APPENDIX B

VSP SUMMARY REPORT, SURVEY UNIT 11

Systematic sampling locations for comparing two population means or medians (site and reference) [nonparametric - MARSSIM]

Summary

This report summarizes the sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample (i.e., soil, groundwater, etc.) and how to analyze the samples (in-situ, fixed laboratory, etc.) are addressed in other sections of the sampling plan.

Table B-1 summarizes the sampling design developed. Figure B-1 shows sampling locations in the field and Table B-2 lists sampling location coordinates.

Table B-1 Summary of Sampling Design, Survey Unit 11

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a reference area mean or median
Type of Sampling Design	Nonparametric
Sample Placement (Location) in the Field	Systematic with a random start location
Working (Null) Hypothesis	The difference between the medians(means) exceeds the threshold
Formula for calculating number of sampling locations	Wilcoxon Rank Sum Test - MARSSIM version
Calculated total number of samples for each site and reference area	18
Number of samples on map [a]	18
Number of selected sample areas [b]	1
Specified sampling area [c]	38077.28 ft^2
Size of grid / Area of grid cell [d]	45.9935 feet / 2115.4 ft^2
Grid pattern	Square

[a] This number may differ from the calculated number because of 1) grid edge effects, 2) adding judgment samples, or 3) selecting or unselecting sample areas.
[b] The number of selected sample areas is the number of colored areas on the map of the site. These sample areas contain the locations where samples are collected.
[c] The sampling area is the total surface area of the selected colored sample areas on the map of the site.
[d] Size of grid / Area of grid cell gives the linear and square dimensions of the grid used to systematically place samples.
[e] Costs for one sampling area, including measurement analyses and fixed overhead costs. See the Cost of Sampling section for an explanation of the costs presented here.

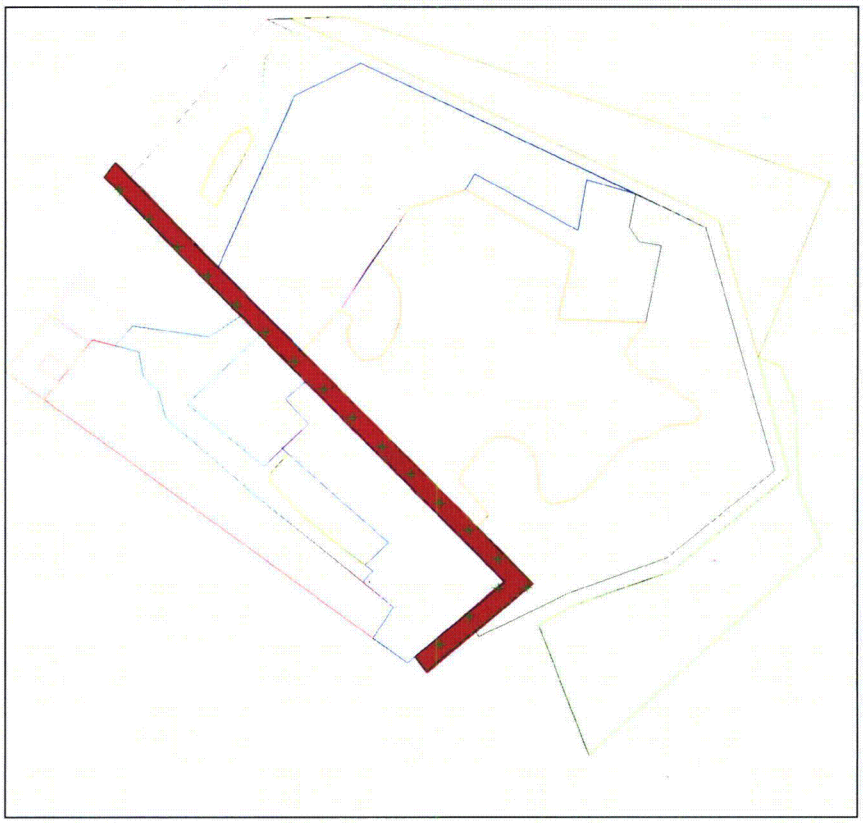

Figure B-1 VSP-Generated Sample Locations, SU 11

Table B-2 Survey Unit 11 Corehole Locations, TN State Plane Coordinates

X Coordinate	Y Coordinate	Type	Reference/Survey Unit
3022491.1260	673506.9463	Systematic	Survey Unit
3022537.1196	673552.9399	Systematic	Survey Unit
3022583.1131	673598.9334	Systematic	Survey Unit
3022629.1066	673598.9334	Systematic	Survey Unit
3022583.1131	673644.9269	Systematic	Survey Unit
3022537.1196	673690.9204	Systematic	Survey Unit
3022491.1260	673736.9140	Systematic	Survey Unit
3022445.1325	673782.9075	Systematic	Survey Unit
3022399.1390	673828.9010	Systematic	Survey Unit
3022353.1455	673874.8945	Systematic	Survey Unit
3022307.1519	673920.8881	Systematic	Survey Unit
3022261.1584	673966.8816	Systematic	Survey Unit
3022215.1649	674012.8751	Systematic	Survey Unit
3022169.1714	674058.8686	Systematic	Survey Unit
3022123.1778	674104.8622	Systematic	Survey Unit
3022077.1843	674150.8557	Systematic	Survey Unit
3022031.1908	674196.8492	Systematic	Survey Unit
3021985.1972	674242.8428	Systematic	Survey Unit

Primary Sampling Objective
The primary purpose of sampling at this site is to compare a site median or mean value with a reference area median or mean value. This is achieved by testing the difference between the site and reference area medians(means). The working hypothesis (or 'null' hypothesis) is that the difference between the site median(mean) and the reference area median(mean) is equal to or exceeds the threshold. The alternative hypothesis is that the difference is less than the threshold. VSP calculates the number of samples required to reject the null hypothesis in favor of the alternative one, given a selected sampling approach and inputs to the associated equation.

Selected Sampling Approach
A nonparametric systematic sampling approach with a random start was used to determine the number of samples and to specify sampling locations. A nonparametric formula was chosen because the conceptual model and historical information (e.g., historical data from this site or a very similar site) indicate that typical parametric assumptions may not be true.

Both parametric and non-parametric equations rely on assumptions about the population. Typically, however, non-parametric equations require fewer assumptions and allow for more uncertainty about the statistical distribution of values at the site. The trade-off is that if the parametric assumptions are valid, the required number of samples is usually less than if a non-parametric equation was used.

Locating the sample points over a systematic grid with a random start ensures spatial coverage of the site. Statistical analyses of systematically collected data are valid if a random start to the grid is used. One disadvantage of systematically collected samples is that spatial variability or patterns may not be discovered if the grid spacing is large relative to the spatial patterns.

Number of Total Samples: Calculation Equation and Inputs
The equation used to calculate the number of samples is based on Wilcoxon Rank Sum test published in MARSSIM (US EPA, et al, 1997). For this site, the null hypothesis is rejected in favor of the alternative one if the difference between the site and reference area median(mean) is sufficiently smaller than the threshold. The number of samples to collect is calculated so that if the inputs to the equation are true, the calculated number of samples will cause the null hypothesis to be rejected.

Equation B-1 and Equation B-2 were used to calculate the number of samples.

$$n + m = \frac{\left(z_{1-\alpha} + z_{1-\beta}\right)^2}{3\left(P_r - 0.5\right)^2}$$

Equation B-1

where

$$P_r = \Phi\left(\frac{\Delta}{\sqrt{2\left(s^2_{sample} + s^2_{analytical} / r\right)}}\right)$$

Equation B-2

where

$\Phi(z)$ is the cumulative standard normal distribution on $(-\infty,z)$ (see PNNL-13450 for details),

P_r is the probability that a measurement collected from a random location at the study site is greater than a measurement collected from a random location in a reference area. See PNNL-13450 for details,

n is the number of samples for the site and is equal to m,

m is the number of samples for the reference area and is equal to n,

S is the estimated standard deviation of the measured values including analytical error,

Δ is the width of the gray region,

α is the acceptable probability of incorrectly concluding the difference between the medians(means) is less than the threshold,

β is the acceptable probability of incorrectly concluding the difference between the medians(means) exceeds the threshold,

$Z_{1-\alpha}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\alpha}$ is $1-\alpha$,

$Z_{1-\beta}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\beta}$ is $1-\beta$.

Note: MARSSIM suggests that the number of samples should be increased by at least 20% to account for missing or unusable data and uncertainty in the calculated value of n. VSP allows a user-supplied percent overage as discussed in MARSSIM (EPA 2000, p. 5-33).

The values of these inputs that result in the calculated number of sampling locations are presented in Table B-3.

Table B-3 Input Parameters in VSP Sample Design

Parameter	Value
S	1.2
Δ	1.5
α	5%
β	10%
$Z_{1-\alpha}$	1.64485 [a]
$Z_{1-\beta}$	1.28155 [b]
MARSSIM Overage	20%

[a] This value is automatically calculated by VSP based upon the user defined value of α.
[b] This value is automatically calculated by VSP based upon the user defined value of β.

Figure B-2 is a performance goal diagram, described in EPA's QA/G-4 guidance (EPA, 2000). It shows the probability of concluding the sample area is dirty (the probability that the difference between the site median(mean) and the reference area median(mean) exceeds the threshold) on the vertical axis versus a range of possible true differences between the medians(means) on the horizontal axis. This graph contains all of the inputs to the number of samples equation and pictorially represents the calculation.

The red vertical line is shown at the threshold (action limit) on the horizontal axis. The width of the gray shaded area is equal to Δ; the upper horizontal dashed blue line is positioned at $1-\alpha$ on the vertical axis; the lower horizontal dashed blue line is positioned at β on the vertical axis. The vertical green line is positioned at one standard deviation below the threshold. The shape of the red curve corresponds to the estimates of variability. The calculated number of samples results in the curve that passes through the lower bound of Δ at β and the upper bound of Δ at $1-\alpha$. If any of the inputs change, the number of samples that result in the correct curve changes.

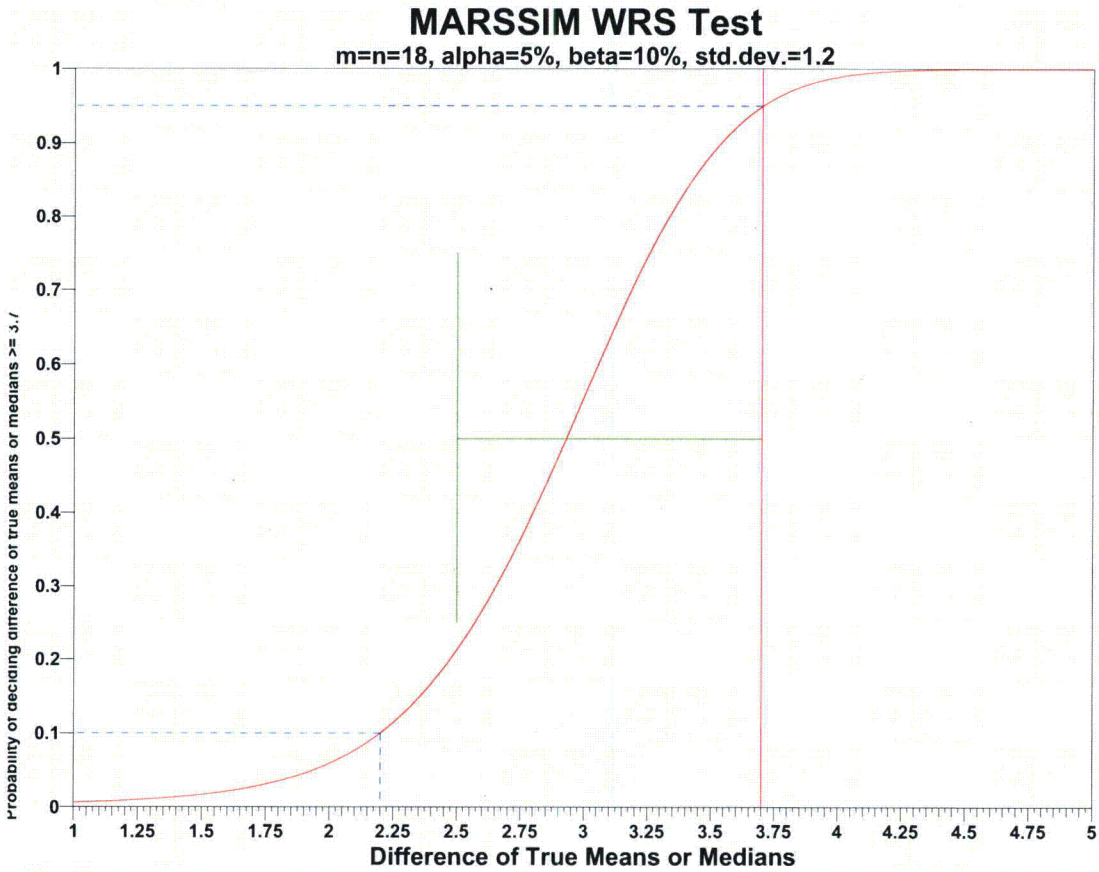

Figure B-2 A-Priori Power Curve for WRS Test

Statistical Assumptions

The assumptions associated with the formulas for computing the number of samples are:

1. although the population does not have to be normally distributed, the test statistic is approximately normally distributed,
2. the variances of the site and reference populations are equal,
3. the variance estimate, S^2, is reasonable and representative of the populations being sampled,
4. the population values are not spatially or temporally correlated, and
5. the sampling locations will be selected probabilistically.

The first four assumptions will be assessed in a post data collection analysis. The last assumption is valid because the gridded sample locations were selected based on a random start.

Sensitivity Analysis

The sensitivity of the calculation of number of samples was explored by varying s, LBGR, β and α and examining the resulting changes in the number of samples. Table B-3 shows the results of this analysis.

*Table B-4 Change in Number of Samples by Varying **LBGR**, **α**, and **β** Parameters*

Number of Samples							
AL=3.7		α=5		α=10		α=15	
		s=2.4	s=1.2	s=2.4	s=1.2	s=2.4	s=1.2
LBGR=90	β=5	75	23	59	18	51	16
	β=10	59	18	46	15	38	12
	β=15	51	16	38	12	30	10
LBGR=80	β=5	75	23	59	18	51	16
	β=10	59	18	46	15	38	12
	β=15	51	16	38	12	30	10
LBGR=70	β=5	75	23	59	18	51	16
	β=10	59	18	46	15	38	12
	β=15	51	16	38	12	30	10

s = Standard Deviation
LBGR = Lower Bound of Gray Region (% of Action Level)
β = Beta (%), Probability of mistakenly concluding that μ > action level
α = Alpha (%), Probability of mistakenly concluding that μ < action level
AL = Action Level (Threshold)

This report was automatically produced* by Visual Sample Plan (VSP) software version 4.6b.

Software and documentation available at http://dqo.pnl.gov/vsp

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APPENDIX C

MACTEC'S FIELD SAMPLE TRACKING PROGRAM

MACTEC and NFS chose to implement MACTEC's computer-based Field Sample Tracking Program for the *Subsurface Soil Characterization and FSS Project* at NFS' North Site due to the complexity of the required sampling regime and due to the large number of samples (more than 4000) that were scheduled to be collected over the duration of the project. Aside from the large number of soil cores and vertical segments of each core (a sample), each sample had the potential to have several subsamples isolated for various purposes, including a number of non-radiological parameters. Adding to the complexity of the prescribed sampling regime was the need to pre-process the primary soil subsample by drying and grinding to assure that appropriate sample homogeneity was achieved prior to splitting to one of three designated analytical laboratories (Figure C-1).

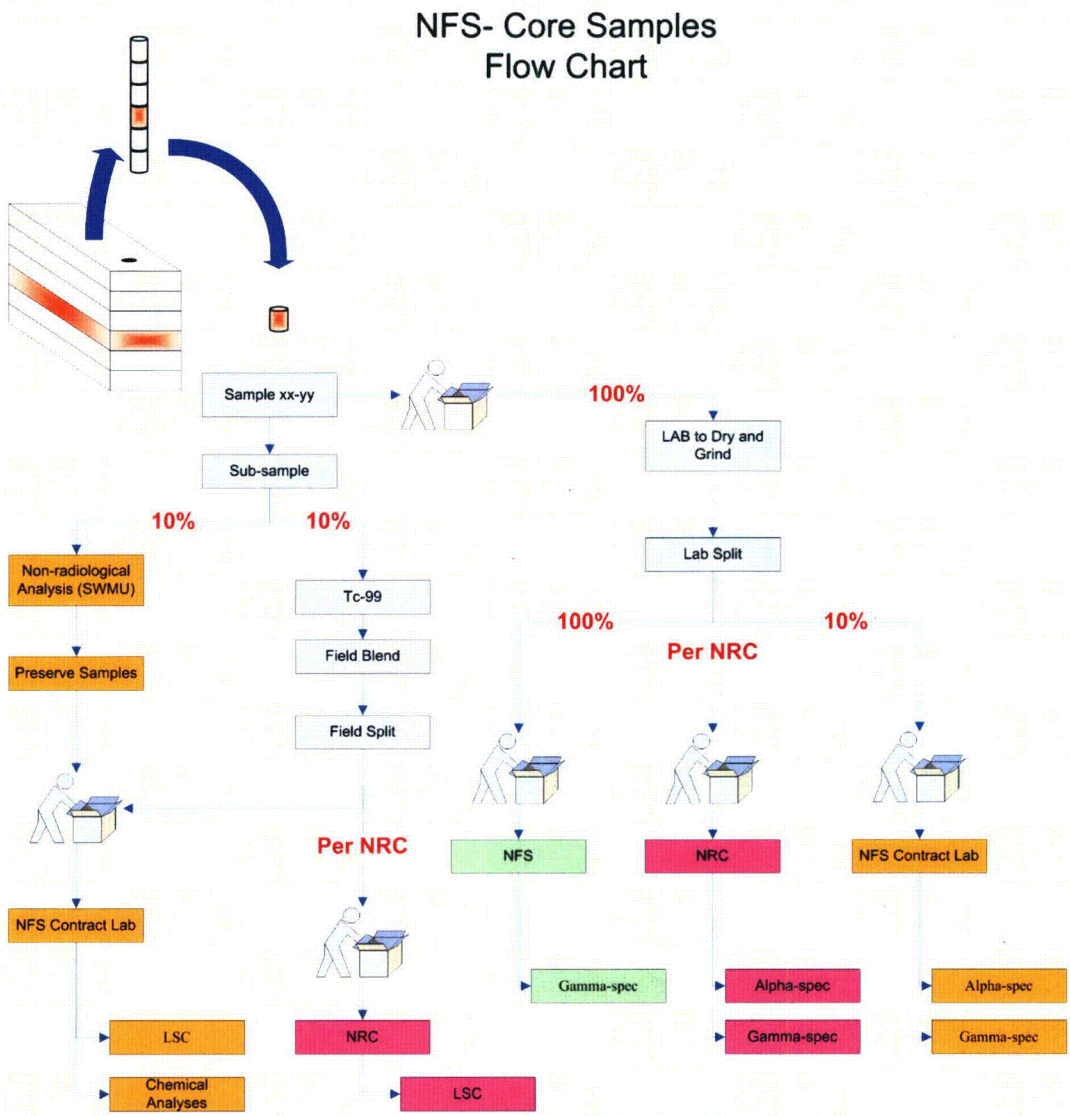


Figure C-1 Project Sample Flow Diagram

The Field Sample Tracking Program is a proprietary, MACTEC-developed database that consists of a "front-end" user interface (Figure C-2) that serves to input sample data, and a main "back-end" database that organizes and catalogues all of the relevant sample and sample program data. The program is built on Microsoft's Access database software application.

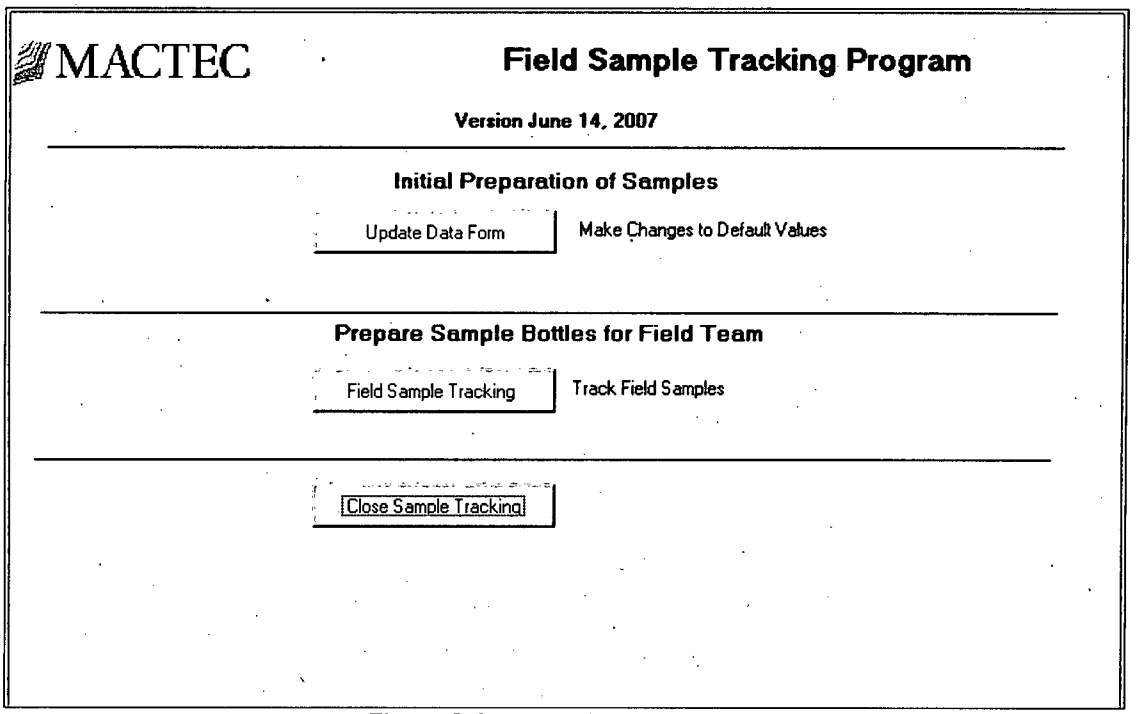


Figure C-2 Main Menu Page

C.1 FIELD SAMPLE TRACKING PROGRAM SETUP

The Field Sample Tracking Program has an array of functions that can be enabled depending upon the requirements and demands of the sampling regime it supports. It is designed to implement and be compatible with the sample collection, documentation, and custody standards required by the EPA. The system was enhanced for this project to incorporate the ability to print unique barcodes on the labels for each sample container (Figure C-3).

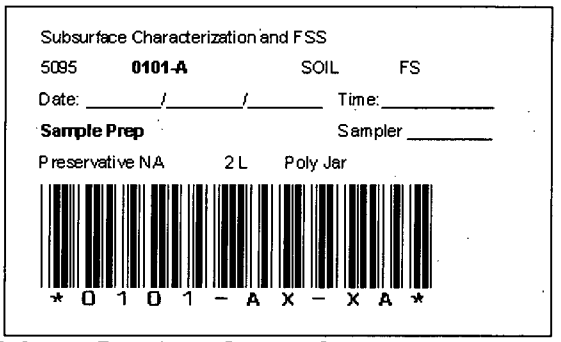


Figure C-3 Preprinted Sample Container Label with Barcode

To reduce the opportunity for transcription errors, a barcode reader was included to allow the user to scan the barcodes attached to samples that had been collected through various steps in the sample management process (Figure C-4).

Figure C-4 Barcode Scanning Pistol

The program contains a catalogue of the various analytical methods that were available to the project sampling team (Figure C-5).

Tbl Method

Method	Matrix	Number of Bottles	Preservative	Bottle Material	Bottle Size	Lab
[redacted]	S	1	NA	Poly Jar	2	TELEDYNE
Gamma Spec (NFS)	S	0	NA	Poly Jar	250	TELEDYNE
Alpha / Gamma Spec (Paragon)	S	0	NA	Poly Jar	500	TELEDYNE
Alpha / Gamma Spec (ORISE)	S	0	NA	Poly Jar	500	TELEDYNE
Tc-99 (ORISE)	S	1	4 Deg. C	Centrifuge 1	50	ORISE
Tc-99 (Paragon)	S	1	4 Deg. C	Centrifuge 1	50	PARAGON
VOCs (Paragon)	S	1	4 Deg. C	Terracore K	1	PARAGON
SVOCs / PCBs / Metals* (Paragon)	S	1	4 Deg. C	Glass	8	PARAGON
BLANK, VOCs	L	2	HCl, 4 Deg. C	Glass	40	PARAGON
BLANK, SVOCs	L	2	4 Deg. C	Glass	1	PARAGON
BLANK, PCBs	L	1	4 Deg. C	Glass	1	PARAGON
BLANK, Metals (6010 - As, Be; 7470 - H	L	1	HNO3; 4 Deg. C	Poly Bottle	500	PARAGON
BLANK, Metals (7196A - Hex Chromium)	L	1	4 Deg. C	Poly Bottle	250	PARAGON
Gamma Spec / DUPLICATE (NFS)	S	0	NA	Poly Jar	250	TELEDYNE
Alpha / Gamma Spec / DUPLICATE (Pare	S	0	NA	Poly Jar	500	TELEDYNE
Tc-99 / DUPLICATE (Paragon)	S	1	4 Deg. C	Centrifuge 1	50	PARAGON
BLANK, Tc-99 (Paragon)	L	1	HNO3	Poly Bottle	1	PARAGON
BLANK, Alpha/Gamma Spec (Paragon)	L	1	HNO3	Poly Bottle	1	PARAGON

Close

Record: 1 of 18

Figure C-5 Catalogue of Available Analytical Methods

The database was preloaded and labeled with records to contain the sample data for 749 cores (the number of coreholes originally planned within the 19 survey units in this project), each with 10 vertically segmented sample intervals. A sequential 4-digit number is assigned to each corehole (e.g., 0001 through 0749). Alphabetic characters (A through J) were assigned to each 1-meter vertical increment from a single soil core. For example, the vertical increment from the ground surface to 1 meter below the ground surface removed from corehole number 0001 is assigned the sample number 0001-A. Every sample was assigned to sample preparation (prep) by Teledyne and gamma spectroscopy by NFS. When opened to *Track Field Samples*, the main data entry screen shows the first sample record in the system. The preloaded information regarding this sample is visible in Figure C-6.

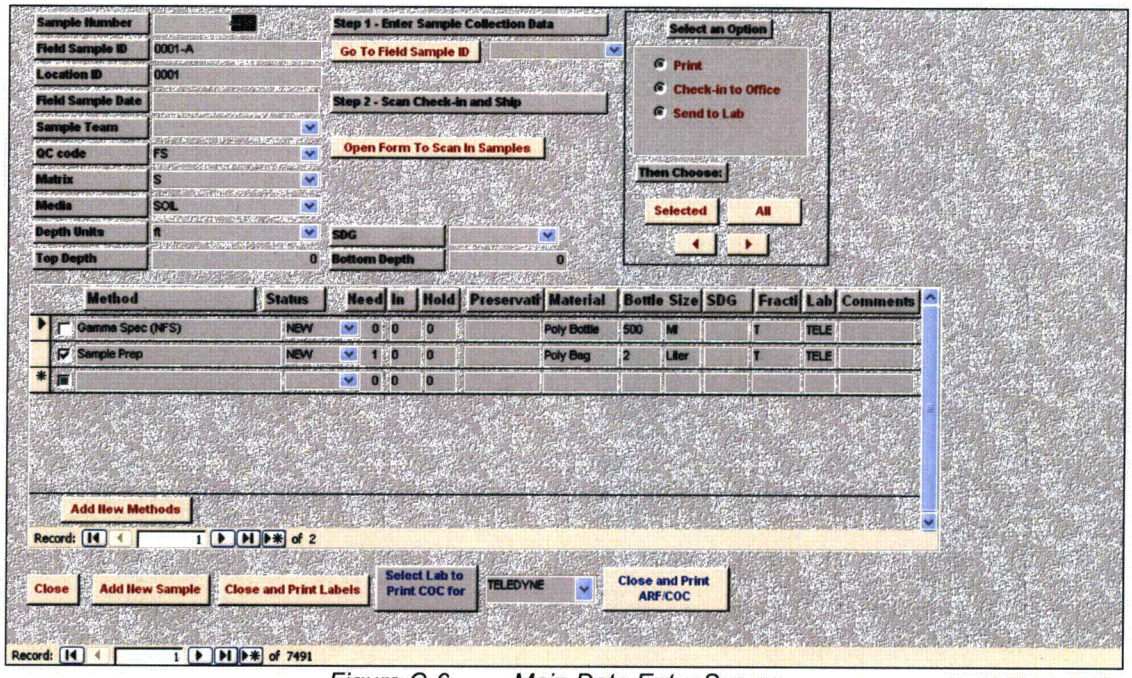


Figure C-6 Main Data Entry Screen

C.2 FIELD SAMPLE TRACKING PROGRAM OPERATIONS

Once the sample records were preloaded into the database, the user would navigate to the appropriate sample record in order to implement the various processes embedded within the program and to add the field-specific data. A particular sample record can be located within the database using any one of several navigation options designed into the program (red circled areas in Figure C-7). Each has its advantage in different situations.

The basic processes available to the user in the Field Sample Tracking Program are

- assigning the appropriate analytical methods for the sample;

- printing labels (with barcodes) for use during sample collection;
- "Checking In" collected samples from the field to the secured sample storage area in the field sample office; and
- preparing samples for shipment to various offsite laboratories, including the automatic generation of sample Chain of Custody (COC) paperwork and electronic COC data files.

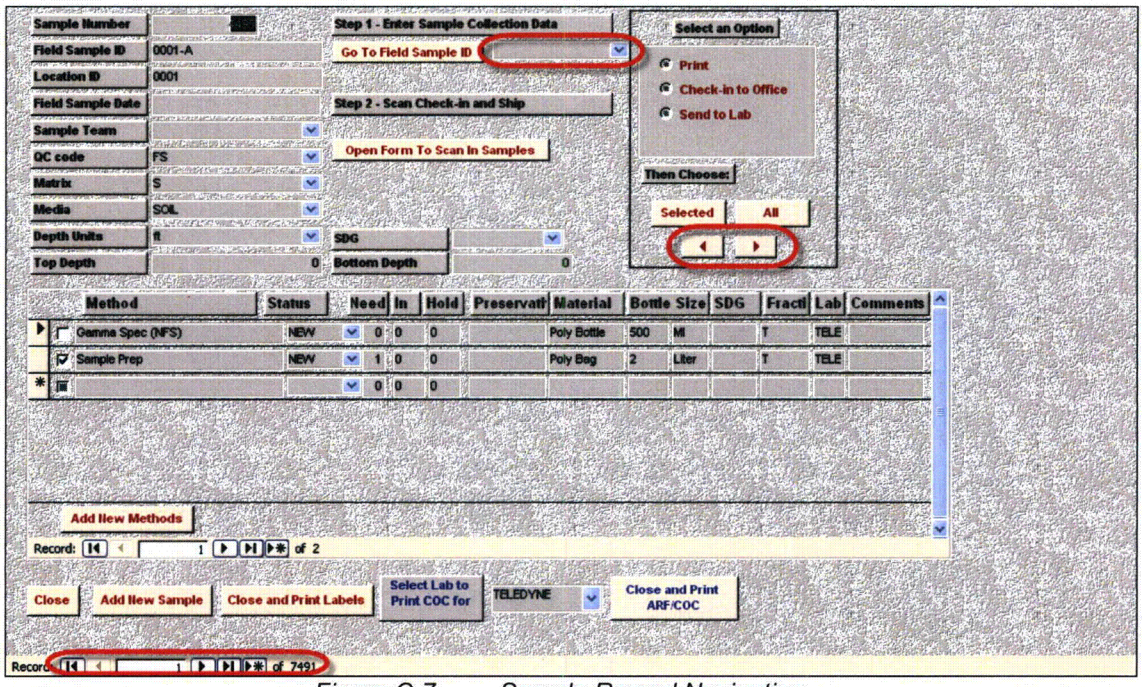


Figure C-7 Sample Record Navigation

C.2.1 Adding New Samples

New samples can be added to the database "on-the-fly" by the user while in the field to accommodate samples that are collected, however, for a variety of possible reasons, had not been preloaded in the database (Figure C-8). For example, trip blanks, equipment blanks, matrix spikes, and matrix duplicates could not be preselected and are, therefore, added to the database by the field sampling team in the field as they are collected.

C.2.2 Specifying Analytical Methods for a Sample

New or additional analytical methods are also added "on-the-fly." With the appropriate Field Sample ID number displayed in the database, the user simply clicks on the Add New Methods button (Figure C-9). A new window opens up to provide the suite analytical methods available to the user to select from (Figure C-10). From this window, multiple analytical methods can be selected and added to the suite of methods specified for the given sample. When the Add Methods button at the bottom of the window is pushed, the user is returned to the main window of the program where the newly added methods will appear (Figure C-11).

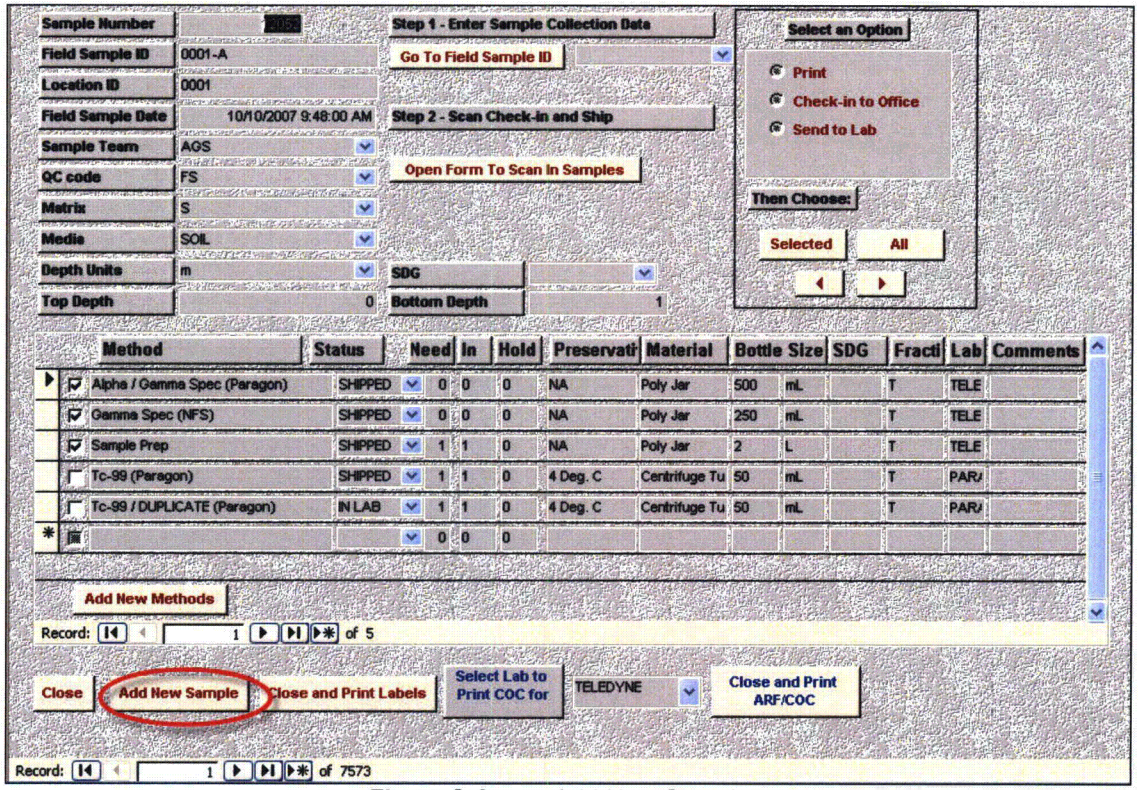


Figure C-8 Add New Sample

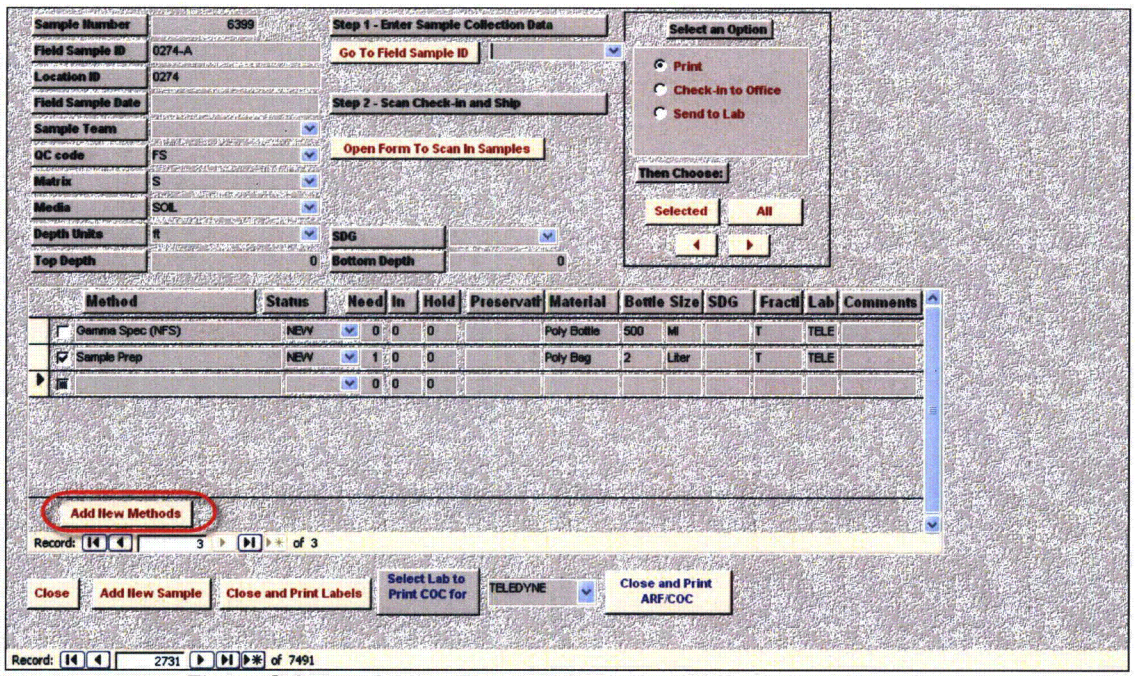
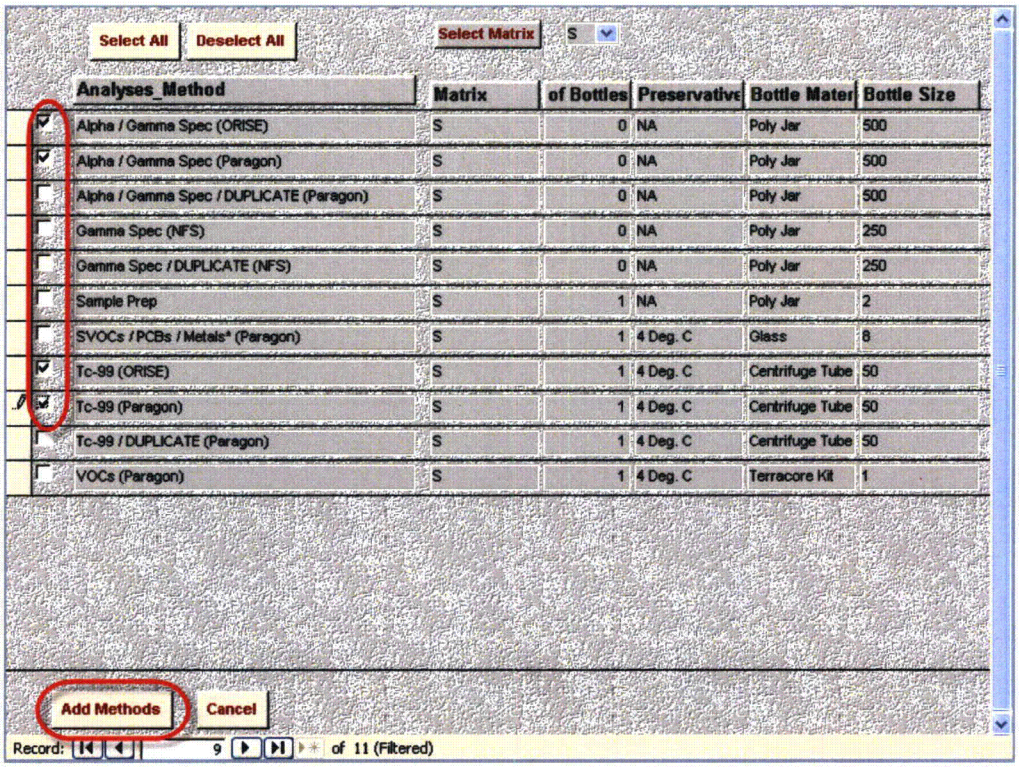


Figure C-9 Adding Required Analytical Methods for a Sample



Analyses_Method	Matrix	of Bottles	Preservative	Bottle Mater	Bottle Size
Alpha / Gamma Spec (ORISE)	S	0	NA	Poly Jar	500
Alpha / Gamma Spec (Paragon)	S	0	NA	Poly Jar	500
Alpha / Gamma Spec / DUPLICATE (Paragon)	S	0	NA	Poly Jar	500
Gamma Spec (NFS)	S	0	NA	Poly Jar	250
Gamma Spec / DUPLICATE (NFS)	S	0	NA	Poly Jar	250
Sample Prep	S	1	NA	Poly Jar	2
SVOCs / PCBs / Metals* (Paragon)	S	1	4 Deg. C	Glass	8
Tc-99 (ORISE)	S	1	4 Deg. C	Centrifuge Tube	50
Tc-99 (Paragon)	S	1	4 Deg. C	Centrifuge Tube	50
Tc-99 / DUPLICATE (Paragon)	S	1	4 Deg. C	Centrifuge Tube	50
VOCs (Paragon)	S	1	4 Deg. C	Terracore Kit	1

Figure C-10 Selecting Adding Desired Analytical Methods

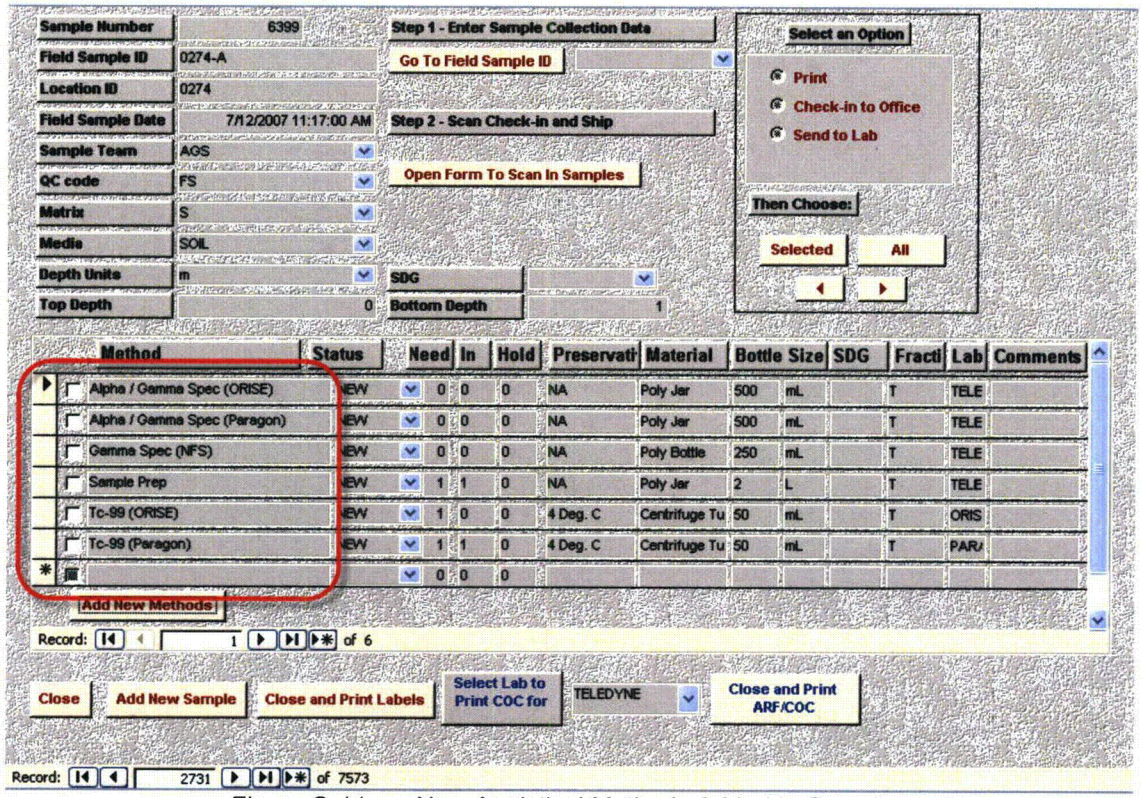


Figure C-11 New Analytical Methods Added to Sample

C.2.3 Sample Status

One of the key data management attributes of the Field Sample Tracking Program is its ability to progressively track the status of a sample in the database. The program assigns one of six status codes to each analytical method assigned to every sample.

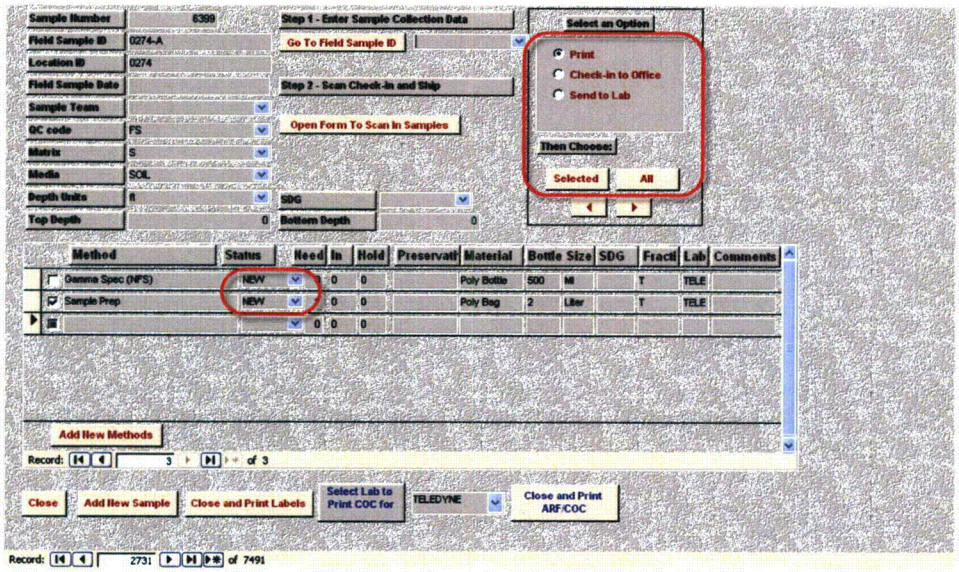


Figure C-12 Sample Status Designation

The status codes available are:

- **NEW** – The NEW status is initially assigned (automatically) to each sample/method that is added to the database, indicating that the sample/method has been created in the Field Sample Tracking Program, but no other actions have been recorded.
- **PRINT** – Indicates that the program is ready to print sample container labels for these select samples/methods. The program will generate labels for only those samples/methods which have been given a status of PRINT by the user.
- **PRINTED** – Indicates that sample label(s) have been printed and that the sample is ready to be collected.
- **IN LAB** – After the sample is collected and the user "checks in" the samples to sample control office, the status changes to IN LAB indicating that the sample has been collected and is in storage.
- **SHIP** – When the sample team is ready to ship samples to an offsite laboratory, the Field Sample Tracking Program allows the user to scan the barcodes on each sample that is packaged for shipment. When these samples are scanned (out of the storage locker and into a shipping container), the status changes to SHIP indicating that the sample is ready to be included on the COC documentation in preparation for shipment.
- **SHIPPED** – After all samples to be shipped have been updated to the SHIP status, the user executes a routine within the program that automatically generates both a hard copy and ASCII format electronic deliverable (COC) that is provided to the selected laboratory along with the samples to be assayed. When the COC has been generated, the status changes to SHIPPED indicating that the sample has been shipped to the laboratory and that analytical data for that sample is forthcoming.

C.2.4 Chain of Sample Custody

As a means of assuring the integrity and continuity of a shipment of a group of samples that are to be delivered to an offsite laboratory, the Field Sample Tracking Program generates both hard copy (paper or image) and ASCII-formatted electronic COCs. Once samples have been collected, checked in, and then designated and prepared for shipment (the status has been changed to SHIP), the program will prepare the shipping paperwork automatically. To prepare the shipping paperwork the user executes a subroutine in the program by:

1. Selecting the appropriate laboratory from the pull-down list, and
2. Pressing the *Close and Print ARF/COC* button.

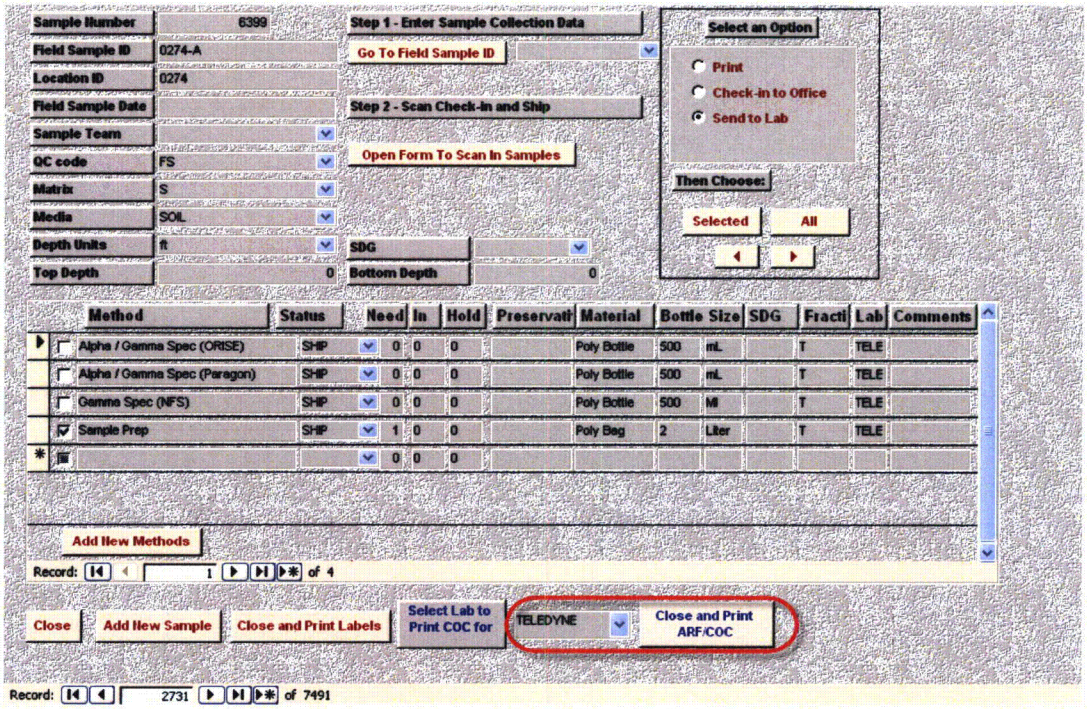


Figure C-13 Generation of Sample Shipping Records

Sample Chain of Custody/Analysis Request Form

Subsurface Characterization and FSS

NFS/MACTEC
Scott Morris
423-742-9141 ext 1439
MBS PO# 1234567

Lab: Teledyne Brown Engineering

ATTN: Sample Receiving, SLAMS CODE: MA002-3LR6 G07
2508 Quality Lane
Knoxville, TN 37921
Phone: (865) 924-0379
Fax: (865) 924-0296
tbeservlab@tbe.com.

Samp #	Sample Date	Sample Time	Field Sample ID	Method / Barcode ID	Qty Total	Qty Each	Bottle Size and Material	Preservative	Media	Method	Fraction
6399	07/12/07	11:17	0271-A		1						
						0	250 m L Poly Bottle	NA	SOIL	Gamma Spec (NFS)	T
				0271-AX-XA		1	2 L Poly Jar	NA	SOIL	Sample Prep	T
						0	500 m L Poly Jar	NA	SOIL	Alpha /Gamma Spec (Paragon)	T

Note: All samples are grab samples

This chain of sample custody record has been verified by the Sampling Team Leader (or designee) to be complete and accurate

Sampling Team Leader: _____ / _____ Date: __/__/__ Time: _____
Print Signature mm dd yy 24 Hour

Relinquished By: _____ Date: __/__/__ Time: _____ Received By: _____ Date: __/__/__ Time: _____

Relinquished By: _____ Date: __/__/__ Time: _____ Received By: _____ Date: __/__/__ Time: _____

*Knowingly or willfully falsifying or concealing a material fact on this form, or making false, fictitious, or fraudulent statements or representations herein could constitute a felony punishable under Federal Statute

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Figure C-14 Example Sample Chain of Custody Form

TELEDYNE1115COC.txt - Notepad

File Edit Format View Help


```
"Temp_sample_no","coc Lab Id","Sampling Organization","Client
Name","Project_No","BarCodeText","Field_Sample_ID","Field_Sample_date","Matrix","Media","QC_
code","Depth_uom","top_depth","bottom_depth","analysis_method","fraction","Number
Needed","Number returned","Bottle Size","Bottle
Material","Bottle_size_units","Preservative","Hold Time","Comment","Note"
6513,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0293-AX-XA","0293-A",11/12/2007 14:55:00,"S","SOIL","FS","m",0.00,1.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6514,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0293-BX-XA","0293-B",11/12/2007 15:00:00,"S","SOIL","FS","m",1.00,2.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6515,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0293-CX-XA","0293-C",11/12/2007 15:02:00,"S","SOIL","FS","m",2.00,3.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6519,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0294-AX-XA","0294-A",11/12/2007 15:35:00,"S","SOIL","FS","m",0.00,1.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6520,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0294-BX-XA","0294-B",11/12/2007 15:37:00,"S","SOIL","FS","m",1.00,2.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6521,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0294-CX-XA","0294-C",11/12/2007 15:41:00,"S","SOIL","FS","m",2.00,3.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6525,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0295-AX-XA","0295-A",11/12/2007 16:05:00,"S","SOIL","FS","m",0.00,1.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6526,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0295-BX-XA","0295-B",11/12/2007 16:09:00,"S","SOIL","FS","m",1.00,2.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6527,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0295-CX-XA","0295-C",11/12/2007 16:15:00,"S","SOIL","FS","m",2.00,3.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
6528,"Teledyne Brown Engineering","NFS/MACTEC","Subsurface Characterization and FSS","NFS
PO# 1234567","0295-DX-XA","0295-D",11/12/2007 16:20:00,"S","SOIL","FS","m",3.00,4.00,"Sample
Prep","T",1,1,"2","Poly Jar","L","NA",0,,"All samples are grab samples"
```


Figure C-15 Example ASCII-formatted Electronic Chain of Custody File

C.3 MANAGING ANALYTICAL DATA

In addition to its utility for managing sample collection data in the field, the Field Sampling Tracking Program is also used by MACTEC as a component of its data validation process. Data from the Field Sample Tracking Program is merged into a master database designed by MACTEC along with the analytical data results received from the various laboratories. This master database is, like the Field Sample Tracking Program, a MACTEC proprietary database design. The database is called "TEDS" (an acronym for Technical Environmental Database System). Once the data is merged into TEDS, a variety of data queries can be executed to qualify, verify, evaluate and validate the data. The principal contribution of the Field Sample Tracking Program to the TEDS database is the ability to verify that the laboratory provided analytical results for every sample and every analyte that was specified by the field sampling team.

Appendix D

Soil Boring Logs, Survey Unit 11

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0274

Date Started: 7/12/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 1		
Date Completed: 7/12/07	**Driller:** James Robinson	**Survey Unit:** 11			
Logged By: Rodney Clark	**Equipment:** Sonic Rig #1402	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-2.5'		GW	0-0.8' Gravel w/ sand
1	0.3	2'/2.5'	FILL	ML	0.8'-2.5' Silt w/ f. sand & clay, Strong brown (7.5YR 5/6) moist, l-m plasticity
2	0.6				
3	0.9	2.5'-5'		GW	2.5'-5' Gravel w/ sand, silt, trace clay, subangular subround, moist, dark gray (5YR 4/1)
4	1.2	2'/2.5'	FILL		
5	1.5	5'-7.5'		GW	5'-7.5' Gravel w/ sand & silt, subangular to subrounded, moist, Strong brown (7.5YR 4/6) angular
6	1.8	1.5'/2.5'	FILL		
7	2.1				
8	2.4	7.5'-9'	FILL	GW	7.5'-9.5' SAA
9	2.7	2.5'/2.5'		SW	9.5'-10' f-m SAND w/ some silt & gravel, moist-wet, light bluish gray (GLEY 2 7/1) RC 7/12/07
10	3.1		Alluvial		
11	3.4	10'-15'		SW	10'-15' f-m SAND w/ gravel (subrounded to subangular) reddish yellow (7.5YR 5/6), wet interbedded w/ gravel lenses gravel > 2" diameter
12	3.7	4'/5			
13	4.0				W.L. @ appx 10'
14	4.3				
15	4.6	15'-19'		SW	15'-18' SAA
16	4.9				gravel (subrounded-rounded) > 2" diameter
17	5.2	4'/4'			
18	5.5		Rome Fm.	GW	18'-19' Gravel w/ silt & clay, angular weathered bedrock strong brown (7.5YR 5/8), wet
19	5.8				Boring terminated @ 19'
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

FP = floodplain

SAA = Same as above

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 275

Date Started: 7/11/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 2
Date Completed: 7/11/07	**Driller:** James Robinson	**Survey Unit:** 11	
Logged By: S. Kelly	**Equipment:** Mini - Sonic #1402	**Elevation:** TBD	

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		1	FILL	SM	0-3.5 FILL grav. si. fm SAND, moist, yellowish
1	0.3	0-2.5			brown (10 YR 5/4)
		1.8/25			
2	0.6				
3	0.9	2			
		2.5-5			
4	1.2	2/2.5	FP	~~FP~~ SM	3.5-4.2: sl. SAND, moist, d. yellowish brown (10 YR
				ML	4/4), some subrounded gravel, roots
5	1.5				4.2-5.6: sa. silt, v. moist, d. gray (N), organic
		3			rich (large tree/limb)
6	1.8	5-7.5		SW	5.6-7.5: grav. SAND (subang to sub round), wet (@ top)
		100%			to moist, gray (GY 1 6/6)
7	2.1				
					7.5-8 sa. SILT, wet, black (N), organic rich
8	2.4	4		ML	(roots), little clay
		7.5-10	ALLUVIAL	SW-GW	8-22: gravely si. SAND, wet, lt yellowish brown
9	2.7	100%			(2.5Y 6/3), micaceous, subang. to subround. up
					to 2" ϕ, grades to strong brown (7.5YR 4/6)
10	3.1				w/ layers of sandy gravel
		5			
11	3.4	10-15			
		100%			
12	3.7				
13	4.0				
14	4.3				
15	4.6				
		15-20			
16	4.9	100%			
		#6			
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

FP = floodplain

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 275

Date Started: 7/11/07	**Drilling Contractor:** Boart Longyear	**Page** 2 **of** 2
Date Completed: 7/11/07	**Driller:** J. Robinson	**Survey Unit:** 11
Logged By: S. Kelly	**Equipment:** mini-sonic #1402	**Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		7			
21	6.4	8 25 100%			
22	6.7		RESIDUAL	SM-	22-25.8 grav. si. SAND, wet, strong brown (7.5YR 5/8), weathered Rome, angular rock fragments
23	7.0				
24	7.3				
25	7.6	8			
26	7.9	25-25.8 100%	BR		25.8- boring terminated @ top of bedrock (Rome Fm.)
27	8.2				
28	8.5				
29	8.8				
30	9.2				
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0276

Date Started: 7/12/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/12/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-2.5'		ML	gravelly, sandy, SILT, moist, gravel > 1" (subangular-angular), brown (7.5 YR 4/3)
1	0.3	2'/2.5'	FILL		
2	0.6				
3	0.9	2.5'-5'		ML	SAA w/ ~~except~~ cobble > 3" subrounded-angular 7/12/07
4	1.2	2'/2.5'			
5	1.5	5'-7.5'		ML	5-6' SAA 7/12/07
6	1.8	2.5'/2.5'	FP		6'-7' gravelly, sandy, SILT, moist, very dark gray (7.5YR 3/1), organic material observed
7	2.1		Alluvial	SW	7'-7.8' gravelly, SAND, moist, pale olive (5Y 6/3)
8	2.4	7.5'-10'			7.8'-10' gravelly, silty, SAND, wet-moist LIGHT yellowish brown (10 YR 6/4) gravel subrounded-subangular > 1" diameter
9	2.7	2.5'/2.5'			
10	3.1		▽		W.L. @ appx. 10'
		10'-15'	Alluvial	SW	10'-11' gravelly, silty SAND, moist, very dark gray
11	3.4	4.5'/5'			11'-15' gravelly silty SAND, wet, LIGHT yellowish brown
12	3.7				
13	4.0		Alluvial		
14	4.3			SW	
15	4.6	15'-20'			15'-20' SAA w/ gravel subrounded-subangular, ~~wet~~ > 3 in diameter
16	4.9	4'/5'			
17	5.2			SW	
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SAA = Same as above

FP = Flood Plain

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0276

Date Started: 7/12/07	**Drilling Contractor:** Boart Longyear	**Page** 2	**of** 2		
Date Completed: 7/12/07	**Driller:** James Robinson	**Survey Unit:** 11			
Logged By: Rodney Clark	**Equipment:** Mini-Sonic #1420	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
					(20-25)
21	6.4	20'-25'		GW	Sandy, GRAVEL, wet, brown (7.5YR 5/2) w/ gravel > 2" subrounded - well rounded
22	6.7		Alluvial		interbedded w/ gravelly SAND lenses
23	7.0	100%			
24	7.3				
25	7.6				
26	7.9	25'-30'		SW	25'-30' ~~Silt~~ gravelly SAND, wet, brown (7.5YR 5/2), gravel subrounded-well rounded
27	8.2	100%	Alluvial		
28	8.5				
29	8.8				
30	9.2				Residuum / Top of Rome @ 30'
31	9.5				Terminate boring @ 30'
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0277

Date Started: 7/16/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/16/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0'-2.5'		ML	0'-1.5' gravelly, sandy, SILT, moist, strong brown
1	0.3	~~2.5'~~ 100%	Fill		7.5 YR 5/6, gravel is angular
2	0.6				1.5'-3.5' gravelly, sandy, SILT, moist, very dark gray
3	0.9	2.5'-5'			7.5 YR 3/1, gravel is angular
4	1.2	100%	Alluvial	SW	3.5'-7.5' gravelly, silty, SAND, moist, light brownish gray 2.5Y 6/2, gravel is subangular - well rounded
5	1.5	5'-7.5'			
6	1.8				
7	2.1	100%			
8	2.4	7.5'-10'	Alluvial		7.5'-10' gravelly, silty, SAND, moist yellow brown, 10 YR 5/4, gravel is subangular - well rounded
9	2.7	100%			
10	3.1			▽	10'-15' silty, gravelly, SAND, wet, pale brown, 10YR 6/3 gravel subangular to well rounded up to 2" diameter
11	3.4	10'-15'	Alluvial		
12	3.7	100%			
13	4.0				
14	4.3				
15	4.6				15'-18' - SAA -
		15'-20'			
16	4.9				
17	5.2	100%			
18	5.5		Alluvial		18'-20' SAA except color changes to brownish yellow 10 YR 6/6.
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0277

Date Started: 7/16/07 **Drilling Contractor:** Boart Longyear **Page** 2 **of** 2

Date Completed: 7/16/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
21	6.4	20'-25'			↑ silty, gravelly SAND, wet, brownish yellow,
22	6.7		Alluvial	SW	20'-23.5' gravel is subrounded-wellround
23	7.0	100%			
24	7.3			GW	23.5'-25' sandy GRAVEL, wet, brownish yellow gravel is subangular → well rounded up to 1" in diameter
25	7.6				
26	7.9	25'-30'			25'-30' gravelly, silty SAND, wet, gravel is subangular - well rounded
27	8.2		Alluvial	SW	
28	8.5	4.5'/5'			
29	8.8				
30	9.2	30'-33'			30'-31' SAA
31	9.5				31'-33' gravelly, sandy ~~GRAVEL~~ SILT, wet, RC 7/16/07
32	9.8	2.5'/3'	Residuum (Rome Formation)	ML	yellow brown 10YR 5/8, gravel is angular, laminated, mudstone
33	10.1				↖ Terminate boring @ 33'
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0278

Date Started: 7/17/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of**		
Date Completed: 7/17/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:**			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
1	0.3	0-2.5 100%	FILL	FILL SM	0-2 gr. sa. SILT, moist yellowish brown (10YR 5/8) increased clay w/ depth
2	0.6			GM	2-4.2 si. sa GRAVEL, wet (perched/saturated) v. dk. gray (GLEY 1 3N) gravel is angular (imported)
3	0.9	2.5-5			
4	1.2			ML	4.2-5.5 gr. sa. SILT, wet, v. dk. greenish gray (GLEY 1 3/10Y)
5	1.5	5-7.5 100%			
6	1.8		FP	FP SM	5.5-6.7 SILT, wet, black, organics rich,
7	2.1		ALLUVIAL	Alluvial SW-GW	6.7-9 f-m SAND, moist, ft. bluish gray (GLEY 2 7/1), incr. si & gravel (subang. to 2.5" (φ)) with depth
8	2.4	7.5-10 100%			
9	2.7				9-33 gr. si. SAND, moist to wet, yellowish brown (10YR 5/3) gravel subang to subrounded, ~~grading~~ SL 7/17/07 w/ interbedded sa. si. GRAVEL yellowish brown (10YR 5/4)
10	3.1	10-15			
11	3.4	100%			
12	3.7				
13	4.0				
14	4.3				
15	4.6	15-20 100%			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0278

Date Started: 7/17/07 Drilling Contractor: Boart Longyear Page 2 of 2

Date Completed: 7/17/07 Driller: J. Robinson Survey Unit: 11

Logged By: S. Kelly Equipment: mini Sonic #1402 Elevation: TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25	Alluvial	SW-GW	
21	6.4	100%			
22	6.7				
23	7.0				
24	7.3				
25	7.6				
		25-30			
26	7.9	100%			
27	8.2				
28	8.5				
29	8.8				
30	9.2				
		30-33			
31	9.5	100%			
32	9.8				
33	10.1				Boring terminated @ 33'
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0279

Date Started: 7/16/07 Drilling Contractor: Boart Longyear Page 1 of 2

Date Completed: 7/16/07 Driller: James Robinson Survey Unit: 11

Logged By: Rodney Clark Equipment: Mini Sonic #1402 Elevation: TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-2.5'		SW	0-1.5' gravelly, SAND, moist, bluish gray (GLEY 2 5/1)
1	0.3	100%	FILL		1.5'-2.5 gravelly, silty SAND moist, brownish yellow 10 YR 6/6, organic debris observed
2	0.6				
		2.5'-5'		ML	2.5'-5' gravelly, sandy SILT, moist, yellowish brown 10 YR 5/6, plastic debris observed low plasticity
3	0.9	100%	FILL		
4	1.2				
5	1.5				5'-5.5 SAA
		5'-10'			5.5'-8' sandy SILT, moist, very dark grayish brown 10YR 3/2, low plasticity organic debris observed
6	1.8		FP		
7	2.1	4.5/5'			
8	2.4				8'-10' gravelly, silty, SAND, moist, olive gray 5Y 5/2, micaceous
9	2.7		Alluvial	SW	
10	3.1				10'-12' SAA
11	3.4	10-12.5'			
12	3.7	100%	▽		12'-15' gravelly, silty, SAND, ~~wet~~ wet, olive yellow 2.5Y 6/6, gravel is subangular - well rounded RL 7/16/
13	4.0	12.5'-15'			
14	4.3	100%	Alluvial		
15	4.6	15'-20'			15'-20' gravelly, silty, SAND, wet, brown 10YR 5/3, gravel is angular to well rounded, interbedded w/ lenses of sandy GRAVEL
16	4.9	4.5/5'	Alluvial		
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SAA = same as above

FP = floodplain

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0279

Date Started:	7/16/07	**Drilling Contractor:**	Boart Longyear	**Page** 2	**of** 2
Date Completed:	7/16/07	**Driller:**	James Robinson	**Survey Unit:**	11
Logged By:	Rodney Clark	**Equipment:**	Mini Sonic #1402	**Elevation:**	TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20'-25'			~~gravel~~
21	6.4	4'/5'		SW	20'-30' gravelly, SAND, wet brown 10YR5/3
22	6.7		Alluvial		gravel is subangular-well rounded, interbedded
23	7.0				w/ lenses of sandy, GRAVEL
24	7.3				
25	7.6	25'-30'			
26	7.9				26.5'-30' sandy, GRAVEL, wet,
27	8.2	4.5'/5'	Alluvial	GW	gravel is subangular-well rounded
28	8.5				
29	8.8				
30	9.2	30'-33'		GW	30'-33' SAA
31	9.5	2'/2.5'	Alluvial		
32	9.8				
33	10.1				Terminate boring @ ~~30'~~ 33'
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SAA = Same as above

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0280

Date Started: 7/18/07 **Drilling Contractor:** Beart Longyear **Page** 1 **of** 2

Date Completed: 7/18/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0'-2.5'		ML	0'-1' gravelly sandy SILT, moist, strong brown (7.5YR 4/6)
1	0.3				
		2'/2.5'	FILL	SW	1'-2.5' gravelly SAND, moist, bluish gray (GLEY2 5/1) gravel is angular
2	0.6				
		2.5'-5'			2.5'-4' gravelly, sandy SILT, moist strong brown, gravel is angular
3	0.9			ML	
4	1.2	100%	FILL		
				SW	4'-5' gravelly, silty, SAND, brown (7.5YR 4/3), gravel is angular
5	1.5				
		5'-10'			
6	1.8				
7	2.1				7/18/07 7.0'-8.0' gravelly, silty, SAND (dark brown 7.5YR 3/2) moist, organics observed
		3.5'/5'			
8	2.4			SW	
9	2.7				8'-10' - gravelly, SAND, ~~moist~~ Res wet
10	3.1			▽	greenish gray (GLEY1 5/1) gravel is subangular - well rounded up to 1" diameter
		10'-15'			
11	3.4				
12	3.7				10'-20' SAA
13	4.0	100%			
14	4.3				
15	4.6				
		15'-20'			
16	4.9				
17	5.2				
18	5.5	100%			
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

MACTEC

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0280

Date Started: 7/18/07 **Drilling Contractor:** Boart Longyear **Page** 2 **of** 2

Date Completed: 7/18/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
21	6.4	20'-25'			20'-24' SAA
22	6.7	4.5'/5'	Alluvial		
23	7.0				Rc 7/18/07
24	7.3		Residuum		24'-25' gravelly SILT, wet, reddish yellow gravel is angular, laminated, mud stone
25	7.6	25'-30'		ML	25'-30' SAA
26	7.9	~~3'/5'~~ Rc 7/18/07			
27	8.2				
28	8.5	1'/5'			
29	8.8				~~29'-30' gravelly SILT,~~ Rc 7/18/07
30	9.2				Terminate boring @ 30'
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1236

BORING NO. 0281

Date Started: 7/16/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/16/07 **Driller:** J. Robinson **Survey Unit:** 11

Logged By: S. Kelly **Equipment:** mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-2.5	FILL		0-0.5 gravel fl.
1	0.3	100%		ML	0.5: gr. sa. SILT, moist, strong brown (7.5YR 4/6) to d. brown (10YR 3/3); gravel is angular to subrounded up to 2" ϕ
2	0.6				
3	0.9	2.5-5 100%			
4	1.2		Alluvial	ML	4-7 sa. SILT, moist, greenish black (Gley1 2.5/10GY) some gravel (subrounded), grading to sa. cl. SILT (wet)
5	1.5	5-10			
6	1.8	100%			
7	2.1			SM-ML	7-8: si. cl. f-c SAND and sa. cl. SILT, very moist, lt. bluish gray (GL2 7/1) w/ strong brown (7.5YR 5/8) mottles, subrounded gr. up to 2.5" ϕ
8	2.4			SM	
9	2.7				8-13 si. cl. SAND, sl. moist, st. brown (7.5YR 5/8) gravel, ang. to sub. round up to 1.5" ϕ
10	3.1	10-15		▽	
11	3.4	100%			
12	3.7				
13	4.0			SW-GW	13-16 gr. si. f-c SAND, wet, yellowish brown (10YR 5/6) gravel is subrounded up to 2" ϕ
14	4.3				
15	4.6	15-20			
16	4.9	100%			16-32.5 gr. si. f-v.c. SAND, wet, yellowish brown (10YR 5/8), gravel is sub ang. to subround up to 8" ϕ; interbedded w/ layers of c./v.c sand & gravelly layers
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0281

Date Started: 7/16/07	**Drilling Contractor:** Boart Longyear	**Page** 2 **of** 2
Date Completed: 7/16/07	**Driller:** J. Robinson	**Survey Unit:** 11
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25			
21	6.4	100%			
22	6.7				
23	7.0				
24	7.3				
25	7.6	25-30			
26	7.9	80%			
27	8.2				
28	8.5				
29	8.8				
30	9.2	30-33			
31	9.5	100%			
32	9.8				
33	10.1		Residuum	ML	32.5-33 SA. SILT wet, yellowish red (5YR 4/6); some gravel (rock fragments, angular) up to 2in ϕ
34	10.4				
35	10.7				33-boring terminated
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0282

Date Started: 7/13/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/13/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** MiniSonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-2.5'	FILL	ML	0-1' gravelly, SILT, moist, strong brown (7.5YR 5/6)
1	0.3	2.3'/2.5'		SW	1'-2.5' gravelly, SAND, moist, light bluish gray Gley 2 7/1
2	0.6				
3	0.9	2.5'-5'		SW	2.5'-5' gravelly, SAND, moist, light bluish gray, gravel is angular and up to 2" diameter
4	1.2	2'/2.5'			
5	1.5		FILL	SW	5'-7.5' silty, gravelly, SAND, moist, brownish yellow 10YR 6/8.
6	1.8	5'-7.5'			
7	2.1	100%			7'-7.5' - SAA (gravel is subrounded-rounded)
8	2.4	7.5'-10'		SW	7.5'-8.5' gravelly, silty, SAND, moist brown 10YR 5/3, gravel is angular
9	2.7	100%			8.5'-10 silty, gravelly, SAND, moist yellowish brown 10YR 5/6 interbedded w/ layers of sandy SILT
10	3.1				
11	3.4	10'-15'		SW	10'-15' gravelly, silty, SAND, moist, gravel subrounded up to 2" diameter yellowish brown (10YR 5/8)
12	3.7		Alluvial		
13	4.0	100%			
14	4.3				
15	4.6		▽		
		15'-19'			15'-20' SAA except wet
16	4.9				
17	5.2	100%	Alluvial		
18	5.5				
19	5.8				encountered cobble/boulder @ 19' (alluvial)
		19'-24'			~~Driller successfully attempts to drill through boulder~~
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SAA = Same as above

NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0282

Date Started: 7/13/07 **Drilling Contractor:** Boart Longyear **Page** 2 **of** 2

Date Completed: 7/13/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Ruby Clark **Equipment:** Mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
21	6.4	19'-24'		SW	gravelly, silty, SAND, wet, yellowish brown, gravel subrounded to well rounded
22	6.7	3.2'/5'	Alluvial		(19-24')
23	7.0				
24	7.3	24'-29'			28'-29.0' SAA
25	7.6				
26	7.9	100%			
27	8.2		~~Residuum~~	RC 7/13/07	26.5'-29' ~~SA~~ RC 7/13/07
28	8.5				silty, sandy, GRAVEL, wet, light
29	8.8		Residuum	GW	yellowish brown 10YR 6/4, gravel is angular & up to 1" diameter
30	9.2				Terminate Boring @ 29'
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SAA = Same as above

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0283

Date Started: 7/18/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/18/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** MiniSonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
1	0.3	0-2.5'	FILL	ML	gravelly, sandy, SILT, moist, strong brown (7.5YR 5/6) gravel is angular & up to 1" diameter
2	0.6	100%			0'-2.7' ~~gravelly, sandy, SILT, brown (10YR 4/3)~~ RC 7/18/07
3	0.9	2.5'-5'			2.7'-4.5' gravelly, sandy, SILT, brown (10YR 4/3) moist gravel is angular
4	1.2	100%			4.5'-10' gravelly, silty, SAND, brownish yellow (10YR 6/6) moist, gravel is subangular-well rounded & up to 1" in diameter
5	1.5	5'-7.5'	Alluvial	SW	
6	1.8				
7	2.1	100%			
8	2.4	7.5'-10'			
9	2.7	100%			
10	3.1		▽		10'-20' SAA except wet
11	3.4	10'-15'			
12	3.7	4'/5'			
13	4.0				
14	4.3				
15	4.6				
16	4.9	15'-20			
17	5.2	100%			
18	5.5				
19	5.8				19'-20' gravelly, SAND, moist, very pale brown 10YR 7/4, gravel is well rounded & up to 2" in diameter
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0284

Date Started: 7/19/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 2
Date Completed: 7/19/07	**Driller:** J. Robinson	**Survey Unit:** 11	
Logged By: S. Kelly	**Equipment:** mini sonic #1402	**Elevation:** TBD	

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5 3.5/5	ALLUVIAL	SM	0-4.5 SAND, moist, trace organics (fine roots), lt. greenish gray (GLEY1 7/1) some gravel (subangl. to subrounded up to 1" ϕ), little silt
1	0.3				
2	0.6				
3	0.9				
4	1.2			▽	wet @ 4'
5	1.5	5-10 3/5		ML	4.5-9.7 Sa. st. cl. SILT, moist/wet, yellowish brown (10YR 5/8), sl. micaceous, trace organic material (decomposed - black) - semi-aquitard
6	1.8				
7	2.1				
8	2.4				
9	2.7				
10	3.1	10-15 4/5'		SW	9.7-14.5 sl. gr. SAND, wet/saturated, yellowish brown (10YR 5/8), gravel is ang. to well rounded up to 2" ϕ
11	3.4				
12	3.7				
13	4.0				
14	4.3				
15	4.6	15-20 100%			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0283

Date Started: 7/18/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/18/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** MiniSonic #14/02 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
1	0.3	0-2.5'	FILL	ML	gravelly, sandy, SILT, moist, strong brown (7.5YR 5/6) gravel is angular & up to 1" diameter
2	0.6	100%			0'-2.7' ~~gravelly, silty, sand, strong yellow (10YR 6/6)~~ RC 7/18/07
3	0.9	2.5'-5'			2.7'-4.5' gravelly, sandy, SILT, brown (10YR 4/3) moist gravel is angular
4	1.2	100%			4.5'-10' gravelly, silty, SAND, brownish yellow
5	1.5	5'-7.5'	Alluvial	SW	(10YR 6/6) moist, gravel is subangular
6	1.8				-well rounded & up to 1" in diameter
7	2.1	100%			
8	2.4	7.5'-10'			
9	2.7	100%			
10	3.1		▽		10'-20' SAA except wet
11	3.4	10'-15'			
12	3.7	4'/5'			
13	4.0				
14	4.3				
15	4.6				
16	4.9	15'-20			
17	5.2	100%			
18	5.5				
19	5.8				19'-20' gravelly, SAND, moist, very pale brown 10YR 7/4, gravel is well rounded & up to 2" in diameter
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0283

Date Started: 7/18/07 **Drilling Contractor:** Boart Longyear **Page** 2 **of** 2

Date Completed: 7/18/07 **Driller:** James Robinson **Survey Unit:** 11

Logged By: Rodney Clark **Equipment:** Mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
21	6.4	20'-25'	Alluvial	SW	20'-30' gravelly, silty, SAND, wet, brownish yellow, gravel is sub-angular - well rounded & up to 2" in diameter
22	6.7				
23	7.0	100%			
24	7.3				
25	7.6				
26	7.9	20'-30'			
27	8.2				
28	8.5	100%			
29	8.8				
30	9.2	30'-33'			30'-33' SAA
31	9.5		Alluvial		
32	9.8	100%			
33	10.1				Terminate boring @ 33'
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0284

Date Started: 7/19/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/19/07 **Driller:** J. Robinson **Survey Unit:** 11

Logged By: S. Kelly **Equipment:** mini sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5 3.5/5	ALLUVIAL	SM	0-4.5 SAND, moist, trace organics (fine roots), lt. greenish gray (GLEY1 7/1) some gravel (subangl. to subround up to 1" ϕ), little silt
1	0.3				
2	0.6				
3	0.9				
4	1.2				wet @ 4'
5	1.5	5-10 3/5		ML	4.5-9.7 Ga. st. cl. SILT, moist/wet, yellowish brown (10YR 5/8) sl. micaceous, trace organic material (decomposed - black) - semi-aquitard
6	1.8				
7	2.1				
8	2.4				
9	2.7				
10	3.1	10-15 4/5'		SW	9.7-14.5 sl. gr. SAND, wet/saturated, yellowish brown (10YR 5/8), gravel is ang. to well rounded up to 2" ϕ
11	3.4				
12	3.7				
13	4.0				
14	4.3				
15	4.6	15-20 100%			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0284

Date Started: 7/19/07	**Drilling Contractor:** Bear Longyear	**Page** 2	**of** 2		
Date Completed: 7/19/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25 100%	ALLUVIAL	SW	
21	6.4				
22	6.7				
23	7.0				
24	7.3				
25	7.6		Residuum	SM-ML	24.5-30 weathered Rome fm - si, gr. SAND to sa. gr. SILT, moist/wet, yellowish brown (10YR 5/8) gravel is angular rock fragments
		25-30 2/5			
26	7.9				
27	8.2				
28	8.5				
29	8.8				
30	9.2				boring terminated @ 30 ft.
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0285

Date Started: 7/19/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** 2

Date Completed: 7/19/07 **Driller:** J. Robinson **Survey Unit:** 11

Logged By: S. Kelly **Equipment:** mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5	ALLUVIAL	SW	(ponded water @ surface)
1	0.3	100%			0-1.5: gr. m-c SAND, wet, strong brown, (7.5 YR 5/6) some si.
2	0.6			SW	1.5-2.5: f-m SAND, wet, lt. bluish gray (GL.2 7/1 10B), little gr. subround.
3	0.9			SM	2.5-7: si. micaceous SAND, wet, dk. yellowish brown (10YR 4/4)
4	1.2				
5	1.5	5-10			
6	1.8	100%			
7	2.1			SW-	7-12.5: si. ~~of~~ (SP) gr. SAND, wet/saturated dk. yellowish brown, gravel is subang to well rounded up to 2" ϕ, becoming drier & slightly "cemented" w/ depth (but wet w/ drilling "fluid")
8	2.4				
9	2.7				
10	3.1	10-15%			
11	3.4	100%			
12	3.7				
13	4.0				
14	4.3				
15	4.6	15-20%			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0285

Date Started: 7/19/07 **Drilling Contractor:** Beart Longyear **Page** 2 **of** 2

Date Completed: 7/19/07 **Driller:** J. Robinson **Survey Unit:** 11

Logged By: S. Kelly **Equipment:** mini-Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25	Alluvial	SW	
21	6.4	25/5			
22	6.7				
23	7.0			ML	22.5-24.5: gr. sa. SILT, wet, strong brown, gravel is angular to subround up to 1.5" ø
24	7.3				
25	7.6		Residuum	ML-GM	24.5-30 weathered Rome Fmn. - sa. gr. SILT, wet, strong brown & gray, ~~but~~ gravel is angular up to 1" ø
		25-30			
26	7.9	50%			
27	8.2				
28	8.5				
29	8.8				
30	9.2				boring terminated @ 30 ft
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0286

Date Started: 7/20/07 **Drilling Contractor:** Boart Longyear **Page** 1 **of** ____

Date Completed: 7/20/07 **Driller:** J. Robinson **Survey Unit:** 11

Logged By: S. Kelly **Equipment:** mini Sonic #1402 **Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5 4/5	Alluvium	SW	0-3: gr. SAND, moist, reddish yellow (7.5YR 7/6) gravel subang to well round up to 2.5"ϕ
1	0.3				
2	0.6				
3	0.9			SW-	3-8.5: si. cl. grav. SAND, v. moist, yellowish brown (10YR 5/6) gravel is subrounded up to 1"ϕ; alluvium is "semi-consolidated"/ cemented; increase gravel size to 2"ϕ w/ depth & unconsolidated
4	1.2			~~SW~~ 7/20/07	
5	1.5	5-10 4/5			
6	1.8				
7	2.1				
8	2.4				wet @ 8'; then dry from pulverized cobble, angular dolomite/limestone gravel (angular) below
9	2.7				
10	3.1	10-15 100%			
11	3.4				
12	3.7				
13	4.0				
14	4.3				
15	4.6	15-20 ~~[illegible]~~ 0% 7/20/07			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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NFS File Classification: DCM-23-05-02

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0286

Date Started: 7/20/07	**Drilling Contractor:** Boart Longyear	**Page** 2 **of** 2
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11
Logged By: S. Kelly	**Equipment:** mini Smic #1402	**Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25 75%	Alluvial	SW	
21	6.4				
22	6.7				
23	7.0				
24	7.3		Residuum	GM-ML	23.5-25: weathered Rome fm. si sa GRAVEL & gr. sa. SILT, wet/saturated, yellowish brown (10YR 5/8); gravel is angular up to 1.5" ϕ (grey siltstone w/ white intrusions)
25	7.6				boring terminated @ 25'
26	7.9				
27	8.2				
28	8.5				
29	8.8				
30	9.2				
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0287

Date Started: 7/20/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 2		
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** Mini Sonic #1402	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5	FILL	GW	0-7.5 ~~gravel S~~ sandy GRAVEL fill, moist/
1	0.3	100%			dry, olive gray (GL 2, 6/1 10B)
2	0.6				
3	0.9				
4	1.2				
5	1.5	5-10			
6	1.8	100%			
7	2.1				
8	2.4		Alluvium	ML	7.5-8.5: gr. sa. SILT ~~(fill)~~ (SD 7/20/07), moist, dk yellowish
					brown (10YR 4/6) gravel is ang to sub ~~angular~~ rounded (SD 7/20/07)
9	2.7			SW	up to 10" ϕ
					8.5-13.5: f-c SAND, moist, yellowish brown (10YR
10	3.1				5/6), gravel ↑w/ depth (subang to subround up
		10-15			to 1" ϕ)
11	3.4	100%			
12	3.7				
13	4.0				13.5 large gravel (3" ϕ) / cobble?
14	4.3		?	ML-SM	13.6-14 sa. SILT to si. gr. SAND, wet, v. dark
					greenish gray (GL 1 3/1 10Y), w/ organics (brown)
15	4.6			SW	14-15: gr. c. SAND, wet, d. greenish gray (GL 1
		15-20	Residuum	ML-GM	4/1 5GY) gravel is subround up to 1.5" ϕ
16	4.9	100%			15-16: cl. gr. sa. SILT (weathered Rome),
					wet, grayish green (GL 1 5/2 5/6), angular
17	5.2				gravel up to 1" ϕ
					16-23 sa. gr. SILT, moist/wet, yellowish brown
18	5.5				(10YR 5/8)
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0287

Date Started: 7/20/07	**Drilling Contractor:** Boart Longyear	**Page** 2 **of** 2
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:** TBD

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25 75%	Residuum		
21	6.4				
22	6.7				
23	7.0		Bedrock (hard)	GW	23-25: sq. GRAVEL (pulverized dolomite), dry, greenish gray (GL1 6/10 10Y)
24	7.3				
25	7.6				boring terminated @ 25'
26	7.9				
27	8.2				
28	8.5				
29	8.8				
30	9.2				
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0288

Date Started: 7/20/07	**Drilling Contractor:** Beart Longyear	**Page** 1	**of** 1		
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** Mini-Sonic #1402	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5	Alluvium	SP	0-2.5': m-c SAND, wet, greenish gray
1	0.3	100%			(GL-1 5/1 10Y)
2	0.6				
3	0.9			SP-SM	2.5-3.3 f-m SAND, moist, greenish black (GL-1 2.5/1 10Y) organics present (brown), little silt
4	1.2			SW	~~greenish blue~~ 7/20/07 3.3-5.7 f-c SAND grading to f-m micaceous
5	1.5	5-10			SAND, moist/wet, dk bluish gray (GL-2 4/1 10B), little gravel (sub-well rounded up to
6	1.8				0.5" ϕ
7	2.1				
8	2.4				
9	2.7				
10	3.1			SM	9.7-10 si. gr. sand. moist/wet, strong brown
		10-15	No	NR	gravel is subround. up to 1" ϕ
11	3.4	~~100%~~ NR	recovery		10-15: NR
12	3.7	0%			
13	4.0				
14	4.3				
15	4.6	15-20	Residuum	ML-GM	15-20 - gr. sa. SILT to si. sa. GRAVEL (w. Rome), yellowish brown (10YR 5/6); gravel
16	4.9	100%			is angular shale/dolomite? up to 1" ϕ
17	5.2				(dry pulverized rock 18.5-19.5')
18	5.5				
19	5.8				
20	6.1				boring terminated @ 20'

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0289

Date Started: 7/20/07	**Drilling Contractor:** Bart Longyear	**Page** 1	**of** 2		
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** mini Sonic #1 f02	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5 4/5	Alluvium	SW	0- gr. SAND, wet, strong brown (7.5YR 4/6) gravel is subang - well rounded up to 2" ϕ
1	0.3				
2	0.6				
3	0.9				
4	1.2				
5	1.5	5-10 100%			
6	1.8				
7	2.1				
8	2.4				
9	2.7				
10	3.1	10-15 100%			
11	3.4				
12	3.7				
13	4.0				
14	4.3			GW	14-14.5 SL. GRAVEL, wet, strong brown gravel is subang to well rounded up to 2" ϕ
15	4.6	15-20 0.5/5 (significant slough)	Residuum	ML-GM	14.5-25 gr. sa. SILT, wet, strong brown (7.5YR 5/8)
16	4.9				
17	5.2				
18	5.6				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

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BORING NO. 0289

Date Started: 7/20/07	**Drilling Contractor:** Fort Langyear	**Page** 2 **of** 2
Date Completed: 7/20/07	**Driller:** J. Robinson	**Survey Unit:** 11
Logged By: J. Kelly	**Equipment:** mini Sonic #1402	**Elevation:**

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		20-25	Residuum	ML-GM	
21	6.4	0.2/5 (significant slough)			
22	6.7				
23	7.0				
24	7.3				
25	7.6				boring terminated @ 25'
26	7.9				
27	8.2				
28	8.5				
29	8.8				
30	9.2				
31	9.5				
32	9.8				
33	10.1				
34	10.4				
35	10.7				
36	11.0				
37	11.3				
38	11.6				
39	11.9				
40	12.2				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SOIL BORING RECORD

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BORING NO. D290

Date Started: 7/23/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 1		
Date Completed: 7/23/07	**Driller:** J. Robinson	**Survey Unit:** 11			
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:** TBD			

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
		0-5	Alluvial	SW	0-3.5 gr. SAND, wet, greenish gray (GL1 5/1 10Y)
1	0.3	3.5/5		?	
2	0.6				
3	0.9				
4	1.2			SW	3.5-7 micaceous m-c SAND, wet, dark gray (GL1 4/N)
5	1.5	5-10			
6	1.8	100%			
7	2.1			SW	7- gr. si. SAND, wet/saturated, yellowish brown (10YR 5/6), gravel is SA to WR up to 2.5" φ
8	2.4				
9	2.7				
10	3.1	10-15			
11	3.4	100%			
12	3.7				
13	4.0				
14	4.3		Residuum	ML	14- weathered Pierre Fm. gr. sa. SILT, wet yellowish brown; gravel is angular up to 1.5" φ
15	4.6				boring terminated @ 15'
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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SA= Subangular

WR= well rounded

SOIL BORING RECORD

NFS Subsurface Soil Characterization and Final Status Survey

MACTEC Project 9120-07-1235

BORING NO. 0291

Date Started: 7/23/07	**Drilling Contractor:** Boart Longyear	**Page** 1	**of** 1
Date Completed: 7/23/07	**Driller:** J. Robinson	**Survey Unit:** 11	
Logged By: S. Kelly	**Equipment:** mini Sonic #1402	**Elevation:** TBD	

DEPTH (ft)	DEPTH (m)	RUN / RECOVERY	STRATA / UNIT	USCS	DESCRIPTION
1	0.3	0-2.5 25%	Alluvial	SW	0-8.5 gr. SAND, moist, v. dk. greenish gray (GL 3/1 10Y), Gravel sub-well rounded up to 2.5" ϕ (causing poor recovery - cobbles being pushed by core barrel), micaceous
2	0.6				
		2.5-5 100%			
3	0.9				wet @ ~2
4	1.2				
5	1.5	5-10 100%			
6	1.8				
7	2.1				
8	2.4				8.5-13' gr. sl. SAND, wet, yellowish brown (10YR 5/6) gr. is subang. to well rounded up to 2" ϕ
9	2.7			SW	
10	3.1	10-15 100%			
11	3.4				
12	3.7				
13	4.0				13-20: weathered Rome Fm., sa., gr. SILT, wet, yellowish brown, gravel is angular to subangular up to 1.5" ϕ (rock fragment)
14	4.3		Residuum	ML	
15	4.6	15-20 50% (½ through)			
16	4.9				
17	5.2				
18	5.5				
19	5.8				
20	6.1				boring terminated @ 20'

Run = Drill Run Interval; Recovery (%) = Run Interval / Amount Recovered

Strata/Unit = deposition/formation (e.g., fill, alluvial, floodplain, residuum, bedrock, etc.)

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Appendix E

Field Sample Data Sheets, Survey Unit 11

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MACTEC Development Corp.
751 Horizon Ct. Suite 104
Grand Junction, CO 81506
Phone 970.243.2861
Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1117
Core ID #: 0274	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	AX	XF	1					✓													✓
0274	AX	XE	1									✓									✓
0274	AX	XA	1	✓	✓	✓	✓		✓												✓ AR 07/12/07

Field Sampler: Art Samilvaw (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1125
Core ID #: 0274	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	BX	XA	1	✓	✓																

Field Sampler: AET SAMIDAN (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1132
Core ID #: 0274	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Americ, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Term Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	CX	XA	1	✓	✓																

Field Sampler: Art Samilson
(Print and Sign)

Date: 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1140
Core ID #: 0274	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th.	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	DX	XA	1	✓	✓																

Field Sampler: Art Samikian (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1143
Core ID #: 0274	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE) Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon) Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	EX	XA	1	✓	✓																

Field Sampler: Art Samilton (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1146
Core ID #: 0274	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Tona Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0274	FX	XA	1	✓	✓																

Field Sampler: Art Samitjan (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1620
Core ID # 0275	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 8010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Term Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0275	AX	XA	1	✓	✓																

Field Sampler: ACT SAMILJAN (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1630
Core ID #: ~~0257~~ 0275 AL. 6/23/07	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0275	BX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1636
Core ID #: 0275	**Core Segment ID #:** CX

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0275	CX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy):	**Time Collected** (24 hour): 1645
Core ID #: 275	**Core Segment ID #:** D	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Cors	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
275	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1650
Core ID #: 0275	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by TerraCore	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury			Sample Preservation (Check If YES)
Core #	Segment #	Sample #																				
0275	EX	XA	1	✓	✓																	

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1658
Core ID #: 0275	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 6270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by TerraCore	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0275	EX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/11/07 **Time Collected** (24 hour): 1704
Core ID #: 0275	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0275	GX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/11/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1442
Core ID #: 0276	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	AX	XA	1	✓	✓	✓	✓		✓												
0276	AX	XF	1					✓													✓
0276	AX	XE	1									✓									✓

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1455
Core ID #: 0276	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Barium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	AX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1459
Core ID #: 0276	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	CX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: H	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1512
Core ID #: 0276	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	0X	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1518
Core ID #: 0276	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	EX	XA	1	✓	✓																

Field Sampler: Art Samples (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/12/07 **Time Collected** (24 hour): 1524
Core ID #: 0276	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon) Arsenic, Beryllium	SW 846 8270C (Paragon) Semi-Volatile Organics	SW 846 8260B (Paragon) VOCs by Terra Core	SW 846 7196A (Paragon) Hexavalent Chromium	SW 846 7471A (Paragon) Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	FX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1528
Core ID #: 0276	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	GX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1531
Core ID #: 0276	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	HX	XA	1	✓	✓																

Field Sampler: Art Samilton (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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Grand Junction, CO 81506
Phone 970.243.2861
Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 7/12/07 **Time Collected** (24 hour): 1536
Core ID #: 0276	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Term Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0276	IX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/12/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1254
Core ID #: 0277	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	AX'	XA	1	✓	✓	✓	✓		✓												
0277	AX	XF	1					✓													✓
0277	AX	XE	1									✓									✓

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1300
Core ID #: 0277	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check If YES)
Core #	Segment #	Sample #																			
0277	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1306
Core ID #: 0277	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check If YES)
Core #	Segment #	Sample #																			
0277	CX	X4	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1325
Core ID #: 0277	**Core Segment ID #:** 1

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1329
Core ID #: 0277	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Barylium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	EX	X4	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1333
Core ID #: 0277	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 8010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Torn Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check If YES)
Core #	Segment #	Sample #																			
0277	FX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1344
Core ID #: 0277	**Core Segment ID #:** 6

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	6X	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1350
Core ID #: 0277	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ❑	Full-Suite Radiological: ❑	
Regulatory Confirmation Sample: ❑	Gamma Only: ❑	Full-Suite: ❑

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	HX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1353
Core ID #: 0277	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	IX	XA	1	✓	✓																

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1359
Core ID #: 0277	**Core Segment ID #:** J

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 8010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0277	Jx	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1006
Core ID #: 0278	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	AX	XF	1					✓													✓
0278	AX	XE	1									✓									✓
0278	AX	XA	1	✓	✓	✓	✓		✓												

Field Sampler: Art Samijan (Print and Sign) **Date:** 07/17/07 AR 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1013
Core ID #: 0278	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846: 6010C (Paragon): Arsenic, Beryllium	SW846: 8270C (Paragon): Semi-Volatile Organics	SW846: 8260B (Paragon): VOCs by Terra Core	SW846: 7196A (Paragon): Hexavalent Chromium	SW846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	BX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1021
Core ID #: 0278	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	CX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1026
Core ID #: 0278	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Term Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	DX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

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Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): **Time Collected** (24 hour): 1030
Core ID #: 0278	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐
Regulatory Confirmation Sample: ☐	Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	EX	XA	1	✓	✓																

Field Sampler: Art Samilson
(Print and Sign)

Date: 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1055
Core ID #: 0278	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	FX	XA	1	✓	✓																

Field Sampler: Art Samilson
(Print and Sign)

Date: 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1044
Core ID #: 0278	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint. (ORISE)	Pu-241 by Liquid Scint. (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	GX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1049
Core ID #: 0278	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	HX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1054
Core ID #: 0278	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	IX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/17/07 **Time Collected** (24 hour): 1059
Core ID #: 0278	**Core Segment ID #:** J

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0278	JX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/17/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 0930
Core ID #: 0279	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	AX	XA	1	✓	✓	✓	✓		✓												
0279	AX	XE	1					✓													✓
0279	AX	XE	1									✓									✓

Field Sampler: Art Sam/JAW (Print and Sign) **Date:** 07/16/07 AR 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 0938
Core ID #: 0279	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 0947
Core ID #: 0279	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW846 8010C (Paragon): Arsenic, Barium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																				
0279	CX	XA	1	✓	✓																	

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 0956
Core ID #: 0279	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1000
Core ID #: 0279	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	EX	XA	1	✓	✓																

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1007
Core ID #: 0279	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	FX	XA	1	✓	✓																

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1015
Core ID #: 0279	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	GX	XA	1	✓	✓																

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1021
Core ID #: 0279	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	HX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1031
Core ID #: 0279	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor-1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	IX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy):	**Time Collected** (24 hour): 1036
Core ID #: 0279	**Core Segment ID #:** J	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0279	JX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/16/01

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0813
Core ID #: 0280	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒ Full-Suite Radiological: ☒

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	AX	XA	1	✓	✓	✓	✓	✓													
0280	AX	XF	1						✓												✓
0280	AX	XE	1										✓								✓
0280	AX	XG	1														✓				✓
0280	AX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0828
Core ID #: 0280	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample ☒ | Full-Suite Radiological: ☐

Regulatory Confirmation Sample ☒ | Gamma Only: ☐ | Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846: 6010C (Paragon): Arsenic, Barylium	SW846: 8270C (Paragon): Semi-Volatile Organics	SW846: 8260B (Paragon): VOCs by Terra Core	SW846: 7196A (Paragon): Hexavalent Chromium	SW846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	BX	XA	1	✓	✓																
0280	BX	X6	1														✓				✓
0280	BX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samillan / (signature) (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0836
Core ID #: 0280	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	CX	XA	1	✓	✓																
0280	CX	XG	1														✓				✓
0280	CX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samilian / (signature) (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0846
Core ID #: 0280	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	DX	XA	1	✓	✓																
0280	DX	XG	1														✓				✓
0280	DX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0858
Core ID #: 0280	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Term Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	EX	XA	1	✓	✓	✓	✓	✓													
0280	EX	XG	1														✓				✓
0280	EX	XH	1											✓	✓	✓		✓	✓		✓
0280	EX	XF	1						✓												✓
~~0280~~	~~EX~~	~~XE~~	~~1~~										✓								✓
0280	EX	XQ	1						✓												✓

NR 09/07/07

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0912
Core ID #: 0280	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	FX	XA	1	✓	✓																
0280	FX	XG	1														✓				✓
0280	FX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samiljan / (signature) (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 0925
Core ID #: 0280	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor-1254 (Paragon)	SW 846 6010B (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0280	6X	XA	1	✓	✓																
0280	6X	XG	1														✓				✓
0280	6X	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1621
Core ID #: 0281	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	AX	XA	1	✓	✓	✓	✓		✓												
0281	AX	XF	1					✓													✓
0281	AX	XB	1									✓									✓

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1629
Core ID #: 0281	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	BX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1635
Core ID #: 0281	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	CX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1638
Core ID #: 0281	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury			Sample Preservation (Check if YES)
Core #	Segment #	Sample #																				
0281	DX	XA	1	✓	✓																	

Field Sampler: Art Samil/JAN (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1646
Core ID #: 0281	**Core Segment ID #:** 6

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	EX	XA	1	✓	✓																

Field Sampler: Art Samilian (Print and Sign) **Date:** 07/16/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1650
Core ID #: 0281	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	FX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1654
Core ID #: 0281	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	GX	XA	1	✓	✓																

Field Sampler: Art Samilson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1658
Core ID #: 0281	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ❑	Full-Suite Radiological: ❑	
Regulatory Confirmation Sample: ❑	Gamma Only: ❑	Full-Suite: ❑

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	HX	XA	1	✓	✓																

Field Sampler: Ted Samuelson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1703
Core ID #: 0281	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	IX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/16/07 **Time Collected** (24 hour): 1708
Core ID #: 0281	**Core Segment ID #:** J

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0281	JX	XA	1	✓	✓																

Field Sampler: Art Samuelson (Print and Sign) **Date:** 07/16/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1441
Core ID #: 0282	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi Volatile Organics	SW846 8260B (Paragon): VOCs by Tetra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	AX	XA	1	✓	✓	✓	✓		✓												
0282	AX	XF	1					✓													✓
0282	AX	XB	1									✓									✓

Field Sampler: Art Sam/JAN [signature] (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1450
Core ID #: 0282	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1455
Core ID #: 0282	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	CX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1512
Core ID #: 0282	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1519
Core ID #: 0282	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	EX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1530
Core ID #: 0282	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	FX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/07 **Time Collected** (24 hour): 1544
Core ID #: 0282	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	GX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 07/13/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/13/2007 **Time Collected** (24 hour): 1555
Core ID #: 0282	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Tc-99 by Liquid Scint (Paragon)	Pu-241 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Tc-99 by Liquid Scint (ORISE)	Pu-241 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Term Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0282	HX	XA	1	✓	✓																

Field Sampler: Art Samiljan (Print and Sign) **Date:** 7/13/2007

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1006
Core ID #: ~~0280~~ 0283	**Core Segment ID #:** A

AP 07/18/07

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	Ax	XA	1	✓	✓																

Field Sampler: Art Samilian / [signature] (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1015
Core ID #: ~~0280~~ 0283	**Core Segment ID #:** B

AR 07/18/07

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan / A Samiljan (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07	**Time Collected** (24 hour): 1019
Core ID #: ~~0280~~ 0283	**Core Segment ID #:** C	

AM 07/18/07

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Barium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	CX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1028
Core ID #: ~~0280~~ 0283	**Core Segment ID #:** D

AP 07/18/07

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	DX	XA	1	✓	✓	✓	✓	✓													
0283	DX	XF	1						✓												✓
~~0283~~	~~DX~~	~~XE~~	~~1~~										✓								✓ AP 07/18/07
0283	DX	XQ	1						✓												✓

Field Sampler: Art Samillan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1040
Core ID #: ~~0280~~ 0283	**Core Segment ID #:** E

AT 07/18/07

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	EX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (signature) (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1044
Core ID #: 0283	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by TerraCore	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	FX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1048
Core ID #: 0283	**Core Segment ID #:** 6

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium,	SW 846, 8270C (Paragon): Semi Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	6X	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1053
Core ID #: 0283	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	HX	XA	1	✓	✓																

Field Sampler: Art Samillan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1059
Core ID #: 0283	**Core Segment ID #:** I

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0283	Ix	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/18/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/18/07 **Time Collected** (24 hour): 1103
Core ID #: 0283	**Core Segment ID #:** J

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sampler: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check If YES)
Core #	Segment #	Sample #																			
0283	JX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/18/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1400
Core ID #: 0284	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Term Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	AX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1406
Core ID #: 0284	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐
Regulatory Confirmation Sample: ☐	Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	BX	XA	1	✓	✓																

Field Sampler: Art Samillan / (signature) (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1413
Core ID #: 0284	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	CX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1414
Core ID #: 0284	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1420
Core ID #: 0284	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	EX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign)

Date: 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1424
Core ID #: 0284	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	FX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1428
Core ID #: 0284	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846 8010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	GX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1434
Core ID #: 0284	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846: 6010C (Paragon): Arsenic, Beryllium	SW846: 8270C (Paragon): Semi-Volatile Organics	SW846: 8260B (Paragon): VOCs by Terra Core	SW846: 7196A (Paragon): Hexavalent Chromium	SW846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0284	HX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1579
Core ID #: 0285	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒
Regulatory Confirmation Sample: ☐	Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint. (Paragon)	Tc-99 by Liquid Scint. (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint. (ORISE)	Tc-99 by Liquid Scint. (ORISE)	PCBs, Aroclor-1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	AX	XA	1	✓	✓	✓	✓	✓													
0285	AX	XF	1						✓												✓
~~0285~~	AX	XE	1										✓								✓

BZ 07/19/07

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy):	**Time Collected** (24 hour): 1524
Core ID #: 0285	**Core Segment ID #:** B	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	BX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1526
Core ID #: 0285	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Terra Core	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	CX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/19/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1530
Core ID #: 0285	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ | Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ | Gamma Only: ☐ | Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1540
Core ID #: 0285	**Core Segment ID #:** 15

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846; 6010C (Paragon): Arsenic, Beryllium	SW-846; 8270C (Paragon): Semi-Volatile Organics	SW-846; 8260B (Paragon): VOCs by Terra Core	SW-846; 7196A (Paragon): Hexavalent Chromium	SW-846; 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	5X	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1541
Core ID #: 0285	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ | Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ | Gamma Only: ☒ | Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	FX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1548
Core ID #: 0285	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	GX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/19/07 **Time Collected** (24 hour): 1553
Core ID #: 0285	**Core Segment ID #:** H

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor-1254 (Paragon)	SW-846, 8010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Tarel Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0285	Hx	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/19/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0827
Core ID #: 0286	**Core Segment ID #:**

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 8010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi Volatile Organics	SW846 8260B (Paragon): VOCs by Tera Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	AX	XA	1	✓	✓	✓	✓	✓													
0286	AX	XF							✓												✓

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0830
Core ID #: 0286	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 01/20/07 **Time Collected** (24 hour): 0835
Core ID #: 0286	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor-1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846/8260B (Paragon): VOCs by Term Core	SW 846/7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	CX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 01/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0841
Core ID #: 0286	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☒	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	DX	XA	1	✓	✓	✓	✓	✓													
0286	DX	XC							✓												✓

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0855
Core ID #: 0286	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	**Segment #**	**Sample #**																			
0286	EX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0858
Core ID #: 0286	**Core Segment ID #:** F

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	FX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 0859
Core ID #: 0286	**Core Segment ID #:** G

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Terra Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0286	GX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

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Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1150
Core ID #: 0287	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	AX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1153
Core ID #: 0287	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services **Project Name:** Subsurface Characterization and FSS **Project Mgr:** Jeffrey Lively **Project No:** 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon) Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon) VOCs by Lateral Core	SW 846, 7196A (Paragon) Hexavalent Chromium	SW 846, 7471A (Paragon) Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1156
Core ID #: 0287	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs (Aroclor 1254) (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	CX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1159
Core ID #: 0287	**Core Segment ID #:** 1

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	1X	XA	1	✓	✓																

Field Sampler: Art Samiljan / [signature] (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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AJ 07/20/07

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): ~~07~~ 07/20/07 **Time Collected** (24 hour): 1208
Core ID #: 0287	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Tera Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0287	EX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1355
Core ID #: 0288	**Core Segment ID #:** A

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☒

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi Volatile Organics	SW-846: 8260B (Paragon): VOCs by Terra Core	SW-846: 7196A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0288	A X	XA	1	✓	✓	✓	✓	✓													
0288	A X	XF							✓												✓

Field Sampler: Art Samillan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07	**Time Collected** (24 hour): 1405
Core ID #: 0288	**Core Segment ID #:** B	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon): Arsenic, Beryllium	SW-846, 8270C (Paragon): Semi-Volatile Organics	SW-846, 8260B (Paragon): VOCs by Tera Core	SW-846, 7196A (Paragon): Hexavalent Chromium	SW-846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0288	BX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07	**Time Collected** (24 hour): 1409
Core ID #: 0288	**Core Segment ID #:** C	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☒	Gamma Only: ☐	Full-Suite: ☒

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846 6010C (Paragon): Arsenic, Beryllium	SW 846 8270C (Paragon): Semi-Volatile Organics	SW 846 8260B (Paragon): VOCs by Purge & Cove	SW 846 7196A (Paragon): Hexavalent Chromium	SW 846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0288	CX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07	**Time Collected** (24 hour): 1603
Core ID #: 0289	**Core Segment ID #:** A	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☒	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☒	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Terra Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0289	AX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (signature) (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1610
Core ID #: 0289	**Core Segment ID #:** B

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐ Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ Gamma Only: ☐ Full Suite: ☑

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Trans Code	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0289	BX	XA	1	✓	✓																

Field Sampler: Art Samilian / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1615
Core ID #: 0289	**Core Segment ID #:** C

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint. (Paragon)	Tc-99 by Liquid Scint. (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint. (ORISE)	Tc-99 by Liquid Scint. (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846, 6010C (Paragon): Arsenic, Beryllium	SW 846, 8270C (Paragon): Semi-Volatile Organics	SW 846, 8260B (Paragon): VOCs by Terra Core	SW 846, 7196A (Paragon): Hexavalent Chromium	SW 846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0289	CX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1619
Core ID #: 0289	**Core Segment ID #:** D

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs (Aroclor 1254) (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Final Conc.	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7470A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0289	DX	XA	1	✓	✓																

Field Sampler: Art Samiljan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (mm/dd/yy): 07/20/07 **Time Collected** (24 hour): 1634
Core ID #: 0289	**Core Segment ID #:** E

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846, 6010C (Paragon): Arsenic, Beryllium	SW846, 8270C (Paragon): Semi-Volatile Organics	SW846, 8260B (Paragon): VOCs by Terra Core	SW846, 7196A (Paragon): Hexavalent Chromium	SW846, 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0289	EX	XA	1	✓	✓																

Field Sampler: Art Samillan / (Print and Sign) **Date:** 07/20/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07): **Time Collected** 1443
Core ID #: 0290	**Core Segment ID #:** 1

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☑	Full-Suite Radiological: ☑	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW-846: 6010C (Paragon): Arsenic, Beryllium	SW-846: 8270C (Paragon): Semi-Volatile Organics	SW-846: 8260B (Paragon): VOCs by Term. Core	SW-846: 7199A (Paragon): Hexavalent Chromium	SW-846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
290	AX	XA	1	✓	✓	✓	✓	✓													✓ A.L.
290	AX	XG	1														✓				✓
290	AX	XH	1											✓	✓	✓		✓	✓		✓
290	AX	XF	1						✓												

Field Sampler: Alejandro Lopez / (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 1448
Core ID #: 0290	**Core Segment ID #:** B	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☑	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Header Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
290	BX	XA	1	✓	✓																
290	BX	XG	1														✓				✓
290	BX	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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Fax 970.256.7356

FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 1506
Core ID #: 0290	**Core Segment ID #:** C	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☑	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☑	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
290	CX	XA	1	✓	✓																
290	CX	XG	1														✓				✓
290	CX	XH	1											✓	✓	✓		✓	✓		✓
FD	001	XG	1														✓				✓
FD	001	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 1522
Core ID #: 0290	**Core Segment ID #:** D	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☑	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW846 6010C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Terra Core	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7470A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
290	DX	XA	1	✓	✓																
290	DX	XG	1														✓				✓
	DX	XH	1											✓	✓	✓		✓	✓		✓
MS	~~DOT~~ 290-DAL	XG	1														✓				✓
MS	~~DOT~~ 290-DAL	XH	1											✓	✓	✓		✓	✓		✓
MSD	~~DOT~~ 290-DAL	XG	1														✓				✓
MSD	~~DOT~~ 290-DAL	XH	1											✓	✓	✓		✓	✓		✓

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 0901
Core ID #: 0291	**Core Segment ID #:** A	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:** Nuclear Fuel Services
	Project Name: Subsurface Characterization and FSS
	Project Mgr: Jeffrey Lively
	Project No: 9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW 846;6010C (Paragon): Arsenic, Beryllium	SW 846;8270C (Paragon): Semi-Volatile Organics	SW 846; 8260B (Paragon): VOCs by Terra Core	SW 846; 7196A (Paragon): Hexavalent Chromium	SW 846; 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
291	AX	XA	1	✓	✓																
0291																					

Field Sampler: Alejandro Lopez / Alex Lopez
(Print and Sign)

Date: 7/27/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 0906
Core ID #: 0291	**Core Segment ID #:** B	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon) Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE) Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846, 6010C (Paragon) Arsenic, Beryllium	SW-846, 8270C (Paragon) Semi-Volatile Organics	SW-846, 8260B (Paragon) VOCs by Term Core	SW-846, 7196A (Paragon) Hexavalent Chromium	SW-846, 7471A (Paragon) Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0291	BX	XA	1	✓	✓																

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 0914
Core ID #: 0291	**Core Segment ID #:** C	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs, Aroclor 1254 (Paragon)	SW-846 6010C (Paragon): Arsenic, Beryllium	SW-846 8270C (Paragon): Semi-Volatile Organics	SW-846 8260B (Paragon): VOCs by Frame Core	SW-846 7196A (Paragon): Hexavalent Chromium	SW-846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0291	CX	XA	1	✓	✓																

Field Sampler: Alejandro Lopez / Alex Lopez
(Print and Sign)

Date: 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 0918
Core ID #: 0291	**Core Segment ID #:** 1	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☐ | Full-Suite Radiological: ☐

Regulatory Confirmation Sample: ☐ | Gamma Only: ☐ | Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs Aroclor 1254 (Paragon)	SW846 60/8C (Paragon): Arsenic, Beryllium	SW846 8270C (Paragon): Semi-Volatile Organics	SW846 8260B (Paragon): VOCs by Term Cap	SW846 7196A (Paragon): Hexavalent Chromium	SW846 7471A (Paragon): Mercury		Sample Preservation (Check if YES)
Core #	Segment #	Sample #																			
0291	DX	XA	1	✓	✓																

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

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FIELD SAMPLE DATA SHEET

Survey Unit ID#: 11	**Date Collected** (07/23/07):	**Time Collected** 1100
Core ID #: EB-11	**Core Segment ID #:** Prior to drilling #290	

Site: NFS North Site 1205 Banner Hill Road Erwin, TN 37650	**Client:**	Nuclear Fuel Services
	Project Name:	Subsurface Characterization and FSS
	Project Mgr:	Jeffrey Lively
	Project No:	9120071235

SWMU Sample: ☐	Full-Suite Radiological: ☐	
Regulatory Confirmation Sample: ☐	Gamma Only: ☐	Full-Suite: ☐

Unique Sample ID Number			NUMBER of CONTAINERS	Sample Preparation (Dry & Grind)	Gamma Spectroscopy (NFS)	Gamma Spectroscopy (Paragon)	Alpha Spectroscopy (Paragon): Am, Pu, U, Th	Pu-241 by Liquid Scint (Paragon)	Tc-99 by Liquid Scint (Paragon)	Gamma Spectroscopy (ORISE)	Alpha Spectroscopy (ORISE): Am, Pu, U, Th	Pu-241 by Liquid Scint (ORISE)	Tc-99 by Liquid Scint (ORISE)	PCBs: Aroclor 1254 (Paragon)	SW 846: 6010C (Paragon): Arsenic, Beryllium	SW 846: 8270C (Paragon): Semi-Volatile Organics	SW 846: 8260B (Paragon): VOCs by Terra Core	SW 846: 7196A (Paragon): Hexavalent Chromium	SW 846: 7470 (Paragon): Mercury		Sample Preservation (Check If YES)
Core #	Segment #	Sample #																			
EB-11	—	XN	1															✓			
EB-11	—	XM	1												✓				✓		
EB-11	—	XL	1											✓							
EB-11	—	XK	1													✓					
EB-11	—	XJ	3														✓				

Field Sampler: Alejandro Lopez / Alex Lopez (Print and Sign) **Date:** 7/23/07

NFS File Classification: DCM-23-05-02

Appendix F

Reference Background Area Dataset
Survey Unit 11

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2146	1	1	1-1	1.520	1.460	1.350	0.096	1.470
2154	2	1	2-1	1.470	1.390	1.340	0.094	1.220
2164	3	1	3-1	1.940	1.540	1.680	0.073	1.510
2175	4	1	4-1	1.620	1.530	1.240	0.069	1.190
2183	5	1	5-1	1.500	1.610	1.780	0.110	1.430
2195	6	1	6-1	1.680	1.870	1.420	0.130	1.610
2204	7	1	7-1	1.620	1.520	1.390	0.111	1.200
2213	8	1	8-1	1.870	1.670	1.730	0.129	1.510
2225	9	1	9-1	1.780	1.300	1.620	0.180	1.420
2230	10	1	10-1	1.370	1.730	1.300	0.076	1.640
2236	11	1	11-1	1.600	1.480	1.550	0.098	1.460
2240	12	1	12-1	1.720	1.690	1.190	0.138	1.380
2244	13	1	13-1	2.290	1.880	1.810	0.170	1.420
2250	14	1	14-1	1.640	1.710	1.560	0.056	1.390
2255	15	1	15-1	1.780	1.340	1.670	0.104	1.630
2259	16	1	16-1	1.300	1.210	1.620	0.091	1.330
2264	17	1	17-1	1.650	1.670	1.560	0.190	1.440
2269	18	1	18-1	1.560	1.760	1.340	0.076	1.360
2274	19	1	19-1	1.790	1.710	1.500	0.170	1.320
2279	20	1	20-1	1.550	1.670	1.440	0.130	1.590
2284	21	1	21-1	1.610	1.450	1.580	0.119	1.160
2307	22	1	22-1	1.820	1.550	1.640	0.000	1.640
2312	23	1	23-1	1.080	1.490	1.310	0.210	1.410
2316	24	1	24-1	1.480	1.480	1.410	0.102	1.410
2320	25	1	25-1	1.430	1.630	1.380	0.083	1.370
2325	26	1	26-1	1.850	1.610	1.280	0.000	1.530
2330	27	1	27-1	1.330	1.530	1.710	0.230	1.300
2335	28	1	28-1	1.390	1.490	1.370	0.079	1.530
2340	29	1	29-1	1.630	1.670	1.670	0.170	1.480
2345	30	1	30-1	1.450	1.380	1.570	0.122	1.600
2350	31	1	31-1	1.490	1.640	1.460	0.077	1.570
2355	32	1	32-1	1.390	1.860	1.270	0.119	1.570
2358	33	1	33-1	1.850	1.500	1.390	0.160	1.640
2364	34	1	34-1	1.850	1.690	1.620	0.033	1.750
2370	35	1	35-1	1.540	1.390	2.000	0.330	1.540
2376	36	1	36-1	1.490	1.390	1.870	0.180	1.630
2381	37	1	37-1	1.810	1.430	1.810	0.280	1.230
2386	38	1	38-1	1.700	1.980	1.640	0.229	1.260
2391	39	1	39-1	1.650	1.690	1.430	0.168	1.400
2396	40	1	40-1	1.130	1.620	1.490	0.106	1.330
2400	41	1	41-1	1.230	1.200	1.520	0.196	1.550
2405	42	1	42-1	1.550	1.710	1.440	0.047	1.600
2410	43	1	43-1	1.900	1.740	1.830	0.208	1.550
2415	44	1	44-1	1.550	1.590	1.680	0.240	1.540
2416	45	1	45-1	1.800	1.550	1.450	0.082	1.530
2421	46	1	46-1	1.730	1.320	1.560	0.098	1.570
2426	47	1	47-1	1.530	1.560	1.560	0.246	1.520
2435	48	1	48-1	1.670	1.550	1.730	0.180	1.320

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2440	49	1	49-1	1.800	1.410	1.630	0.120	1.590
2445	50	1	50-1	1.750	1.390	1.720	0.330	1.560
2450	51	1	51-1	2.090	1.540	1.960	0.180	1.810
2455	52	1	52-1	1.910	1.360	1.920	0.260	1.660
2460	53	1	53-1	2.130	1.530	1.560	0.260	1.340
2465	54	1	54-1	1.640	1.580	1.600	0.113	1.800
2470	55	1	55-1	1.450	1.520	1.820	0.129	1.450
2476	56	1	56-1	1.560	1.860	1.620	0.072	1.210
2480	57	1	57-1	1.450	1.610	1.410	0.130	1.310
2485	58	1	58-1	1.540	1.510	1.350	0.145	1.300
2490	59	1	59-1	1.670	1.700	2.140	0.200	1.410
2495	60	1	60-1	1.780	1.620	1.810	0.150	1.290
2499	61	1	61-1	1.920	2.030	1.480	0.149	1.380
2504	62	1	62-1	1.430	1.490	1.530	0.132	1.370
2509	63	1	63-1	1.640	1.720	1.460	0.200	1.470
2513	64	1	64-1	1.680	1.360	1.740	0.160	1.410
2517	65	1	65-1	1.950	1.940	1.760	0.132	1.460
2522	66	1	66-1	1.420	1.410	1.780	0.142	1.410
2527	67	1	67-1	1.600	1.510	1.470	0.126	1.370
2532	68	1	68-1	1.750	1.570	1.610	0.130	1.820
2537	69	1	69-1	1.710	1.560	2.780	0.120	1.650
2542	70	1	70-1	1.710	1.690	3.520	0.420	1.790
2547	71	1	71-1	1.610	1.430	1.240	0.110	1.280
2552	72	1	72-1	1.660	1.300	1.400	0.114	1.610
2557	73	1	73-1	1.710	2.080	1.660	0.126	1.490
2561	74	1	74-1	1.540	1.540	2.100	0.150	1.480
2566	75	1	75-1	1.620	1.480	1.610	0.046	1.450
2569	76	1	76-1	1.590	1.190	2.240	0.140	1.910
2572	77	1	77-1	1.870	1.260	1.690	0.030	1.100
2578	78	1	78-1	1.820	1.660	1.730	-0.050	1.410
2583	79	1	79-1	2.430	1.930	1.880	0.120	1.580
2587	80	1	80-1	2.140	1.560	1.530	0.090	1.410
2591	81	1	81-1	1.880	1.680	1.220	0.190	1.730
2595	82	1	82-1	1.690	1.580	1.450	0.076	1.380
2599	83	1	83-1	2.310	1.830	1.780	0.200	1.380
2603	84	1	84-1	1.330	1.590	1.490	0.103	1.540
2608	85	1	85-1	1.530	1.770	3.360	0.150	2.140
2148	1	2	1-2	1.150	1.320	1.250	0.115	1.310
2156	2	2	2-2	1.440	1.610	1.450	0.105	1.510
2166	3	2	3-2	1.380	1.350	1.480	0.099	1.540
2174	4	2	4-2	1.920	1.840	1.570	0.131	1.330
2185	5	2	5-2	1.850	1.420	1.520	0.134	1.370
2196	6	2	6-2	1.690	1.870	1.480	0.140	1.620
2206	7	2	7-2	1.390	1.800	1.300	0.260	1.430
2217	8	2	8-2	1.890	1.810	1.820	0.136	1.690
2226	9	2	9-2	1.710	1.830	1.870	0.048	1.210
2233	10	2	10-2	1.610	1.530	1.920	0.120	1.040
2237	11	2	11-2	1.740	1.640	1.330	0.094	1.340

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2241	12	2	12-2	1.550	1.740	1.830	0.260	1.600
2245	13	2	13-2	1.950	1.550	1.580	0.059	1.360
2251	14	2	14-2	1.890	1.610	1.610	0.092	1.290
2254	15	2	15-2	1.580	1.280	1.370	0.139	1.380
2260	16	2	16-2	1.620	1.610	1.590	0.056	1.470
2265	17	2	17-2	1.310	1.310	1.320	0.056	1.310
2270	18	2	18-2	1.280	1.070	1.010	0.060	1.410
2275	19	2	19-2	1.440	1.350	1.340	0.110	1.320
2280	20	2	20-2	1.900	1.530	1.290	0.091	1.510
2285	21	2	21-2	1.850	1.670	1.690	0.270	1.630
2308	22	2	22-2	1.920	1.500	1.680	0.220	1.440
2313	23	2	23-2	1.380	1.500	1.330	0.116	1.290
2317	24	2	24-2	1.270	1.470	1.100	0.036	1.370
2321	25	2	25-2	1.530	1.720	1.390	0.074	1.680
2326	26	2	26-2	1.490	1.570	1.470	0.107	1.610
2331	27	2	27-2	1.530	2.180	1.490	0.260	1.490
2336	28	2	28-2	1.930	1.600	1.260	0.180	1.530
2341	29	2	29-2	1.630	1.730	1.550	0.230	1.630
2346	30	2	30-2	1.420	1.530	1.680	0.066	1.550
2351	31	2	31-2	1.660	1.240	1.340	0.052	1.330
2356	32	2	32-2	1.770	1.740	1.470	0.140	1.180
2362	33	2	33-2	1.630	1.770	1.570	0.136	1.480
2366	34	2	34-2	1.540	1.480	1.640	0.136	1.400
2371	35	2	35-2	1.480	1.560	1.540	0.290	1.430
2375	36	2	36-2	1.720	1.330	1.600	0.023	1.470
2377	37	2	37-2	1.850	1.570	1.470	0.230	0.990
2387	38	2	38-2	1.810	1.940	1.580	0.104	1.460
2392	39	2	39-2	1.910	2.000	1.570	0.212	1.720
2395	40	2	40-2	1.340	1.620	1.470	0.233	1.290
2401	41	2	41-2	1.880	1.880	1.500	0.136	1.430
2406	42	2	42-2	1.940	1.740	1.440	0.184	1.300
2411	43	2	43-2	2.050	1.710	2.200	0.370	2.450
2417	44	2	44-2	1.680	1.580	1.660	0.020	1.540
2422	45	2	45-2	1.610	1.830	1.310	0.154	1.440
2427	46	2	46-2	1.550	1.660	1.790	0.155	1.510
2431	47	2	47-2	1.410	1.720	1.610	0.162	1.440
2436	48	2	48-2	1.780	1.420	1.840	0.270	1.670
2441	49	2	49-2	1.520	1.870	1.940	0.170	1.690
2447	50	2	50-2	1.590	1.470	1.650	0.084	1.300
2451	51	2	51-2	2.160	1.570	1.630	0.260	1.670
2456	52	2	52-2	1.820	1.770	1.400	0.161	1.390
2461	53	2	53-2	1.500	1.160	1.490	0.132	1.470
2466	54	2	54-2	1.800	1.500	1.600	0.180	1.290
2471	55	2	55-2	1.150	1.490	1.410	0.053	1.400
2475	56	2	56-2	1.450	1.450	1.580	0.100	1.320
2481	57	2	57-2	1.300	1.400	1.960	0.151	1.670
2486	58	2	58-2	1.540	1.400	1.460	0.044	1.410
2491	59	2	59-2	1.710	1.700	1.780	0.250	1.560

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2496	60	2	60-2	2.150	1.890	1.720	0.142	1.840
2500	61	2	61-2	1.900	1.750	1.680	0.190	1.300
2505	62	2	62-2	1.520	1.530	1.370	0.250	1.280
2510	63	2	63-2	1.560	1.260	1.270	0.088	1.420
2514	64	2	64-2	2.020	1.900	1.410	0.022	1.280
2518	65	2	65-2	1.530	1.530	1.950	0.050	1.210
2523	66	2	66-2	1.510	1.850	1.410	0.065	1.510
2528	67	2	67-2	1.640	1.670	1.600	0.124	1.300
2533	68	2	68-2	1.640	1.530	1.580	0.100	1.640
2538	69	2	69-2	1.680	1.730	1.490	0.136	1.730
2543	70	2	70-2	1.180	1.580	1.690	0.110	1.330
2548	71	2	71-2	2.190	1.950	1.650	0.190	1.450
2553	72	2	72-2	1.650	1.660	1.930	0.150	1.550
2558	73	2	73-2	1.660	1.820	1.350	0.136	1.380
2562	74	2	74-2	1.580	1.690	1.520	0.240	1.310
2565	75	2	75-2	1.470	1.740	1.450	0.143	1.610
2570	76	2	76-2	1.850	1.850	1.170	0.060	1.510
2574	77	2	77-2	1.850	1.530	1.440	0.190	1.520
2579	78	2	78-2	1.590	2.200	1.480	0.110	1.390
2584	79	2	79-2	1.620	1.970	1.420	0.195	1.600
2588	80	2	80-2	2.030	1.870	2.270	0.040	1.690
2592	81	2	81-2	1.480	1.480	1.190	-0.010	1.380
2596	82	2	82-2	1.850	1.980	2.280	0.040	1.490
2600	83	2	83-2	1.490	1.360	1.500	0.070	1.400
2604	84	2	84-2	1.810	1.420	1.570	0.180	1.660
2609	85	2	85-2	1.820	1.790	1.460	0.120	1.840
2150	1	3	1-3	1.940	1.900	1.600	0.095	1.510
2158	2	3	2-3	1.680	1.800	1.600	0.110	1.740
2168	3	3	3-3	1.600	2.110	1.280	0.075	1.230
2179	4	3	4-3	1.230	1.420	1.340	0.073	1.350
2188	5	3	5-3	1.690	1.610	1.570	0.133	1.430
2198	6	3	6-3	1.590	2.130	1.170	0.210	1.620
2207	7	3	7-3	1.370	1.560	1.610	0.170	1.520
2216	8	3	8-3	1.490	1.590	1.330	0.160	1.290
2227	9	3	9-3	1.510	1.470	1.140	0.109	0.870
2235	10	3	10-3	1.830	1.670	1.490	0.140	1.590
2238	11	3	11-3	1.640	1.880	1.370	0.094	1.250
2243	12	3	12-3	1.650	1.680	1.540	0.063	1.520
2246	13	3	13-3	1.870	1.550	1.190	0.085	1.290
2252	14	3	14-3	1.270	1.590	1.500	0.181	1.290
2257	15	3	15-3	1.600	1.630	1.360	0.150	1.170
2261	16	3	16-3	1.680	1.540	1.370	0.082	1.110
2266	17	3	17-3	1.470	1.690	1.060	0.200	1.320
2271	18	3	18-3	1.350	1.560	1.360	0.034	1.390
2276	19	3	19-3	1.540	1.670	1.390	0.160	1.640
2281	20	3	20-3	1.820	1.880	1.590	0.128	1.390
2286	21	3	21-3	1.360	1.800	1.440	0.126	1.280
2309	22	3	22-3	1.490	1.370	1.850	0.220	1.150

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2314	23	3	23-3	1.470	1.680	1.410	0.083	1.380
2318	24	3	24-3	1.410	1.660	1.540	0.107	1.400
2322	25	3	25-3	1.760	1.520	1.490	0.110	1.160
2327	26	3	26-3	1.600	1.440	1.850	0.230	1.400
2332	27	3	27-3	1.690	1.550	1.400	0.085	1.240
2337	28	3	28-3	1.410	1.830	1.800	0.160	1.090
2342	29	3	29-3	1.580	2.100	1.090	0.110	1.130
2347	30	3	30-3	1.550	1.670	1.440	0.093	1.390
2352	31	3	31-3	2.040	1.900	1.250	0.070	1.340
2357	32	3	32-3	1.720	1.660	1.530	0.090	1.310
2361	33	3	33-3	1.600	1.840	1.630	0.150	1.250
2367	34	3	34-3	1.780	1.840	1.850	0.240	1.440
2372	35	3	35-3	1.360	1.510	1.510	0.117	1.460
2378	36	3	36-3	1.490	1.870	1.780	0.180	1.590
2382	37	3	37-3	1.620	1.670	1.810	0.230	1.330
2388	38	3	38-3	1.620	1.520	1.770	0.183	1.590
2393	39	3	39-3	1.700	1.610	1.910	0.221	1.830
2397	40	3	40-3	1.590	1.820	1.280	0.141	1.410
2402	41	3	41-3	1.750	1.270	1.550	0.197	1.290
2407	42	3	42-3	1.400	1.910	1.460	0.129	1.440
2412	43	3	43-3	1.670	1.790	2.260	0.310	2.850
2418	44	3	44-3	2.070	2.130	1.650	0.250	1.730
2423	45	3	45-3	1.450	1.730	1.480	0.024	1.530
2428	46	3	46-3	1.540	1.900	1.460	0.213	1.380
2433	47	3	47-3	1.450	1.650	1.560	0.210	1.350
2437	48	3	48-3	1.490	1.610	1.540	0.140	1.380
2442	49	3	49-3	1.590	1.820	1.350	0.160	1.630
2446	50	3	50-3	2.020	1.620	1.850	0.200	1.510
2452	51	3	51-3	1.720	1.560	1.720	0.122	1.820
2457	52	3	52-3	2.050	1.830	1.510	0.250	1.390
2462	53	3	53-3	1.480	1.700	1.450	0.210	1.480
2467	54	3	54-3	1.760	1.880	1.900	0.151	1.540
2472	55	3	55-3	1.500	1.770	1.390	0.200	1.360
2477	56	3	56-3	1.510	2.130	1.850	0.039	1.320
2482	57	3	57-3	1.410	1.540	1.950	0.113	1.520
2487	58	3	58-3	1.540	1.590	1.380	0.200	1.080
2492	59	3	59-3	1.630	1.970	1.390	0.146	1.380
2497	60	3	60-3	1.390	1.490	1.690	0.200	1.660
2501	61	3	61-3	1.720	1.860	1.790	0.114	1.520
2506	62	3	62-3	1.090	1.720	1.340	0.053	1.100
2511	63	3	63-3	1.780	1.830	1.620	0.230	1.270
2515	64	3	64-3	1.430	1.630	1.200	0.073	1.090
2519	65	3	65-3	1.620	1.490	1.490	0.067	1.450
2524	66	3	66-3	1.410	1.800	1.360	0.156	1.360
2529	67	3	67-3	1.660	1.830	1.480	0.130	1.430
2534	68	3	68-3	1.770	2.100	1.230	0.230	1.070
2539	69	3	69-3	1.860	1.610	1.750	0.051	1.180
2544	70	3	70-3	1.580	1.600	1.410	0.180	1.790

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2549	71	3	71-3	1.450	1.750	1.100	0.130	1.450
2554	72	3	72-3	1.660	1.780	1.460	0.180	1.280
2559	73	3	73-3	1.270	1.360	1.570	0.190	1.170
2563	74	3	74-3	1.330	1.710	1.330	0.140	1.420
2567	75	3	75-3	1.730	1.600	1.350	0.120	1.210
2571	76	3	76-3	1.410	1.630	1.120	0.210	0.880
2576	77	3	77-3	1.440	1.300	1.260	0.030	1.000
2580	78	3	78-3	1.310	1.350	1.330	0.060	1.310
2585	79	3	79-3	1.750	1.510	1.160	0.110	0.880
2589	80	3	80-3	1.510	1.520	0.870	0.020	0.740
2593	81	3	81-3	2.270	1.590	1.220	0.110	1.210
2597	82	3	82-3	1.700	1.840	1.130	0.090	1.240
2601	83	3	83-3	1.650	2.680	1.480	0.180	1.450
2605	84	3	84-3	1.640	1.930	1.590	0.130	1.260
2610	85	3	85-3	1.810	1.850	1.550	0.110	1.500
2152	1	4	1-4	1.830	2.260	1.620	0.073	1.290
2160	2	4	2-4	1.460	1.740	1.430	0.099	1.410
2170	3	4	3-4	1.410	2.020	1.220	0.103	1.190
2181	4	4	4-4	1.230	1.650	0.950	0.093	0.920
2191	5	4	5-4	1.440	1.870	1.040	0.120	1.170
2199	6	4	6-4	1.760	1.490	1.520	0.300	1.210
2211	7	4	7-4	1.360	1.430	1.040	0.163	0.990
2221	8	4	8-4	1.560	1.520	1.300	0.180	1.060
2234	9	4	9-4	1.750	2.720	1.720	0.170	1.720
2239	10	4	10-4	1.170	1.560	1.070	0.051	0.870
2242	11	4	11-4	1.440	1.480	1.140	0.147	1.100
2247	12	4	12-4	2.310	1.610	1.270	0.062	1.320
2249	13	4	13-4	1.390	1.870	1.570	0.066	1.560
2258	14	4	14-4	1.720	1.930	1.800	0.210	1.130
2262	15	4	15-4	1.420	1.650	1.220	0.118	1.280
2267	16	4	16-4	1.630	2.220	1.350	0.140	1.340
2272	17	4	17-4	1.720	1.560	1.150	0.069	1.110
2277	18	4	18-4	1.430	1.580	1.380	0.100	1.090
2282	19	4	19-4	1.200	1.260	1.390	0.121	1.170
2287	20	4	20-4	1.480	1.800	1.420	0.060	1.370
2310	21	4	21-4	1.810	1.660	1.490	0.230	1.470
2315	22	4	22-4	1.960	1.740	1.280	0.121	1.440
2319	23	4	23-4	1.410	1.370	1.560	0.230	1.370
2323	24	4	24-4	1.270	1.620	1.380	0.190	1.490
2328	25	4	25-4	1.530	1.660	1.210	0.098	1.220
2333	26	4	26-4	1.160	1.470	1.250	0.076	1.240
2338	27	4	27-4	1.450	1.530	1.310	0.080	1.060
2343	28	4	28-4	1.400	1.960	1.410	0.080	1.250
2348	29	4	29-4	1.480	1.770	1.840	0.220	1.240
2353	30	4	30-4	1.510	1.850	1.330	0.101	1.000
2359	31	4	31-4	1.150	1.740	1.500	0.210	1.390
2363	32	4	32-4	1.240	1.470	1.660	0.120	1.180
2368	33	4	33-4	1.320	1.810	1.190	0.044	1.310

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2373	34	4	34-4	1.390	1.670	1.220	0.190	1.060
2379	35	4	35-4	1.310	1.460	1.100	0.130	1.100
2383	36	4	36-4	1.560	1.560	1.370	0.130	1.240
2384	37	4	37-4	1.230	1.550	1.590	0.182	1.290
2389	38	4	38-4	1.210	1.400	1.510	0.158	1.080
2399	39	4	39-4	1.510	1.770	1.250	0.150	1.290
2403	40	4	40-4	1.300	1.940	1.060	0.092	1.160
2408	41	4	41-4	1.310	1.760	1.220	0.066	1.240
2413	42	4	42-4	1.230	1.600	1.220	0.113	1.100
2419	43	4	43-4	1.190	1.540	1.370	0.102	1.070
2424	44	4	44-4	1.280	1.300	1.160	0.096	1.160
2429	45	4	45-4	1.230	1.390	1.110	0.183	1.140
2432	46	4	46-4	1.020	1.290	1.230	0.179	1.180
2438	47	4	47-4	0.710	1.360	1.110	0.140	0.820
2443	48	4	48-4	0.900	1.110	1.120	0.087	1.140
2448	49	4	49-4	1.210	1.460	1.290	0.170	1.310
2453	50	4	50-4	1.570	1.370	0.900	0.120	0.890
2458	51	4	51-4	1.160	1.770	1.530	0.180	1.330
2464	52	4	52-4	1.210	1.550	1.340	0.068	1.220
2468	53	4	53-4	1.540	1.690	1.820	0.059	1.370
2474	54	4	54-4	1.320	1.560	1.290	0.190	1.040
2478	55	4	55-4	1.490	1.810	1.280	0.107	1.040
2483	56	4	56-4	1.420	1.600	1.200	0.120	1.020
2488	57	4	57-4	1.450	1.790	1.350	0.210	1.430
2493	58	4	58-4	0.840	1.340	0.880	0.052	0.930
2498	59	4	59-4	1.830	1.180	1.130	0.121	0.990
2502	60	4	60-4	0.930	1.030	1.160	0.082	0.520
2507	61	4	61-4	0.680	1.530	1.110	0.170	1.030
2512	62	4	62-4	0.900	1.520	1.600	0.090	0.720
2516	63	4	63-4	0.710	0.950	0.890	0.122	0.750
2520	64	4	64-4	1.250	1.060	1.030	0.180	0.890
2525	65	4	65-4	1.420	1.290	1.030	0.076	1.180
2530	66	4	66-4	1.160	1.210	0.870	0.121	0.800
2535	67	4	67-4	1.240	1.620	1.130	0.102	1.340
2540	68	4	68-4	1.330	1.930	1.650	0.100	1.270
2545	69	4	69-4	1.160	1.380	1.120	0.091	1.010
2550	70	4	70-4	1.540	1.740	1.150	0.123	1.040
2555	71	4	71-4	1.120	1.430	1.030	0.111	1.110
2560	72	4	72-4	1.170	1.480	1.090	0.200	0.910
2564	73	4	73-4	1.030	1.140	0.680	0.036	0.550
2568	74	4	74-4	0.860	0.870	1.100	0.020	0.930
2573	75	4	75-4	1.090	1.310	0.770	0.020	0.660
2575	76	4	76-4	1.960	3.540	0.930	0.121	0.690
2581	77	4	77-4	1.280	1.530	0.880	0.010	0.900
2586	78	4	78-4	1.110	1.310	1.070	0.050	0.860
2590	79	4	79-4	1.350	1.690	0.980	0.130	0.620
2594	80	4	80-4	1.130	1.760	0.920	0.060	0.650
2598	81	4	81-4	0.830	1.160	0.600	0.121	0.820

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2602	82	4	82-4	1.370	1.180	1.260	0.090	0.750
2606	83	4	83-4	1.080	1.350	1.410	0.140	0.950
2611	84	4	84-4	1.360	1.460	1.190	0.121	0.890
AVG	85	4	85-4	1.332	1.585	1.242	0.121	1.100
2162	1	5	1-5	1.060	1.630	1.010	0.099	1.130
2172	2	5	2-5	1.020	1.900	1.430	0.164	1.140
2177	3	5	3-5	1.760	2.050	0.650	0.034	1.010
2193	4	5	4-5	1.960	2.360	1.950	0.240	1.350
2203	5	5	5-5	1.470	2.030	1.050	0.060	1.030
2212	6	5	6-5	0.890	2.050	0.880	0.150	0.640
2222	7	5	7-5	0.930	1.590	0.690	0.130	0.700
2248	8	5	8-5	1.550	1.770	1.330	0.087	1.110
2253	9	5	9-5	1.100	1.600	1.240	0.103	1.100
2256	10	5	10-5	1.190	1.160	1.300	0.220	1.170
2263	11	5	11-5	1.280	1.310	1.020	0.120	1.090
2268	12	5	12-5	1.300	1.900	1.170	0.055	1.100
2273	13	5	13-5	1.360	2.010	1.120	0.180	1.150
2278	14	5	14-5	1.280	1.800	0.890	0.110	1.220
2283	15	5	15-5	1.960	1.970	1.020	0.160	1.130
2288	16	5	16-5	1.020	1.520	1.130	0.053	0.980
2311	17	5	17-5	1.210	1.840	1.070	0.034	0.950
2324	18	5	18-5	1.370	1.570	1.620	0.125	1.050
2329	19	5	19-5	2.040	1.750	1.610	0.290	0.920
2334	20	5	20-5	1.460	1.910	1.340	0.125	1.310
2339	21	5	21-5	1.650	1.710	1.600	0.083	1.080
2344	22	5	22-5	1.370	1.550	2.160	0.150	1.950
2349	23	5	23-5	1.310	1.960	1.150	0.220	1.740
2354	24	5	24-5	1.040	1.270	0.790	0.054	1.090
2360	25	5	25-5	1.230	1.810	1.330	0.170	1.000
2365	26	5	26-5	0.820	1.050	0.670	0.087	0.570
2369	27	5	27-5	1.400	1.730	0.890	0.140	0.950
2374	28	5	28-5	1.390	1.490	1.450	0.160	1.340
2380	29	5	29-5	1.430	1.850	1.450	0.125	1.180
2385	30	5	30-5	1.460	1.850	1.400	0.151	1.150
2390	31	5	31-5	1.300	1.610	1.070	0.114	1.060
2394	32	5	32-5	1.450	1.710	1.400	0.125	1.340
2398	33	5	33-5	1.610	1.750	1.440	0.158	1.250
2404	34	5	34-5	0.910	1.530	1.160	0.137	0.920
2409	35	5	35-5	1.440	1.950	1.820	0.188	1.570
2414	36	5	36-5	1.250	1.490	1.320	0.168	1.200
2420	37	5	37-5	1.110	1.400	1.040	0.125	1.030
2425	38	5	38-5	1.200	1.860	1.130	0.178	1.150
2430	39	5	39-5	0.850	1.230	0.620	0.064	0.600
2434	40	5	40-5	0.970	1.530	1.220	0.125	0.790
2439	41	5	41-5	0.880	1.220	1.110	0.160	1.380
2444	42	5	42-5	1.150	1.390	0.840	0.080	0.880
2449	43	5	43-5	1.020	1.230	0.860	0.126	0.820
2454	44	5	44-5	1.310	1.410	1.300	0.055	1.160

Reference Background Area Dataset

Sample ID	Corehole ID #	Depth Interval	RBA Number	Analytical Result, pCi/g				
				Th-230	Th-232	U-233/234	U-235/236	U-238
2459	45	5	45-5	1.290	1.770	1.260	0.150	1.540
2463	46	5	46-5	1.350	1.280	1.020	0.052	1.140
2469	47	5	47-5	1.110	2.110	0.910	0.064	0.920
2473	48	5	48-5	1.110	1.610	1.160	0.101	0.910
2479	49	5	49-5	1.390	1.580	1.190	0.145	0.960
2484	50	5	50-5	1.010	1.390	0.860	0.043	0.820
2489	51	5	51-5	1.130	0.840	0.590	0.125	0.660
2494	52	5	52-5	1.310	1.770	1.410	0.250	1.130
2503	53	5	53-5	1.040	1.360	0.920	0.167	1.070
2508	54	5	54-5	0.630	0.880	1.120	0.160	1.070
2521	55	5	55-5	0.590	1.190	1.040	0.120	0.610
2526	56	5	56-5	0.970	1.470	1.100	0.067	0.780
2531	57	5	57-5	1.750	2.310	1.430	0.120	0.950
2536	58	5	58-5	1.590	1.920	1.110	0.120	0.980
2541	59	5	59-5	1.120	2.130	0.790	0.058	1.050
2546	60	5	60-5	1.080	2.510	0.680	0.057	0.720
2551	61	5	61-5	0.950	1.270	0.990	0.082	0.920
2582	62	5	62-5	1.630	2.090	1.450	0.140	1.290
2607	63	5	63-5	1.280	1.960	1.040	0.030	0.960
2612	64	5	64-5	1.370	2.110	1.490	0.270	1.240
AVG	65	5	65-5	1.257	1.670	1.161	0.125	1.066
AVG	66	5	66-5	1.257	1.670	1.161	0.125	1.066
AVG	67	5	67-5	1.257	1.670	1.161	0.125	1.066
AVG	68	5	68-5	1.257	1.670	1.161	0.125	1.066
AVG	69	5	69-5	1.257	1.670	1.161	0.125	1.066
AVG	70	5	70-5	1.257	1.670	1.161	0.125	1.066
AVG	71	5	71-5	1.257	1.670	1.161	0.125	1.066
AVG	72	5	72-5	1.257	1.670	1.161	0.125	1.066
AVG	73	5	73-5	1.257	1.670	1.161	0.125	1.066
AVG	74	5	74-5	1.257	1.670	1.161	0.125	1.066
AVG	75	5	75-5	1.257	1.670	1.161	0.125	1.066
AVG	76	5	76-5	1.257	1.670	1.161	0.125	1.066
AVG	77	5	77-5	1.257	1.670	1.161	0.125	1.066
AVG	78	5	78-5	1.257	1.670	1.161	0.125	1.066
AVG	79	5	79-5	1.257	1.670	1.161	0.125	1.066
AVG	80	5	80-5	1.257	1.670	1.161	0.125	1.066
AVG	81	5	81-5	1.257	1.670	1.161	0.125	1.066
AVG	82	5	82-5	1.257	1.670	1.161	0.125	1.066
AVG	83	5	83-5	1.257	1.670	1.161	0.125	1.066
AVG	84	5	84-5	1.257	1.670	1.161	0.125	1.066
AVG	85	5	85-5	1.257	1.670	1.161	0.125	1.066

Appendix G

Radiological Dataset, Survey Unit 11

Survey Unit 11 Radiological Dataset

Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0274-A	FS	NFS	Gamma	Am-241	0.2631	0.2825	0.4752	U
0274-A	FS	NFS	Gamma	Th-232	1.107	0.2364	0.3765	
0274-A	FS	NFS	Gamma	U-235	0.0345	0.0569	0.096	U
0274-A	FS	PARAGON	Gamma	Am-241	-0.9	1	1.9	U
0274-A	FS	PARAGON	Alpha	Am-241	0.0078	0.0097	0.0144	U
0274-A	FS	PARAGON	Alpha	Pu-238	0.002	0.0096	0.0053	U
0274-A	FS	PARAGON	Alpha	Pu-239/240	0.012	0.013	0.018	U
0274-A	FS	PARAGON	LSC	Pu-241	0.1	2	3.4	U
0274-A	FS	PARAGON	Alpha	Pu-242	0.04	0.023	0.019	
0274-A	FS	PARAGON	LSC	Tc-99	0.26	0.96	1.6	U
0274-A	FS	PARAGON	Alpha	Th-230	0.98	0.19	0.06	
0274-A	FS	PARAGON	Gamma	Th-232	0.55	0.3	0.6	U
0274-A	FS	PARAGON	Alpha	Th-232	0.65	0.13	0.02	
0274-A	FS	PARAGON	Alpha	U-233/234	1.12	0.23	0.05	
0274-A	FS	PARAGON	Gamma	U-235	0.06	0.37	0.63	U
0274-A	FS	PARAGON	Alpha	U-235	0.044	0.034	0.032	
0274-A	FS	PARAGON	Alpha	U-238	0.824	0.18	0.044	
0274-B	FS	NFS	Gamma	Am-241	0.3297	0.3536	0.5944	U
0274-B	FS	NFS	Gamma	Th-232	0.5442	0.2493	0.4088	
0274-B	FS	NFS	Gamma	U-235	0.1092	0.0534	0.089	
0274-C	FS	NFS	Gamma	Am-241	0.0469	0.2594	0.4393	U
0274-C	FS	NFS	Gamma	Th-232	0.8253	0.2224	0.3593	
0274-C	FS	NFS	Gamma	U-235	-0.0274	-0.0539	0.0917	U
0274-D	FS	NFS	Gamma	Am-241	-0.3964	-4.707	0.6694	U
0274-D	FS	NFS	Gamma	Th-232	1.912	0.2931	0.4625	
0274-D	FS	NFS	Gamma	U-235	0.1014	0.0612	0.1024	U
0274-E	FS	NFS	Gamma	Am-241	-0.1374	-0.2713	0.4615	U
0274-E	FS	NFS	Gamma	Th-232	1.146	0.2539	0.4172	
0274-E	FS	NFS	Gamma	U-235	0.1143	0.0536	0.0892	
0274-F	FS	NFS	Gamma	Am-241	0.5344	4.423	0.5945	U
0274-F	FS	NFS	Gamma	Th-232	1.29	0.2749	0.4437	
0274-F	FS	NFS	Gamma	U-235	0.0928	0.0543	0.0907	
0275-A	FS	NFS	Gamma	Am-241	-0.1393	-0.2739	0.4671	U
0275-A	FS	NFS	Gamma	Th-232	1.309	0.2647	0.4218	
0275-A	FS	NFS	Gamma	U-235	0.1435	0.0623	0.1037	
0275-B	FS	NFS	Gamma	Am-241	-0.1328	-0.4038	0.6875	U
0275-B	FS	NFS	Gamma	Th-232	0.9157	0.2169	0.3449	
0275-B	FS	NFS	Gamma	U-235	0.0478	0.0618	0.1042	U
0275-C	FS	NFS	Gamma	Am-241	-0.1773	-0.2437	0.416	U
0275-C	FS	NFS	Gamma	Th-232	1.413	0.2047	0.316	
0275-C	FS	NFS	Gamma	U-235	0.0751	0.0524	0.0878	U
0275-D	FS	NFS	Gamma	Am-241	0.1862	0.3901	0.6588	U
0275-D	FS	NFS	Gamma	Th-232	1.511	0.2281	0.3535	
0275-D	FS	NFS	Gamma	U-235	0.1854	0.0581	0.094	
0275-E	FS	NFS	Gamma	Am-241	-0.1659	-0.2401	0.4096	U
0275-E	FS	NFS	Gamma	Th-232	1.181	0.2063	0.3266	
0275-E	FS	NFS	Gamma	U-235	0.0444	0.0532	0.0896	U
0275-F	FS	NFS	Gamma	Am-241	-0.2938	-0.3809	0.6501	U
0275-F	FS	NFS	Gamma	Th-232	0.9598	0.2338	0.3734	
0275-F	FS	NFS	Gamma	U-235	0.149	0.0532	0.088	
0275-F-DUP	FD	NFS	Gamma	Am-241	0.5174	0.4113	0.6889	U
0275-F-DUP	FD	NFS	Gamma	Th-232	1.527	0.2514	0.3924	

Survey Unit 11 Radiological Dataset

Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0275-F-DUP	FD	NFS	Gamma	U-235	0.1019	0.0592	0.0971	
0275-G	FS	NFS	Gamma	Am-241	0.1099	0.441	0.7463	U
0275-G	FS	NFS	Gamma	Th-232	1.764	0.2805	0.4384	
0275-G	FS	NFS	Gamma	U-235	0.0872	0.0664	0.1088	U
0276-A	FS	NFS	Gamma	Am-241	0.2334	0.2517	0.4234	U
0276-A	FS	NFS	Gamma	Th-232	1.037	0.2237	0.3568	
0276-A	FS	NFS	Gamma	U-235	0.2907	0.0591	0.0966	
0276-A	FS	PARAGON	Gamma	Am-241	0.43	0.47	0.76	U
0276-A	FS	PARAGON	Alpha	Am-241	0.05	0.021	0.005	
0276-A	FS	PARAGON	Alpha	Pu-238	0.01	0.01	0.005	J
0276-A	FS	PARAGON	Alpha	Pu-239/240	0.087	0.031	0.019	
0276-A	FS	PARAGON	LSC	Pu-241	1.2	1.9	3.2	U
0276-A	FS	PARAGON	Alpha	Pu-242	0.039	0.022	0.018	
0276-A	FS	PARAGON	LSC	Tc-99	-0.57	0.89	1.52	U
0276-A	FS	PARAGON	Alpha	Th-230	0.98	0.19	0.07	
0276-A	FS	PARAGON	Gamma	Th-232	0.95	0.28	0.45	
0276-A	FS	PARAGON	Alpha	Th-232	0.9	0.18	0.03	
0276-A	FS	PARAGON	Alpha	U-233/234	5.27	0.9	0.04	
0276-A	FS	PARAGON	Gamma	U-235	0.02	0.26	0.46	U
0276-A	FS	PARAGON	Alpha	U-235	0.187	0.073	0.046	
0276-A	FS	PARAGON	Alpha	U-238	1.06	0.22	0.03	
0276-B	FS	NFS	Gamma	Am-241	0.0466	0.4431	0.751	U
0276-B	FS	NFS	Gamma	Th-232	1.378	0.2734	0.4305	
0276-B	FS	NFS	Gamma	U-235	0.2349	0.0655	0.1066	
0276-C	FS	NFS	Gamma	Am-241	0.1998	0.2442	0.4112	U
0276-C	FS	NFS	Gamma	Th-232	1.385	0.2449	0.3878	
0276-C	FS	NFS	Gamma	U-235	0.1337	0.059	0.0983	
0276-C-DUP	FD	NFS	Gamma	Am-241	-0.1697	-0.408	0.6946	U
0276-C-DUP	FD	NFS	Gamma	Th-232	1.665	0.2439	0.3776	
0276-C-DUP	FD	NFS	Gamma	U-235	0.1477	0.0582	0.0966	
0276-D	FS	NFS	Gamma	Am-241	0.1171	0.3025	0.5111	U
0276-D	FS	NFS	Gamma	Th-232	1.035	0.2763	0.4476	
0276-D	FS	NFS	Gamma	U-235	0.1896	0.0571	0.0942	
0276-E	FS	NFS	Gamma	Am-241	-0.3716	-0.3593	0.6145	U
0276-E	FS	NFS	Gamma	Th-232	1.436	0.2473	0.3909	
0276-E	FS	NFS	Gamma	U-235	0.1282	0.0526	0.086	
0276-F	FS	NFS	Gamma	Am-241	-0.1792	-0.2854	0.4859	U
0276-F	FS	NFS	Gamma	Th-232	1.144	0.1955	0.3051	
0276-F	FS	NFS	Gamma	U-235	-0.0221	-0.0549	0.0932	U
0276-F-DUP	FD	NFS	Gamma	Am-241	-0.0443	-0.2479	0.4209	U
0276-F-DUP	FD	NFS	Gamma	Th-232	0.8569	0.2392	0.39	
0276-F-DUP	FD	NFS	Gamma	U-235	0.0873	0.0507	0.0848	
0276-G	FS	NFS	Gamma	Am-241	-0.3503	-0.2607	0.446	U
0276-G	FS	NFS	Gamma	Th-232	1.495	0.2678	0.4266	
0276-G	FS	NFS	Gamma	U-235	0.0572	0.052	0.0871	U
0276-H	FS	NFS	Gamma	Am-241	0.0261	0.3341	0.567	U
0276-H	FS	NFS	Gamma	Th-232	0.6164	0.254	0.4167	
0276-H	FS	NFS	Gamma	U-235	0.0419	0.0535	0.0896	U
0276-I	FS	NFS	Gamma	Am-241	-0.0259	-0.3609	0.6129	U
0276-I	FS	NFS	Gamma	Th-232	1.207	0.1984	0.309	
0276-I	FS	NFS	Gamma	U-235	0.0382	0.052	0.083	U
0277-A	FS	NFS	Gamma	Am-241	-0.3864	-0.4768	0.814	U

Survey Unit 11 Radiological Dataset

Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0277-A	FS	NFS	Gamma	Th-232	1.438	0.3272	0.5256	
0277-A	FS	NFS	Gamma	U-235	0.3048	0.0718	0.1174	
0277-A	FS	PARAGON	Gamma	Am-241	0	0.5	0.88	U
0277-A	FS	PARAGON	Alpha	Am-241	0.018	0.012	0.005	
0277-A	FS	PARAGON	Alpha	Pu-238	0.0019	0.0094	0.0052	U
0277-A	FS	PARAGON	Alpha	Pu-239/240	0.015	0.012	0.014	
0277-A	FS	PARAGON	LSC	Pu-241	1.9	1.9	3.1	U
0277-A	FS	PARAGON	Alpha	Pu-242	0.0189	0.014	0.0136	
0277-A	FS	PARAGON	LSC	Tc-99	-0.7	1	1.7	U
0277-A	FS	PARAGON	Alpha	Th-230	1.02	0.24	0.1	
0277-A	FS	PARAGON	Gamma	Th-232	0.71	0.3	0.67	J
0277-A	FS	PARAGON	Alpha	Th-232	0.98	0.23	0.05	
0277-A	FS	PARAGON	Alpha	U-233/234	1.68	0.33	0.08	
0277-A	FS	PARAGON	Gamma	U-235	-0.07	0.28	0.51	U
0277-A	FS	PARAGON	Alpha	U-235	0.076	0.047	0.045	
0277-A	FS	PARAGON	Alpha	U-238	1.11	0.23	0.05	
0277-B	FS	NFS	Gamma	Am-241	0.1782	0.2345	0.3951	U
0277-B	FS	NFS	Gamma	Th-232	0.7631	0.2029	0.3285	
0277-B	FS	NFS	Gamma	U-235	0.0878	0.0496	0.0829	
0277-C	FS	NFS	Gamma	Am-241	-0.4049	-0.3995	0.6832	U
0277-C	FS	NFS	Gamma	Th-232	0.9905	0.272	0.4442	
0277-C	FS	NFS	Gamma	U-235	0.1221	0.057	0.0945	
0277-D	FS	NFS	Gamma	Am-241	-0.0155	-0.2274	0.386	U
0277-D	FS	NFS	Gamma	Th-232	0.8407	0.1944	0.3117	
0277-D	FS	NFS	Gamma	U-235	0.0292	0.0486	0.082	U
0277-E	FS	NFS	Gamma	Am-241	0.01	0.2941	0.4994	U
0277-E	FS	NFS	Gamma	Th-232	0.6514	0.1921	0.3072	
0277-E	FS	NFS	Gamma	U-235	0.1402	0.0521	0.0809	
0277-F	FS	NFS	Gamma	Am-241	-0.2324	-0.2364	0.4041	U
0277-F	FS	NFS	Gamma	Th-232	0.5921	0.2422	0.3999	
0277-F	FS	NFS	Gamma	U-235	-0.0085	-0.0517	0.0877	U
0277-G	FS	NFS	Gamma	Am-241	0.3506	0.3322	0.5575	U
0277-G	FS	NFS	Gamma	Th-232	1.101	0.2146	0.3363	
0277-G	FS	NFS	Gamma	U-235	0.0481	0.0537	0.0903	U
0277-G-DUP	FD	NFS	Gamma	Am-241	0.2658	0.2618	0.44	U
0277-G-DUP	FD	NFS	Gamma	Th-232	1.343	0.2075	0.3202	
0277-G-DUP	FD	NFS	Gamma	U-235	0.0181	0.0493	0.0834	U
0277-H	FS	NFS	Gamma	Am-241	0.0082	0.2597	0.44	U
0277-H	FS	NFS	Gamma	Th-232	1.118	0.2322	0.371	
0277-H	FS	NFS	Gamma	U-235	0.0698	0.0513	0.0856	U
0277-I	FS	NFS	Gamma	Am-241	-0.4233	-0.2561	0.439	U
0277-I	FS	NFS	Gamma	Th-232	0.7999	0.2415	0.3945	
0277-I	FS	NFS	Gamma	U-235	0.0751	0.0514	0.0862	U
0277-J	FS	NFS	Gamma	Am-241	0.3389	0.4137	0.6963	U
0277-J	FS	NFS	Gamma	Th-232	0.9557	0.2931	0.479	
0277-J	FS	NFS	Gamma	U-235	0.1286	0.0631	0.1052	
0278-A	FS	NFS	Gamma	Am-241	-0.4759	-0.4384	0.7501	U
0278-A	FS	NFS	Gamma	Th-232	0.9912	0.2972	0.4858	
0278-A	FS	NFS	Gamma	U-235	0.1736	0.067	0.1104	
0278-A	FS	PARAGON	Gamma	Am-241	0.7	1	1.7	U
0278-A	FS	PARAGON	Alpha	Am-241	0.016	0.012	0.013	
0278-A	FS	PARAGON	Alpha	Pu-238	-0.002	0.011	0.02	U

Survey Unit 11 Radiological Dataset

Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0278-A	FS	PARAGON	Alpha	Pu-239/240	0.028	0.022	0.031	U
0278-A	FS	PARAGON	LSC	Pu-241	-1	1.7	3	U
0278-A	FS	PARAGON	Alpha	Pu-242	0.0253	0.017	0.0164	
0278-A	FS	PARAGON	LSC	Tc-99	-0.36	0.95	1.61	U
0278-A	FS	PARAGON	Alpha	Th-230	1.01	0.19	0.06	
0278-A	FS	PARAGON	Gamma	Th-232	0.91	0.3	0.63	J
0278-A	FS	PARAGON	Alpha	Th-232	0.89	0.17	0.02	
0278-A	FS	PARAGON	Alpha	U-233/234	1.47	0.28	0.04	
0278-A	FS	PARAGON	Gamma	U-235	-0.02	0.35	0.61	U
0278-A	FS	PARAGON	Alpha	U-235	0.098	0.048	0.034	
0278-A	FS	PARAGON	Alpha	U-238	1.01	0.21	0.02	
0278-B	FS	NFS	Gamma	Am-241	-0.2888	-0.271	0.4653	U
0278-B	FS	NFS	Gamma	Th-232	0.7613	0.2251	0.3663	
0278-B	FS	NFS	Gamma	U-235	0.0748	0.056	0.0939	U
0278-C	FS	NFS	Gamma	Am-241	-0.3596	-0.6328	1.073	U
0278-C	FS	NFS	Gamma	Th-232	1.435	0.2318	0.363	
0278-C	FS	NFS	Gamma	U-235	0.0865	0.0558	0.0926	U
0278-D	FS	NFS	Gamma	Am-241	-0.0298	-0.2544	0.4317	U
0278-D	FS	NFS	Gamma	Th-232	1.148	0.2266	0.3618	
0278-D	FS	NFS	Gamma	U-235	0.0394	0.0558	0.0933	U
0278-E	FS	NFS	Gamma	Am-241	-0.1824	-0.5936	1.006	U
0278-E	FS	NFS	Gamma	Th-232	1.061	0.2187	0.3496	
0278-E	FS	NFS	Gamma	U-235	0.035	0.0561	0.0906	U
0278-F	FS	NFS	Gamma	Am-241	0.0118	0.2637	0.4468	U
0278-F	FS	NFS	Gamma	Th-232	1.246	0.2233	0.3528	
0278-F	FS	NFS	Gamma	U-235	0.1011	0.0512	0.0855	
0278-G	FS	NFS	Gamma	Am-241	0.1037	0.2534	0.4282	U
0278-G	FS	NFS	Gamma	Th-232	1.626	0.2804	0.4477	
0278-G	FS	NFS	Gamma	U-235	0.0479	0.0536	0.0902	U
0278-H	FS	NFS	Gamma	Am-241	-0.0612	-0.3372	0.5738	U
0278-H	FS	NFS	Gamma	Th-232	0.9303	0.2082	0.33	
0278-H	FS	NFS	Gamma	U-235	-0.01	-0.0521	0.0885	U
0278-I	FS	NFS	Gamma	Am-241	-0.0195	-0.319	0.5417	U
0278-I	FS	NFS	Gamma	Th-232	1.132	0.214	0.3354	
0278-I	FS	NFS	Gamma	U-235	0.0079	0.05	0.0848	U
0278-J	FS	NFS	Gamma	Am-241	0.0494	0.1418	0.4374	U
0278-J	FS	NFS	Gamma	Th-232	0.7634	0.2266	0.3692	
0278-J	FS	NFS	Gamma	U-235	0.002	0.0537	0.0907	U
0279-A	FS	NFS	Gamma	Am-241	-0.0598	-0.6211	1.051	U
0279-A	FS	NFS	Gamma	Th-232	0.3983	0.2244	0.3732	
0279-A	FS	NFS	Gamma	U-235	0.0662	0.0526	0.0882	U
0279-A	FS	PARAGON	Gamma	Am-241	0.13	0.4	0.68	U
0279-A	FS	PARAGON	Alpha	Am-241	0.0109	0.0091	0.0049	
0279-A	FS	PARAGON	Alpha	Pu-238	0.0039	0.0096	0.0053	U
0279-A	FS	PARAGON	Alpha	Pu-239/240	0.029	0.016	0.005	
0279-A	FS	PARAGON	LSC	Pu-241	0.2	1.8	3	U
0279-A	FS	PARAGON	Alpha	Pu-242	0.046	0.023	0.007	
0279-A	FS	PARAGON	LSC	Tc-99	0.22	0.88	1.48	U
0279-A	FS	PARAGON	Alpha	Th-230	0.69	0.14	0.06	
0279-A	FS	PARAGON	Gamma	Th-232	0.63	0.23	0.48	
0279-A	FS	PARAGON	Alpha	Th-232	0.57	0.12	0.02	
0279-A	FS	PARAGON	Alpha	U-233/234	1.7	0.33	0.04	

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0279-A	FS	PARAGON	Gamma	U-235	0.22	0.21	0.33	U
0279-A	FS	PARAGON	Alpha	U-235	0.092	0.049	0.038	
0279-A	FS	PARAGON	Alpha	U-238	0.651	0.15	0.04	
0279-B	FS	NFS	Gamma	Am-241	-0.2511	-0.3116	0.5315	U
0279-B	FS	NFS	Gamma	Th-232	1.039	0.3172	0.5212	
0279-B	FS	NFS	Gamma	U-235	0.0914	0.0717	0.1204	U
0279-C	FS	NFS	Gamma	Am-241	-0.5701	-0.6757	1.148	U
0279-C	FS	NFS	Gamma	Th-232	0.5182	0.295	0.4761	
0279-C	FS	NFS	Gamma	U-235	0.1095	0.0629	0.0989	
0279-D	FS	NFS	Gamma	Am-241	-0.5479	-0.3176	0.5444	U
0279-D	FS	NFS	Gamma	Th-232	1.843	0.3009	0.4743	
0279-D	FS	NFS	Gamma	U-235	0.2014	0.0607	0.0999	
0279-D-DUP	FD	NFS	Gamma	Am-241	-0.2535	-0.3003	0.5125	U
0279-D-DUP	FD	NFS	Gamma	Th-232	1.562	0.2983	0.4737	
0279-D-DUP	FD	NFS	Gamma	U-235	0.2049	0.0621	0.1027	
0279-E	FS	NFS	Gamma	Am-241	0.3167	0.3785	0.6369	U
0279-E	FS	NFS	Gamma	Th-232	0.89	0.2415	0.3927	
0279-E	FS	NFS	Gamma	U-235	-0.0038	-0.0546	0.0926	U
0279-F	FS	NFS	Gamma	Am-241	-0.5023	-0.2812	0.4823	U
0279-F	FS	NFS	Gamma	Th-232	1.921	0.2527	0.3774	
0279-F	FS	NFS	Gamma	U-235	0.1192	0.0576	0.0961	
0279-G	FS	NFS	Gamma	Am-241	0.2211	0.3755	0.6336	U
0279-G	FS	NFS	Gamma	Th-232	1.343	0.2289	0.3578	
0279-G	FS	NFS	Gamma	U-235	-0.0141	-0.0639	0.0982	U
0279-H	FS	NFS	Gamma	Am-241	-0.0999	-0.2587	0.4397	U
0279-H	FS	NFS	Gamma	Th-232	1.305	0.2154	0.3368	
0279-H	FS	NFS	Gamma	U-235	0.0738	0.0504	0.0844	U
0279-I	FS	NFS	Gamma	Am-241	-0.0268	-0.2594	0.44	U
0279-I	FS	NFS	Gamma	Th-232	1.173	0.2204	0.3464	
0279-I	FS	NFS	Gamma	U-235	0.1813	0.0541	0.0891	
0279-J	FS	NFS	Gamma	Am-241	-0.4538	-0.3612	0.6188	U
0279-J	FS	NFS	Gamma	Th-232	0.66	0.2631	0.4348	
0279-J	FS	NFS	Gamma	U-235	0.1203	0.0503	0.0834	
0280-A	FS	NFS	Gamma	Am-241	0.0901	0.3518	0.6437	U
0280-A	FS	NFS	Gamma	Th-232	1.254	0.2749	0.4406	
0280-A	FS	NFS	Gamma	U-235	0.1839	0.0587	0.0967	
0280-A	FS	PARAGON	Gamma	Am-241	-0.3	0.54	0.99	U
0280-A	FS	PARAGON	Alpha	Am-241	0.04	0.018	0.005	
0280-A	FS	PARAGON	Alpha	Pu-238	0.006	0.01	0.015	U
0280-A	FS	PARAGON	Alpha	Pu-239/240	0.093	0.032	0.015	
0280-A	FS	PARAGON	LSC	Pu-241	0.5	1.8	3	U
0280-A	FS	PARAGON	Alpha	Pu-242	0.053	0.025	0.007	
0280-A	FS	PARAGON	Alpha	Th-230	1.05	0.2	0.06	
0280-A	FS	PARAGON	Gamma	Th-232	0.7	0.34	0.63	J
0280-A	FS	PARAGON	Alpha	Th-232	1.09	0.2	0.02	
0280-A	FS	PARAGON	Alpha	U-233/234	1.37	0.27	0.04	
0280-A	FS	PARAGON	Gamma	U-235	0.36	0.35	0.56	U
0280-A	FS	PARAGON	Alpha	U-235	0.065	0.039	0.028	
0280-A	FS	PARAGON	Alpha	U-238	0.941	0.2	0.039	
0280-B	FS	NFS	Gamma	Am-241	-0.5744	-0.2663	0.4589	U
0280-B	FS	NFS	Gamma	Th-232	0.8089	0.2743	0.4499	
0280-B	FS	NFS	Gamma	U-235	0.1318	0.0559	0.0928	

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0280-C	FS	NFS	Gamma	Am-241	-0.2577	-0.4095	0.6979	U
0280-C	FS	NFS	Gamma	Th-232	2.165	0.2308	0.3409	
0280-C	FS	NFS	Gamma	U-235	0.1985	0.0595	0.0975	
0280-D	FS	NFS	Gamma	Am-241	-0.4601	-0.2864	0.4904	U
0280-D	FS	NFS	Gamma	Th-232	2.175	0.29	0.4509	
0280-D	FS	NFS	Gamma	U-235	0.0683	0.0616	0.1032	U
0280-E	FS	NFS	Gamma	Am-241	-0.0757	-0.4823	0.6489	U
0280-E	FS	NFS	Gamma	Th-232	1.367	0.2499	0.3988	
0280-E	FS	NFS	Gamma	U-235	0.0207	0.0537	0.0908	U
0280-E	FS	PARAGON	Gamma	Am-241	-0.32	0.4	0.74	U
0280-E	FS	PARAGON	Alpha	Am-241	0.0088	0.0087	0.0048	J
0280-E	FS	PARAGON	Alpha	Pu-238	0.006	0.014	0.008	U
0280-E	FS	PARAGON	Alpha	Pu-239/240	0.017	0.016	0.021	U
0280-E	FS	PARAGON	LSC	Pu-241	0.2	2	3.3	U
0280-E	FS	PARAGON	Alpha	Pu-242	0.0088	0.013	0.0247	U
0280-E	FS	PARAGON	LSC	Tc-99	-0.06	0.86	1.45	U
0280-E	FS	PARAGON	Alpha	Th-230	0.7	0.14	0.06	
0280-E	FS	PARAGON	Gamma	Th-232	1.29	0.31	0.42	
0280-E	FS	PARAGON	Alpha	Th-232	1.17	0.22	0.03	
0280-E	FS	PARAGON	Alpha	U-233/234	0.716	0.16	0.047	
0280-E	FS	PARAGON	Gamma	U-235	-0.22	0.25	0.46	U
0280-E	FS	PARAGON	Alpha	U-235	0.031	0.029	0.039	U
0280-E	FS	PARAGON	Alpha	U-238	0.573	0.14	0.042	
0280-F	FS	NFS	Gamma	Am-241	-0.0745	-0.2809	0.4771	U
0280-F	FS	NFS	Gamma	Th-232	1.858	0.2943	0.4537	
0280-F	FS	NFS	Gamma	U-235	0.0965	0.0616	0.0995	U
0280-F-DUP	FD	NFS	Gamma	Am-241	-0.665	-0.3819	0.6552	U
0280-F-DUP	FD	NFS	Gamma	Th-232	1.401	0.2564	0.4058	
0280-F-DUP	FD	NFS	Gamma	U-235	0.1878	0.0572	0.0945	
0280-G	FS	NFS	Gamma	Am-241	0.4572	0.2693	0.45	
0280-G	FS	NFS	Gamma	Th-232	1.203	0.2825	0.4575	
0280-G	FS	NFS	Gamma	U-235	-0.0132	-0.058	0.0984	U
0281-A	FS	NFS	Gamma	Am-241	-0.3597	-0.4062	0.694	U
0281-A	FS	NFS	Gamma	Th-232	1.17	0.2625	0.4163	
0281-A	FS	NFS	Gamma	U-235	0.1175	0.06	0.1002	
0281-A	FS	PARAGON	Gamma	Am-241	1.2	1.2	1.9	U
0281-A	FS	PARAGON	Alpha	Am-241	0.05	0.022	0.014	
0281-A	FS	PARAGON	Alpha	Pu-238	0.022	0.024	0.033	U
0281-A	FS	PARAGON	Alpha	Pu-239/240	0.151	0.061	0.041	
0281-A	FS	PARAGON	LSC	Pu-241	0.7	1.8	3	U
0281-A	FS	PARAGON	Alpha	Pu-242	0.049	0.025	0.018	
0281-A	FS	PARAGON	LSC	Tc-99	0.04	0.88	1.48	U
0281-A	FS	PARAGON	Alpha	Th-230	1.07	0.2	0.06	
0281-A	FS	PARAGON	Gamma	Th-232	1.06	0.34	0.55	J
0281-A	FS	PARAGON	Alpha	Th-232	1.05	0.2	0.02	
0281-A	FS	PARAGON	Alpha	U-233/234	3.7	0.66	0.03	
0281-A	FS	PARAGON	Gamma	U-235	0.25	0.43	0.72	U
0281-A	FS	PARAGON	Alpha	U-235	0.085	0.05	0.046	
0281-A	FS	PARAGON	Alpha	U-238	1.02	0.22	0.04	
0281-B	FS	NFS	Gamma	Am-241	-0.3187	-0.2896	0.4948	U
0281-B	FS	NFS	Gamma	Th-232	1.301	0.2565	0.4085	
0281-B	FS	NFS	Gamma	U-235	0.0767	0.0592	0.0993	U

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0281-C	FS	NFS	Gamma	Am-241	0.3181	0.395	0.6649	U
0281-C	FS	NFS	Gamma	Th-232	1.498	0.2996	0.4805	
0281-C	FS	NFS	Gamma	U-235	0.1318	0.0591	0.0956	
0281-D	FS	NFS	Gamma	Am-241	0.3661	0.2845	0.477	U
0281-D	FS	NFS	Gamma	Th-232	1.28	0.2787	0.4477	
0281-D	FS	NFS	Gamma	U-235	0.0801	0.0593	0.099	U
0281-D-DUP	FD	NFS	Gamma	Am-241	-0.1509	-0.3604	0.6142	U
0281-D-DUP	FD	NFS	Gamma	Th-232	1.626	0.2481	0.3849	
0281-D-DUP	FD	NFS	Gamma	U-235	0.2863	0.0606	0.0984	
0281-E	FS	NFS	Gamma	Am-241	0.3828	0.3911	0.6571	U
0281-E	FS	NFS	Gamma	Th-232	1.504	0.2865	0.4597	
0281-E	FS	NFS	Gamma	U-235	0.0018	0.0631	0.1028	U
0281-F	FS	NFS	Gamma	Am-241	0.0316	0.2763	0.468	U
0281-F	FS	NFS	Gamma	Th-232	1.176	0.2537	0.4074	
0281-F	FS	NFS	Gamma	U-235	0.1061	0.0528	0.088	
0281-G	FS	NFS	Gamma	Am-241	-0.31	-0.3333	0.5703	U
0281-G	FS	NFS	Gamma	Th-232	1.046	0.226	0.3623	
0281-G	FS	NFS	Gamma	U-235	0.0963	0.0539	0.0874	
0281-H	FS	NFS	Gamma	Am-241	0.1544	0.2911	0.4913	U
0281-H	FS	NFS	Gamma	Th-232	1.69	0.2459	0.3772	
0281-H	FS	NFS	Gamma	U-235	-0.0361	-0.0614	0.1046	U
0281-I	FS	NFS	Gamma	Am-241	0.1184	0.3453	0.5841	U
0281-I	FS	NFS	Gamma	Th-232	1.012	0.2384	0.3835	
0281-I	FS	NFS	Gamma	U-235	-0.0031	-0.0541	0.0917	U
0281-J	FS	NFS	Gamma	Am-241	0.1153	0.2827	0.4777	U
0281-J	FS	NFS	Gamma	Th-232	0.4502	0.3058	0.5157	U
0281-J	FS	NFS	Gamma	U-235	0.1197	0.0599	0.0999	
0282-A	FS	NFS	Gamma	Am-241	0.3718	0.4094	0.6884	U
0282-A	FS	NFS	Gamma	Th-232	0.4918	0.3286	0.5264	U
0282-A	FS	NFS	Gamma	U-235	0.0421	0.0627	0.0994	U
0282-A	FS	PARAGON	Gamma	Am-241	0.22	0.41	0.69	U
0282-A	FS	PARAGON	Alpha	Am-241	0.012	0.012	0.015	U
0282-A	FS	PARAGON	Alpha	Pu-238	0	0.011	0.02	U
0282-A	FS	PARAGON	Alpha	Pu-239/240	0.044	0.023	0.02	
0282-A	FS	PARAGON	LSC	Pu-241	-0.1	2	3.3	U
0282-A	FS	PARAGON	Alpha	Pu-242	0.045	0.025	0.025	
0282-A	FS	PARAGON	LSC	Tc-99	-0.34	0.96	1.64	U
0282-A	FS	PARAGON	Alpha	Th-230	1	0.22	0.09	
0282-A	FS	PARAGON	Gamma	Th-232	0.63	0.43	0.64	U
0282-A	FS	PARAGON	Alpha	Th-232	0.79	0.18	0.04	
0282-A	FS	PARAGON	Alpha	U-233/234	1.25	0.26	0.04	
0282-A	FS	PARAGON	Gamma	U-235	0.1	0.25	0.43	U
0282-A	FS	PARAGON	Alpha	U-235	0.023	0.026	0.034	U
0282-A	FS	PARAGON	Alpha	U-238	0.845	0.19	0.04	
0282-B	FS	NFS	Gamma	Am-241	0.1292	0.2791	0.4714	U
0282-B	FS	NFS	Gamma	Th-232	0.8174	0.2828	0.4502	
0282-B	FS	NFS	Gamma	U-235	0.0688	0.0565	0.0949	U
0282-C	FS	NFS	Gamma	Am-241	0.1287	0.3567	0.6033	U
0282-C	FS	NFS	Gamma	Th-232	1.061	0.27	0.4394	
0282-C	FS	NFS	Gamma	U-235	0.0386	0.0526	0.0884	U
0282-D	FS	NFS	Gamma	Am-241	-0.3398	-0.2885	0.4932	U
0282-D	FS	NFS	Gamma	Th-232	0.8567	0.2721	0.441	

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0282-D	FS	NFS	Gamma	U-235	0.0506	0.0555	0.0931	U
0282-E	FS	NFS	Gamma	Am-241	0.5003	0.3577	0.6587	U
0282-E	FS	NFS	Gamma	Th-232	1.532	0.2859	0.4554	
0282-E	FS	NFS	Gamma	U-235	0.1507	0.0541	0.0883	
0282-F	FS	NFS	Gamma	Am-241	0.2216	0.2696	0.4539	U
0282-F	FS	NFS	Gamma	Th-232	1.032	0.3172	0.5216	
0282-F	FS	NFS	Gamma	U-235	0.1227	0.0541	0.0901	
0282-G	FS	NFS	Gamma	Am-241	0.0571	0.279	0.4722	U
0282-G	FS	NFS	Gamma	Th-232	1.429	0.2087	0.3162	
0282-G	FS	NFS	Gamma	U-235	0.102	0.0547	0.0907	
0282-H	FS	NFS	Gamma	Am-241	-0.139	-0.3704	0.6318	U
0282-H	FS	NFS	Gamma	Th-232	0.5574	0.2862	0.4721	
0282-H	FS	NFS	Gamma	U-235	0.0754	0.0588	0.0986	U
0283-A	FS	NFS	Gamma	Am-241	0.5141	0.4747	0.797	U
0283-A	FS	NFS	Gamma	Th-232	2.061	0.3178	0.4928	
0283-A	FS	NFS	Gamma	U-235	0.1712	0.0743	0.1231	
0283-B	FS	NFS	Gamma	Am-241	-0.1754	-0.2872	0.4892	U
0283-B	FS	NFS	Gamma	Th-232	1.641	0.3277	0.5284	
0283-B	FS	NFS	Gamma	U-235	0.2636	0.0568	0.0924	
0283-C	FS	NFS	Gamma	Am-241	0.0737	0.3743	0.634	U
0283-C	FS	NFS	Gamma	Th-232	1.279	0.2436	0.3863	
0283-C	FS	NFS	Gamma	U-235	0.1126	0.0596	0.0994	
0283-D	FS	NFS	Gamma	Am-241	0.2859	0.2656	0.4461	U
0283-D	FS	NFS	Gamma	Th-232	1.02	0.3417	0.5641	
0283-D	FS	NFS	Gamma	U-235	0.1922	0.0567	0.093	
0283-D	FS	PARAGON	Gamma	Am-241	0	0.48	0.85	U
0283-D	FS	PARAGON	Alpha	Am-241	0.004	0.01	0.016	U
0283-D	FS	PARAGON	Alpha	Pu-238	0.0019	0.0092	0.0051	U
0283-D	FS	PARAGON	Alpha	Pu-239/240	0.0075	0.0093	0.0051	J
0283-D	FS	PARAGON	LSC	Pu-241	0.8	1.8	3	U
0283-D	FS	PARAGON	Alpha	Pu-242	0.0159	0.013	0.0131	
0283-D	FS	PARAGON	LSC	Tc-99	-0.01	0.97	1.63	U
0283-D	FS	PARAGON	Alpha	Th-230	0.85	0.16	0.05	
0283-D	FS	PARAGON	Gamma	Th-232	0.65	0.29	0.51	J
0283-D	FS	PARAGON	Alpha	Th-232	1	0.18	0.02	
0283-D	FS	PARAGON	Alpha	U-233/234	0.82	0.18	0.045	
0283-D	FS	PARAGON	Gamma	U-235	0.12	0.31	0.53	U
0283-D	FS	PARAGON	Alpha	U-235	0.046	0.035	0.037	
0283-D	FS	PARAGON	Alpha	U-238	0.803	0.18	0.031	
0283-E	FS	NFS	Gamma	Am-241	-0.1103	-0.3782	0.6433	U
0283-E	FS	NFS	Gamma	Th-232	0.9992	0.2434	0.387	
0283-E	FS	NFS	Gamma	U-235	0.0626	0.055	0.0919	U
0283-F	FS	NFS	Gamma	Am-241	0.1309	0.2596	0.4384	U
0283-F	FS	NFS	Gamma	Th-232	1.105	0.2985	0.4851	
0283-F	FS	NFS	Gamma	U-235	0.1085	0.0526	0.0875	
0283-G	FS	NFS	Gamma	Am-241	-0.1301	-0.3323	0.5662	U
0283-G	FS	NFS	Gamma	Th-232	0.7432	0.2732	0.4424	
0283-G	FS	NFS	Gamma	U-235	0.0739	0.0559	0.0938	U
0283-G-DUP	FD	NFS	Gamma	Am-241	-0.4788	-0.268	0.4604	U
0283-G-DUP	FD	NFS	Gamma	Th-232	0.743	0.3015	0.4986	
0283-G-DUP	FD	NFS	Gamma	U-235	0.0091	0.0595	0.1007	U
0283-H	FS	NFS	Gamma	Am-241	0.2394	0.2655	0.4467	U

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0283-H	FS	NFS	Gamma	Th-232	1.371	0.2244	0.3489	
0283-H	FS	NFS	Gamma	U-235	0.0642	0.0562	0.094	U
0283-I	FS	NFS	Gamma	Am-241	0.2259	0.2423	0.4076	U
0283-I	FS	NFS	Gamma	Th-232	0.6093	0.232	0.3873	
0283-I	FS	NFS	Gamma	U-235	0.0499	0.0516	0.0867	U
0283-I-DUP	FD	NFS	Gamma	Am-241	0.3541	0.3247	0.5449	U
0283-I-DUP	FD	NFS	Gamma	Th-232	0.8103	0.2504	0.409	
0283-I-DUP	FD	NFS	Gamma	U-235	0.1062	0.0571	0.0953	
0283-J	FS	NFS	Gamma	Am-241	0.0573	0.3838	0.6503	U
0283-J	FS	NFS	Gamma	Th-232	1.292	0.263	0.4226	
0283-J	FS	NFS	Gamma	U-235	0.1258	0.3287	0.5536	U
0284-A	FS	NFS	Gamma	Am-241	0.0579	0.2638	0.4463	U
0284-A	FS	NFS	Gamma	Th-232	1.087	0.233	0.3728	
0284-A	FS	NFS	Gamma	U-235	0.1684	0.0536	0.0883	
0284-B	FS	NFS	Gamma	Am-241	-0.1024	-0.3645	0.62	U
0284-B	FS	NFS	Gamma	Th-232	1.333	0.2316	0.364	
0284-B	FS	NFS	Gamma	U-235	0.1246	0.3435	0.5788	U
0284-C	FS	NFS	Gamma	Am-241	0.119	0.345	0.583	U
0284-C	FS	NFS	Gamma	Th-232	2.19	0.3427	0.5389	
0284-C	FS	NFS	Gamma	U-235	0.2007	0.071	0.1181	
0284-D	FS	NFS	Gamma	Am-241	-0.1152	-0.4365	0.7419	U
0284-D	FS	NFS	Gamma	Th-232	1.345	0.2617	0.4178	
0284-D	FS	NFS	Gamma	U-235	0.0767	0.3252	0.5481	U
0284-E	FS	NFS	Gamma	Am-241	-0.0479	-0.2738	0.4646	U
0284-E	FS	NFS	Gamma	Th-232	0.902	0.2653	0.4341	
0284-E	FS	NFS	Gamma	U-235	0.1208	0.0559	0.093	
0284-F	FS	NFS	Gamma	Am-241	-0.2564	-0.4097	0.6981	U
0284-F	FS	NFS	Gamma	Th-232	1.665	0.2594	0.4068	
0284-F	FS	NFS	Gamma	U-235	0.144	0.3313	0.5582	U
0284-G	FS	NFS	Gamma	Am-241	0.2765	0.3831	0.6455	U
0284-G	FS	NFS	Gamma	Th-232	1.432	0.2794	0.447	
0284-G	FS	NFS	Gamma	U-235	0.0808	0.0558	0.0935	U
0284-G-DUP	FD	NFS	Gamma	Am-241	-0.3674	-0.3748	0.6409	U
0284-G-DUP	FD	NFS	Gamma	Th-232	1.057	0.2709	0.4412	
0284-G-DUP	FD	NFS	Gamma	U-235	0.1357	0.0584	0.0972	
0284-H	FS	NFS	Gamma	Am-241	-0.4753	-0.2964	0.5078	U
0284-H	FS	NFS	Gamma	Th-232	1.326	0.3468	0.566	
0284-H	FS	NFS	Gamma	U-235	0.0169	0.0605	0.1023	U
0285-A	FS	NFS	Gamma	Am-241	0.2903	0.2756	0.4631	U
0285-A	FS	NFS	Gamma	Th-232	0.3842	0.3225	0.5411	U
0285-A	FS	NFS	Gamma	U-235	0.2237	0.0598	0.0983	
0285-A	FS	PARAGON	Gamma	Am-241	0.1	0.44	0.77	U
0285-A	FS	PARAGON	Alpha	Am-241	0.027	0.02	0.009	
0285-A	FS	PARAGON	Alpha	Pu-238	0.002	0.0096	0.0053	U
0285-A	FS	PARAGON	Alpha	Pu-239/240	0.033	0.018	0.014	
0285-A	FS	PARAGON	LSC	Pu-241	-0.2	2.6	4.4	U
0285-A	FS	PARAGON	Alpha	Pu-242	0.0155	0.013	0.0143	
0285-A	FS	PARAGON	LSC	Tc-99	0.53	0.54	0.87	U
0285-A	FS	PARAGON	Alpha	Th-230	0.87	0.16	0.04	
0285-A	FS	PARAGON	Gamma	Th-232	0.98	0.28	0.41	
0285-A	FS	PARAGON	Alpha	Th-232	1.2	0.21	0.02	
0285-A	FS	PARAGON	Alpha	U-233/234	3.36	0.61	0.07	

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0285-A	FS	PARAGON	Gamma	U-235	0.02	0.24	0.41	U
0285-A	FS	PARAGON	Alpha	U-235	0.115	0.06	0.05	
0285-A	FS	PARAGON	Alpha	U-238	2.88	0.53	0.05	
0285-B	FS	NFS	Gamma	Am-241	-0.1526	-0.393	0.6686	U
0285-B	FS	NFS	Gamma	Th-232	1.791	0.2518	0.3903	
0285-B	FS	NFS	Gamma	U-235	0.3866	0.3404	0.572	U
0285-C	FS	NFS	Gamma	Am-241	-0.1725	-0.3105	0.528	U
0285-C	FS	NFS	Gamma	Th-232	2.04	0.249	0.3821	
0285-C	FS	NFS	Gamma	U-235	0.1236	0.0563	0.0937	
0285-D	FS	NFS	Gamma	Am-241	-0.5255	-0.3931	0.6735	U
0285-D	FS	NFS	Gamma	Th-232	1.423	0.2639	0.4194	
0285-D	FS	NFS	Gamma	U-235	-0.002	-0.0607	0.0974	U
0285-D-DUP	FD	NFS	Gamma	Am-241	-0.4087	-0.2856	0.4894	U
0285-D-DUP	FD	NFS	Gamma	Th-232	1.582	0.2462	0.3837	
0285-D-DUP	FD	NFS	Gamma	U-235	0.0353	0.0602	0.1011	U
0285-E	FS	NFS	Gamma	Am-241	0.3254	0.2648	0.4441	U
0285-E	FS	NFS	Gamma	Th-232	0.9285	0.2231	0.36	
0285-E	FS	NFS	Gamma	U-235	-0.0061	-0.0502	0.0853	U
0285-F	FS	NFS	Gamma	Am-241	-0.3747	-2.249	0.6969	U
0285-F	FS	NFS	Gamma	Th-232	0.5504	0.2847	0.4732	
0285-F	FS	NFS	Gamma	U-235	0.076	0.0589	0.0967	U
0285-G	FS	NFS	Gamma	Am-241	-0.48	-0.3316	0.568	U
0285-G	FS	NFS	Gamma	Th-232	1.723	0.3626	0.582	
0285-G	FS	NFS	Gamma	U-235	0.0076	0.0655	0.111	U
0285-H	FS	NFS	Gamma	Am-241	-0.704	-0.5219	0.8948	U
0285-H	FS	NFS	Gamma	Th-232	1.524	0.4084	0.6592	
0285-H	FS	NFS	Gamma	U-235	0.0661	0.0727	0.1223	U
0286-A	FS	NFS	Gamma	Am-241	0.0973	0.2603	0.44	U
0286-A	FS	NFS	Gamma	Th-232	1.006	0.2453	0.3968	
0286-A	FS	NFS	Gamma	U-235	0.0177	0.0538	0.091	U
0286-A	FS	PARAGON	Gamma	Am-241	-0.04	0.34	0.61	U
0286-A	FS	PARAGON	Alpha	Am-241	0.0086	0.0092	0.0127	U
0286-A	FS	PARAGON	Alpha	Pu-238	-0.0019	0.0094	0.0179	U
0286-A	FS	PARAGON	Alpha	Pu-239/240	0.0019	0.0094	0.0052	U
0286-A	FS	PARAGON	LSC	Pu-241	2	3.7	6.2	U
0286-A	FS	PARAGON	Alpha	Pu-242	0.0229	0.019	0.0212	
0286-A	FS	PARAGON	LSC	Tc-99	-0.03	0.47	0.81	U
0286-A	FS	PARAGON	Alpha	Th-230	0.74	0.14	0.04	
0286-A	FS	PARAGON	Gamma	Th-232	0.71	0.28	0.54	J
0286-A	FS	PARAGON	Alpha	Th-232	1.01	0.18	0.01	
0286-A	FS	PARAGON	Alpha	U-233/234	0.653	0.15	0.074	
0286-A	FS	PARAGON	Gamma	U-235	0.01	0.23	0.41	U
0286-A	FS	PARAGON	Alpha	U-235	0.032	0.032	0.049	U
0286-A	FS	PARAGON	Alpha	U-238	0.646	0.15	0.045	
0286-B	FS	NFS	Gamma	Am-241	-0.6001	-0.3989	0.6839	U
0286-B	FS	NFS	Gamma	Th-232	1.821	0.243	0.3729	
0286-B	FS	NFS	Gamma	U-235	0.0936	0.0594	0.0985	U
0286-C	FS	NFS	Gamma	Am-241	0.3316	0.2621	0.4395	U
0286-C	FS	NFS	Gamma	Th-232	0.8426	0.2319	0.3767	
0286-C	FS	NFS	Gamma	U-235	-0.0042	-0.0512	0.0871	U
0286-D	FS	NFS	Gamma	Am-241	-0.5919	-0.4328	0.7416	U
0286-D	FS	NFS	Gamma	Th-232	1.032	0.2785	0.4452	

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0286-D	FS	NFS	Gamma	U-235	0.0304	0.0586	0.0984	U
0286-D	FS	PARAGON	Gamma	Am-241	-0.21	0.52	0.95	U
0286-D	FS	PARAGON	Alpha	Am-241	0	0.0098	0.0208	U
0286-D	FS	PARAGON	Alpha	Pu-238	-0.003	0.013	0.03	U
0286-D	FS	PARAGON	Alpha	Pu-239/240	0.005	0.014	0.027	U
0286-D	FS	PARAGON	LSC	Pu-241	-1.5	4	7	U
0286-D	FS	PARAGON	Alpha	Pu-242	0.004	0.015	0.0292	U
0286-D	FS	PARAGON	LSC	Tc-99	-0.12	0.51	0.89	U
0286-D	FS	PARAGON	Alpha	Th-230	0.72	0.14	0.04	
0286-D	FS	PARAGON	Gamma	Th-232	0.97	0.39	0.6	J
0286-D	FS	PARAGON	Alpha	Th-232	0.88	0.17	0.02	
0286-D	FS	PARAGON	Alpha	U-233/234	0.734	0.19	0.076	
0286-D	FS	PARAGON	Gamma	U-235	0.07	0.32	0.56	U
0286-D	FS	PARAGON	Alpha	U-235	0.012	0.033	0.073	U
0286-D	FS	PARAGON	Alpha	U-238	0.78	0.2	0.08	
0286-E	FS	NFS	Gamma	Am-241	-0.3461	-0.2636	0.4512	U
0286-E	FS	NFS	Gamma	Th-232	0.7812	0.2235	0.3632	
0286-E	FS	NFS	Gamma	U-235	0.0876	0.0482	0.0799	
0286-F	FS	NFS	Gamma	Am-241	0.2737	0.4017	0.677	U
0286-F	FS	NFS	Gamma	Th-232	1.385	0.3644	0.5935	
0286-F	FS	NFS	Gamma	U-235	0.246	0.0559	0.0913	
0286-G	FS	NFS	Gamma	Am-241	0.171	0.2794	0.8316	U
0286-G	FS	NFS	Gamma	Th-232	1.314	0.4097	0.6562	
0286-G	FS	NFS	Gamma	U-235	0.2422	0.0723	0.1188	
0287-A	FS	NFS	Gamma	Am-241	-0.1171	-0.29	0.4928	U
0287-A	FS	NFS	Gamma	Th-232	0.9716	0.2838	0.4649	
0287-A	FS	NFS	Gamma	U-235	-0.0169	-0.0625	0.1038	U
0287-B	FS	NFS	Gamma	Am-241	-0.5368	-0.4542	0.776	U
0287-B	FS	NFS	Gamma	Th-232	1.937	0.397	0.6474	
0287-B	FS	NFS	Gamma	U-235	0.272	0.0663	0.1088	
0287-B-DUP	FD	NFS	Gamma	Am-241	-0.3284	-2.204	0.7275	U
0287-B-DUP	FD	NFS	Gamma	Th-232	1.28	0.2648	0.4239	
0287-B-DUP	FD	NFS	Gamma	U-235	0.2115	0.0636	0.105	
0287-C	FS	NFS	Gamma	Am-241	0.4781	0.2669	0.4452	
0287-C	FS	NFS	Gamma	Th-232	1.145	0.241	0.3856	
0287-C	FS	NFS	Gamma	U-235	0.1597	0.054	0.0892	
0287-D	FS	NFS	Gamma	Am-241	-0.4003	-0.4194	0.7166	U
0287-D	FS	NFS	Gamma	Th-232	1.023	0.3932	0.6482	
0287-D	FS	NFS	Gamma	U-235	0.2586	0.0613	0.0993	
0287-E	FS	NFS	Gamma	Am-241	0.0989	0.3227	0.5458	U
0287-E	FS	NFS	Gamma	Th-232	0.7004	0.3397	0.5686	
0287-E	FS	NFS	Gamma	U-235	0.2197	0.063	0.1036	
0288-A	FS	NFS	Gamma	Am-241	-0.0736	-0.3515	0.5975	U
0288-A	FS	NFS	Gamma	Th-232	0.7185	0.3633	0.6064	
0288-A	FS	NFS	Gamma	U-235	0.2194	0.0588	0.0967	
0288-A	FS	PARAGON	Gamma	Am-241	0.18	0.31	0.51	U
0288-A	FS	PARAGON	Alpha	Am-241	0.0073	0.0091	0.0135	U
0288-A	FS	PARAGON	Alpha	Pu-238	-0.0019	0.0092	0.0201	U
0288-A	FS	PARAGON	Alpha	Pu-239/240	0.015	0.011	0.005	
0288-A	FS	PARAGON	LSC	Pu-241	-1.6	2.3	3.9	U
0288-A	FS	PARAGON	Alpha	Pu-242	0.0181	0.014	0.0166	
0288-A	FS	PARAGON	LSC	Tc-99	0.64	0.52	0.83	U

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0288-A	FS	PARAGON	Alpha	Th-230	0.62	0.12	0.04	
0288-A	FS	PARAGON	Gamma	Th-232	0.73	0.25	0.3	J
0288-A	FS	PARAGON	Alpha	Th-232	0.7	0.13	0.01	
0288-A	FS	PARAGON	Alpha	U-233/234	1.58	0.3	0.04	
0288-A	FS	PARAGON	Gamma	U-235	0.2	0.23	0.38	U
0288-A	FS	PARAGON	Alpha	U-235	0.056	0.036	0.03	
0288-A	FS	PARAGON	Alpha	U-238	0.672	0.15	0.038	
0288-B	FS	NFS	Gamma	Am-241	-0.0152	-0.2806	0.4758	U
0288-B	FS	NFS	Gamma	Th-232	1.239	0.2483	0.3969	
0288-B	FS	NFS	Gamma	U-235	0.126	0.0552	0.0912	
0288-C	FS	NFS	Gamma	Am-241	-0.1109	-0.3911	0.665	U
0288-C	FS	NFS	Gamma	Th-232	1.443	0.3947	0.6487	
0288-C	FS	NFS	Gamma	U-235	0.2508	0.0615	0.1004	
0289-A	FS	NFS	Gamma	Am-241	-0.1967	-0.2624	0.4471	U
0289-A	FS	NFS	Gamma	Th-232	1.517	0.2396	0.3767	
0289-A	FS	NFS	Gamma	U-235	0.1386	0.0509	0.0845	
0289-B	FS	NFS	Gamma	Am-241	-0.4406	-0.4108	0.702	U
0289-B	FS	NFS	Gamma	Th-232	1.649	0.4154	0.6832	
0289-B	FS	NFS	Gamma	U-235	0.1988	0.0716	0.1099	
0289-C	FS	NFS	Gamma	Am-241	-0.4283	-0.2784	0.4768	U
0289-C	FS	NFS	Gamma	Th-232	0.8441	0.2633	0.4309	
0289-C	FS	NFS	Gamma	U-235	0.1051	0.0517	0.0862	
0289-D	FS	NFS	Gamma	Am-241	-0.2254	-0.3836	0.6538	U
0289-D	FS	NFS	Gamma	Th-232	1.819	0.2398	0.3699	
0289-D	FS	NFS	Gamma	U-235	0.0723	0.0661	0.0958	U
0289-D-DUP	FD	NFS	Gamma	Am-241	-0.1328	-0.2584	0.4399	U
0289-D-DUP	FD	NFS	Gamma	Th-232	1.103	0.26	0.4205	
0289-D-DUP	FD	NFS	Gamma	U-235	-0.0095	-0.0577	0.0973	U
0289-E	FS	NFS	Gamma	Am-241	0.1987	0.3511	0.5926	U
0289-E	FS	NFS	Gamma	Th-232	1.587	0.2331	0.3587	
0289-E	FS	NFS	Gamma	U-235	0.0629	0.0566	0.0959	U
0290-A	FS	NFS	Gamma	Am-241	0.0997	0.4028	0.6819	U
0290-A	FS	NFS	Gamma	Th-232	1.905	0.2502	0.3831	
0290-A	FS	NFS	Gamma	U-235	0.1757	0.0587	0.0955	
0290-A	FS	PARAGON	Gamma	Am-241	-0.02	0.45	0.8	U
0290-A	FS	PARAGON	Alpha	Am-241	0.0117	0.0097	0.0053	
0290-A	FS	PARAGON	Alpha	Pu-238	0.0115	0.0096	0.0052	
0290-A	FS	PARAGON	Alpha	Pu-239/240	0.011	0.011	0.014	U
0290-A	FS	PARAGON	LSC	Pu-241	-0.4	3.1	5.3	U
0290-A	FS	PARAGON	Alpha	Pu-242	0.0086	0.011	0.0078	J
0290-A	FS	PARAGON	LSC	Tc-99	0.05	0.52	0.89	U
0290-A	FS	PARAGON	Alpha	Th-230	0.8	0.16	0.05	
0290-A	FS	PARAGON	Gamma	Th-232	1.17	0.31	0.43	
0290-A	FS	PARAGON	Alpha	Th-232	1.32	0.24	0.02	
0290-A	FS	PARAGON	Alpha	U-233/234	0.955	0.2	0.039	
0290-A	FS	PARAGON	Gamma	U-235	-0.02	0.22	0.4	U
0290-A	FS	PARAGON	Alpha	U-235	0.051	0.035	0.034	
0290-A	FS	PARAGON	Alpha	U-238	0.747	0.16	0.029	
0290-B	FS	NFS	Gamma	Am-241	0.2332	0.2862	0.4819	U
0290-B	FS	NFS	Gamma	Th-232	1.393	0.2386	0.3711	
0290-B	FS	NFS	Gamma	U-235	0.1619	0.0574	0.095	
0290-C	FS	NFS	Gamma	Am-241	-0.7877	-0.3889	0.6688	U

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Sample ID	QC Code	Laboratory	Analysis Method	Isotope	pCi/g			Qualifier[1]
					Analytical Result	Error (2-sigma)	MDC	
0290-C	FS	NFS	Gamma	Th-232	1.457	0.2221	0.3442	
0290-C	FS	NFS	Gamma	U-235	0.1845	0.0519	0.0846	
0290-D	FS	NFS	Gamma	Am-241	0.1082	0.284	0.48	U
0290-D	FS	NFS	Gamma	Th-232	0.5711	0.2902	0.475	
0290-D	FS	NFS	Gamma	U-235	0.1096	0.053	0.0883	
0291-A	FS	NFS	Gamma	Am-241	-0.4099	-0.4134	0.7062	U
0291-A	FS	NFS	Gamma	Th-232	1.523	0.2766	0.4383	
0291-A	FS	NFS	Gamma	U-235	0.1668	0.0583	0.0966	
0291-B	FS	NFS	Gamma	Am-241	0.1651	0.3665	0.6192	U
0291-B	FS	NFS	Gamma	Th-232	1.61	0.2613	0.4106	
0291-B	FS	NFS	Gamma	U-235	0.187	0.0623	0.0995	
0291-C	FS	NFS	Gamma	Am-241	-0.6618	-0.416	0.7135	U
0291-C	FS	NFS	Gamma	Th-232	1.428	0.2691	0.4263	
0291-C	FS	NFS	Gamma	U-235	0.1482	0.0629	0.1014	
0291-D	FS	NFS	Gamma	Am-241	-0.1305	-0.2741	0.4663	U
0291-D	FS	NFS	Gamma	Th-232	1.729	0.2927	0.4639	
0291-D	FS	NFS	Gamma	U-235	0.0082	0.0561	0.0949	U
0280-E-DUP	FD	PARAGON	LSC	Tc-99	-0.13	0.89	1.51	U
0283-D-DUP	FD	PARAGON	LSC	Tc-99	-0.15	0.91	1.55	U

[1] Description of data qualifiers is found in NFS Data Validation Procedure NFS-DC-008 (NFS 2007b)