S09V000842				

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosanne Larry Rosanne	7-27-09/1415	RASteele RASteele	7.27.09 1415

SPECIAL INSTRUCTIONS
There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory with even number samples being "Quick Turn Samples". Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material.
(1)2320_ALKALINITY (TF) {Alkalinity} RADISO_ICPMS_WE (TF) {Technetium-99} IC Anions - 9056 (Tier 1) {Nitrate}

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	V09-004-120	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8P	DATA TURNAROUND
Rosane	CONNELLY, MP	373-3981	WIDRIG, DL	AIR QUALITY ☐	75 Days / 75 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7192; I-003	Direct Push Samples for SX Interim Barrier		V09-004		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-503-2 pg 16	140'-142'	301483ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
222-S Lab Operations	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

59°

2009872

SPECIAL HANDLING AND/OR STORAGE

14.4°C

PRESERVATION	None												
TYPE OF CONTAINER	Liner												
NO. OF CONTAINER(S)	3												
VOLUME	160g												
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B20755	SOIL	7-27-09	1250	✓									
Sample 843													
844													
845													

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	7-27-09 / 14:15	Robert Blake	7-27-09 1415
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

RPP-RPT-47008 Rev.0

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			V09-004-120	PAGE 2 OF 2
COLLECTOR Rosawe	COMPANY CONTACT CONNELLY, MP	TELEPHONE NO. 373-3981	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8P	DATA TURNAROUND
SAMPLING LOCATION C7192; I-003	PROJECT DESIGNATION Direct Push Samples for SX Interim Barrier		SAF NO. V09-004	AIR QUALITY ☐	75 Days / 75 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-503-2 pg 16	ACTUAL SAMPLE DEPTH 140'-142'	COA 301483ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO 222-S Lab Operations	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

There are 21 sampling sites at each sampling site there will be 3 vertical samples taken. At each vertical samples, there is a "Quick Turn" Sample that only has Alkalinity, Nitrate and Tc-99 Analysis due 48 hours after sample is received by laboratory. Furthermore, the quick turn sample is taken from the drive shoe and placed in a 500 mL bottle. The Tier 1 analysis due 90 calendar days after last sample in group is taken. The tier 1 analysis is taken from Liner A, with the other liners held in reserve for additional sample material. Tier 1 Samples are odd-numbered samples
(1)6010M_ICP_AE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} 6010M_ICP_WE (TF) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Rhenium, Selenium, Silicon, Silver, Sodium, Strontium, Sulfur, Thallium, Tin, Titanium, Uranium, Vanadium, Yttrium, Zinc, Zirconium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate} ALPHA_BETA_LSC_AE (TF) {Gross alpha, Gross beta} ALPHA_BETA_LSC_WE (TF) {Gross alpha, Gross beta} RADISO_ICPMS_ASTM_AE {Americium-241, Neptunium-237, Plutonium-239, Technetium-99, Uranium-238} RADISO_ICPMS_WE (TF) {Antimony-121, Antimony-123, Arsenic-75, Cadmium-111, Cadmium-114, Chromium-52, Chromium-53, Copper-63, Copper-65, Iodine-129, Lead-206, Lead-208, Molybdenum-95, Molybdenum-97, Molybdenum-98, Ruthenium-101, Ruthenium-102, Ruthenium-104, Selenium-82, Silver-107, Silver-109 metastable, Technetium-99, Uranium-238} GAMMA ENERGY ANALYSIS (Tier 1) {Antimony-125, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Conductivity - 9050 (Tier 1) {Specific Conductance} Percent Solids (TF) {Percent Solids} Percent Water (TF) {Percent moisture (wet sample)} pH (Soil) - 9045 (Tier 1) {pH Measurement}

Attachment 8

ANALYTICAL BATCH AND LAB SAMPLE ID NO. INDEX

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Analytical Batch and Lab Sample ID No. Index

METHOD	BATCH	SAMPLE	MATRIX	GROUP	CORE
ALPHA/BETA by LSC	00015715	S09V001209	LIQUID	20090635	EB
ALPHA/BETA by LSC	00016965	S09V001269	LIQUID	20090635	EB
ALPHA/BETA by LSC-AV	00017496	S09V001440	SOLID	20090802	C7154
ALPHA/BETA by LSC-AV	00017496	S09V001443	SOLID	20090802	C7154
ALPHA/BETA by LSC-AV	00017496	S09V001446	SOLID	20090802	C7154
ALPHA/BETA by LSC-AV	00017496	S09V001450	SOLID	20090802	C7154
ALPHA/BETA by LSC-AV	00017496	S09V001453	SOLID	20090802	C7154
ALPHA/BETA by LSC-AV	00017496	S09V001456	SOLID	20090804	C7156
ALPHA/BETA by LSC-AV	00017496	S09V001459	SOLID	20090804	C7156
ALPHA/BETA by LSC-AV	00017496	S09V001462	SOLID	20090804	C7156
ALPHA/BETA by LSC-AV	00017496	S09V001465	SOLID	20090805	C7168
ALPHA/BETA by LSC-AV	00017496	S09V001468	SOLID	20090805	C7168
ALPHA/BETA by LSC-AV	00017496	S09V001471	SOLID	20090805	C7168
ALPHA/BETA by LSC-AV	00017500	S09V001531	SOLID	20090811	C7186
ALPHA/BETA by LSC-AV	00017500	S09V001534	SOLID	20090811	C7186
ALPHA/BETA by LSC-AV	00017500	S09V001537	SOLID	20090811	C7186
ALPHA/BETA by LSC-AV	00017500	S09V001540	SOLID	20090812	C7192
ALPHA/BETA by LSC-AV	00017500	S09V001543	SOLID	20090812	C7192
ALPHA/BETA by LSC-AV	00017500	S09V001546	SOLID	20090812	C7192
ALPHA/BETA by LSC-AV	00017610	S09V001506	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017610	S09V001509	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017610	S09V001512	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017610	S09V001515	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017610	S09V001518	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017610	S09V001521	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017610	S09V001524	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017610	S09V001527	SOLID	20090810	C7184
ALPHA/BETA by LSC-WV	00017753	S09V001439	SOLID	20090802	C7154
ALPHA/BETA by LSC-WV	00017753	S09V001442	SOLID	20090802	C7154
ALPHA/BETA by LSC-WV	00017753	S09V001445	SOLID	20090802	C7154
ALPHA/BETA by LSC-WV	00017753	S09V001448	SOLID	20090802	C7154
ALPHA/BETA by LSC-WV	00017753	S09V001452	SOLID	20090802	C7154
ALPHA/BETA by LSC-WV	00017753	S09V001455	SOLID	20090804	C7156
ALPHA/BETA by LSC-WV	00017753	S09V001458	SOLID	20090804	C7156
ALPHA/BETA by LSC-WV	00017753	S09V001461	SOLID	20090804	C7156
ALPHA/BETA by LSC-WV	00017753	S09V001464	SOLID	20090805	C7168
ALPHA/BETA by LSC-WV	00017753	S09V001467	SOLID	20090805	C7168
ALPHA/BETA by LSC-WV	00017753	S09V001470	SOLID	20090805	C7168
ALPHA/BETA by LSC-WV	00017754	S09V001473	SOLID	20090806	C7170
ALPHA/BETA by LSC-WV	00017754	S09V001476	SOLID	20090806	C7170
ALPHA/BETA by LSC-WV	00017754	S09V001479	SOLID	20090806	C7170
ALPHA/BETA by LSC-WV	00017754	S09V001482	SOLID	20090806	C7170
ALPHA/BETA by LSC-WV	00017754	S09V001485	SOLID	20090807	C7172
ALPHA/BETA by LSC-WV	00017754	S09V001488	SOLID	20090807	C7172
ALPHA/BETA by LSC-WV	00017754	S09V001491	SOLID	20090807	C7172
ALPHA/BETA by LSC-WV	00017754	S09V001494	SOLID	20090807	C7172
ALPHA/BETA by LSC-WV	00017754	S09V001497	SOLID	20090808	C7178
ALPHA/BETA by LSC-WV	00017754	S09V001500	SOLID	20090808	C7178
ALPHA/BETA by LSC-WV	00017754	S09V001503	SOLID	20090808	C7178
ALPHA/BETA by LSC-AV	00017766	S09V001474	SOLID	20090806	C7170
ALPHA/BETA by LSC-AV	00017766	S09V001477	SOLID	20090806	C7170
ALPHA/BETA by LSC-AV	00017766	S09V001480	SOLID	20090806	C7170
ALPHA/BETA by LSC-AV	00017766	S09V001483	SOLID	20090806	C7170
ALPHA/BETA by LSC-AV	00017766	S09V001486	SOLID	20090807	C7172
ALPHA/BETA by LSC-AV	00017766	S09V001489	SOLID	20090807	C7172
ALPHA/BETA by LSC-AV	00017766	S09V001492	SOLID	20090807	C7172
ALPHA/BETA by LSC-AV	00017766	S09V001495	SOLID	20090807	C7172
ALPHA/BETA by LSC-AV	00017766	S09V001498	SOLID	20090808	C7178
ALPHA/BETA by LSC-AV	00017766	S09V001501	SOLID	20090808	C7178
ALPHA/BETA by LSC-AV	00017766	S09V001504	SOLID	20090808	C7178

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Analytical Batch and Lab Sample ID No. Index

METHOD	BATCH	SAMPLE	MATRIX	GROUP	CORE
ALPHA/BETA by LSC-WV	00017800	S09V001530	SOLID	20090811	C7186
ALPHA/BETA by LSC-WV	00017800	S09V001533	SOLID	20090811	C7186
ALPHA/BETA by LSC-WV	00017800	S09V001536	SOLID	20090811	C7186
ALPHA/BETA by LSC-WV	00017800	S09V001539	SOLID	20090812	C7192
ALPHA/BETA by LSC-WV	00017800	S09V001542	SOLID	20090812	C7192
ALPHA/BETA by LSC-WV	00017800	S09V001545	SOLID	20090812	C7192
ALPHA/BETA by LSC-AV	00017827	S09V001510	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017827	S09V001513	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017827	S09V001516	SOLID	20090809	C7180
ALPHA/BETA by LSC-AV	00017827	S09V001519	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017827	S09V001522	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017827	S09V001525	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00017827	S09V001528	SOLID	20090810	C7184
ALPHA/BETA by LSC-AV	00018387	S10V000219	SOLID	20090809	C7180
CONDUCTIVITY	00016019	S09V001210	LIQUID	20090635	
CONDUCTIVITY	00016019	S09V001270	LIQUID	20090635	
CONDUCTIVITY	00017593	S09V001529	SOLID	20090811	C7186
CONDUCTIVITY	00017593	S09V001532	SOLID	20090811	C7186
CONDUCTIVITY	00017593	S09V001535	SOLID	20090811	C7186
CONDUCTIVITY	00017593	S09V001538	SOLID	20090812	C7192
CONDUCTIVITY	00017593	S09V001541	SOLID	20090812	C7192
CONDUCTIVITY	00017593	S09V001544	SOLID	20090812	C7192
CONDUCTIVITY	00017596	S09V001508	SOLID	20090809	C7180
CONDUCTIVITY	00017596	S09V001511	SOLID	20090809	C7180
CONDUCTIVITY	00017596	S09V001514	SOLID	20090809	C7180
CONDUCTIVITY	00017596	S09V001517	SOLID	20090810	C7184
CONDUCTIVITY	00017596	S09V001520	SOLID	20090810	C7184
CONDUCTIVITY	00017596	S09V001523	SOLID	20090810	C7184
CONDUCTIVITY	00017596	S09V001526	SOLID	20090810	C7184
CONDUCTIVITY	00017597	S09V001505	SOLID	20090809	C7180
CONDUCTIVITY	00017669	S09V001438	SOLID	20090802	C7154
CONDUCTIVITY	00017669	S09V001441	SOLID	20090802	C7154
CONDUCTIVITY	00017669	S09V001444	SOLID	20090802	C7154
CONDUCTIVITY	00017669	S09V001447	SOLID	20090802	C7154
CONDUCTIVITY	00017669	S09V001451	SOLID	20090802	C7154
CONDUCTIVITY	00017669	S09V001454	SOLID	20090804	C7156
CONDUCTIVITY	00017669	S09V001457	SOLID	20090804	C7156
CONDUCTIVITY	00017669	S09V001460	SOLID	20090804	C7156
CONDUCTIVITY	00017669	S09V001463	SOLID	20090805	C7168
CONDUCTIVITY	00017669	S09V001466	SOLID	20090805	C7168
CONDUCTIVITY	00017669	S09V001469	SOLID	20090805	C7168
CONDUCTIVITY	00017729	S09V001472	SOLID	20090806	C7170
CONDUCTIVITY	00017729	S09V001475	SOLID	20090806	C7170
CONDUCTIVITY	00017729	S09V001478	SOLID	20090806	C7170
CONDUCTIVITY	00017729	S09V001481	SOLID	20090806	C7170
CONDUCTIVITY	00017729	S09V001484	SOLID	20090807	C7172
CONDUCTIVITY	00017729	S09V001487	SOLID	20090807	C7172
CONDUCTIVITY	00017729	S09V001490	SOLID	20090807	C7172
CONDUCTIVITY	00017729	S09V001493	SOLID	20090807	C7172
CONDUCTIVITY	00017729	S09V001496	SOLID	20090808	C7178
CONDUCTIVITY	00017729	S09V001499	SOLID	20090808	C7178
CONDUCTIVITY	00017729	S09V001502	SOLID	20090808	C7178

Analytical Batch and Lab Sample ID No. Index

METHOD	BATCH	SAMPLE	MATRIX	GROUP	CORE
GEA	00016848	S09V001221	SOLID	20090811	C7186
GEA	00016848	S09V001237	SOLID	20090802	C7154
GEA	00016848	S09V001243	SOLID	20090804	C7156
GEA	00016848	S09V001249	SOLID	20090804	C7156
GEA	00016848	S09V001255	SOLID	20090804	C7156
GEA	00016848	S09V001261	SOLID	20090802	C7154
GEA	00016848	S09V001275	SOLID	20090802	C7154
GEA	00016848	S09V001281	SOLID	20090802	C7154
GEA	00016848	S09V001437	SOLID	20090802	C7154
GEA	00016889	S09V000514	SOLID	20090807	C7172
GEA	00016889	S09V000520	SOLID	20090807	C7172
GEA	00016889	S09V000671	SOLID	20090807	C7172
GEA	00016889	S09V000677	SOLID	20090807	C7172
GEA	00016889	S09V000681	SOLID	20090808	C7178
GEA	00016889	S09V000711	SOLID	20090808	C7178
GEA	00016889	S09V000717	SOLID	20090808	C7178
GEA	00016889	S09V000765	SOLID	20090809	C7180
GEA	00016889	S09V000771	SOLID	20090809	C7180
GEA	00016893	S09V000831	SOLID	20090812	C7192
GEA	00016893	S09V000837	SOLID	20090812	C7192
GEA	00016893	S09V000843	SOLID	20090812	C7192
GEA	00016893	S09V000941	SOLID	20090810	C7184
GEA	00016893	S09V000946	SOLID	20090810	C7184
GEA	00016893	S09V001002	SOLID	20090810	C7184
GEA	00016893	S09V001040	SOLID	20090810	C7184
GEA	00016893	S09V001186	SOLID	20090811	C7186
GEA	00016893	S09V001201	SOLID	20090811	C7186
GEA	00016904	S09V000777	SOLID	20090809	C7180
GEA	00016904	S09V000783	SOLID	20090809	C7180
GEA	00016904	S09V000789	SOLID	20090806	C7170
GEA	00016904	S09V000795	SOLID	20090806	C7170
GEA	00016904	S09V000801	SOLID	20090806	C7170
GEA	00016904	S09V000807	SOLID	20090806	C7170
GEA	00016904	S09V000813	SOLID	20090805	C7168
GEA	00016904	S09V000819	SOLID	20090805	C7168
GEA	00016904	S09V000825	SOLID	20090805	C7168
GEA-HANFORD LIBRARY	00015713	S09V001209	LIQUID	20090635	
GEA-HANFORD LIBRARY	00016881	S09V001269	LIQUID	20090635	
IC - ANIONS	00015648	S09V001205	LIQUID	20090635	
IC - ANIONS	00015977	S09V001265	LIQUID	20090635	
IC - ANIONS	00017752	S09V001439	SOLID	20090802	C7154
IC - ANIONS	00017752	S09V001442	SOLID	20090802	C7154
IC - ANIONS	00017752	S09V001445	SOLID	20090802	C7154
IC - ANIONS	00017752	S09V001448	SOLID	20090802	C7154
IC - ANIONS	00017752	S09V001452	SOLID	20090802	C7154
IC - ANIONS	00017752	S09V001455	SOLID	20090804	C7156
IC - ANIONS	00017752	S09V001458	SOLID	20090804	C7156
IC - ANIONS	00017752	S09V001461	SOLID	20090804	C7156
IC - ANIONS	00017752	S09V001464	SOLID	20090805	C7168
IC - ANIONS	00017752	S09V001467	SOLID	20090805	C7168
IC - ANIONS	00017752	S09V001470	SOLID	20090805	C7168
IC - ANIONS	00017775	S09V001473	SOLID	20090806	C7170
IC - ANIONS	00017775	S09V001476	SOLID	20090806	C7170
IC - ANIONS	00017775	S09V001479	SOLID	20090806	C7170
IC - ANIONS	00017775	S09V001482	SOLID	20090806	C7170
IC - ANIONS	00017775	S09V001485	SOLID	20090807	C7172
IC - ANIONS	00017775	S09V001488	SOLID	20090807	C7172
IC - ANIONS	00017775	S09V001491	SOLID	20090807	C7172
IC - ANIONS	00017775	S09V001494	SOLID	20090807	C7172
IC - ANIONS	00017775	S09V001497	SOLID	20090808	C7178
IC - ANIONS	00017775	S09V001500	SOLID	20090808	C7178
IC - ANIONS	00017775	S09V001503	SOLID	20090808	C7178

Analytical Batch and Lab Sample ID No. Index

METHOD	BATCH	SAMPLE	MATRIX	GROUP	CORE
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001530	SOLID	20090811	C7186
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001533	SOLID	20090811	C7186
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001536	SOLID	20090811	C7186
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001539	SOLID	20090812	C7192
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001542	SOLID	20090812	C7192
IC - ANIONS/SMALL ORG. ACIDS	00017856	S09V001545	SOLID	20090812	C7192
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001506	SOLID	20090809	C7180
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001509	SOLID	20090809	C7180
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001512	SOLID	20090809	C7180
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001515	SOLID	20090809	C7180
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001518	SOLID	20090810	C7184
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001521	SOLID	20090810	C7184
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001524	SOLID	20090810	C7184
IC - ANIONS/SMALL ORG. ACIDS	00017910	S09V001527	SOLID	20090810	C7184
IC - ANIONS/SMALL ORG. ACIDS	00018904	S09V001542	SOLID	20090812	C7192
ICP-TOTAL METALS	00017765	S09V001204	LIQUID	20090635	
ICP-TOTAL METALS	00017765	S09V001264	LIQUID	20090635	
ICP-TOTAL METALS-WV	00017796	S09V001530	SOLID	20090811	C7186
ICP-TOTAL METALS-WV	00017796	S09V001533	SOLID	20090811	C7186
ICP-TOTAL METALS-WV	00017796	S09V001536	SOLID	20090811	C7186
ICP-TOTAL METALS-WV	00017796	S09V001539	SOLID	20090812	C7192
ICP-TOTAL METALS-WV	00017796	S09V001542	SOLID	20090812	C7192
ICP-TOTAL METALS-AV	00017796	S09V001545	SOLID	20090812	C7192
ICP-TOTAL METALS-AV	00017936	S09V001440	SOLID	20090802	C7154
ICP-TOTAL METALS-AV	00017936	S09V001443	SOLID	20090802	C7154
ICP-TOTAL METALS-AV	00017936	S09V001446	SOLID	20090802	C7154
ICP-TOTAL METALS-AV	00017936	S09V001450	SOLID	20090802	C7154
ICP-TOTAL METALS-AV	00017936	S09V001453	SOLID	20090802	C7154
ICP-TOTAL METALS-AV	00017936	S09V001456	SOLID	20090804	C7156
ICP-TOTAL METALS-AV	00017936	S09V001459	SOLID	20090804	C7156
ICP-TOTAL METALS-AV	00017936	S09V001462	SOLID	20090804	C7156
ICP-TOTAL METALS-AV	00017936	S09V001465	SOLID	20090805	C7168
ICP-TOTAL METALS-AV	00017936	S09V001468	SOLID	20090805	C7168
ICP-TOTAL METALS-AV	00017936	S09V001471	SOLID	20090805	C7168
ICP-TOTAL METALS-AV	00017947	S09V001474	SOLID	20090806	C7170
ICP-TOTAL METALS-AV	00017947	S09V001477	SOLID	20090806	C7170
ICP-TOTAL METALS-AV	00017947	S09V001480	SOLID	20090806	C7170
ICP-TOTAL METALS-AV	00017947	S09V001483	SOLID	20090806	C7170
ICP-TOTAL METALS-AV	00017947	S09V001486	SOLID	20090807	C7172
ICP-TOTAL METALS-AV	00017947	S09V001489	SOLID	20090807	C7172
ICP-TOTAL METALS-AV	00017947	S09V001492	SOLID	20090807	C7172
ICP-TOTAL METALS-AV	00017947	S09V001495	SOLID	20090807	C7172
ICP-TOTAL METALS-AV	00017947	S09V001498	SOLID	20090808	C7178
ICP-TOTAL METALS-AV	00017947	S09V001501	SOLID	20090808	C7178
ICP-TOTAL METALS-AV	00017947	S09V001504	SOLID	20090808	C7178
ICP-TOTAL METALS-AV	00017969	S09V001507	SOLID	20090809	C7180
ICP-TOTAL METALS-AV	00017969	S09V001510	SOLID	20090809	C7180
ICP-TOTAL METALS-AV	00017969	S09V001513	SOLID	20090809	C7180
ICP-TOTAL METALS-AV	00017969	S09V001516	SOLID	20090809	C7180
ICP-TOTAL METALS-AV	00017969	S09V001519	SOLID	20090810	C7184
ICP-TOTAL METALS-AV	00017969	S09V001522	SOLID	20090810	C7184
ICP-TOTAL METALS-AV	00017969	S09V001525	SOLID	20090810	C7184
ICP-TOTAL METALS-AV	00017969	S09V001528	SOLID	20090810	C7184
ICP-TOTAL METALS-AV	00018124	S09V001531	SOLID	20090811	C7186
ICP-TOTAL METALS-AV	00018124	S09V001534	SOLID	20090811	C7186
ICP-TOTAL METALS-AV	00018124	S09V001537	SOLID	20090811	C7186
ICP-TOTAL METALS-AV	00018124	S09V001540	SOLID	20090812	C7192
ICP-TOTAL METALS-AV	00018124	S09V001543	SOLID	20090812	C7192
ICP-TOTAL METALS-AV	00018124	S09V001546	SOLID	20090812	C7192

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METHOD	BATCH	SAMPLE	MATRIX	GROUP	CORE
ICP-TOTAL METALS-WV	00018262	S09V001439	SOLID	20090802	C7154
ICP-TOTAL METALS-WV	00018262	S09V001442	SOLID	20090802	C7154
ICP-TOTAL METALS-WV	00018262	S09V001445	SOLID	20090802	C7154
ICP-TOTAL METALS-WV	00018262	S09V001448	SOLID	20090802	C7154
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Analytical Batch and Lab Sample ID No. Index

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IODINE-129 in SOIL	00018650	S09V001269	LIQUID	20090635	
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MS ACTINIDES-AV	00018293	S09V001513	SOLID	20090809	C7180
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MS ACTINIDES-AV	00018371	S09V001504	SOLID	20090808	C7178
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Analytical Batch and Lab Sample ID No. Index

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Analytical Batch and Lab Sample ID No. Index

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PH LIQUID	00016049	S09V001205	LIQUID	20090635	
TOTAL ALKALINITY - APD	00015749	S09V001206	LIQUID	20090635	

DISTRIBUTION SHEET

To	From	
S. J. Eberlein	G. P. Ritenour	Page 1 of 1
Project Title/Work Order		Date 4/17/12
FINAL ANALYTICAL REPORT FOR SOIL SAMPLES IN SUPPORT OF AN INTERIM BARRIER AT SX FARM		EDT No. N/A
		ECN No. N/A

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
G. P. Ritenour	T6-10	X			
S. J. Eberlein	E6-31	X			
M. P. Connelly	E6-31	X			
D. R. Glaser	H6-13	X			
H. A. Sydnor	E6-31	X			
J. M. Johnson	T6-02	X			
S. G. McKinney	T6-02	X			
H. L. Anastos	T6-05	X			
A. Shrum	E6-31	X			
J. R. Prilucik	T6-02	X			
C. P. Mangano	H8-51	X			
S. A. Lynch	R3-50	X			
DOE Reading Room	H2-53	H			
R. W. Lober	H6-60	X			

INFORMATION CLEARANCE REVIEW AND RELEASE APPROVAL

Part I: Background Information

Title: Final Analytical Report for Soil Samples in Support of an Interim Barrier at SX Farm

Information Category:
- ☐ Abstract ☐ Journal Article ☐ Summary
- ☐ Internet ☐ Visual Aid ☐ Software
- ☐ Full Paper ☑ Report ☐ Other

Publish to OSTI? ☐ Yes ☑ No

Trademark/Copyright "Right to Use" Information or Permission Documentation	Yes	NA
	☐	☑

Document Number: RPP-RPT-47008 Revision 0 Date: April 2012

Author: Tabor, Cindy L

Part II: External/Public Presentation Information

Conference Name:

Sponsoring Organization(s): WRPS

Date of Conference: Conference Location:

Will Material be Handed Out? ☐ Yes ☑ No Will Information be Published? ☐ Yes ☑ No *(If Yes, attach copy of Conference format instructions/guidance.)*

Part III: WRPS Document Originator Checklist

Description	*Yes*	*N/A*	*Print/Sign/Date*
Information Product meets requirements in TFC-BSM-AD-C-01?	☐	☑	
Document Release Criteria in TFC-ENG-DESIGN-C-25 completed? (Attach checklist)	☐	☑	
If product contains pictures, safety review completed?	☑	☐	Roberts, Sheryl K IDMS Data File att. 04/09/2020

Part IV: WRPS Internal Review

Function	*Organization*	*Date*	*Print Name/Signature/Date*
Subject Matter Expert	WRPS	04/20/2020	Tabor, Cindy L IDMS Data File att.
Responsible Manager	WRPS	04/09/2020	Rutland, Paul L IDMS Data File att.
Other:			

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Document Contains Information Restricted by DOE Operational Security Guidelines?	☐	☒	Reviewer Signature: Print Name/Signature/Date
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Additional Comments from Information Clearance Specialist Review?	☐	☒	Information Clearance Specialist Approval APPROVED By Janis D. Aardal at 8:40 am, Apr 21, 2020 Print Name/Signature/Date

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INFORMATION CLEARANCE REVIEW AND RELEASE APPROVAL

Part VI: Final Review and Approvals

Description	*Approved for Release*		*Print Name/Signature*	
	Yes	*N/A*		
WRPS External Affairs	☒	☐	IDMS Data File att.	McKenna, Mark
WRPS Office of Chief Counsel	☒	☐	IDMS Data File att.	Peters, Amber D
DOE – ORP Public Affairs/Communications	☒	☐	IDMS Data File att.	Levardi, Yvonne M/ Tyree, Geoff T
Other: ORP SME	☒	☐	IDMS Data File att.	Blackwell, Becky
Other: DOE OCC	☒	☐	IDMS Data File att.	Zelen, Benjamin J

Comments Required for WRPS-Indicate Purpose of Document:

This final report contains the analytical results supporting characterization of soil samples for an interim barrier for 241-SX Tank Farm. It also contains the results for associated field and trip blanks supporting the sampling effort.

APPROVED
By Janis D. Aardal at 8:41 am, Apr 21, 2020

Approved for Public Release; Further Dissemination Unlimited

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  - <task name="Clearance Process" id="0" date-initiated="20200409T1035" performer="Janis
      D Aardal" performer-id="267960" username="h0090683">
      <comments>ATTN: Due Monday, Apr. 20, 2020 - COB Please approve the Rev. 0, Final
        Analytical Report for Soil Samples in Support of an Interim Barrier at SX Farm,
        submitted by Cindy Tabor for expedited public release to the AR. (Released in
        SPF/IDMS on 4/18/12) Thank you, Janis Aardal Information
        Clearance</comments>
    </task>
    <task name="Add XML" id="1" date-done="20200409T1035" />
    <task name="Expedite - Manager Approval" id="6" date-due="20200413T1035" date-
      done="20200409T1112" performer="Paul L Rutland" performer-id="140633218"
      username="h4494439" disposition="Approve" authentication="true" />
    <task name="Expedite - Document Reviewer1" id="16" date-due="20200413T1112" date-
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      username="h1903617" disposition="Public Release" authentication="true" />
    <task name="Expedite - Document Reviewer3" id="18" date-due="20200413T1112" date-
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      username="h9138590" disposition="Public Release" authentication="true" />
    <task name="Expedite - Document Reviewer4" id="19" date-due="20200413T1112" date-
      done="20200409T1606" performer="Sheryl K Roberts" performer-id="171787680"
      username="h0081997" disposition="Public Release" authentication="true" />
    <task name="Expedite - Document Reviewer2" id="17" date-due="20200413T1112" date-
      done="20200413T1033" performer="Amber D Peters" performer-id="210402196"
      username="h3022486" disposition="Public Release" authentication="true" />
    <task name="Doc Owner Clearance Review" id="13" date-due="20200414T1033" date-
      done="20200415T0705" performer="Cynthia L Tabor" performer-id="173738849"
      username="h6436378" disposition="Send On" authentication="true" />
    <task name="Milestone 1" id="24" date-done="20200415T0705" />
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      username="h1214744" disposition="Public Release" authentication="true" />
    <task name="ORP Document Reviewer3" id="59" date-due="20200417T0705" date-
      done="20200417T0950" performer="Geoff T Tyree" performer-id="6158846"
      username="h0068565" disposition="Public Release" authentication="true" />
  - <task name="ORP Document Reviewer2" id="58" date-due="20200417T0705" date-
      done="20200420T1122" performer="Yvonne M Levardi" performer-id="185346745"
      username="h7131303" disposition="Public Release" authentication="true">
      <comments>no comments</comments>
    </task>
    <task name="Doc Owner Reviews ORP Comments" id="61" date-due="20200421T1122"
      date-done="20200420T1222" performer="Cynthia L Tabor" performer-id="173738849"
      username="h6436378" disposition="Send On" authentication="true" />
    <task name="Milestone 2" id="62" date-done="20200420T1222" />
    <task name="Verify Doc Consistency" id="4" date-due="20200421T1222" date-
      done="20200421T0811" performer="Janis D Aardal" performer-id="267960"
      username="h0090683" disposition="Cleared" authentication="true" />
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