MAXEY FLATS
NUCLEAR DISPOSAL SITE
CALENDAR YEAR 2009

SUMMARY REPORT

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Prepared by

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MFNDS CY 2009 SUMMARY REPORT

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MFNDS CY 2009 SUMMARY REPORT

Introduction

One thousand two hundred three (1,203) water samples were collected during calendar year (CY) 2009 from the environment within 4.5 air miles of the Maxey Flats Nuclear Disposal Site (MFNDS) (***Figure 1***). The Radiation/Environmental Monitoring Section (REMS) of the Radiation Health Branch (RHB) performed 3613 analyses on these samples. An additional 20,199 quality control (QC) analyses were performed to ensure the accuracy and precision of the analytical results. The cited 20,199 QC analyses represent all daily, instrument, and run QC analyses. Data was validated by an independent third party.

Surface water and groundwater samples were collected from the MFNDS and its environs in CY 2009. Surface water samples were collected from on-site streams (within the original licensed site area), off-site streams (outside the original licensed area), drains, washes, ditches, and retention basins. Groundwater samples were collected from drinking-water wells and U. S. Geological Survey (USGS) monitoring wells. Samples were also collected from the public water supply in Hillsboro, Kentucky. Analytical data generated from the MFNDS sampling locations is provided in data summaries.

In CY 2009, the REMS conducted extended radionuclide analyses on groundwater samples from the USGS monitoring wells outside the restricted area and on samples from select surface water locations and seeps. Extended radionuclide analyses of monitoring-well groundwater, surface water, and seep-water samples provided the RHB with information regarding contaminant migration from the burial trenches following completion of Initial Remedial Phase Superfund activities.

Data collected during 2009 was used to assess whether the actions implemented during the Initial Remedial Phase under Superfund at the MFNDS were successful in meeting remedial goals. Assessment of validated data from monitoring wells, seeps, and surface water locations indicate that ex-filtration of leachate from the trenches continues to occur at the MFNDS. The data collected to date does not support the U.S. Environmental Protection Agency's (USEPA) conclusion in their Second Five-Year Report. The Initial Remedial Phase of the Superfund remediation has been completed and certified by the USEPA. The *Five-Year Review Report (Second Five-Year Report) for the Maxey Flats Disposal Site Fleming County, Kentucky, United States Environmental Protection Agency – Region 2, Atlanta, Georgia, September 2007* states on page 35:

> "Remedial action objectives for the Site are being met. The continued release of contaminants to bedrock, groundwater, sediment, and surface water has been mitigated."

Assessment of CY2009 data provides continuing evidence that releases to the environment continue to occur at the MFDS. Releases of radionuclides to bedrock, groundwater, surface water, and sediment have not been mitigated by the Initial Remedial Phase at the Maxey Flats Disposal Site.

Laboratory Considerations

The sample minimum detectable activity (MDA) for tritiated water (HTO) measurements by the REMS laboratory ranged from 0.3 picocuries/milliliter (pCi/ml) for 5.0 ml sample aliquots used in the analysis of all on-site, off-site, drinking wells, some monitoring wells, and soil water

samplers to 16.5 pCi/ml for 0.1 ml aliquots used in the analysis of various and monitoring well water samples. The MDA for gross alpha-particle activity is sample volume dependent and was approximately 2.0 pCi/l for 200 ml aliquots that increased with a decrease in sample aliquot volume. The MDA for gross beta-particle activity is also sample volume dependent and was approximately 4.0-5.0 pCi/l for 200 ml aliquots with a corresponding increase in the MDA as sample volume aliquots decreased.

Background and Off-Site Monitoring

Mean HTO activity for sample locations ranged from less than the MDA at background and off-site sampling locations, to 66.0 pCi/ml at the old site license boundary, Location 144, in the East Main Drainage Channel. Background and off-site surface-water sample locations ***(Figure 1)*** included; Crane Creek (ST119) on Highway 32, Crane Creek on Rawlings Road (ST121), Fox Creek off Highway 158 (ST130), Fox Creek on Highway 111 (ST136), Rock Lick Creek above its confluence with No-Name Creek (ST122), and Rock Lick Road at the first bridge (ST101).

HTO activity in groundwater samples from the background drinking-water well, ST112, north of the site at Highway 1895 was below the laboratory reported sample MDAs ***(Figure 2).*** The February and August water samples for calendar year 2009 from ST142 had HTO activity above laboratory reported sample MDAs while the samples taken in April and October of 2009 had HTO activity below the laboratory reported sample MDA.

East Main Drain Seep Monitoring

Samples collected from a biomonitoring plot in 1990 established the contamination zone on the East Main Drain Hillside. The plume of HTO activity associated with the seeps on the East Main Drain Hillside was mapped by using data from the biomonitoring network. The biomonitoring plot results indicated that HTO moves through the colluvium on the East Main Drain Hillside to the East Main Drainage Channel above the 800' elevation (above Location 113). REMS personnel have monitored the East Main Drain Hillside seeps since 1990.

Table 1-1 presents the HTO data for seeps on the East Main Drain Hillside ***(Figure 3)*** from January through December 2009. This data indicates that a pulse of HTO activity in groundwater continues to migrate from the 40-Series trenches to the East Main Drain Hillside. Since this movement is most likely through fractures in the Upper/Lower Farmers Members underlying the East Side of the site, it may have been difficult to mitigate during remediation of the facility. The RHB continues to monitor the East Main Drain Hillside for further evidence of radionuclide activity.

TABLE 1-1. CY 2009 East Drain Seep Data

Tritium data for Water Samples were collected from Seeps on the East Hillside at the Maxey Flats Nuclear Disposal Site.

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDC (pCi/ml)	Validation Code
1/22/2009	4.192E+03	3.148E+01	1.497E+01	=
2/16/2009	2.006E+03	3.179E+00	3.546E-01	=
3/24/2009	4.389E+03	4.815E+00	3.497E-01	=
4/8/2009	2.081E+03	3.262E+00	3.406E-01	=
4/23/2009	1.898E+03	2.209E+01	1.560E+01	=
5/29/2009	2.607E+03	3.652E+00	3.514E-01	=
6/23/2009	3.317E+03	3.902E+00	3.035E-01	=
7/28/2009	1.308E+03	2.478E+00	3.204E-01	=
8/12/2009	1.841E+03	2.936E+00	3.057E-01	=
9/29/2009	2.371E+03	3.535E+00	3.735E-01	=
10/1/2009	4.356E+03	4.564E+00	3.015E-01	=
11/23/2009	2.909E+03	3.840E+00	3.623E-01	=
12/4/2009	2.077E+03	3.164E+00	3.298E-01	=

HTO = tritium; MDC = Minimum Detectable Concentration; CU=Counting Uncertainty; Validation code "=" indicates no qualifier is necessary

East Drain seeps USF1, UFS1N, LFS2, EMR1, EMR2, EMR3, EML1, EML2, and EML3 were collected during the annual seep sample collection in CY 2009. The data for these East Main Drain Hillside Seeps is provided in Table 1-2.

TABLE 1-2. East Hillside Annual Seep Data

Annual Seeps located at Farmers outcrops East Hillside April 23, 2009

	HTO		Gross alpha		Gross beta		Gamma
Location	pCi/ml	CU	pCi/l	CU	pCi/l	CU	pCi/l
UFS1	64	6	*-0.3*	*0.6*	*4.0*	*1.7*	<MDA
UFSN1	4839	35	*1.1*	*3.0*	30.2	5.3	<MDA
LFS2	1855	22	*2.4*	*3.4*	*7.9*	*4.4*	<MDA
EMR1	3940	31	*3.4*	*3.4*	29.1	5.2	<MDA
EMR2	3867	31	*1.9*	*2.7*	16.5	4.7	<MDA
EMR3	144	8	*1.1*	*0.8*	5.6	1.5	<MDA
EML1	24.4	*5*	*1.6*	*0.8*	*0.8*	*1.1*	<MDA
EML2	*12.0*	*5*	*1.1*	*0.6*	*2.2*	*1.1*	<MDA
EML3	*6.3*	*5*	*0.5*	*0.5*	*5.6*	*1.5*	<MDA

Italics = Reported value below sample MDA or error greater than 50% of the reported value. MDA=Minimum Detectable ACTIVITY. CU=Counting Uncertainty.

Elevated HTO activity was detected in samples collected from the Farmers outcrop seeps to the North of the East Main Drain at the six (6) locations sampled in CY 2009. Water collected from locations at the East Main Drain Seeps on April 23, 2009 was also analyzed for strontium (^{90}Sr), uranium and plutonium isotopes, and gamma emitting radionuclides.

East Main Drain Monitoring

The HTO activity at East Main Drain sampling locations 113 and 144 ***(Figure 4)*** is representative of the discharge to surface water of leachate-contaminated groundwater that has migrated through the subsurface from the 40-Series disposal trenches to the East Main Drainage Channel. The average HTO activity at Location 144 in the East Main Drainage Channel was 52 pCi/ml in CY 2002, 60 pCi/ml in 2003, 90 pCi/ml in 2004, 50 pCi/ml in 2005, 52 pCi/ml in 2006, 78 pCi/ml in 2007, 35 pCi/ml in 2008, and 66 pCi/ml in 2009. The average HTO activity at location 113 was 64 pCi/ml in CY 2002, 84 pCi/ml in 2003, 153 pCi/ml in 2004, 106 pCi/ml in 2005, 126 pCi/ml in 2006, 181 pCi/ml in 2007, 82 pCi/ml in 2008, and 187 pCi/ml in 2009.

The HTO activity in surface water at East Main Drainage Channel locations 113 and 144 remain elevated relative to HTO activity upgradient and upslope at the outlet of the East Main Drainage Retention Pond (EDOUTL). Based on three samples collected at the EDOUTL in 2009, the average HTO in surface water at EDOUTL was 1.4 pCi/ml as compared to 66 and 187 pCi/ml for surface water at locations 144 and 113, respectively.

The mean HTO activity for the East Drain ISCO automatic sampler (EDRN) at 800 feet above mean sea level (MSL) in the East Main Drainage Channel ***(Figure 5)*** was 103 pCi/ml in 2002, 106 pCi/ml in 2003, 133 pCi/ml in 2004, 111 pCi/ml in 2005, 82 pCi/ml in 2006, 135 pCi/ml in 2007, 90 pCi/ml in 2008, and 140 pCi/ml in 2009. Automatic samplers composites surface water samples on a daily basis. EDRN HTO activity in surface water for: (1) CY 2006 ranged from 1.9 to 269 pCi/ml, (2) CY 2007 ranged from 0.2 to 525 pCi/ml, (3) CY 2008 ranged from 1.5 to 288 pCi/ml and (4) CY 2009 ranged from 3.7 to 464 pCi/ml.

The results of surface water ^{90}Sr analyses for the first (1st) through fourth (4th) quarters of CY 2009 are presented in Table 1-3. The Results of surface water ^{90}Sr analyses for the East Main Drain seeps is provided in Appendix 1.

TABLE 1-3. Strontium-90 (^{90}Sr) surface water data for CY 2009.

Strontium-90 Analysis of Water Samples Collected at the MFNDS on February 1, 2009.

Location	^{90}Sr pCi/liter	CU*
102	***-1.1***	0.9
103	***-0.8***	0.9
106	***-0.5***	0.8
107	***0.1***	0.8
122	***-0.9***	0.8
143	***-0.3***	0.8
144	***-0.2***	0.8
145	***-1.3***	0.8

Bold Italics = Reported Values Below MDA; *CU=Counting Uncertainty

Strontium-90 Analysis of Water Samples Collected at the MFNDS on April 8, 2009.

Location	^{90}Sr pCi/liter	CU*
103	*-0.2*	0.8
106	*0.3*	0.8
107	1.7	0.9
122	*0.2*	0.8
143	*-0.3*	0.8
144	*0.3*	0.8
145	*0.6*	0.9

Bold Italics = Reported Values Below MDA; CU=Counting Uncertainty

Strontium-90 Analysis of Water Samples Collected at the MFNDS on August 12, 2009.

Location	^{90}Sr pCi/liter	CU*
102	***-1.0***	1.3
103	***-0.6***	0.8
106	***0.08***	0.8
107	***-0.3***	0.9
122	0.2	0.8
143	***-0.3***	1.1
144	***-0.8***	0.9
145	***-0.6***	0.9

Bold Italics = Reported Values Below MDA; CU=Counting Uncertainty

Strontium-90 Analysis of Water Samples Collected at the MFNDS on October 30, 2009.

Location	^{90}Sr pCi/liter	CU*
102	***1.7***	0.7
103	***1.3***	0.6
106	***1.3***	0.7
107	***1.2***	0.7
122	***0.1***	0.7
143	***0.1***	0.7
144	***1.1***	0.7
145	***1.7***	0.7

Bold Italics = Reported Values Below MDA; CU=Counting Uncertainty

West Hillside Surface Water Monitoring

During the Initial Remedial Phase of the Superfund Action, significant releases of HTO occurred from the Earthen Mound Concrete Bunkers (EMCB) that were constructed for disposition of trench leachate. These HTO releases occurred from 1999 through 2000 and impacted surface water in Wash 107. The data in Appendix 1 for Locations F107, G107, and I107 demonstrate that by 2004 the average annual level of HTO at location I107 had decreased to less than the detection limit. The data for location I107 established the releases that occurred during the Initial Remedial Phase of the Superfund Action are no longer impacting Wash 107. The data in Appendix 1 also shows that the HTO levels at F107 and G107 in Wash 107 continue to be impacted by a source of HTO other than the release that occurred during the Initial Remedial Phase of the Superfund action. The source of HTO impacting Wash 107 is the western series trenches. This data establishes releases from the trenches via the fractures in the lower sandstone marker bed to the west hillside colluvium with release to the surface water in Wash 107 are still a major concern for the long-term stability of the site.

Surface water sampling locations in Wash 107 from the middle of the hillside, locations F107 and G107, downgradient/downslope to the dirt road, W7ATRD, have elevated HTO activity compared to levels of HTO activity above the middle of the hillside at locations H107, I107 and J10. The HTO activity in surface water sampling locations from the middle of the hillside in Wash 107 to downslope locations at the bottom of the west hillside indicate that HTO continues to move from the western series disposal trenches to the west hillside via subsurface pathways. This data supports the continuing release of HTO from the disposal site to the west hillside subsequent to the Initial Remedial Phase of the Superfund Action at the Maxey Flats Nuclear Disposal Site. The remedial action at the site has not impacted release of HTO from the disposal trenches to the west hillside.

The mean HTO activity for location 102 grab-samples collected at the junction of Rock Lick Creek and Highway 158 was 0.6 pCi/ml in 2002, 0.7 pCi/ml in 2003, 0.9 pCi/ml in 2004, 0.8 pCi/ml in 2005, 0.6 pCi/ml in 2006, 0.9 pCi/ml in 2007, 0.7 pCi/ml in 2008, and 0.6 in 2009. The mean HTO activity in Drip Springs Creek Location 103 grab-samples (Figure 8) was 0.7 pCi/ml in 2002, 0.6 pCi/ml in 2003, 0.6 pCi/ml in 2004 0.6 pCi/ml in 2005, 0.4 pCi/ml in 2006, 0.6 pCi/ml in 2007, 0.3 pCi/ml in 2008, and 0.4 pCi/ml. The HTO activity at these two (2) sampling locations may reflect some stabilization of HTO discharges due to controls established during the Initial Remedial Phase to minimize release of HTO from the Earthen Mound Concrete Bunkers that occurred during the Superfund Action.

USGS Monitoring Well Sampling

Extended radionuclide analysis of water from selected United States Geological Survey (USGS) monitoring wells ***(Figure 7)*** continued in CY 2009. Extended radionuclide analyses were evaluated in order to monitor the flux of contaminants in groundwater contaminant plumes located under the Northwest corner of the Restricted Area. All monitoring wells along the eastern side of the Restricted Area were abandoned during the Initial Remedial Phase. Extended radionuclide data collected during CY 2009 along with data collected from CY 2000 through 2008 is critical for establishing trends that can be utilized for assessment of the performance and effectiveness of Initial Remedial Phase actions.

Extended radionuclide analyses were conducted for USGS monitoring well groundwater samples collected in April and October 2009. Extended radionuclide analyses included; Strontium-90

(^{90}Sr), carbon-14 (^{14}C), plutonium-238 (^{238}Pu), plutonium-239 (^{239}Pu), uranium-238 (^{238}U), uranium-235 (^{235}U), and uranium-234 (^{234}U)

CY 2009 Observations for Water from USGS Monitoring Wells

- Elevated gross alpha-particle activity was detected in water from monitoring well UF2, UF2, N2B(J) in October 2009. The gross alpha-particle activity data for water from well N2B collected in October 2009 had a high counting uncertainty associated with the measurements. Therefore, the results are reported as uncertain "J" for the water samples from that location.
- Specific alpha analyses were performed for the following radionuclides: ^{234}U, ^{235}U, ^{238}U, ^{238}Pu, and ^{239}Pu. Tables 1-4a and 1-4b present the activity of these isotopes for water from wells UE2, UF2, UK1, N2B, and UF10a.
- Based on the data in Table 1-4a and 1-4b, alpha-emitting radionuclides are distributed in Lower Marker Bed (LMB) groundwater in the north/northwest portion of the Restricted Area and adjacent areas.
- Groundwater from wells UE2, UF2, UK1, and N2B had ^{234}U activity that exceeded sample specific MDAs for both the April and October 2009 samples. Monitoring well UF10a was only sampled in April and it had a ^{234}U activity that exceeded the sample specific activity.
- Wells UE2 had ^{238}U activity in groundwater that exceed sample specific MDAs for samples collected in April and October CY 2009. Well UF2 did not ^{238}U activity that exceed the sample specific MDA for either collection date. Wells UK1 and N2B did not have ^{238}U activity that exceed sample specific MDAs in April but had ^{238}U activity that exceeded sample specific MDAs in October. UF10a had ^{238}U activity exceeding the sample specific activity for the only collection date (April).
- The maximum activity for ^{238}U in the monitoring wells tested ranged from 2.2/0.5 pCi/l (activity/counting uncertainty) in well UF10a to 0.9/0.3 pCi/l in well UE2.
- Uranium-235 activity was below the MDA or had counting uncertainty greater than 50% of the activity for monitoring well water samples.
- The activity of ^{234}U exceeded the activity of ^{238}U in the wells listed in Tables 1-4a and 1-4b suggesting that natural or depleted uranium is not the source of the ^{234}U or that the activity may be due to another isotope of uranium. Based on analysis of alpha spectroscopy data by REMS staff, the elevated activity may be due to the presence of ^{233}U.
- In October 2009 the $^{233/234}$U activity in water from USGS monitoring well UE2 was 22.7/2.4 pCi/l (activity/counting uncertainty), UF2 was 19.8/2.1 pCi/l, UK1 was 23.8/2.4 pCi/l, and N2B was 12.9/1.4 pCi/l.
- In April 2009, the $^{233/234}$U activity in well UE2 was 33.6/3.5 pCi/l (activity/counting uncertainty), UF2 was 20.5/2.1 pCi/l, UK1 was 2.9/0.6 pCi/l, N2B was 1.5/0.4 pCi/l, and UF10a was 5.0/0.5 pCi/l.
- If the activity is due to the presence of $^{233/234}$U, the maximum activity of 33.6/3.5 pCi/l is 11.2% of the limit of 300 pCi/l imposed by 902 KAR 100:019, for controlled release of $^{233/234}$U outside the boundary of a disposal trench.
- Plutonium-238 activity was above sample-specific MDAs in wells UE2, UF2, UK1, and N2B for both April and October 2009. Water from well UF10a was below sample specific MDAs for April 2009.
- Plutonium-239 activity was below sample specific MDAs or had counting uncertainties greater than 50% in wells UE2, UF2, UK1, N2B, and UF10a.
- The maximum activity of ^{238}Pu, 4.4/1.0 pCi/L was observed in well UE2.
- The ^{238}Pu activity in CY 2009 for UE2 was 22.0% of the limit of 20 pCi/l imposed by 902 KAR 100:019, for controlled release of ^{238}Pu outside the boundary of a disposal trench.

- Strontium-90 activity was above sample specific MDAs in water from USGS monitoring wells UE2, UF2, UK1, N2B, and UF10a (not collected in October) for both April and October collection dates (Table 1-5).
- The maximum ^{90}Sr activity for groundwater from well UF2 was 238/8 pCi/l (activity/counting uncertainty) which is less than the 500 pCi/l limit imposed by 902 KAR 100:019 for controlled release of ^{90}Sr outside the boundary of a disposal trench.
- Cobalt-60 (^{60}Co) activity in groundwater was above sample specific MDAs in wells UE2 and UF2 for the April and October 2009 samples (Table 1-6). Wells UK1 and N2B well water ^{60}Co activity were above the MDA in the October 2009 sample (Table 1-6). Cobalt-60 activity in well UF-10a was below the sample specific MDA for the April collection date (Table 1-6).
- The ^{14}C activity was above sample specific MDAs in USGS monitoring wells UK1, UF2, UE2, N2B, and UF10a (Table 1-7). Carbon-14 activity data (April) for wells UE2 and N2B is of question quality and is noted as such in Table 1-7.
- Cesium-137 activity in groundwater samples from USGS monitoring wells was below the REMS sample specific MDAs.

Summary of Extended Radionuclide Analyses

- Based on historical and CY 2009 extended radionuclide analyses, radionuclides in groundwater continue to migrate away from the disposal trenches at elevated levels to the west and north/northwest corner of the Restricted Area. This data provides convincing evidence to the contrary of the statement "Remedial action objectives for the Site are being met. The continued release of contaminants to bedrock, groundwater, sediment, and surface water has been mitigated." made in the *Five-Year Review Report (Second Five-Year report) for the Maxey Flats Disposal Site Fleming County, Kentucky, United States Environmental Protection Agency – Region 2, Atlanta, Georgia, September 2007*. **Clearly, release of radionuclides to bedrock, groundwater, surface water, and sediment have not been mitigated by the Initial Remedial Phase at the Maxey flats Nuclear Site**.

- Radionuclide movement away from the disposal trenches is most likely controlled by: 1) The potentiometric gradient in the Lower Sandstone Marker Bed (LMB) which is radially away from the center of the Restricted Area; 2) The dip of the LMB which is radially away from the center of the Restricted Area; and 3) by the fracture orientation of the LMB.

- Extended radionuclide data indicates that Initial Remedial Phase remedial measures may not have been in place for sufficient time to impact the migration of radionuclides or is not functioning to prevent continued releases to the environment.

- The continued monitoring of radionuclides in groundwater is critical during the Interim Maintenance Period (IMP) because elevated levels of radionuclides continue migration toward the west hillside and north/northwest area of the MFNDS and the long-term potential for erosion to impact the discharge of groundwater to the surface resulting in increased radionuclide activity in surface water.

TABLE 1-4a. USGS Monitoring Well Uranium and Plutonium Data April 2009.

Activity in pCi/l

USGS Well	^{238}U/CU	^{234}U/CU	^{238}Pu/CU	^{239}Pu/CU	
UE2	1.*2/0.4*	33.6/3.5	4.4/1.0	*0.5/0.3*	
UF2	***0.3/0.2***	20.5/2.1	2.6/0.7		*0.2/0.2*
UK1	*0.3/0.2*	2.9/0.6	1.0/0.4	*0.2/0.1*	
N2B	***0.1/0.1***	1.5/0.4	1.0/0.4	***0.05/0.1***	
UF10a	2.2/0.5	5.0/0.5	***0.1/0.10.06/0.7***		

Bold Italics = Reported Value Below MDA or a counting uncertainty of greater than 50%; Italics = uncertainty for measurement ("J" result); NA = Not Analyzed; CU=Counting Uncertainty

TABLE 1-4b. USGS Monitoring Well Uranium and Plutonium Data October 2009.

Activity/CU in pCi/l

USGS Well	^{238}U/CU	^{234}U/CU	^{238}Pu/CU	^{239}Pu/CU	
UE2	0.9/0.3	22.7/2.4	2.0/0.5***0.02/0.1***		
UF2	***0.2/0.2***	19.8/2.1	1.7/0.4		***0.1/0.1***
UK1	1.4/0.4	23.8/2.4	2.8/0.5		***0.1/0.1***
N2B	1.5/0.5	12.9/1.4	1.5/0.4		***0.05/0.1***

Bold Italics = Reported Value Below MDA or a counting uncertainty of greater than 50%; Italics = uncertainty for measurement ("J" result); NA = Not Analyzed; CU=Counting Uncertainty

TABLE 1-5. USGS Monitoring Well Strontium-90 Data April/October 2009.

^{90}Sr Activity/CU in pCi/l

USGS Well	April	October
UE2	114/6	132/6
UF2	188/7	238/8
UK1	18.2/3	106/6
N2B	16.9/3	106/6
UF10a	6.6/3	NS

Bold Italics = Reported Value Below MDA or a counting uncertainty of greater than 50%; NS = No Sample; CU=Counting Uncertainty

TABLE 1-6. USGS Monitoring Well Cobalt-60 Data April/October 2009.

^{60}Co Activity/CU in pCi/L

USGS Well	April	October
UE2	29.9/13.5	17.6/9.3
UF2	18.6/8.4	25.6/12.0
UK1	***8.7/7.3***	*19.6/12.4*
N2B	***-3.5/8.8*** 27.1/11.6	
UF10a	***10.7/6.8***	NS

Bold Italics = Reported Value Below MDA or a counting uncertainty of greater than 50%; Italics = uncertainty for measurement ("J" result); NS = No Sample; CU=Counting Uncertainty

TABLE 1-7. USGS Test Monitoring Well Carbon-14 data April/October 2009.

^{14}C Activity/CU in pCi/l		
USGS Well	April	October
UE2	-236/27*	634/49
UF2	837/57	1113/62
UK1	94/34	449/44
N2B	-4.6/12* 637/49	
UF10a	*995/61*	*NS*

Bold Italics = Reported Value Below MDA or a counting uncertainty of greater than 50%; Italics = uncertainty for measurement ("J" result); NS = No Sample; CU=Counting Uncertainty; *data is of question quality based on historical values

Regulatory & Public Health Assessment

Kentucky Administrative Regulation, 902 KAR 100:022, Section 18 requires that the annual dose at the site boundary of a low-level radioactive disposal site not exceed 25 mrem. Kentucky Administrative Regulation 902 KAR 100:015, Section 2 establishes releases be maintained "As Low As Reasonably Achievable" (ALARA). A primary focus of a radiation protection program is to maintain concentration/doses ALARA. The license for the MFNDS and other licenses issued in the Commonwealth of Kentucky for the handling and release of radioactive material are based on ALARA requirements in order to minimize radiation doses to workers and members of the public.

The HTO activities at East Main Drain Hillside seep locations inside the site boundary need to be compared to a limit of 1,000 pCi/ml imposed by 902 KAR 100:019, Section 44(7) for the controlled release of tritium outside the boundary of the trenches and the Restricted Area. HTO activity in CY 2005 at the lower farmers seep (LFS2) ranged from 1380 to 7170 pCi/ml with an average activity of 2810 pCi/ml. HTO activity in CY 2006 at LFS2 ranged from 3110 to 6290 pCi/ml with an average activity of 4570 pCi/ml. In CY 2007 HTO activity at LFS2 ranged from 1380 to 5920 pCi/ml with an average activity of 3530 pCi/ml. In CY 2008 HTO activity at LFS2 ranged from 999 to 5300 pCi/ml with an average activity of 2490 pCi/ml. In CY 2009 HTO activity at LFS2 ranged from 1300 to 4390 pCi/ml with an average activity of 2700 pCi/ml. The LFS2 HTO activity exceeds the established release limit of 1,000 pCi/ml for HTO. These temporal HTO activity trends do not reflect cessation of releases from the trenches and Restricted Area and continue to exceed the release criteria in 902 KAR 100:019, Section 44(7).

The chart below (Figure 1.8) provides the trend line for the LFS2 HTO activity from 1995 through 2009. There is a downward trend in the HTO activity which is expected because the graph represents a time frame of 13 years, which corresponds to greater than one HTO half-life (12.43 years). Based on the graph for HTO activity at the Lower Farmers Seep, it is not clear whether the Initial Remedial Phase has significantly impacted HTO activity at the Lower Farmers Seep on the East Main Drain hillside. This data is contrary to the statement "Remedial action objectives for the Site are being met. The continued release of contaminants to bedrock, groundwater, sediment, and surface water has been mitigated." made in the *Five-Year Review Report (Second Five-Year report) for the Maxey Flats Disposal Site Fleming County, Kentucky, United States Environmental Protection Agency – Region 2, Atlanta, Georgia, September 2007*. **Release of HTO to bedrock, groundwater, and surface water clearly have not been mitigated by the Initial Remedial Phase remedial activities.**

Surface water sample location 113 is in the East Main Drainage Channel and within the MFNDS old site-license boundary. CY 2009 mean HTO activity at ISCO EDRN was 140 pCi/ml which is 14% of the 1,000 pCi/ml limit in 902 KAR 100:019, Section 44(7) for the release of HTO outside the boundary of the trenches and the Restricted Area (Table 1.9). CY 2008 mean HTO activity at ISCO EDRN was 90.2 pCi/ml which is 9.2% of the 1,000 pCi/ml limit in 902 KAR 100:019, Section 44(7) for the release of HTO outside the boundary of the trenches and the Restricted Area (Table 1.9). CY 2007 mean HTO activity at ISCO EDRN was 135 pCi/ml which is 13.5% of the 1,000 pCi/ml limit in 902 KAR 100:019, Section 44(7) for the release of HTO outside the boundary of the trenches and the Restricted Area. CY 2006 EDRN mean HTO activity was 126 pCi/ml which and 12.6% of the release limit. CY 2005 ISCO EDRN mean HTO activity was 106 pCi/ml which is 10.6% of the release limit. The HTO activity remains elevated over the past seven (8) years at location 113. The Table 1-9 below provides the annual average HTO activity and the range of HTO activity in surface water at Location 113.

Surface water sampling location 144 is at the MFNDS old site license boundary in the East Main Drainage Channel. The average annual HTO activity for Location 144 was 52 pCi/ml during CY 2002, 60 pCi/ml during CY 2003, 90 pCi/ml in CY 2004, 50 pCi/ml in CY 2005, 54 pCi/ml in 2006, 78 pCi/ml in 2007, 35 pCi/ml in 2008, and 66 in 2009. This data along with the data for the Lower Farmers Seep and Location 113 indicates that release of HTO from the disposal trenches continues to impact the East Drainage Channel.

With the completion of the Initial Remedial Phase all surface water from the Initial Remedial Phase cap has been diverted to the East Main Drainage Channel. The increased discharge of surface water with a mean HTO activity of approximately 1.4 pCi/l to the East Main Drainage Channel should be diluting the HTO activity. However, HTO activity from 2002 to 2009 at locations 113 (EDRN) and LFS2 indicate that the remedial activities may not have mitigated releases to the East Main Drain hillside and East Main Drainage Channel.

TABLE 1-8. LFS2 HTO activity trends from 1995 through 2009.

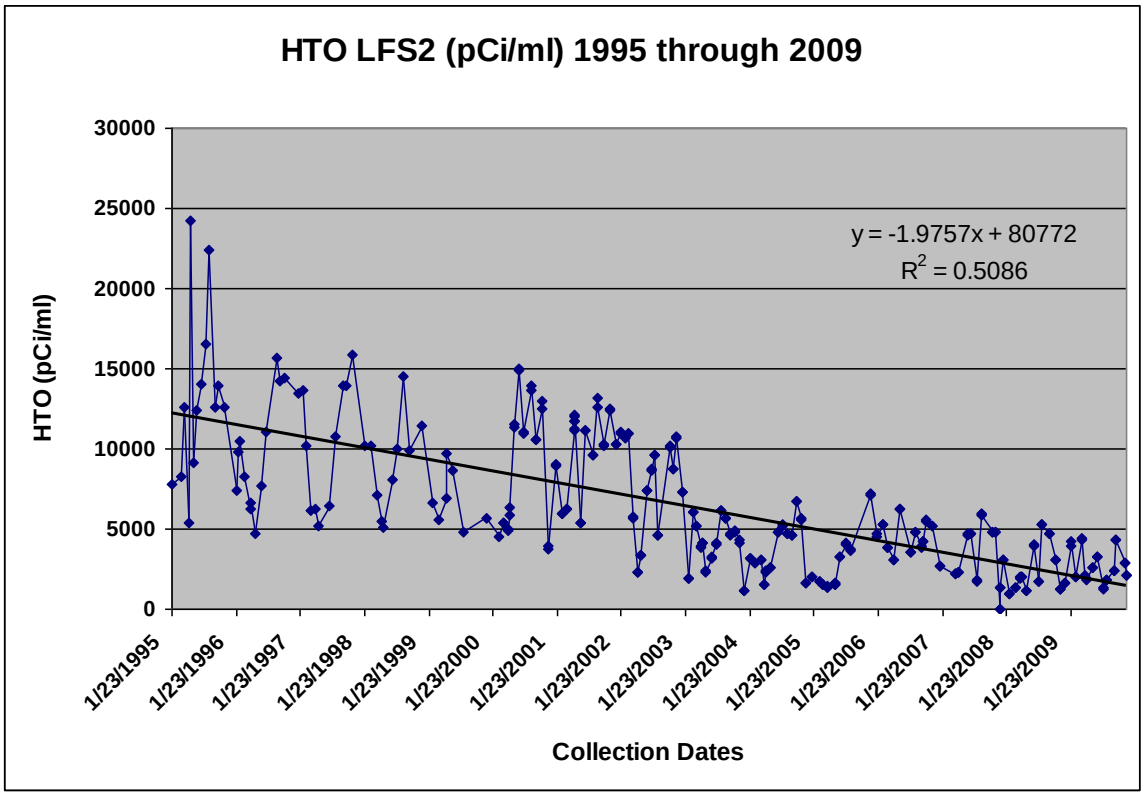


TABLE 1-9. HTO Activity in Water at Location 113 – East Drainage Channel

Year	Annual Average (pCi/ml)	Range	
		Lower (pCi/ml)	Upper (pCi/ml)
2009	140	3.9	464
2008	90.2	1.54	288
2007	135	0.2	535
2006	126	34	308
2005	106	58	290
2004	153	28	237
2003	84	10	258
2002	64	7	178

With the addition of the buffer zone acquired during the Initial Remedial Phase the CERCLA compliance point was set at Location 102. Location 102 is the CERCLA point for comparison to the 25 mrem/yr dose standard in 902 KAR 100:022. Because the license for the site has not been amended to modify the site boundary, radiation doses will continue to be calculated at location 144 in order to assess long-term statistical trends and maintain compliance with license requirements.

The dose assessment at location 144 for HTO assumes: 1) sufficient surface water is available at or one mile within the new site boundary; 2) a person resides at the location for 365 days a year; and 3) a person consumes 2 liters of water per day. Based on these hypothetical assumptions, a person consuming surface water at 66 pCi HTO/ml would receive an annual radiation dose from tritium of 3.1 millirem/year (mrem/yr). The hypothetical annual dose at location 144 would be 12.4 % of the 25 mrem/yr dose limit for the site boundary established by 902 KAR 100:022, Section 18. The annual dose for tritium was calculated using the RESRAD-BASELINE computer code (ARGONNE NATIONAL LABORATORY).

The CERCLA compliance point requires calculation of the potential dose to a receptor at location 102. This location is immediately outside buffer zone on Rock Lick Creek. Samples were collected at location 102 with a sequential sampler. The average annual CY 2009 HTO activity at location 102 was 0.7 pCi/ml. Assuming surface water with an average HTO activity of 0.7 pCi/ml could be used as a drinking water source, an individual consuming 730 liters of water per year would receive an annual radiation dose of 0.03 mrem/yr from HTO. The annual radiation dose from HTO at location 102 is 0.16% of the 25 mrem/yr dose limit established by 902 KAR 100:022, Section 18 for the site boundary. The annual dose for tritium was calculated using the RESRAD-BASELINE computer code (ARGONNE NATIONAL LABORATORY).

The 3.1 mrem/year radiation dose from HTO for an individual drinking surface water at the old site boundary, location 144, in the East Main Drainage Channel, one mile upstream of the new site boundary, would result in a risk of $7.0x10^{-05}$ (from Risk/Dose Conversion Factors) and $1.0x10^{-04}$ (from Slope Factors). However, the East Main Drainage Channel is not a perennial stream and it is no longer the point of compliance. It is also unlikely that sufficient water would be present to provide 2.0 liters of drinking water for an individual 365 days per year. The level for cancer risk was calculated using the RESRAD-BASELINE computer code (ARGONNE NATIONAL LABORAORY).

The 0.03 mrem/year radiation dose from HTO for an individual drinking surface water at Rock Lick Creek location 102, outside of the new site boundary, would result in a risk of $7.5x10^{-7}$ (from Risk/Dose Conversion Factors) and $1.1x10^{-6}$ (from Slope Factors). The level for total cancer risk at location 102 was calculated using the RESRAD-BASELINE computer code (ARGONNE NATIONAL LABORAORY).

The release of elevated levels of HTO within the site boundary remains a significant long-term concern considering the potential for erosion on the east and west hillsides. Efforts were made during the Initial Remedial Phase to minimize both the release of radionuclides from the trenches and the potential for impacts by erosion of the hillslopes surrounding the disposal trenches. Analysis of CY 2009 data indicates release of radionuclides from the disposal trenches continues subsequent to the Initial Remedial Phase activities. Based on analysis of CY 2009 data, it is essential that sufficient monitoring be conducted to continue the evaluation of the effectiveness of the Initial Remedial Phase and to determine the potential for impacts on public health.

The International Commission on Radiation Protection (ICRP) proposed use of the effective dose (H_T) as a primary radiation protection standard and Annual Limit of Intake (ALI) as a secondary standard (ICRP Publication 30 and 60) for radiation protection. These limits have been adopted by the National Council on Radiation Protection and Measurements (NCRP, Report No. 116). NCRP Report No. 116 recommends a Negligible Individual Risk Limit (NIRL) of 1 mrem/year. The NIRL is the level of average excess fatal health risk from radiation exposure from any individual source or practice below which further effort to reduce individual exposure is unwarranted.

In 2007 the Radiation Health Branch reduced sampling at grab sample locations surrounding the Maxey Flats Nuclear Disposal Site to once every other month. This schedule was continued in 2009. This action was supported by an assessment of the previous 12 years of data collected at the MFNDS by the RHB. It was determined ISCO samplers would provide sufficient samples and data for the assessment of continued releases of residual radioactive material on public health.

The REMS continues to maintain sufficient monitoring locations and collects samples at a more than adequate frequency for assessing impacts of continued releases from the disposal trench on the East Main Drain Hillside and in the East Main Drainage Channel. The sample locations and frequency needs to be maintained in order to assess present and future impacts of contaminant movement to locations within the new site boundary and to locations outside of the new site boundary. Sampling frequency allows for remedial actions to be planned and implemented and to address increases in radionuclide activity, if necessary. The REMS also has sufficient monitoring locations on the west hillside to continue to effectively monitor releases from the disposal trenches to Wash 107 and Drip Springs Creek.

Conclusions

On the basis of the data generated by the Radiation Health Branch, Department for Public Health, Cabinet for Health and Family Services during CY 2009, the MFNDS does not presently pose a threat to public health.

Analyses of water from monitoring wells, seeps, and surface water locations indicate that ex-filtration of leachate from the trenches continues to occur at the MFNDS. The Initial Remedial Phase of the Superfund remediation has been completed and certified by the U.S. Environmental Protection Agency. EPA states in the *Five-Year Review Report (Second Five-Year Report) for*

the Maxey Flats Disposal Site Fleming County, Kentucky, United States Environmental Protection Agency – Region 2, Atlanta, Georgia, September 2007 (page 35) that "Remedial action objectives for the Site are being met. The continued release of contaminants to bedrock, groundwater, sediment, and surface water has been mitigated." **Assessment of CY2009 data provides unequivocal evidence to the contrary. Clearly, release of radionuclides to bedrock, groundwater, surface water, and sediment have not been mitigated by the Initial Remedial Phase at the Maxey Flats Disposal Site**.

The activity of HTO and radionuclides in at the perimeter of the Restricted Area were not mitigated by the Initial Remedial Phase and continue to occur. To fully appreciate the present evaluation of water infiltration/ex-filtration problems at MFNDS and the continuing release of radionuclides, it must be stressed that the existing evaluation of site conditions encompasses a snapshot in time compared to the 200 year duration of the remedial action and institutional control required by the Federal Court Ordered Consent Decree.

APPENDICES

APPENDIX 1. Surface Water Summary Data.

Mean HTO, Gross Alpha, Gross Beta Activity for 2009
in Off-Site Surface Water at the Maxey Flats Disposal Site

Location	Mean HTO (pCi/ml)	Mean Gross Beta Activity (pCi/liter)	Mean Gross Alpha Activity (pCi/liter)
101	-0.07	3.2	0.2
102	0.6	3.4	-0.5
102QC	0.5	2.9	0.1
103	0.4	3.0	0.8
143	0.1	3.5	0.8
PDSKG	0.1	3.9	3.7
106	2.6	2.9	0.2
107	0.9	4.0	0.5
N107	0.8	3.6	-0.09
108	0.4	6.7	2.3
112	0.1	5.6	0.7
113	187	5.5	1.7
144	66	4.0	0.5
119	0.08	3	0.8
121	0.1	2.6	0.3
122	0.08	3.1	0.4
124	0.2	1.9	-0.3
130	0.1	2	0.5
132	0.1	1.8	-0.1
145	0.9	3.6	0.4
136	0.06	5.0	-0.8
142	0.3	3.2	0.3

Mean HTO Activity in Surface Water at Location 113 and East Pond Outlet

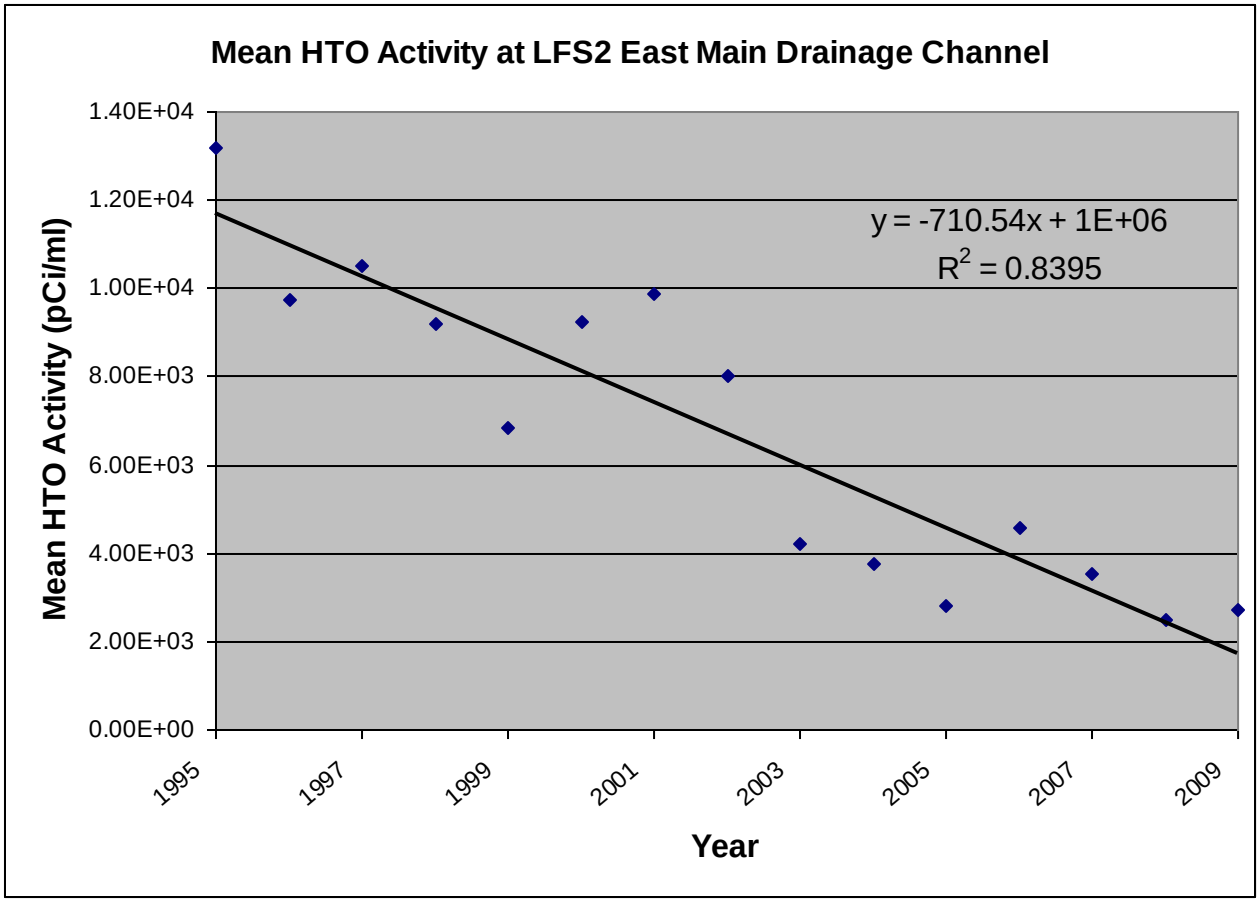
Location 113			East Pond Outlet		
Collection Date	pCi HTO/ml	CU	Collection Date	pCi HTO/ml	CU
1/22/09	206	1.0			
1/22/09	204	1.0			
2/16/09	174	0.9	2/16/09	2.1	0.1
2/16/09	174	0.9	2/16/09	0.1	0.09
3/24/09	239	1.1			
3/24/09	240	1.1			
4/8/09	90	0.7	4/8/09	0.9	0.1
4/8/09	93	0.7	4/8/09	0.7	0.1
5/29/09	26	0.4			
5/29/09	27	0.4			
6/23/09	201	1.0			
6/23/09	198	0.9			
7/28/09	110	0.7			
7/28/09	109	0.7			
8/12/09	146	0.8	8/12/09	1.6	0.1
8/12/09	146	0.8			
9/29//09	219	1.1			
9/29/09	220	1.1			
10/1/09	256	1.1			
10/1/09	257	1.1			
11/23/09	347	1.3			
11/23/09	350	1.3			
12/4/09	231	1.1			
12/4/09	230	1.1			

Strontium-90 (^{90}Sr) data for East Main Drain Seeps CY 2009.

Strontium-90 Analysis of Water Samples Collected at the Maxey Flats Nuclear Disposal Site on April 17, 2009.

Location	^{90}Sr pCi/liter	CU*
UFS1	***-2.1***	1.4
UFS1N	***-1.8***	1.5
LFS2	***-1.8***	1.4
EMR1	***-3.1***	1.8
EMR2	***-3.5***	1.3
EMR3	***-1.8***	1.5
EML1	***-2.7***	1.5
EML2	***-2.0***	1.2
EML3	***-2.4***	0.7

Bold Italics = Reported Values Below MDA; *CU=Counting Uncertainty



Mean tritiated Water (HTO), Beta and Alpha Activity in
Wash from South Drain of 33L at Maxey Flats Waste Disposal Site and Drip Springs Creek for 2009

Location	pCi HTO/ml	Beta Act. (pCi/l)	Alpha Act. (pCi/l)
NCW114	0.9	3.6	0.2
SCW114	0.9	4.5	-0.5
NCW145	0.9	3.1	0.9

Mean Tritiated Water (HTO), Beta and Alpha Activity in
Wash 107 at Maxey Flats Waste Disposal Site and Drip Springs Creek for 2009

Location	pCi HTO/ml	Beta Act. (pCi/l)	Alpha Act. (pCi/l)
J107	0.2	2.3	1.4
I107	0.2	3.8	1.0
H107	0.2	2.8(1.8)	0.2(1.0)
G107	28.9	5.0	0.7
F107	15.4	4.6	-0.7
E107	13.6	4.5	0.5
D107	10.9	3.3	0.5
C107	10.2	3.8	1.2
W7atRd	5.3	2.4	-0.05
B107	4.8	2.1	-0.9

Mean Tritiated Water Activity (HTO) in Wash 107 Before, During, and After the Initial Remedial Phase of the Maxey Flat Disposal Site Superfund Action

Year	Locations		
	F107 (pCi/ml)	G107 (pCi/ml)	I107 (pCi/ml)
2009	15.4	28.9	0.2
2008	22.8	28.6	0.1
2007	15.7	18.7	0.1
2006	11.6	14.5	0.1
2005	29.0	28.0	0.2
2004	22.6	24.8	0.1
2003	9.8	10.2	0.5
2002	16.0	20.6	3.9
2001	30.0	19.2	12.7
2000	299.0	82.9	301.0
1999	408.0	331.0	396.0
1998	17.5	14.9	70.8
1997	33.1	13.2	NC
1996	18.6	24.2	10.8
1995	7.0	6.0	2.9

NC = Not collected.

Tritiated Water (HTO), Beta and Alpha Activity in South Drainage Channel For 2009 at the Bottom of the Farmers (BF143)

Collection Date	HTO (pCi/ml)	CU	Beta Activity (pCi/l)	CU	Alpha Activity (pCi/l)	CU
2/16/09	0.05	0.1	3.7	1.5	1.5	1.0
4/8/09	0.2	0.1	0.5	1.6	0.0	1.1
6/23/09	0.1	0.1	2.8	1.9	1.3	1.4
8/12/09	0.2	0.1	4.1	1.7	0.0	1.4
12/4/09	0.2	0.1	5.2	1.5	0.9	0.9

Mean tritiated Water (HTO), Beta and Alpha Activity from Public Water Supply at Hillsboro, Kentucky for 2009

Location	pCi HTO/ml	Beta Activity (pCi/L)	Alpha Activity (pCi/L)
West Fleming Water District	0.07	3	0.6

APPENDIX 2. Groundwater Summary Data

Tritiated Water (HTO) Mean Activity for 2009
in U-Wells at Maxey Flats Disposal Site

Location	Mean pCi HTO/ml
UE-2	344000
UK-1	187000
N2B	107000
UF2	207000
UF10a	37900

APPENDIX 3. ISCO Surface-water Data

Data Qualifiers for ISCO Surface-water Data

"=" – Validated Laboratory Result
"U" – Reported Value Below Minimum Detectable Concentration or Error > 50% of Reported Value
"R" – Results Rejected because Relative Percent Difference between duplicate samples is > 15%
CU = Counting Uncertainty

ISCO 102 HTO Activity for 2009

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
1/5/2009	0.46	0.11	0.33	=
1/5/2009	0.50	0.11	0.33	=
1/6/2009	0.94	0.11	0.30	=
1/6/2009	1.01	0.11	0.30	=
1/7/2009	0.78	0.11	0.30	=
1/7/2009	0.84	0.11	0.30	=
1/8/2009	0.49	0.10	0.30	=
1/8/2009	0.67	0.11	0.30	=
1/9/2009	0.56	0.10	0.30	=
1/9/2009	0.75	0.11	0.30	=
1/10/2009	0.40	0.10	0.30	=
1/10/2009	0.51	0.10	0.30	=
1/11/2009	0.55	0.10	0.30	=
1/11/2009	0.56	0.10	0.30	=
1/12/2009	0.33	0.10	0.30	=
1/12/2009	0.38	0.10	0.30	=
1/13/2009	0.36	0.10	0.30	=
1/13/2009	0.42	0.10	0.30	=
1/14/2009	0.72	0.11	0.30	=
1/14/2009	0.77	0.11	0.30	=
1/15/2009	0.75	0.11	0.30	=
1/15/2009	0.78	0.11	0.30	=
1/18/2009	0.51	0.10	0.30	=
1/18/2009	0.60	0.11	0.30	=
1/19/2009	0.37	0.10	0.30	=
1/19/2009	0.42	0.10	0.30	=
1/20/2009	0.65	0.11	0.30	=
1/20/2009	0.66	0.11	0.30	=
1/23/2009	0.96	0.14	0.40	=
1/23/2009	1.13	0.14	0.40	=
1/24/2009	0.84	0.12	0.34	=
1/24/2009	0.84	0.12	0.34	=
1/25/2009	0.69	0.14	0.40	=
1/25/2009	0.83	0.14	0.40	=
1/26/2009	0.75	0.14	0.40	=
1/26/2009	0.85	0.14	0.40	=
1/27/2009	0.77	0.14	0.40	=
1/27/2009	0.87	0.14	0.40	=
1/28/2009	0.62	0.13	0.40	=
1/28/2009	0.74	0.14	0.40	=
2/1/2009	2.06	0.16	0.40	=
2/1/2009	2.07	0.16	0.40	=
2/2/2009	0.87	0.14	0.40	=
2/2/2009	0.94	0.14	0.40	=
2/8/2009	0.47	0.13	0.40	=
2/8/2009	0.53	0.13	0.40	=
2/11/2009	0.26	0.13	0.40	U
2/11/2009	0.47	0.13	0.40	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
2/12/2009	0.38	0.13	0.40	U
2/12/2009	0.54	0.13	0.40	=
2/13/2009	0.59	0.11	0.31	=
2/13/2009	0.64	0.11	0.31	=
2/14/2009	0.56	0.11	0.31	=
2/14/2009	0.58	0.11	0.31	=
2/15/2009	0.39	0.11	0.34	=
2/15/2009	0.49	0.11	0.34	=
2/16/2009	0.50	0.11	0.31	=
2/16/2009	0.62	0.11	0.31	=
2/17/2009	0.55	0.11	0.31	=
2/17/2009	0.65	0.11	0.31	=
2/18/2009	0.52	0.11	0.31	=
2/18/2009	0.61	0.11	0.31	=
2/19/2009	1.34	0.12	0.31	=
2/19/2009	1.50	0.13	0.31	=
2/20/2009	0.88	0.11	0.31	=
2/20/2009	0.94	0.12	0.31	=
2/21/2009	0.71	0.11	0.31	=
2/21/2009	0.86	0.11	0.31	=
2/22/2009	0.64	0.11	0.31	=
2/22/2009	0.67	0.11	0.31	=
2/23/2009	1.02	0.12	0.31	=
2/23/2009	1.19	0.12	0.31	=
2/24/2009	0.88	0.11	0.31	=
2/24/2009	1.05	0.12	0.31	=
2/25/2009	0.64	0.11	0.31	=
2/25/2009	0.78	0.11	0.31	=
2/26/2009	0.72	0.11	0.31	=
2/26/2009	0.75	0.11	0.31	=
2/27/2009	0.66	0.11	0.31	=
2/27/2009	0.75	0.11	0.31	=
2/28/2009	0.57	0.11	0.31	=
2/28/2009	0.73	0.11	0.31	=
3/1/2009	0.71	0.11	0.31	=
3/1/2009	0.81	0.11	0.31	=
3/2/2009	0.74	0.11	0.31	=
3/2/2009	0.82	0.11	0.31	=
3/3/2009	0.50	0.11	0.31	=
3/3/2009	0.65	0.11	0.31	=
3/4/2009	0.80	0.11	0.31	=
3/4/2009	0.83	0.11	0.31	=
3/5/2009	0.63	0.12	0.35	=
3/5/2009	0.66	0.12	0.35	=
3/6/2009	0.69	0.12	0.35	=
3/6/2009	0.84	0.12	0.35	=
3/7/2009	0.73	0.12	0.35	=
3/7/2009	0.81	0.12	0.35	=
3/8/2009	0.61	0.12	0.35	=
3/8/2009	0.69	0.12	0.35	=
3/9/2009	0.52	0.12	0.35	=
3/9/2009	0.62	0.12	0.35	=
3/10/2009	1.04	0.13	0.35	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
3/10/2009	1.19	0.13	0.35	=
3/11/2009	0.72	0.12	0.35	=
3/11/2009	0.77	0.12	0.35	=
3/12/2009	0.81	0.12	0.35	=
3/12/2009	0.95	0.13	0.35	=
3/13/2009	1.18	0.13	0.35	=
3/13/2009	1.22	0.13	0.35	=
3/14/2009	0.53	0.12	0.35	=
3/14/2009	0.74	0.12	0.35	=
3/15/2009	0.75	0.12	0.35	=
3/15/2009	0.81	0.12	0.35	=
3/16/2009	1.25	0.13	0.35	=
3/16/2009	1.52	0.14	0.35	=
3/17/2009	0.82	0.12	0.35	=
3/17/2009	0.89	0.12	0.35	=
3/18/2009	0.55	0.12	0.35	=
3/18/2009	0.60	0.12	0.35	=
3/19/2009	0.76	0.12	0.35	=
3/19/2009	0.77	0.12	0.35	=
3/20/2009	1.34	0.13	0.35	=
3/20/2009	1.42	0.13	0.35	=
3/21/2009	0.69	0.12	0.35	=
3/21/2009	0.91	0.12	0.35	=
3/22/2009	0.52	0.12	0.35	=
3/22/2009	0.66	0.12	0.35	=
3/23/2009	0.62	0.12	0.35	=
3/23/2009	0.79	0.12	0.35	=
3/24/2009	0.50	0.12	0.35	=
3/24/2009	0.59	0.12	0.35	=
3/25/2009	0.52	0.11	0.33	=
3/25/2009	0.53	0.11	0.33	=
3/26/2009	1.17	0.13	0.33	=
3/26/2009	1.24	0.13	0.33	=
3/27/2009	0.82	0.19	0.55	=
3/27/2009	0.86	0.19	0.55	=
3/28/2009	0.72	0.12	0.33	=
3/28/2009	0.81	0.12	0.33	=
3/29/2009	0.71	0.12	0.33	=
3/29/2009	0.77	0.12	0.33	=
3/30/2009	0.90	0.12	0.33	=
3/30/2009	0.94	0.12	0.33	=
3/31/2009	0.61	0.11	0.33	=
3/31/2009	0.66	0.12	0.33	=
4/1/2009	0.90	0.12	0.33	=
4/2/2009	0.88	0.12	0.33	=
4/2/2009	1.03	0.12	0.33	=
4/3/2009	0.51	0.11	0.33	=
4/3/2009	0.55	0.11	0.33	=
4/4/2009	0.65	0.12	0.33	=
4/4/2009	0.76	0.12	0.33	=
4/5/2009	0.62	0.11	0.33	=
4/5/2009	0.69	0.12	0.33	=
4/6/2009	0.70	0.12	0.33	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
4/6/2009	0.73	0.12	0.33	=
4/7/2009	0.74	0.12	0.33	=
4/7/2009	0.78	0.12	0.33	=
4/8/2009	0.71	0.12	0.33	=
4/8/2009	0.77	0.12	0.33	=
4/9/2009	0.65	0.12	0.33	=
4/9/2009	0.67	0.12	0.33	=
4/10/2009	0.77	0.12	0.33	=
4/10/2009	0.77	0.12	0.33	=
4/11/2009	0.68	0.12	0.33	=
4/11/2009	0.78	0.12	0.33	=
4/12/2009	0.67	0.12	0.33	=
4/12/2009	0.80	0.12	0.33	=
4/13/2009	0.67	0.12	0.33	=
4/13/2009	0.89	0.12	0.33	=
4/14/2009	0.85	0.12	0.33	=
4/14/2009	0.87	0.12	0.33	=
4/15/2009	0.71	0.12	0.33	=
4/15/2009	0.79	0.12	0.33	=
4/16/2009	0.49	0.13	0.39	=
4/16/2009	0.57	0.13	0.39	=
4/17/2009	0.51	0.11	0.34	=
4/17/2009	0.54	0.12	0.34	=
4/18/2009	0.44	0.11	0.34	=
4/18/2009	0.53	0.12	0.34	=
4/19/2009	0.42	0.11	0.34	=
4/19/2009	0.48	0.11	0.34	=
4/20/2009	0.76	0.12	0.34	=
4/20/2009	0.79	0.12	0.34	=
4/21/2009	0.82	0.12	0.34	=
4/21/2009	0.85	0.12	0.34	=
4/22/2009	0.61	0.12	0.34	=
4/22/2009	0.61	0.12	0.34	=
4/23/2009	0.64	0.12	0.34	=
4/23/2009	0.67	0.12	0.34	=
4/24/2009	0.46	0.11	0.34	=
4/24/2009	0.61	0.12	0.34	=
4/25/2009	0.42	0.11	0.34	=
4/25/2009	0.63	0.12	0.34	=
4/26/2009	0.48	0.11	0.34	=
4/26/2009	0.52	0.12	0.34	=
4/27/2009	0.50	0.11	0.34	=
4/27/2009	0.51	0.11	0.34	=
4/28/2009	0.49	0.11	0.34	=
4/28/2009	0.55	0.12	0.34	=
4/29/2009	0.73	0.12	0.34	=
4/29/2009	0.94	0.12	0.34	=
4/30/2009	1.37	0.13	0.34	=
4/30/2009	1.49	0.13	0.34	=
5/1/2009	1.61	0.14	0.34	=
5/1/2009	1.70	0.14	0.34	=
5/2/2009	1.25	0.13	0.34	=
5/2/2009	1.41	0.13	0.34	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
5/3/2009	1.07	0.13	0.34	=
5/3/2009	1.28	0.13	0.34	=
5/4/2009	0.90	0.12	0.34	=
5/4/2009	0.93	0.12	0.34	=
5/5/2009	0.56	0.12	0.34	=
5/5/2009	0.67	0.12	0.34	=
5/6/2009	0.78	0.12	0.34	=
5/6/2009	0.82	0.12	0.34	=
5/7/2009	0.62	0.13	0.39	=
5/7/2009	0.75	0.14	0.39	=
5/8/2009	0.74	0.11	0.32	=
5/8/2009	0.75	0.11	0.32	=
5/9/2009	0.75	0.11	0.32	=
5/9/2009	0.77	0.11	0.32	=
5/10/2009	0.67	0.11	0.32	=
5/10/2009	0.84	0.12	0.32	=
5/11/2009	0.69	0.11	0.32	=
5/11/2009	0.78	0.12	0.32	=
5/12/2009	0.81	0.12	0.32	=
5/12/2009	0.84	0.12	0.32	=
5/13/2009	0.59	0.11	0.32	=
5/13/2009	0.60	0.11	0.32	=
5/14/2009	0.92	0.12	0.32	=
5/14/2009	0.95	0.12	0.32	=
5/15/2009	1.23	0.12	0.32	=
5/15/2009	1.29	0.13	0.32	=
5/16/2009	0.74	0.11	0.32	=
5/16/2009	0.78	0.11	0.32	=
5/17/2009	1.02	0.12	0.32	=
5/17/2009	1.03	0.12	0.32	=
5/18/2009	0.75	0.12	0.33	=
5/18/2009	0.84	0.12	0.33	=
5/19/2009	0.69	0.11	0.32	=
5/19/2009	0.78	0.11	0.32	=
5/20/2009	0.48	0.11	0.33	=
5/20/2009	0.64	0.12	0.33	=
5/21/2009	0.63	0.11	0.32	=
5/21/2009	0.70	0.11	0.32	=
5/22/2009	0.46	0.11	0.32	=
5/22/2009	0.51	0.11	0.32	=
5/23/2009	0.38	0.11	0.32	=
5/23/2009	0.55	0.11	0.32	=
5/24/2009	0.44	0.11	0.33	=
5/24/2009	0.49	0.11	0.33	=
5/25/2009	0.53	0.11	0.32	=
5/25/2009	0.64	0.11	0.32	=
5/26/2009	0.64	0.11	0.32	=
5/26/2009	0.72	0.11	0.32	=
5/27/2009	1.50	0.13	0.32	=
5/27/2009	1.78	0.14	0.32	=
5/28/2009	1.07	0.12	0.32	=
5/28/2009	1.27	0.13	0.32	=
5/29/2009	1.05	0.12	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
5/29/2009	1.19	0.12	0.32	=
5/30/2009	0.92	0.12	0.34	=
5/30/2009	1.09	0.13	0.34	=
5/31/2009	1.07	0.13	0.34	=
5/31/2009	1.25	0.13	0.34	=
6/1/2009	0.95	0.12	0.34	=
6/1/2009	1.05	0.13	0.34	=
6/2/2009	0.80	0.12	0.33	=
6/2/2009	0.82	0.12	0.33	=
6/3/2009	0.86	0.12	0.34	=
6/3/2009	1.11	0.13	0.34	=
6/4/2009	0.54	0.12	0.34	=
6/4/2009	0.62	0.12	0.34	=
6/5/2009	0.67	0.12	0.34	=
6/5/2009	0.72	0.12	0.34	=
6/6/2009	0.58	0.12	0.34	=
6/6/2009	0.62	0.12	0.34	=
6/7/2009	0.63	0.12	0.34	=
6/7/2009	0.64	0.12	0.34	=
6/8/2009	0.52	0.11	0.34	=
6/8/2009	0.59	0.12	0.34	=
6/9/2009	0.48	0.11	0.34	=
6/9/2009	0.52	0.11	0.34	=
6/10/2009	0.37	0.11	0.34	=
6/10/2009	0.44	0.11	0.34	=
6/11/2009	0.98	0.12	0.34	=
6/11/2009	1.09	0.13	0.34	=
6/12/2009	0.69	0.12	0.34	=
6/12/2009	0.76	0.12	0.34	=
6/13/2009	0.46	0.11	0.33	=
6/13/2009	0.54	0.11	0.33	=
6/14/2009	0.31	0.11	0.34	U
6/14/2009	0.48	0.11	0.34	=
6/15/2009	0.37	0.11	0.34	=
6/15/2009	0.38	0.11	0.34	=
6/16/2009	0.71	0.12	0.34	=
6/16/2009	0.71	0.12	0.34	=
6/17/2009	0.56	0.12	0.34	=
6/17/2009	0.77	0.12	0.34	=
6/18/2009	0.45	0.11	0.34	=
6/18/2009	0.53	0.12	0.34	=
6/19/2009	0.46	0.11	0.34	=
6/19/2009	0.50	0.11	0.34	=
6/20/2009	0.52	0.11	0.32	=
6/20/2009	0.54	0.11	0.32	=
6/21/2009	0.59	0.11	0.32	=
6/21/2009	0.66	0.11	0.32	=
6/22/2009	0.60	0.11	0.32	=
6/22/2009	0.64	0.11	0.32	=
6/23/2009	0.51	0.10	0.30	=
6/23/2009	0.53	0.10	0.30	=
6/24/2009	0.31	0.11	0.32	U
6/24/2009	0.38	0.11	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
6/25/2009	0.35	0.11	0.32	=
6/25/2009	0.45	0.11	0.32	=
6/26/2009	0.43	0.11	0.32	=
6/26/2009	0.53	0.11	0.32	=
6/27/2009	0.42	0.11	0.32	=
6/27/2009	0.44	0.11	0.32	=
6/28/2009	0.42	0.11	0.32	=
6/28/2009	0.42	0.11	0.32	=
6/29/2009	0.32	0.11	0.32	U
6/29/2009	0.40	0.11	0.32	=
6/30/2009	0.07	0.10	0.32	U
6/30/2009	0.38	0.11	0.32	=
7/1/2009	0.16	0.10	0.32	U
7/1/2009	0.32	0.11	0.32	U
7/2/2009	0.27	0.10	0.32	U
7/2/2009	0.31	0.11	0.32	U
7/3/2009	0.11	0.10	0.32	U
7/3/2009	0.36	0.11	0.32	=
7/4/2009	0.26	0.10	0.32	U
7/4/2009	0.29	0.10	0.32	U
7/5/2009	0.57	0.10	0.30	=
7/5/2009	0.67	0.11	0.30	=
7/6/2009	0.53	0.11	0.32	=
7/6/2009	0.69	0.11	0.32	=
7/7/2009	0.56	0.11	0.32	=
7/7/2009	0.61	0.11	0.32	=
7/8/2009	0.54	0.10	0.30	=
7/8/2009	0.63	0.11	0.30	=
7/9/2009	0.37	0.11	0.32	=
7/9/2009	0.51	0.11	0.32	=
7/10/2009	0.45	0.11	0.31	=
7/10/2009	0.65	0.11	0.31	=
7/11/2009	0.39	0.11	0.32	=
7/11/2009	0.47	0.11	0.32	=
7/12/2009	0.71	0.11	0.31	=
7/12/2009	0.72	0.11	0.31	=
7/13/2009	1.02	0.12	0.31	=
7/13/2009	1.03	0.12	0.31	=
7/14/2009	1.09	0.12	0.31	=
7/14/2009	1.18	0.12	0.31	=
7/15/2009	1.21	0.12	0.31	=
7/15/2009	1.23	0.12	0.31	=
7/16/2009	1.09	0.12	0.31	=
7/16/2009	1.21	0.12	0.31	=
7/17/2009	0.88	0.11	0.31	=
7/17/2009	1.03	0.12	0.31	=
7/18/2009	0.92	0.11	0.31	=
7/18/2009	1.09	0.12	0.31	=
7/19/2009	0.89	0.11	0.31	=
7/19/2009	1.02	0.12	0.31	=
7/20/2009	0.85	0.11	0.31	=
7/20/2009	0.93	0.12	0.31	=
7/21/2009	0.81	0.11	0.31	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
7/21/2009	0.91	0.11	0.31	=
7/22/2009	0.56	0.11	0.31	=
7/22/2009	0.74	0.11	0.31	=
7/23/2009	0.74	0.11	0.31	=
7/23/2009	0.80	0.11	0.31	=
7/24/2009	0.99	0.12	0.31	=
7/24/2009	1.04	0.12	0.31	=
7/25/2009	1.17	0.12	0.32	=
7/25/2009	1.34	0.12	0.32	=
7/26/2009	1.36	0.12	0.31	=
7/26/2009	1.41	0.12	0.31	=
7/27/2009	1.11	0.12	0.31	=
7/27/2009	1.13	0.12	0.31	=
7/28/2009	0.97	0.12	0.31	=
7/28/2009	1.15	0.12	0.31	=
7/29/2009	0.96	0.12	0.33	=
7/29/2009	1.06	0.12	0.33	=
7/30/2009	1.26	0.12	0.33	=
7/30/2009	1.36	0.13	0.33	=
7/31/2009	0.51	0.11	0.33	=
7/31/2009	0.72	0.11	0.33	=
8/1/2009	0.51	0.11	0.33	=
8/1/2009	0.53	0.11	0.33	=
8/2/2009	0.53	0.11	0.33	=
8/2/2009	0.58	0.11	0.33	=
8/3/2009	0.67	0.11	0.33	=
8/3/2009	0.80	0.12	0.33	=
8/4/2009	0.24	0.10	0.33	U
8/4/2009	0.39	0.11	0.33	=
8/5/2009	0.42	0.11	0.33	=
8/5/2009	0.51	0.11	0.33	=
8/6/2009	0.46	0.11	0.33	=
8/7/2009	0.33	0.11	0.33	=
8/7/2009	0.41	0.11	0.33	=
8/8/2009	0.26	0.10	0.33	U
8/8/2009	0.31	0.11	0.33	U
8/9/2009	0.28	0.11	0.33	U
8/9/2009	0.36	0.11	0.33	=
8/10/2009	0.31	0.11	0.33	U
8/10/2009	0.37	0.11	0.33	=
8/11/2009	0.93	0.12	0.33	=
8/11/2009	1.01	0.12	0.33	=
8/12/2009	0.69	0.11	0.33	=
8/12/2009	0.75	0.11	0.33	=
8/13/2009	0.47	0.11	0.33	=
8/13/2009	0.62	0.11	0.33	=
8/14/2009	0.44	0.11	0.33	=
8/14/2009	0.49	0.11	0.33	=
8/15/2009	0.29	0.11	0.33	U
8/15/2009	0.48	0.11	0.33	=
8/16/2009	0.27	0.10	0.33	U
8/16/2009	0.34	0.11	0.33	=
8/17/2009	0.43	0.11	0.33	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
8/17/2009	0.54	0.11	0.33	=
8/18/2009	0.27	0.11	0.33	U
8/18/2009	0.40	0.11	0.33	=
8/19/2009	0.33	0.11	0.33	=
8/19/2009	0.47	0.11	0.33	=
8/20/2009	0.23	0.10	0.33	U
8/20/2009	0.31	0.11	0.33	U
8/21/2009	0.62	0.11	0.32	=
8/21/2009	0.65	0.11	0.32	=
8/22/2009	1.36	0.13	0.32	=
8/22/2009	1.39	0.13	0.32	=
8/23/2009	1.51	0.13	0.32	=
8/23/2009	1.58	0.13	0.32	=
8/24/2009	1.65	0.13	0.32	=
8/24/2009	1.69	0.13	0.32	=
8/25/2009	1.53	0.13	0.32	=
8/25/2009	1.70	0.13	0.32	=
8/26/2009	1.75	0.13	0.32	=
8/26/2009	1.81	0.13	0.32	=
8/27/2009	1.37	0.13	0.32	=
8/27/2009	1.44	0.13	0.32	=
8/28/2009	1.06	0.12	0.32	=
8/28/2009	1.24	0.12	0.32	=
8/29/2009	1.31	0.12	0.32	=
8/29/2009	1.40	0.13	0.32	=
8/30/2009	1.56	0.13	0.32	=
8/30/2009	1.59	0.13	0.32	=
8/31/2009	1.48	0.13	0.32	=
8/31/2009	1.49	0.13	0.32	=
9/1/2009	1.12	0.12	0.32	=
9/1/2009	1.26	0.12	0.32	=
9/2/2009	1.10	0.12	0.32	=
9/2/2009	1.37	0.13	0.32	=
9/3/2009	1.32	0.12	0.32	=
9/3/2009	1.46	0.13	0.32	=
9/4/2009	1.25	0.12	0.32	=
9/4/2009	1.28	0.12	0.32	=
9/5/2009	1.33	0.12	0.32	=
9/5/2009	1.35	0.13	0.32	=
9/6/2009	1.28	0.12	0.32	=
9/6/2009	1.36	0.13	0.32	=
9/7/2009	1.14	0.12	0.32	=
9/7/2009	1.20	0.12	0.32	=
9/8/2009	0.93	0.12	0.32	=
9/8/2009	0.97	0.12	0.32	=
9/9/2009	1.24	0.12	0.32	=
9/9/2009	1.44	0.13	0.32	=
9/10/2009	0.78	0.11	0.32	=
9/10/2009	0.89	0.12	0.32	=
9/11/2009	0.65	0.11	0.32	=
9/11/2009	0.69	0.11	0.32	=
9/12/2009	0.78	0.12	0.32	=
9/12/2009	0.85	0.12	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
9/13/2009	0.83	0.12	0.32	=
9/13/2009	0.90	0.12	0.32	=
9/14/2009	0.89	0.12	0.32	=
9/14/2009	0.93	0.12	0.32	=
9/15/2009	0.81	0.12	0.32	=
9/15/2009	0.88	0.12	0.32	=
9/16/2009	0.74	0.12	0.33	=
9/16/2009	0.78	0.12	0.33	=
9/17/2009	0.58	0.11	0.33	=
9/17/2009	0.68	0.12	0.33	=
9/18/2009	0.82	0.12	0.32	=
9/18/2009	0.90	0.12	0.32	=
9/19/2009	0.87	0.12	0.32	=
9/19/2009	0.99	0.12	0.32	=
9/20/2009	0.58	0.11	0.32	=
9/20/2009	0.64	0.11	0.32	=
9/21/2009	0.77	0.12	0.32	=
9/21/2009	0.81	0.12	0.32	=
9/22/2009	0.92	0.12	0.32	=
9/22/2009	1.12	0.12	0.32	=
9/23/2009	0.94	0.12	0.32	=
9/23/2009	1.17	0.12	0.32	=
9/24/2009	0.82	0.12	0.32	=
9/24/2009	0.98	0.12	0.32	=
9/25/2009	0.99	0.12	0.32	=
9/25/2009	1.04	0.12	0.32	=
9/26/2009	0.63	0.11	0.32	=
9/26/2009	0.66	0.11	0.32	=
9/27/2009	0.49	0.11	0.32	=
9/27/2009	0.51	0.11	0.32	=
9/28/2009	0.18	0.10	0.32	U
9/28/2009	0.44	0.11	0.32	=
9/29/2009	0.19	0.10	0.32	U
9/29/2009	0.31	0.11	0.32	U
9/30/2009	0.39	0.11	0.33	=
9/30/2009	0.48	0.11	0.33	=
10/1/2009	0.42	0.11	0.33	=
10/1/2009	0.42	0.11	0.33	=
10/2/2009	0.39	0.11	0.33	=
10/2/2009	0.59	0.11	0.33	=
10/3/2009	0.47	0.11	0.33	=
10/3/2009	0.51	0.11	0.33	=
10/4/2009	0.67	0.12	0.35	=
10/4/2009	0.82	0.12	0.35	=
10/5/2009	1.32	0.13	0.33	=
10/5/2009	1.39	0.13	0.33	=
10/6/2009	1.12	0.13	0.33	=
10/6/2009	1.30	0.13	0.33	=
10/7/2009	0.93	0.12	0.33	=
10/7/2009	0.98	0.12	0.33	=
10/8/2009	0.73	0.12	0.33	=
10/8/2009	0.80	0.12	0.33	=
10/9/2009	0.42	0.11	0.33	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
10/9/2009	0.53	0.11	0.33	=
10/10/2009	0.24	0.11	0.33	U
10/10/2009	0.42	0.11	0.33	=
10/11/2009	0.18	0.11	0.33	U
10/11/2009	0.33	0.11	0.33	U
10/12/2009	0.16	0.10	0.33	U
10/12/2009	0.42	0.11	0.33	=
10/13/2009	0.22	0.11	0.33	U
10/13/2009	0.31	0.11	0.33	U
10/14/2009	0.10	0.10	0.33	U
10/14/2009	0.17	0.10	0.33	U
10/15/2009	0.29	0.11	0.33	U
10/15/2009	0.33	0.11	0.33	U
10/16/2009	0.37	0.11	0.33	=
10/16/2009	0.49	0.11	0.33	=
10/17/2009	0.14	0.10	0.33	U
10/17/2009	0.27	0.11	0.33	U
10/18/2009	0.21	0.11	0.33	U
10/18/2009	0.25	0.11	0.33	U
10/19/2009	0.30	0.11	0.33	U
10/19/2009	0.34	0.11	0.33	=
10/20/2009	0.15	0.10	0.33	U
10/20/2009	0.32	0.11	0.33	U
10/21/2009	0.42	0.11	0.33	=
10/21/2009	0.45	0.11	0.33	=
10/22/2009	0.11	0.10	0.34	U
10/22/2009	0.15	0.11	0.34	U
10/23/2009	0.20	0.11	0.34	U
10/23/2009	0.23	0.11	0.34	U
10/24/2009	0.26	0.11	0.34	U
10/24/2009	0.26	0.11	0.34	U
10/25/2009	0.45	0.11	0.34	=
10/25/2009	0.50	0.11	0.34	=
10/26/2009	0.23	0.11	0.34	U
10/26/2009	0.25	0.11	0.34	U
10/27/2009	0.11	0.11	0.34	U
10/27/2009	0.27	0.11	0.34	U
10/28/2009	0.37	0.11	0.34	=
10/28/2009	0.44	0.11	0.34	=
10/29/2009	0.41	0.11	0.34	=
10/29/2009	0.54	0.11	0.34	=
10/30/2009	0.21	0.11	0.34	U
10/30/2009	0.34	0.11	0.34	=
10/31/2009	0.28	0.11	0.34	U
10/31/2009	0.43	0.11	0.34	=
11/1/2009	0.66	0.12	0.34	=
11/1/2009	0.69	0.12	0.34	=
11/2/2009	0.11	0.10	0.34	U
11/2/2009	0.14	0.11	0.34	U
11/3/2009	0.17	0.11	0.34	U
11/3/2009	0.29	0.11	0.34	U
11/4/2009	0.10	0.11	0.34	U
11/4/2009	0.11	0.11	0.34	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
11/5/2009	0.03	0.10	0.34	U
11/5/2009	0.35	0.11	0.34	=
11/6/2009	0.28	0.11	0.34	U
11/6/2009	0.33	0.11	0.34	U
11/7/2009	0.23	0.11	0.34	U
11/7/2009	0.31	0.11	0.34	U
11/8/2009	0.16	0.11	0.34	U
11/8/2009	0.27	0.11	0.34	U
11/9/2009	0.18	0.11	0.34	U
11/9/2009	0.26	0.11	0.34	U
11/10/2009	0.37	0.11	0.34	=
11/10/2009	0.54	0.11	0.34	=
11/11/2009	0.03	0.10	0.34	U
11/11/2009	0.17	0.11	0.34	U
11/12/2009	0.17	0.11	0.34	U
11/12/2009	0.29	0.11	0.34	U
11/13/2009	0.27	0.12	0.37	U
11/13/2009	0.38	0.12	0.37	=
11/14/2009	0.25	0.12	0.37	U
11/14/2009	0.31	0.12	0.37	U
11/15/2009	0.09	0.12	0.37	U
11/15/2009	0.15	0.12	0.37	U
11/16/2009	0.14	0.12	0.37	U
11/16/2009	0.16	0.12	0.37	U
11/17/2009	0.31	0.12	0.37	U
11/17/2009	0.32	0.12	0.37	U
11/18/2009	0.11	0.12	0.37	U
11/18/2009	0.30	0.12	0.37	U
11/19/2009	0.11	0.12	0.37	U
11/19/2009	0.12	0.12	0.37	U
11/20/2009	0.05	0.11	0.37	U
11/20/2009	0.25	0.12	0.37	U
11/21/2009	0.13	0.12	0.37	U
11/21/2009	0.18	0.12	0.37	U
11/22/2009	0.12	0.12	0.37	U
11/22/2009	0.20	0.12	0.37	U
11/23/2009	0.11	0.12	0.37	U
11/23/2009	0.16	0.12	0.37	U
11/24/2009	0.59	0.13	0.37	=
11/24/2009	0.61	0.13	0.37	=
11/25/2009	0.51	0.12	0.36	=
11/25/2009	0.72	0.12	0.36	=
11/26/2009	0.78	0.13	0.37	=
11/26/2009	0.90	0.13	0.37	=
11/27/2009	0.85	0.13	0.37	=
11/27/2009	0.95	0.13	0.37	=
11/28/2009	0.60	0.13	0.37	=
11/28/2009	0.69	0.13	0.37	=
11/29/2009	0.56	0.13	0.37	=
11/29/2009	0.65	0.13	0.37	=
11/30/2009	0.58	0.13	0.37	=
11/30/2009	0.72	0.13	0.37	=
12/1/2009	0.69	0.13	0.37	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
12/1/2009	0.93	0.13	0.37	=
12/2/2009	1.69	0.15	0.37	=
12/2/2009	1.73	0.15	0.37	=
12/3/2009	0.92	0.13	0.37	=
12/3/2009	1.15	0.14	0.37	=
12/4/2009	0.43	0.12	0.37	=
12/4/2009	0.66	0.13	0.37	=
12/5/2009	0.06	0.10	0.32	U
12/5/2009	0.15	0.10	0.32	U
12/6/2009	0.16	0.10	0.32	U
12/6/2009	0.35	0.10	0.32	=
12/7/2009	0.55	0.11	0.32	=
12/7/2009	0.61	0.11	0.32	=
12/8/2009	0.69	0.11	0.32	=
12/8/2009	0.75	0.11	0.32	=
12/9/2009	0.37	0.10	0.32	=
12/9/2009	0.53	0.11	0.32	=
12/10/2009	0.50	0.11	0.32	=
12/10/2009	0.54	0.11	0.32	=
12/11/2009	0.54	0.11	0.32	=
12/11/2009	0.60	0.11	0.32	=
12/12/2009	0.52	0.11	0.32	=
12/12/2009	0.59	0.11	0.32	=
12/13/2009	0.56	0.11	0.32	=
12/13/2009	0.61	0.11	0.32	=
12/14/2009	0.59	0.11	0.32	=
12/14/2009	0.78	0.11	0.32	=
12/15/2009	0.49	0.11	0.32	=
12/15/2009	0.50	0.11	0.32	=
12/16/2009	0.44	0.11	0.32	=
12/16/2009	0.56	0.11	0.32	=
12/17/2009	0.39	0.10	0.32	=
12/17/2009	0.57	0.11	0.32	=
12/18/2009	0.41	0.10	0.32	=
12/18/2009	0.53	0.11	0.32	=
Average	0.69			
Minimum	0.03			
Maximum	2.07			
Stdev	0.35			

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Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
1/1/2009	0.34	0.11	0.34	=
1/1/2009	0.36	0.11	0.34	=
1/2/2009	0.28	0.11	0.34	U
1/2/2009	0.63	0.12	0.34	=
1/3/2009	0.23	0.11	0.34	U
1/3/2009	0.58	0.12	0.34	=
1/4/2009	0.35	0.11	0.34	=
1/4/2009	0.41	0.11	0.34	=
1/5/2009	0.27	0.11	0.34	U
1/5/2009	0.45	0.11	0.34	=
1/7/2009	0.40	0.13	0.39	=
1/7/2009	0.58	0.13	0.39	=
1/8/2009	0.30	0.12	0.39	U
1/8/2009	0.36	0.13	0.39	U
1/9/2009	0.54	0.13	0.39	=
1/9/2009	0.59	0.13	0.39	=
1/10/2009	0.36	0.13	0.39	U
1/10/2009	0.59	0.13	0.39	=
1/11/2009	0.40	0.13	0.39	=
1/11/2009	0.44	0.13	0.39	=
1/12/2009	0.55	0.13	0.39	=
1/12/2009	0.58	0.13	0.39	=
1/13/2009	0.66	0.13	0.39	=
1/13/2009	0.73	0.13	0.39	=
1/14/2009	0.59	0.13	0.39	=
1/14/2009	0.83	0.14	0.39	=
1/15/2009	0.51	0.13	0.39	=
1/15/2009	0.62	0.13	0.39	=
1/16/2009	0.54	0.13	0.39	=
1/16/2009	0.61	0.13	0.39	=
1/17/2009	0.32	0.12	0.36	U
1/17/2009	0.39	0.12	0.36	=
1/29/2009	0.24	0.10	0.32	U
1/29/2009	0.31	0.10	0.32	U
1/30/2009	0.25	0.10	0.32	U
1/30/2009	0.29	0.10	0.32	U
1/31/2009	0.29	0.10	0.32	U
1/31/2009	0.32	0.10	0.32	U
2/1/2009	0.40	0.11	0.32	=
2/1/2009	0.43	0.11	0.32	=
2/2/2009	0.33	0.11	0.32	=
2/2/2009	0.48	0.11	0.32	=
2/3/2009	0.41	0.11	0.32	=
2/3/2009	0.42	0.11	0.32	=
2/4/2009	0.21	0.10	0.32	U
2/4/2009	0.46	0.11	0.32	=
2/5/2009	0.27	0.10	0.32	U
2/5/2009	0.34	0.11	0.32	=
2/6/2009	0.23	0.10	0.32	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
2/6/2009	0.52	0.11	0.32	=
2/7/2009	0.36	0.11	0.32	=
2/7/2009	0.50	0.11	0.32	=
2/8/2009	0.25	0.10	0.32	U
2/8/2009	0.48	0.11	0.32	=
2/9/2009	0.37	0.11	0.32	=
2/10/2009	0.34	0.11	0.32	=
2/10/2009	0.35	0.11	0.32	=
2/11/2009	0.32	0.10	0.32	U
2/11/2009	0.42	0.11	0.32	=
2/12/2009	0.14	0.10	0.32	U
2/12/2009	0.36	0.11	0.32	=
2/13/2009	0.33	0.11	0.35	U
2/13/2009	0.47	0.12	0.35	=
2/14/2009	0.29	0.11	0.35	U
2/14/2009	0.54	0.12	0.35	=
2/15/2009	0.36	0.12	0.35	=
2/15/2009	0.60	0.12	0.35	=
2/16/2009	0.36	0.12	0.35	=
2/16/2009	0.41	0.12	0.35	=
2/17/2009	0.34	0.11	0.35	U
2/17/2009	0.43	0.12	0.35	=
2/18/2009	0.50	0.12	0.35	=
2/18/2009	0.55	0.12	0.35	=
2/19/2009	0.60	0.12	0.35	=
2/19/2009	0.64	0.12	0.35	=
2/20/2009	0.61	0.12	0.35	=
2/20/2009	0.61	0.12	0.35	=
2/21/2009	0.37	0.12	0.36	=
2/21/2009	0.56	0.12	0.36	=
2/22/2009	0.76	0.12	0.35	=
2/22/2009	0.84	0.13	0.35	=
2/23/2009	0.32	0.12	0.36	U
2/23/2009	0.33	0.12	0.36	U
2/24/2009	0.42	0.12	0.35	=
2/24/2009	0.57	0.12	0.35	=
2/25/2009	0.33	0.11	0.35	U
2/25/2009	0.48	0.12	0.35	=
2/26/2009	0.26	0.11	0.35	U
2/26/2009	0.59	0.12	0.35	=
2/27/2009	0.58	0.12	0.35	=
2/27/2009	0.76	0.12	0.35	=
2/28/2009	0.39	0.12	0.35	=
2/28/2009	0.45	0.12	0.35	=
3/1/2009	0.38	0.12	0.35	=
3/1/2009	0.45	0.12	0.35	=
3/2/2009	0.41	0.12	0.35	=
3/2/2009	0.47	0.12	0.35	=
3/3/2009	0.21	0.11	0.35	U
3/3/2009	0.30	0.11	0.35	U
3/4/2009	0.30	0.11	0.35	U
3/4/2009	0.47	0.12	0.35	=
3/5/2009	0.50	0.12	0.37	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
3/5/2009	0.56	0.12	0.37	=
3/6/2009	0.43	0.12	0.37	=
3/6/2009	0.55	0.12	0.37	=
3/7/2009	0.41	0.12	0.37	=
3/7/2009	0.44	0.12	0.37	=
3/8/2009	0.40	0.12	0.37	=
3/8/2009	0.54	0.12	0.37	=
3/9/2009	0.42	0.12	0.37	=
3/9/2009	0.64	0.13	0.37	=
3/10/2009	0.44	0.12	0.37	=
3/10/2009	0.56	0.12	0.37	=
3/11/2009	0.55	0.12	0.37	=
3/11/2009	0.64	0.13	0.37	=
3/12/2009	0.27	0.12	0.37	U
3/12/2009	0.46	0.12	0.37	=
3/13/2009	0.55	0.12	0.37	=
3/13/2009	0.63	0.13	0.37	=
3/14/2009	0.63	0.13	0.37	=
3/14/2009	0.66	0.13	0.37	=
3/15/2009	0.87	0.13	0.36	=
3/15/2009	0.90	0.13	0.36	=
3/16/2009	0.97	0.13	0.37	=
3/16/2009	0.98	0.13	0.37	=
3/17/2009	0.73	0.13	0.37	=
3/17/2009	0.87	0.13	0.37	=
3/18/2009	0.67	0.13	0.37	=
3/18/2009	0.80	0.13	0.37	=
3/19/2009	0.65	0.13	0.37	=
3/19/2009	0.77	0.13	0.37	=
3/20/2009	0.92	0.13	0.37	=
3/20/2009	0.97	0.13	0.37	=
3/21/2009	0.91	0.13	0.37	=
3/22/2009	0.57	0.12	0.37	=
3/22/2009	0.75	0.13	0.37	=
3/23/2009	0.69	0.13	0.37	=
3/23/2009	0.77	0.13	0.37	=
3/24/2009	0.65	0.13	0.37	=
3/24/2009	0.84	0.13	0.37	=
3/25/2009	0.79	0.11	0.31	=
3/25/2009	0.82	0.11	0.31	=
3/26/2009	1.41	0.13	0.31	=
3/26/2009	1.44	0.13	0.31	=
3/27/2009	0.78	0.11	0.31	=
3/27/2009	0.90	0.11	0.31	=
3/28/2009	0.63	0.11	0.31	=
3/28/2009	0.72	0.11	0.31	=
3/29/2009	0.77	0.11	0.31	=
3/29/2009	0.82	0.11	0.31	=
3/30/2009	0.89	0.11	0.31	=
3/30/2009	0.93	0.12	0.31	=
3/31/2009	0.58	0.11	0.31	=
3/31/2009	0.62	0.11	0.31	=
4/1/2009	0.79	0.11	0.31	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
4/1/2009	0.87	0.11	0.31	=
4/2/2009	0.94	0.12	0.31	=
4/2/2009	1.10	0.12	0.31	=
4/3/2009	0.62	0.11	0.31	=
4/3/2009	0.67	0.11	0.31	=
4/4/2009	0.31	0.10	0.31	U
4/4/2009	0.62	0.11	0.31	=
4/5/2009	0.45	0.11	0.31	=
4/5/2009	0.53	0.11	0.31	=
4/6/2009	0.68	0.11	0.31	=
4/6/2009	0.74	0.11	0.31	=
4/7/2009	0.68	0.11	0.31	=
4/7/2009	0.78	0.11	0.31	=
4/8/2009	0.51	0.11	0.31	=
4/8/2009	0.69	0.11	0.31	=
4/9/2009	0.53	0.11	0.31	=
4/9/2009	0.66	0.11	0.31	=
4/10/2009	0.67	0.11	0.31	=
4/10/2009	0.75	0.11	0.31	=
4/11/2009	0.76	0.11	0.31	=
4/11/2009	0.77	0.11	0.31	=
4/12/2009	0.40	0.10	0.31	=
4/12/2009	0.58	0.11	0.31	=
4/13/2009	0.56	0.11	0.31	=
4/13/2009	0.66	0.11	0.31	=
4/14/2009	0.82	0.11	0.31	=
4/14/2009	0.88	0.11	0.31	=
4/15/2009	0.53	0.11	0.31	=
4/15/2009	0.57	0.11	0.31	=
4/16/2009	0.43	0.12	0.37	=
4/16/2009	0.62	0.13	0.37	=
4/17/2009	0.35	0.12	0.36	U
4/17/2009	0.42	0.12	0.36	=
4/18/2009	0.56	0.12	0.37	=
4/18/2009	0.56	0.13	0.37	=
4/19/2009	0.65	0.13	0.37	=
4/19/2009	0.72	0.13	0.37	=
4/20/2009	0.83	0.13	0.37	=
4/20/2009	0.85	0.13	0.37	=
4/21/2009	0.73	0.13	0.37	=
4/21/2009	0.75	0.13	0.37	=
4/22/2009	0.67	0.13	0.37	=
4/22/2009	0.78	0.13	0.37	=
4/23/2009	0.71	0.13	0.37	=
4/23/2009	0.72	0.13	0.37	=
4/24/2009	0.80	0.13	0.37	=
4/24/2009	0.88	0.13	0.37	=
4/25/2009	0.55	0.12	0.37	=
4/25/2009	0.56	0.13	0.37	=
4/26/2009	0.71	0.13	0.37	=
4/26/2009	0.73	0.13	0.37	=
4/27/2009	0.69	0.13	0.37	=
4/27/2009	0.72	0.13	0.37	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
4/28/2009	0.68	0.13	0.37	=
4/28/2009	0.71	0.13	0.37	=
4/29/2009	0.45	0.12	0.37	=
4/29/2009	0.50	0.12	0.37	=
4/30/2009	0.55	0.12	0.37	=
4/30/2009	0.69	0.13	0.37	=
5/1/2009	0.59	0.13	0.37	=
5/1/2009	0.76	0.13	0.37	=
5/2/2009	0.49	0.12	0.36	=
5/2/2009	0.56	0.12	0.36	=
5/3/2009	0.68	0.13	0.37	=
5/3/2009	0.82	0.13	0.37	=
5/4/2009	1.13	0.14	0.37	=
5/4/2009	1.16	0.14	0.37	=
5/5/2009	0.96	0.13	0.37	=
5/5/2009	0.98	0.13	0.37	=
5/6/2009	0.67	0.13	0.37	=
5/6/2009	0.91	0.13	0.37	=
5/7/2009	0.79	0.13	0.37	=
5/7/2009	0.88	0.13	0.37	=
5/8/2009	0.87	0.12	0.33	=
5/8/2009	0.89	0.12	0.33	=
5/9/2009	0.68	0.12	0.33	=
5/9/2009	0.77	0.12	0.33	=
5/10/2009	0.56	0.11	0.33	=
5/10/2009	0.67	0.12	0.33	=
5/11/2009	0.48	0.11	0.33	=
5/11/2009	0.63	0.12	0.33	=
5/12/2009	0.46	0.11	0.33	=
5/12/2009	0.48	0.11	0.33	=
5/13/2009	0.49	0.11	0.33	=
5/13/2009	0.53	0.11	0.33	=
5/14/2009	0.56	0.11	0.33	=
5/14/2009	0.57	0.11	0.33	=
5/15/2009	0.40	0.11	0.33	=
5/15/2009	0.45	0.11	0.33	=
5/16/2009	0.36	0.11	0.33	=
5/16/2009	0.53	0.11	0.33	=
5/17/2009	0.48	0.11	0.33	=
5/17/2009	0.49	0.11	0.33	=
5/18/2009	0.48	0.11	0.33	=
5/18/2009	0.53	0.11	0.33	=
5/19/2009	0.54	0.11	0.33	=
5/19/2009	0.60	0.11	0.33	=
5/20/2009	0.42	0.11	0.33	=
5/20/2009	0.45	0.11	0.33	=
5/21/2009	0.49	0.11	0.33	=
5/21/2009	0.55	0.11	0.33	=
5/22/2009	0.37	0.11	0.33	=
5/22/2009	0.43	0.11	0.33	=
5/23/2009	0.15	0.10	0.33	U
5/23/2009	0.46	0.11	0.33	=
5/24/2009	0.35	0.11	0.33	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
5/24/2009	0.38	0.11	0.33	=
5/25/2009	0.29	0.11	0.33	U
5/25/2009	0.45	0.11	0.33	=
5/26/2009	0.47	0.11	0.33	=
5/26/2009	0.48	0.11	0.33	=
5/27/2009	0.50	0.11	0.33	=
5/27/2009	0.50	0.11	0.33	=
5/28/2009	0.53	0.11	0.33	=
5/29/2009	0.48	0.11	0.33	=
5/29/2009	0.50	0.11	0.33	=
5/30/2009	0.51	0.11	0.33	=
5/30/2009	0.55	0.11	0.33	=
5/31/2009	0.54	0.11	0.33	=
5/31/2009	0.56	0.11	0.33	=
6/1/2009	0.42	0.11	0.32	=
6/1/2009	0.46	0.11	0.32	=
6/2/2009	0.47	0.11	0.33	=
6/2/2009	0.60	0.12	0.33	=
6/3/2009	0.41	0.11	0.32	=
6/3/2009	0.46	0.11	0.32	=
6/4/2009	0.73	0.12	0.33	=
6/5/2009	1.01	0.12	0.33	=
6/5/2009	1.13	0.13	0.33	=
6/6/2009	0.67	0.12	0.33	=
6/6/2009	0.70	0.12	0.33	=
6/7/2009	0.59	0.11	0.33	=
6/7/2009	0.61	0.12	0.33	=
6/8/2009	0.40	0.11	0.33	=
6/8/2009	0.58	0.11	0.33	=
6/9/2009	0.50	0.11	0.33	=
6/9/2009	0.51	0.11	0.33	=
6/10/2009	0.39	0.11	0.33	=
6/10/2009	0.49	0.11	0.33	=
6/11/2009	0.73	0.12	0.33	=
6/11/2009	0.78	0.12	0.33	=
6/12/2009	0.56	0.11	0.32	=
6/12/2009	0.76	0.12	0.32	=
6/13/2009	0.62	0.11	0.32	=
6/13/2009	0.67	0.11	0.32	=
6/14/2009	0.54	0.11	0.32	=
6/14/2009	0.71	0.11	0.32	=
6/15/2009	0.35	0.11	0.33	=
6/15/2009	0.36	0.11	0.33	=
6/16/2009	0.45	0.11	0.33	=
6/16/2009	0.52	0.11	0.33	=
6/17/2009	0.49	0.11	0.33	=
6/17/2009	0.53	0.11	0.33	=
6/18/2009	0.28	0.11	0.33	U
6/18/2009	0.42	0.11	0.33	=
6/19/2009	0.41	0.11	0.33	=
6/19/2009	0.42	0.11	0.33	=
6/20/2009	0.22	0.10	0.32	U
6/20/2009	0.33	0.10	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
6/21/2009	0.13	0.10	0.32	U
6/21/2009	0.17	0.10	0.32	U
6/22/2009	0.35	0.10	0.32	=
6/22/2009	0.36	0.10	0.32	=
6/23/2009	0.12	0.10	0.32	U
6/23/2009	0.20	0.10	0.32	U
6/24/2009	0.25	0.10	0.32	U
6/24/2009	0.27	0.10	0.32	U
6/25/2009	0.18	0.10	0.32	U
6/25/2009	0.26	0.10	0.32	U
6/26/2009	0.24	0.10	0.32	U
6/26/2009	0.25	0.10	0.32	U
6/27/2009	0.41	0.10	0.32	=
6/27/2009	0.47	0.11	0.32	=
6/28/2009	0.42	0.11	0.32	=
6/28/2009	0.43	0.11	0.32	=
6/29/2009	0.37	0.10	0.32	=
6/29/2009	0.42	0.11	0.32	=
6/30/2009	0.18	0.10	0.32	U
6/30/2009	0.23	0.10	0.32	U
7/1/2009	0.27	0.10	0.32	U
7/1/2009	0.31	0.10	0.32	U
7/2/2009	0.21	0.10	0.32	U
7/2/2009	0.36	0.10	0.32	=
7/3/2009	0.11	0.10	0.32	U
7/3/2009	0.24	0.10	0.32	U
7/4/2009	0.21	0.10	0.32	U
7/4/2009	0.21	0.10	0.32	U
7/5/2009	0.18	0.10	0.32	U
7/5/2009	0.26	0.10	0.32	U
7/6/2009	0.52	0.11	0.32	=
7/6/2009	0.67	0.11	0.32	=
7/7/2009	0.24	0.10	0.32	U
7/7/2009	0.37	0.10	0.32	=
7/8/2009	0.35	0.10	0.32	=
7/8/2009	0.45	0.11	0.32	=
7/9/2009	0.28	0.10	0.32	U
7/9/2009	0.50	0.11	0.32	=
7/10/2009	0.23	0.11	0.34	U
7/10/2009	0.28	0.11	0.34	U
7/11/2009	0.28	0.11	0.34	U
7/11/2009	0.44	0.11	0.34	=
7/12/2009	0.36	0.11	0.34	=
7/12/2009	0.42	0.11	0.34	=
7/13/2009	0.32	0.11	0.34	U
7/13/2009	0.48	0.11	0.34	=
7/14/2009	0.38	0.11	0.34	=
7/14/2009	0.45	0.11	0.34	=
7/15/2009	0.26	0.11	0.34	U
7/15/2009	0.31	0.11	0.34	U
7/16/2009	0.37	0.11	0.34	=
7/16/2009	0.38	0.11	0.34	=
7/17/2009	0.17	0.11	0.34	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
7/17/2009	0.29	0.11	0.34	U
7/18/2009	0.35	0.11	0.34	=
7/18/2009	0.37	0.11	0.34	=
7/19/2009	0.27	0.11	0.34	U
7/19/2009	0.42	0.11	0.34	=
7/20/2009	0.34	0.11	0.34	U
7/20/2009	0.46	0.11	0.34	=
7/21/2009	0.22	0.11	0.34	U
7/21/2009	0.44	0.11	0.34	=
7/22/2009	0.27	0.11	0.34	U
7/22/2009	0.42	0.11	0.34	=
7/23/2009	0.18	0.11	0.34	U
7/23/2009	0.23	0.11	0.34	U
7/24/2009	0.19	0.11	0.34	U
7/24/2009	0.35	0.11	0.34	=
7/25/2009	0.29	0.11	0.34	U
7/25/2009	0.31	0.11	0.34	U
7/26/2009	0.20	0.11	0.34	U
7/26/2009	0.24	0.11	0.34	U
7/27/2009	0.22	0.11	0.34	U
7/27/2009	0.27	0.11	0.34	U
7/28/2009	0.21	0.11	0.34	U
7/28/2009	0.35	0.11	0.34	=
7/29/2009	0.25	0.11	0.36	U
7/29/2009	0.42	0.12	0.36	=
7/30/2009	0.28	0.11	0.36	U
7/30/2009	0.31	0.12	0.36	U
7/31/2009	0.19	0.11	0.36	U
7/31/2009	0.34	0.12	0.36	U
8/1/2009	0.04	0.11	0.36	U
8/1/2009	0.25	0.11	0.36	U
8/2/2009	0.07	0.11	0.36	U
8/2/2009	0.19	0.11	0.36	U
8/3/2009	0.21	0.11	0.36	U
8/3/2009	0.35	0.12	0.36	U
8/4/2009	0.08	0.11	0.36	U
8/4/2009	0.33	0.12	0.36	U
8/5/2009	0.28	0.11	0.35	U
8/5/2009	0.58	0.12	0.35	=
8/6/2009	0.32	0.12	0.36	U
8/6/2009	0.44	0.12	0.36	=
8/7/2009	0.42	0.12	0.36	=
8/7/2009	0.43	0.12	0.36	=
8/8/2009	0.14	0.11	0.36	U
8/8/2009	0.27	0.11	0.36	U
8/9/2009	0.18	0.11	0.36	U
8/9/2009	0.53	0.12	0.36	=
8/10/2009	0.22	0.11	0.36	U
8/10/2009	0.22	0.11	0.36	U
8/11/2009	0.32	0.12	0.36	U
8/11/2009	0.38	0.12	0.36	=
8/21/2009	0.16	0.11	0.36	U
8/21/2009	0.23	0.11	0.36	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
8/22/2009	0.23	0.11	0.36	U
8/22/2009	0.25	0.12	0.36	U
8/23/2009	0.16	0.11	0.36	U
8/23/2009	0.22	0.11	0.36	U
8/24/2009	0.15	0.11	0.36	U
8/24/2009	0.34	0.12	0.36	U
8/25/2009	0.16	0.11	0.36	U
8/25/2009	0.31	0.12	0.36	U
8/26/2009	0.07	0.11	0.36	U
8/26/2009	0.26	0.12	0.36	U
8/27/2009	0.14	0.11	0.36	U
8/27/2009	0.26	0.12	0.36	U
8/28/2009	0.16	0.11	0.36	U
8/28/2009	0.32	0.12	0.36	U
8/29/2009	0.24	0.11	0.36	U
8/29/2009	0.26	0.12	0.36	U
8/30/2009	0.16	0.11	0.36	U
8/30/2009	0.21	0.11	0.36	U
8/31/2009	0.13	0.11	0.36	U
8/31/2009	0.26	0.12	0.36	U
9/1/2009	0.10	0.11	0.36	U
9/1/2009	0.27	0.12	0.36	U
9/2/2009	0.02	0.11	0.36	U
9/2/2009	0.21	0.11	0.36	U
9/3/2009	0.10	0.11	0.36	U
9/3/2009	0.30	0.12	0.36	U
9/4/2009	0.08	0.11	0.36	U
9/4/2009	0.13	0.11	0.36	U
9/5/2009	0.14	0.11	0.36	U
9/5/2009	0.17	0.11	0.36	U
9/6/2009	0.13	0.11	0.36	U
9/6/2009	0.14	0.11	0.36	U
9/7/2009	0.18	0.11	0.36	U
9/7/2009	0.40	0.12	0.36	=
9/8/2009	0.24	0.11	0.36	U
9/8/2009	0.27	0.12	0.36	U
9/9/2009	0.25	0.11	0.36	U
9/9/2009	0.25	0.11	0.36	U
9/10/2009	0.42	0.12	0.36	=
9/10/2009	0.47	0.12	0.36	=
9/11/2009	0.41	0.12	0.36	=
9/11/2009	0.52	0.12	0.36	=
9/12/2009	0.38	0.12	0.37	=
9/12/2009	0.41	0.12	0.37	=
9/13/2009	0.25	0.12	0.37	U
9/13/2009	0.44	0.12	0.37	=
9/14/2009	0.16	0.12	0.37	U
9/14/2009	0.17	0.12	0.37	U
9/15/2009	0.30	0.12	0.37	U
9/15/2009	0.35	0.12	0.37	U
9/16/2009	0.35	0.12	0.37	U
9/16/2009	0.42	0.12	0.37	=
9/17/2009	0.06	0.11	0.37	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
9/17/2009	0.29	0.12	0.37	U
9/18/2009	0.21	0.12	0.37	U
9/18/2009	0.22	0.12	0.37	U
9/19/2009	0.25	0.12	0.37	U
9/19/2009	0.30	0.12	0.37	U
9/20/2009	0.23	0.12	0.37	U
9/20/2009	0.33	0.12	0.37	U
9/21/2009	0.42	0.12	0.37	=
9/21/2009	0.52	0.12	0.37	=
9/22/2009	0.35	0.12	0.37	U
9/22/2009	0.60	0.12	0.37	=
9/23/2009	0.37	0.12	0.37	=
9/23/2009	0.40	0.12	0.37	=
9/24/2009	0.41	0.12	0.37	=
9/24/2009	0.42	0.12	0.37	=
9/25/2009	0.53	0.12	0.37	=
9/25/2009	0.55	0.12	0.37	=
9/26/2009	0.10	0.11	0.37	U
9/26/2009	0.33	0.12	0.37	U
9/27/2009	0.23	0.12	0.37	U
9/27/2009	0.28	0.12	0.37	U
9/28/2009	0.20	0.12	0.37	U
9/28/2009	0.21	0.12	0.37	U
9/29/2009	0.14	0.12	0.37	U
9/29/2009	0.18	0.12	0.37	U
9/30/2009	0.19	0.10	0.33	U
9/30/2009	0.37	0.11	0.33	=
10/1/2009	0.25	0.11	0.33	U
10/1/2009	0.46	0.11	0.33	=
10/2/2009	0.25	0.11	0.33	U
10/2/2009	0.35	0.11	0.33	=
10/3/2009	0.23	0.11	0.33	U
10/3/2009	0.34	0.11	0.33	=
10/4/2009	0.18	0.10	0.33	U
10/4/2009	0.34	0.11	0.33	=
10/5/2009	0.23	0.11	0.33	U
10/5/2009	0.33	0.11	0.33	=
10/6/2009	0.24	0.11	0.33	U
10/7/2009	0.21	0.10	0.33	U
10/7/2009	0.26	0.11	0.33	U
10/8/2009	0.25	0.11	0.33	U
10/8/2009	0.50	0.11	0.33	=
10/9/2009	0.13	0.10	0.33	U
10/9/2009	0.57	0.11	0.33	=
10/10/2009	0.04	0.10	0.33	U
10/10/2009	0.19	0.10	0.33	U
10/11/2009	0.27	0.11	0.33	U
10/11/2009	0.35	0.11	0.33	=
10/12/2009	0.14	0.10	0.33	U
10/12/2009	0.33	0.11	0.33	=
10/13/2009	0.21	0.10	0.33	U
10/13/2009	0.26	0.11	0.33	U
10/14/2009	0.16	0.10	0.33	U

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
10/14/2009	0.20	0.10	0.33	U
10/15/2009	0.49	0.11	0.33	=
10/15/2009	0.56	0.11	0.33	=
10/16/2009	0.23	0.11	0.33	U
10/16/2009	0.33	0.11	0.33	U
10/17/2009	0.28	0.11	0.33	U
10/17/2009	0.30	0.11	0.33	U
10/18/2009	0.37	0.10	0.31	=
10/18/2009	0.49	0.11	0.31	=
10/19/2009	0.33	0.11	0.33	=
10/19/2009	0.37	0.11	0.33	=
10/20/2009	0.24	0.11	0.33	U
10/20/2009	0.32	0.11	0.33	U
10/21/2009	0.35	0.11	0.33	=
10/21/2009	0.40	0.11	0.33	=
10/22/2009	0.19	0.12	0.38	U
10/22/2009	0.27	0.12	0.38	U
10/23/2009	0.13	0.12	0.38	U
10/23/2009	0.38	0.12	0.38	U
10/24/2009	0.27	0.12	0.38	U
10/24/2009	0.43	0.13	0.38	=
10/25/2009	0.34	0.12	0.38	U
10/25/2009	0.36	0.12	0.38	U
10/26/2009	0.19	0.12	0.38	U
10/26/2009	0.24	0.12	0.38	U
10/27/2009	0.30	0.12	0.38	U
10/27/2009	0.39	0.12	0.38	=
10/28/2009	0.28	0.12	0.38	U
10/28/2009	0.43	0.13	0.38	=
10/29/2009	0.21	0.12	0.38	U
10/29/2009	0.27	0.12	0.38	U
10/30/2009	0.23	0.12	0.38	U
10/30/2009	0.32	0.12	0.38	U
10/31/2009	0.28	0.12	0.38	U
10/31/2009	0.32	0.12	0.38	U
11/1/2009	0.22	0.12	0.38	U
11/1/2009	0.42	0.12	0.38	=
11/2/2009	0.07	0.12	0.38	U
11/2/2009	0.19	0.12	0.38	U
11/3/2009	0.28	0.12	0.38	U
11/3/2009	0.30	0.12	0.38	U
11/4/2009	0.26	0.12	0.38	U
11/4/2009	0.36	0.12	0.38	U
11/5/2009	0.20	0.12	0.38	U
11/5/2009	0.43	0.13	0.38	=
11/6/2009	0.39	0.12	0.38	=
11/6/2009	0.57	0.13	0.38	=
11/7/2009	0.30	0.12	0.38	U
11/7/2009	0.60	0.13	0.38	=
11/8/2009	0.29	0.12	0.38	U
11/8/2009	0.33	0.12	0.38	U
11/9/2009	0.30	0.12	0.38	U
11/9/2009	0.38	0.12	0.38	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
11/10/2009	0.17	0.12	0.38	U
11/10/2009	0.27	0.12	0.38	U
11/11/2009	0.42	0.12	0.38	=
11/11/2009	0.43	0.13	0.38	=
11/12/2009	0.51	0.13	0.38	=
11/12/2009	0.69	0.13	0.38	=
11/13/2009	0.19	0.10	0.32	U
11/13/2009	0.29	0.10	0.32	U
11/14/2009	0.20	0.10	0.32	U
11/14/2009	0.31	0.10	0.32	U
11/15/2009	0.21	0.10	0.32	U
11/15/2009	0.24	0.10	0.32	U
11/16/2009	0.17	0.10	0.32	U
11/16/2009	0.35	0.11	0.32	=
11/17/2009	0.15	0.10	0.32	U
11/17/2009	0.16	0.10	0.32	U
11/18/2009	0.15	0.10	0.32	U
11/18/2009	0.25	0.10	0.32	U
11/19/2009	0.29	0.10	0.32	U
11/19/2009	0.37	0.11	0.32	=
11/20/2009	0.24	0.10	0.32	U
11/20/2009	0.35	0.11	0.32	=
11/21/2009	0.18	0.10	0.32	U
11/21/2009	0.29	0.10	0.32	U
11/22/2009	0.17	0.10	0.32	U
11/22/2009	0.18	0.10	0.32	U
11/23/2009	0.25	0.10	0.32	U
11/23/2009	0.28	0.10	0.32	U
11/24/2009	0.23	0.10	0.32	U
11/24/2009	0.30	0.10	0.32	U
11/25/2009	0.20	0.10	0.32	U
11/25/2009	0.27	0.10	0.32	U
11/26/2009	0.12	0.10	0.32	U
11/26/2009	0.19	0.10	0.32	U
11/27/2009	0.37	0.11	0.32	=
11/27/2009	0.43	0.11	0.32	=
11/28/2009	0.23	0.10	0.32	U
11/28/2009	0.33	0.11	0.32	=
11/29/2009	0.17	0.10	0.32	U
11/29/2009	0.45	0.11	0.32	=
11/30/2009	0.21	0.10	0.32	U
11/30/2009	0.25	0.10	0.32	U
12/1/2009	0.20	0.10	0.32	U
12/1/2009	0.35	0.11	0.32	=
12/2/2009	0.25	0.10	0.32	U
12/2/2009	0.30	0.10	0.32	U
12/3/2009	0.60	0.11	0.32	=
12/3/2009	0.72	0.11	0.32	=
12/4/2009	0.36	0.11	0.32	=
12/4/2009	0.39	0.11	0.32	=
12/5/2009	0.36	0.12	0.36	=
12/5/2009	0.41	0.12	0.36	=
12/6/2009	0.38	0.12	0.36	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
12/6/2009	0.44	0.12	0.36	=
12/7/2009	0.39	0.12	0.36	=
12/7/2009	0.55	0.12	0.36	=
12/8/2009	0.32	0.12	0.36	U
12/8/2009	0.44	0.12	0.36	=
12/9/2009	0.19	0.11	0.36	U
12/9/2009	0.27	0.12	0.36	U
12/10/2009	0.32	0.12	0.36	U
12/10/2009	0.33	0.12	0.36	U
12/11/2009	0.39	0.12	0.36	=
12/11/2009	0.40	0.12	0.36	=
12/12/2009	0.34	0.13	0.40	U
12/12/2009	0.38	0.13	0.40	U
12/13/2009	0.58	0.12	0.36	=
12/13/2009	0.64	0.12	0.36	=
12/14/2009	0.78	0.13	0.36	=
12/14/2009	0.83	0.13	0.36	=
12/15/2009	0.69	0.12	0.36	=
12/15/2009	0.75	0.13	0.36	=
12/16/2009	0.57	0.12	0.36	=
12/16/2009	0.71	0.12	0.36	=
12/17/2009	0.31	0.11	0.35	U
12/17/2009	0.44	0.12	0.35	=
12/18/2009	0.50	0.12	0.36	=
12/18/2009	0.57	0.12	0.36	=

Average	0.43
Minimum	0.02
Maximum	1.44
Stdev	0.21

ISCO EDRN HTO Activity for 2009

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
1/1/2009	210.05	0.98	0.30	=
1/1/2009	210.55	0.99	0.30	=
1/2/2009	222.99	1.01	0.30	=
1/2/2009	223.48	1.02	0.30	=
1/3/2009	225.55	1.02	0.30	=
1/3/2009	229.59	1.03	0.30	=
1/4/2009	39.90	0.44	0.30	=
1/4/2009	40.28	0.44	0.30	=
1/5/2009	81.05	0.62	0.30	=
1/5/2009	81.34	0.62	0.30	=
1/6/2009	79.85	0.64	0.33	=
1/6/2009	85.73	0.66	0.33	=
1/7/2009	6.76	0.21	0.33	=
1/7/2009	6.83	0.21	0.33	=
1/8/2009	22.97	0.35	0.33	=
1/8/2009	23.11	0.35	0.33	=
1/9/2009	49.91	0.51	0.33	=
1/9/2009	50.69	0.51	0.33	=
1/10/2009	41.24	0.46	0.33	=
1/10/2009	41.34	0.46	0.33	=
1/11/2009	29.20	0.39	0.33	=
1/11/2009	29.69	0.40	0.33	=
1/12/2009	120.25	0.78	0.33	=
1/12/2009	120.73	0.78	0.33	=
1/13/2009	131.73	0.81	0.33	=
1/13/2009	132.07	0.81	0.33	=
1/14/2009	156.67	0.89	0.33	=
1/14/2009	156.99	0.89	0.33	=
1/15/2009	148.68	0.86	0.33	=
1/15/2009	150.09	0.87	0.33	=
1/22/2009	179.03	0.95	0.33	=
1/22/2009	179.73	0.95	0.33	=
1/23/2009	124.80	0.80	0.34	=
1/23/2009	124.93	0.80	0.34	=
1/24/2009	127.11	0.80	0.34	=
1/24/2009	127.78	0.80	0.34	=
1/25/2009	92.29	0.98	0.68	=
1/25/2009	92.33	0.98	0.68	=
2/1/2009	11.10	0.26	0.34	=
2/1/2009	11.35	0.26	0.34	=
2/2/2009	12.01	0.27	0.34	=
2/2/2009	12.40	0.27	0.34	=
2/3/2009	49.91	0.51	0.34	=
2/3/2009	49.94	0.51	0.34	=
2/7/2009	26.45	0.38	0.34	=
2/7/2009	26.74	0.38	0.34	=
2/8/2009	24.53	0.36	0.34	=
2/8/2009	25.30	0.37	0.34	=
2/9/2009	103.92	0.73	0.34	=
2/9/2009	105.68	0.73	0.34	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
2/10/2009	71.51	0.61	0.34	=
2/10/2009	71.81	0.61	0.34	=
2/11/2009	6.60	0.21	0.34	=
2/11/2009	7.19	0.22	0.34	=
2/12/2009	14.16	0.28	0.34	=
2/12/2009	14.45	0.29	0.34	=
2/13/2009	50.49	0.52	0.34	=
2/13/2009	51.55	0.52	0.34	=
2/14/2009	86.75	0.67	0.34	=
2/14/2009	88.19	0.68	0.34	=
2/15/2009	109.50	0.75	0.34	=
2/15/2009	110.85	0.76	0.34	=
2/16/2009	129.72	0.82	0.34	=
2/16/2009	134.24	0.83	0.34	=
2/17/2009	147.72	0.87	0.34	=
2/17/2009	151.72	0.88	0.34	=
2/18/2009	91.85	0.69	0.34	=
2/18/2009	92.78	0.69	0.34	=
2/19/2009	17.10	0.31	0.34	=
2/19/2009	17.94	0.32	0.34	=
2/20/2009	109.89	0.75	0.34	=
2/20/2009	110.96	0.76	0.34	=
2/21/2009	135.77	0.84	0.34	=
2/21/2009	137.07	0.84	0.34	=
2/22/2009	19.32	0.33	0.34	=
2/22/2009	19.53	0.33	0.34	=
2/24/2009	78.34	0.64	0.34	=
2/24/2009	78.48	0.64	0.34	=
2/25/2009	121.19	0.79	0.34	=
2/25/2009	122.97	0.80	0.34	=
2/26/2009	72.77	0.62	0.34	=
2/26/2009	73.32	0.62	0.34	=
2/27/2009	7.67	0.22	0.34	=
2/27/2009	8.20	0.23	0.34	=
2/28/2009	18.91	0.33	0.34	=
2/28/2009	19.21	0.33	0.34	=
3/1/2009	9.28	0.24	0.34	=
3/1/2009	9.49	0.24	0.34	=
3/2/2009	49.89	0.51	0.34	=
3/2/2009	49.94	0.51	0.34	=
3/3/2009	87.46	0.67	0.34	=
3/3/2009	89.13	0.68	0.34	=
3/4/2009	66.95	0.59	0.34	=
3/4/2009	68.11	0.60	0.34	=
3/5/2009	58.04	0.55	0.34	=
3/5/2009	59.62	0.56	0.34	=
3/6/2009	124.27	0.80	0.34	=
3/6/2009	124.69	0.80	0.34	=
3/7/2009	170.11	0.94	0.34	=
3/7/2009	171.17	0.94	0.34	=
3/8/2009	182.61	0.97	0.34	=
3/8/2009	185.51	0.98	0.34	=
3/9/2009	81.79	0.65	0.34	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
3/9/2009	83.36	0.66	0.34	=
3/10/2009	156.33	0.90	0.34	=
3/10/2009	160.08	0.91	0.34	=
3/11/2009	65.91	0.59	0.34	=
3/11/2009	66.47	0.59	0.34	=
3/12/2009	154.40	0.89	0.34	=
3/12/2009	154.61	0.89	0.34	=
3/13/2009	88.57	0.68	0.34	=
3/13/2009	89.12	0.68	0.34	=
3/14/2009	77.89	0.64	0.34	=
3/14/2009	78.09	0.64	0.34	=
3/15/2009	37.72	0.45	0.34	=
3/15/2009	38.47	0.45	0.34	=
3/16/2009	117.38	0.78	0.34	=
3/16/2009	119.63	0.79	0.34	=
3/17/2009	188.96	0.99	0.34	=
3/17/2009	191.68	0.99	0.34	=
3/18/2009	204.49	1.03	0.34	=
3/18/2009	204.99	1.03	0.34	=
3/19/2009	62.50	0.57	0.34	=
3/19/2009	62.83	0.58	0.34	=
3/20/2009	185.26	0.98	0.34	=
3/20/2009	186.22	0.98	0.34	=
3/21/2009	220.70	1.07	0.34	=
3/21/2009	222.54	1.07	0.34	=
3/22/2009	226.65	1.08	0.34	=
3/22/2009	229.01	1.09	0.34	=
3/23/2009	231.19	1.09	0.34	=
3/23/2009	231.62	1.09	0.34	=
3/24/2009	227.59	1.08	0.34	=
3/24/2009	227.99	1.08	0.34	=
3/25/2009	59.55	0.59	0.39	=
3/25/2009	60.45	0.59	0.39	=
3/26/2009	8.20	0.24	0.39	=
3/26/2009	8.65	0.25	0.39	=
3/27/2009	66.96	0.62	0.39	=
3/27/2009	69.11	0.63	0.39	=
3/28/2009	64.56	0.61	0.39	=
3/28/2009	65.75	0.62	0.39	=
3/29/2009	94.10	0.73	0.39	=
3/29/2009	95.17	0.74	0.39	=
3/30/2009	144.50	0.90	0.39	=
3/30/2009	145.60	0.91	0.39	=
3/31/2009	159.74	0.95	0.39	=
3/31/2009	159.93	0.95	0.39	=
4/1/2009	48.65	0.53	0.39	=
4/1/2009	50.07	0.54	0.39	=
4/2/2009	137.30	0.88	0.39	=
4/2/2009	137.75	0.88	0.39	=
4/3/2009	49.14	0.54	0.39	=
4/3/2009	49.24	0.54	0.39	=
4/4/2009	41.66	0.49	0.39	=
4/4/2009	41.91	0.50	0.39	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
4/5/2009	133.97	0.87	0.39	=
4/5/2009	134.61	0.87	0.39	=
4/15/2009	32.81	0.44	0.39	=
4/15/2009	33.11	0.44	0.39	=
4/16/2009	70.59	0.61	0.33	=
4/16/2009	71.54	0.62	0.33	=
4/17/2009	151.49	0.89	0.33	=
4/17/2009	155.15	0.90	0.33	=
4/18/2009	177.90	0.97	0.33	=
4/18/2009	178.34	0.97	0.33	=
4/19/2009	85.11	0.67	0.33	=
4/19/2009	85.93	0.68	0.33	=
4/20/2009	13.74	0.28	0.33	=
4/20/2009	13.93	0.29	0.33	=
4/21/2009	23.55	0.36	0.33	=
4/21/2009	23.56	0.36	0.33	=
4/22/2009	39.29	0.46	0.33	=
4/22/2009	40.02	0.47	0.33	=
4/23/2009	96.63	0.72	0.33	=
4/23/2009	96.79	0.72	0.33	=
4/24/2009	128.57	0.82	0.33	=
4/24/2009	129.28	0.83	0.33	=
4/25/2009	133.08	0.84	0.33	=
4/25/2009	133.37	0.84	0.33	=
4/26/2009	148.78	0.88	0.33	=
4/26/2009	148.99	0.89	0.33	=
4/27/2009	161.99	0.92	0.33	=
4/27/2009	164.21	0.93	0.33	=
4/28/2009	132.97	0.84	0.33	=
4/28/2009	133.46	0.84	0.33	=
4/29/2009	40.10	0.47	0.33	=
4/29/2009	40.33	0.47	0.33	=
4/30/2009	80.12	0.65	0.33	=
4/30/2009	81.50	0.66	0.33	=
5/1/2009	21.16	0.35	0.33	=
5/1/2009	21.32	0.35	0.33	=
5/2/2009	44.68	0.49	0.33	=
5/2/2009	46.15	0.50	0.33	=
5/3/2009	65.84	0.59	0.33	=
5/3/2009	66.32	0.60	0.33	=
5/7/2009	69.57	0.61	0.33	=
5/7/2009	69.83	0.61	0.33	=
5/8/2009	79.22	0.66	0.34	=
5/8/2009	79.52	0.66	0.34	=
5/9/2009	22.40	0.36	0.34	=
5/9/2009	23.23	0.37	0.34	=
5/10/2009	103.36	0.75	0.34	=
5/10/2009	105.76	0.76	0.34	=
5/11/2009	112.69	0.78	0.34	=
5/11/2009	113.97	0.78	0.34	=
5/12/2009	131.20	0.84	0.34	=
5/12/2009	131.56	0.84	0.34	=
5/13/2009	163.05	0.93	0.34	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
5/13/2009	164.35	0.94	0.34	=
5/14/2009	35.82	0.45	0.34	=
5/14/2009	36.18	0.45	0.34	=
5/15/2009	126.26	0.82	0.34	=
5/15/2009	130.23	0.84	0.34	=
5/16/2009	66.66	0.60	0.34	=
5/16/2009	68.27	0.61	0.34	=
5/17/2009	135.40	0.85	0.34	=
5/17/2009	139.89	0.87	0.34	=
5/18/2009	214.18	1.07	0.34	=
5/18/2009	216.29	1.08	0.34	=
5/19/2009	242.15	1.14	0.34	=
5/19/2009	246.69	1.15	0.34	=
5/20/2009	255.00	1.17	0.34	=
5/20/2009	256.62	1.17	0.34	=
5/21/2009	264.28	1.19	0.34	=
5/21/2009	275.15	1.21	0.34	=
5/22/2009	256.28	1.17	0.34	=
5/22/2009	262.87	1.18	0.34	=
5/23/2009	275.23	1.21	0.34	=
5/23/2009	278.77	1.22	0.34	=
5/24/2009	283.36	1.23	0.34	=
5/24/2009	291.31	1.25	0.34	=
5/25/2009	215.60	1.07	0.34	=
5/25/2009	217.52	1.08	0.34	=
5/26/2009	42.63	0.49	0.34	=
5/26/2009	47.97	0.51	0.34	=
5/27/2009	18.60	0.33	0.34	=
5/27/2009	19.86	0.34	0.34	=
5/28/2009	37.21	0.46	0.34	=
5/28/2009	37.41	0.46	0.34	=
5/29/2009	41.83	0.48	0.34	=
5/29/2009	42.14	0.48	0.34	=
5/30/2009	117.55	0.79	0.34	=
5/30/2009	118.94	0.79	0.34	=
5/31/2009	26.75	0.39	0.34	=
5/31/2009	27.19	0.39	0.34	=
6/1/2009	116.46	0.78	0.34	=
6/1/2009	118.71	0.79	0.34	=
6/2/2009	181.20	0.97	0.34	=
6/2/2009	183.62	0.98	0.34	=
6/3/2009	6.48	0.21	0.34	=
6/3/2009	6.58	0.21	0.34	=
6/4/2009	6.38	0.21	0.34	=
6/4/2009	6.46	0.21	0.34	=
6/5/2009	49.43	0.52	0.34	=
6/5/2009	50.22	0.52	0.34	=
6/6/2009	173.71	0.95	0.34	=
6/6/2009	175.19	0.96	0.34	=
6/7/2009	216.70	1.06	0.34	=
6/7/2009	218.11	1.07	0.34	=
6/8/2009	233.77	1.10	0.34	=
6/8/2009	236.09	1.11	0.34	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
6/9/2009	242.81	1.13	0.34	=
6/9/2009	246.32	1.13	0.34	=
6/10/2009	190.15	1.00	0.34	=
6/10/2009	191.37	1.00	0.34	=
6/11/2009	6.79	0.21	0.34	=
6/11/2009	7.43	0.22	0.34	=
6/12/2009	21.23	0.35	0.34	=
6/12/2009	21.23	0.35	0.34	=
6/13/2009	129.68	0.83	0.34	=
6/13/2009	130.19	0.83	0.34	=
6/14/2009	195.22	1.01	0.34	=
6/14/2009	198.64	1.02	0.34	=
6/15/2009	100.21	0.73	0.34	=
6/15/2009	100.34	0.73	0.34	=
6/16/2009	9.92	0.25	0.34	=
6/16/2009	10.06	0.25	0.34	=
6/17/2009	52.91	0.53	0.34	=
6/17/2009	54.10	0.54	0.34	=
6/18/2009	115.77	0.78	0.34	=
6/18/2009	117.18	0.79	0.34	=
6/19/2009	115.74	0.78	0.34	=
6/19/2009	117.83	0.79	0.34	=
6/20/2009	86.46	0.66	0.35	=
6/20/2009	87.35	0.66	0.35	=
6/21/2009	89.58	0.67	0.35	=
6/21/2009	90.32	0.67	0.35	=
6/22/2009	159.53	0.89	0.35	=
6/22/2009	159.60	0.89	0.35	=
6/23/2009	182.76	0.95	0.35	=
6/23/2009	186.99	0.96	0.35	=
6/24/2009	193.70	0.97	0.35	=
6/24/2009	198.15	0.99	0.35	=
6/25/2009	157.41	0.88	0.35	=
6/25/2009	162.78	0.89	0.35	=
6/26/2009	7.97	0.22	0.35	=
6/26/2009	8.22	0.23	0.35	=
6/27/2009	20.08	0.33	0.35	=
6/27/2009	20.46	0.33	0.35	=
6/28/2009	92.61	0.68	0.35	=
6/28/2009	94.50	0.69	0.35	=
6/29/2009	150.92	0.86	0.35	=
6/29/2009	161.66	0.89	0.35	=
6/30/2009	181.75	0.94	0.35	=
6/30/2009	184.63	0.95	0.35	=
7/1/2009	208.17	1.01	0.35	=
7/1/2009	208.70	1.01	0.35	=
7/2/2009	225.84	1.05	0.35	=
7/2/2009	233.04	1.07	0.35	=
7/3/2009	242.98	1.09	0.35	=
7/3/2009	246.75	1.10	0.35	=
7/4/2009	220.96	1.04	0.35	=
7/4/2009	228.21	1.06	0.35	=
7/5/2009	5.87	0.20	0.35	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
7/5/2009	6.16	0.20	0.35	=
7/6/2009	60.04	0.55	0.35	=
7/6/2009	62.53	0.56	0.35	=
7/7/2009	132.01	0.81	0.35	=
7/7/2009	133.97	0.81	0.35	=
7/8/2009	180.58	0.94	0.35	=
7/8/2009	180.77	0.94	0.35	=
7/9/2009	210.19	1.01	0.35	=
7/9/2009	211.25	1.02	0.35	=
7/10/2009	183.25	0.92	0.31	=
7/10/2009	190.93	0.94	0.31	=
7/11/2009	24.75	0.35	0.31	=
7/11/2009	26.39	0.36	0.31	=
7/12/2009	36.60	0.42	0.31	=
7/12/2009	39.18	0.44	0.31	=
7/13/2009	115.57	0.74	0.31	=
7/13/2009	116.01	0.74	0.31	=
7/14/2009	160.85	0.87	0.31	=
7/14/2009	174.00	0.90	0.31	=
7/15/2009	205.03	0.98	0.31	=
7/15/2009	208.06	0.98	0.31	=
7/16/2009	230.97	1.04	0.31	=
7/16/2009	233.16	1.04	0.31	=
7/17/2009	132.01	0.79	0.31	=
7/17/2009	132.65	0.79	0.31	=
7/18/2009	38.60	0.43	0.31	=
7/18/2009	39.34	0.44	0.31	=
7/19/2009	120.82	0.75	0.31	=
7/19/2009	123.74	0.76	0.31	=
7/20/2009	175.77	0.91	0.31	=
7/20/2009	179.15	0.91	0.31	=
7/21/2009	177.10	0.91	0.31	=
7/21/2009	181.39	0.92	0.31	=
7/29/2009	49.31	0.49	0.32	=
7/29/2009	50.71	0.50	0.32	=
7/30/2009	6.79	0.20	0.32	=
7/30/2009	6.91	0.21	0.32	=
7/31/2009	3.67	0.16	0.32	=
7/31/2009	3.72	0.16	0.32	=
8/1/2009	6.48	0.20	0.32	=
8/1/2009	6.86	0.20	0.32	=
8/2/2009	9.57	0.23	0.32	=
8/2/2009	9.81	0.24	0.32	=
8/3/2009	93.22	0.67	0.32	=
8/3/2009	93.88	0.67	0.32	=
8/4/2009	51.56	0.50	0.32	=
8/4/2009	52.42	0.51	0.32	=
8/5/2009	5.04	0.18	0.32	=
8/5/2009	5.27	0.19	0.32	=
8/6/2009	58.23	0.53	0.32	=
8/6/2009	61.80	0.55	0.32	=
8/7/2009	118.92	0.76	0.32	=
8/7/2009	120.12	0.76	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
8/8/2009	176.92	0.92	0.32	=
8/8/2009	181.12	0.93	0.32	=
8/9/2009	190.38	0.96	0.32	=
8/9/2009	190.57	0.96	0.32	=
8/10/2009	59.99	0.54	0.32	=
8/10/2009	60.52	0.54	0.32	=
8/11/2009	10.17	0.24	0.32	=
8/11/2009	10.29	0.24	0.32	=
8/12/2009	73.47	0.60	0.32	=
8/12/2009	75.40	0.61	0.32	=
8/13/2009	131.33	0.80	0.32	=
8/13/2009	133.05	0.80	0.32	=
8/14/2009	81.43	0.63	0.32	=
8/14/2009	82.21	0.63	0.32	=
8/18/2009	14.29	0.28	0.32	=
8/18/2009	15.39	0.29	0.32	=
8/19/2009	26.92	0.37	0.32	=
8/19/2009	28.49	0.38	0.32	=
8/20/2009	20.52	0.33	0.32	=
8/20/2009	21.17	0.33	0.32	=
8/22/2009	13.64	0.27	0.32	=
8/22/2009	14.74	0.28	0.32	=
8/29/2009	51.94	0.51	0.32	=
8/29/2009	52.13	0.51	0.32	=
8/30/2009	74.31	0.60	0.32	=
8/30/2009	75.29	0.61	0.32	=
8/31/2009	128.65	0.79	0.32	=
8/31/2009	130.76	0.80	0.32	=
9/1/2009	187.24	0.95	0.32	=
9/1/2009	190.20	0.96	0.32	=
9/2/2009	228.52	1.05	0.32	=
9/2/2009	231.18	1.05	0.32	=
9/3/2009	251.55	1.10	0.32	=
9/3/2009	251.98	1.10	0.32	=
9/4/2009	265.92	1.13	0.32	=
9/4/2009	269.91	1.14	0.32	=
9/5/2009	8.47	0.22	0.32	=
9/5/2009	8.90	0.23	0.32	=
9/6/2009	62.25	0.55	0.32	=
9/6/2009	63.00	0.56	0.32	=
9/7/2009	113.76	0.74	0.32	=
9/7/2009	113.86	0.74	0.32	=
9/8/2009	164.16	0.89	0.32	=
9/8/2009	164.64	0.89	0.32	=
9/9/2009	195.26	0.97	0.32	=
9/9/2009	199.64	0.98	0.32	=
9/10/2009	218.89	1.03	0.32	=
9/10/2009	226.76	1.04	0.32	=
9/11/2009	226.23	1.04	0.32	=
9/11/2009	240.68	1.08	0.32	=
9/12/2009	153.42	0.86	0.32	=
9/12/2009	154.61	0.86	0.32	=
9/13/2009	186.53	0.94	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
9/13/2009	188.57	0.95	0.32	=
9/18/2009	18.23	0.31	0.32	=
9/18/2009	18.63	0.31	0.32	=
9/19/2009	16.15	0.29	0.32	=
9/19/2009	16.72	0.30	0.32	=
9/20/2009	44.26	0.47	0.32	=
9/20/2009	44.41	0.47	0.32	=
9/21/2009	8.56	0.22	0.32	=
9/21/2009	8.76	0.23	0.32	=
9/22/2009	103.86	0.71	0.32	=
9/22/2009	104.16	0.71	0.32	=
9/23/2009	61.84	0.55	0.32	=
9/23/2009	63.13	0.55	0.32	=
9/24/2009	114.64	0.74	0.32	=
9/24/2009	115.49	0.74	0.32	=
9/25/2009	8.87	0.23	0.32	=
9/25/2009	9.16	0.23	0.32	=
9/26/2009	13.94	0.27	0.32	=
9/26/2009	14.46	0.28	0.32	=
9/27/2009	7.58	0.21	0.32	=
9/27/2009	7.84	0.22	0.32	=
9/28/2009	127.88	0.78	0.32	=
9/28/2009	128.42	0.78	0.32	=
9/29/2009	207.97	1.00	0.32	=
9/29/2009	209.41	1.00	0.32	=
9/30/2009	238.67	1.07	0.32	=
9/30/2009	241.15	1.08	0.32	=
10/1/2009	251.50	1.10	0.32	=
10/1/2009	251.80	1.10	0.32	=
10/2/2009	127.61	0.79	0.32	=
10/2/2009	127.81	0.79	0.32	=
10/3/2009	123.48	0.78	0.32	=
10/3/2009	124.50	0.78	0.32	=
10/4/2009	229.57	1.05	0.32	=
10/4/2009	229.59	1.05	0.32	=
10/5/2009	250.00	1.10	0.32	=
10/5/2009	252.53	1.11	0.32	=
10/6/2009	254.54	1.11	0.32	=
10/6/2009	256.01	1.11	0.32	=
10/7/2009	150.20	0.85	0.32	=
10/7/2009	154.40	0.87	0.32	=
10/8/2009	144.32	0.84	0.32	=
10/8/2009	145.82	0.84	0.32	=
10/9/2009	9.94	0.24	0.32	=
10/9/2009	10.75	0.25	0.32	=
10/10/2009	24.24	0.35	0.32	=
10/10/2009	24.61	0.36	0.32	=
10/11/2009	299.92	1.20	0.32	=
10/11/2009	302.73	1.21	0.32	=
10/21/2009	322.06	1.25	0.32	=
10/21/2009	340.26	1.28	0.32	=
10/22/2009	322.96	1.24	0.32	=
10/22/2009	326.16	1.25	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
10/23/2009	169.57	0.90	0.32	=
10/23/2009	170.08	0.90	0.32	=
10/24/2009	12.79	0.26	0.32	=
10/24/2009	12.98	0.27	0.32	=
10/25/2009	257.80	1.11	0.32	=
10/25/2009	257.81	1.11	0.32	=
10/26/2009	384.59	1.35	0.32	=
10/26/2009	386.03	1.36	0.32	=
10/27/2009	309.04	1.21	0.32	=
10/27/2009	309.58	1.21	0.32	=
10/28/2009	10.78	0.25	0.32	=
10/28/2009	11.52	0.25	0.32	=
10/29/2009	287.19	1.17	0.32	=
10/29/2009	288.93	1.17	0.32	=
10/30/2009	445.03	1.45	0.32	=
10/30/2009	446.70	1.46	0.32	=
10/31/2009	113.26	0.74	0.32	=
10/31/2009	114.30	0.74	0.32	=
11/1/2009	146.75	0.84	0.32	=
11/1/2009	146.77	0.84	0.32	=
11/2/2009	287.53	1.17	0.32	=
11/2/2009	289.59	1.17	0.32	=
11/3/2009	288.71	1.17	0.32	=
11/3/2009	291.55	1.18	0.32	=
11/4/2009	296.64	1.19	0.32	=
11/4/2009	298.68	1.19	0.32	=
11/5/2009	302.56	1.20	0.32	=
11/5/2009	303.06	1.20	0.32	=
11/6/2009	307.83	1.21	0.32	=
11/6/2009	310.59	1.22	0.32	=
11/7/2009	313.53	1.22	0.32	=
11/7/2009	313.71	1.22	0.32	=
11/8/2009	322.29	1.24	0.32	=
11/8/2009	322.85	1.24	0.32	=
11/9/2009	316.77	1.23	0.32	=
11/9/2009	317.30	1.23	0.32	=
11/10/2009	311.17	1.22	0.32	=
11/10/2009	311.98	1.22	0.32	=
11/11/2009	308.23	1.21	0.32	=
11/11/2009	308.80	1.21	0.32	=
11/12/2009	301.44	1.20	0.32	=
11/12/2009	303.78	1.20	0.32	=
11/13/2009	290.55	1.20	0.37	=
11/13/2009	293.99	1.20	0.37	=
11/14/2009	292.09	1.20	0.37	=
11/14/2009	294.50	1.21	0.37	=
11/15/2009	304.73	1.23	0.37	=
11/15/2009	305.66	1.23	0.37	=
11/16/2009	303.82	1.22	0.37	=
11/16/2009	306.89	1.23	0.37	=
11/17/2009	302.82	1.22	0.37	=
11/17/2009	302.89	1.22	0.37	=
11/18/2009	204.75	1.01	0.37	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
11/18/2009	206.68	1.01	0.37	=
11/19/2009	116.45	0.76	0.37	=
11/19/2009	116.46	0.76	0.37	=
11/20/2009	285.45	1.19	0.37	=
11/20/2009	286.74	1.19	0.37	=
11/21/2009	331.73	1.28	0.37	=
11/21/2009	334.65	1.28	0.37	=
11/22/2009	334.78	1.28	0.37	=
11/22/2009	341.84	1.30	0.37	=
11/23/2009	273.02	1.16	0.37	=
11/23/2009	275.92	1.17	0.37	=
11/24/2009	189.21	0.97	0.37	=
11/24/2009	189.73	0.97	0.37	=
11/25/2009	152.46	0.87	0.37	=
11/25/2009	153.96	0.88	0.37	=
11/26/2009	341.60	1.30	0.37	=
11/26/2009	343.30	1.30	0.37	=
11/27/2009	225.85	1.06	0.37	=
11/27/2009	227.25	1.06	0.37	=
11/28/2009	382.50	1.37	0.37	=
11/28/2009	382.98	1.37	0.37	=
11/29/2009	408.11	1.42	0.37	=
11/29/2009	410.52	1.42	0.37	=
11/30/2009	130.02	0.81	0.37	=
11/30/2009	130.66	0.81	0.37	=
12/1/2009	308.94	1.23	0.37	=
12/1/2009	309.08	1.23	0.37	=
12/2/2009	216.63	1.04	0.37	=
12/2/2009	216.70	1.04	0.37	=
12/3/2009	144.67	0.85	0.37	=
12/3/2009	145.03	0.85	0.37	=
12/4/2009	429.77	1.45	0.37	=
12/4/2009	432.64	1.46	0.37	=
12/5/2009	454.47	1.54	0.36	=
12/5/2009	455.25	1.55	0.36	=
12/6/2009	140.50	0.86	0.36	=
12/6/2009	140.66	0.86	0.36	=
12/7/2009	463.14	1.56	0.36	=
12/7/2009	464.17	1.56	0.36	=
12/8/2009	453.41	1.54	0.36	=
12/8/2009	454.70	1.55	0.36	=
12/9/2009	131.15	0.83	0.36	=
12/9/2009	131.99	0.84	0.36	=
12/10/2009	34.17	0.44	0.36	=
12/10/2009	35.40	0.44	0.36	=
12/11/2009	158.12	0.92	0.36	=
12/11/2009	158.34	0.92	0.36	=
12/12/2009	180.32	0.92	0.32	=
12/12/2009	181.29	0.93	0.32	=
12/13/2009	192.71	0.95	0.32	=
12/13/2009	193.38	0.96	0.32	=
12/14/2009	36.35	0.42	0.32	=
12/14/2009	36.96	0.43	0.32	=

Collection Date	HTO (pCi/ml)	CU (pCi/ml)	MDA (pCi/ml)	Validation Code
12/15/2009	170.61	0.90	0.32	=
12/15/2009	170.82	0.90	0.32	=
12/16/2009	200.52	0.97	0.32	=
12/16/2009	204.43	0.98	0.32	=
12/17/2009	241.30	1.07	0.32	=
12/17/2009	241.40	1.07	0.32	=
12/18/2009	123.06	0.76	0.32	=
12/18/2009	124.03	0.77	0.32	=
Average	139.91			
Minimum	3.67			
Maximum	464.17			
Stdev	103.48			

APPENDIX 4. Figures.

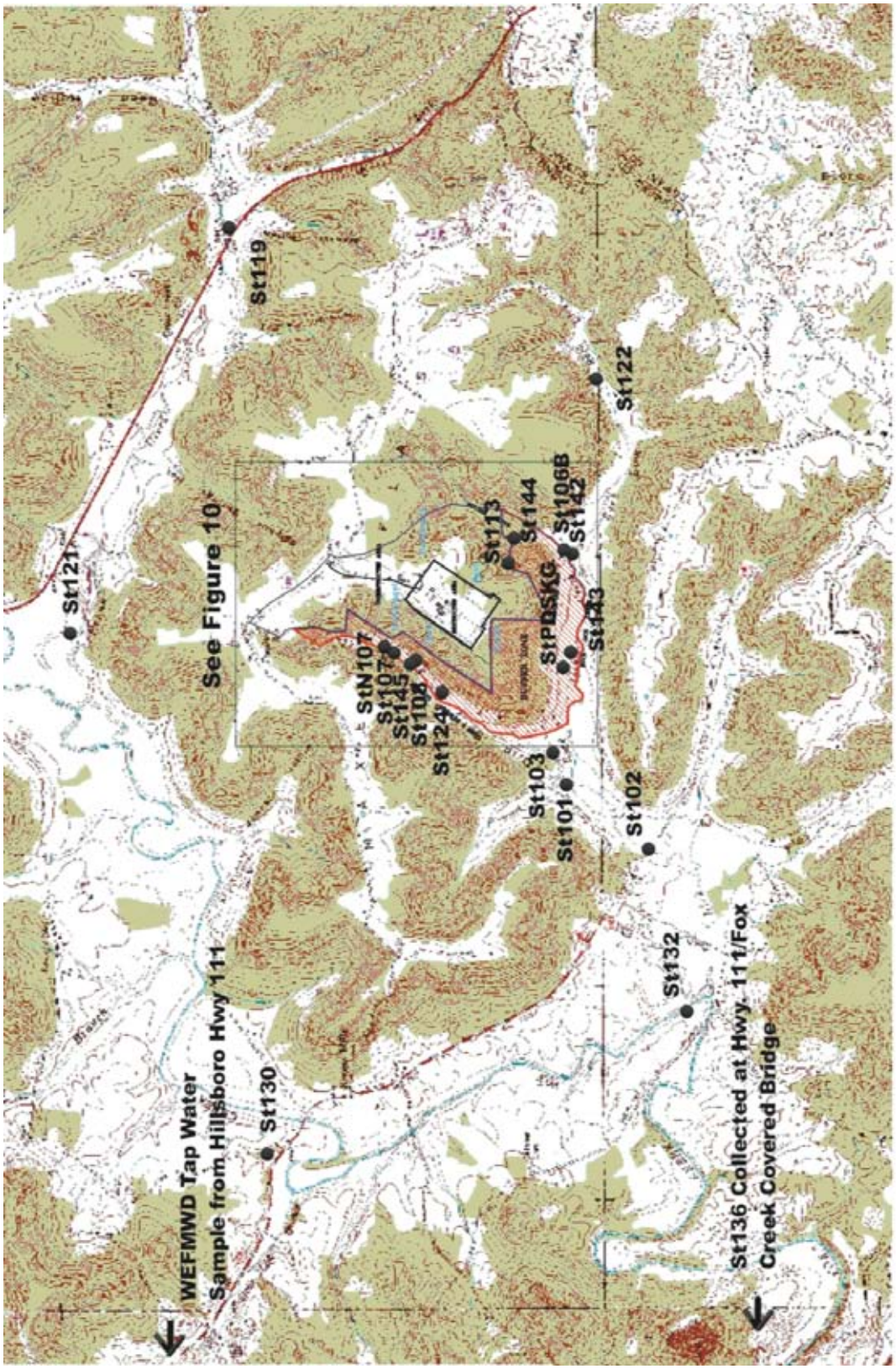

Figure 1. Background and off-site surface water sampling locations

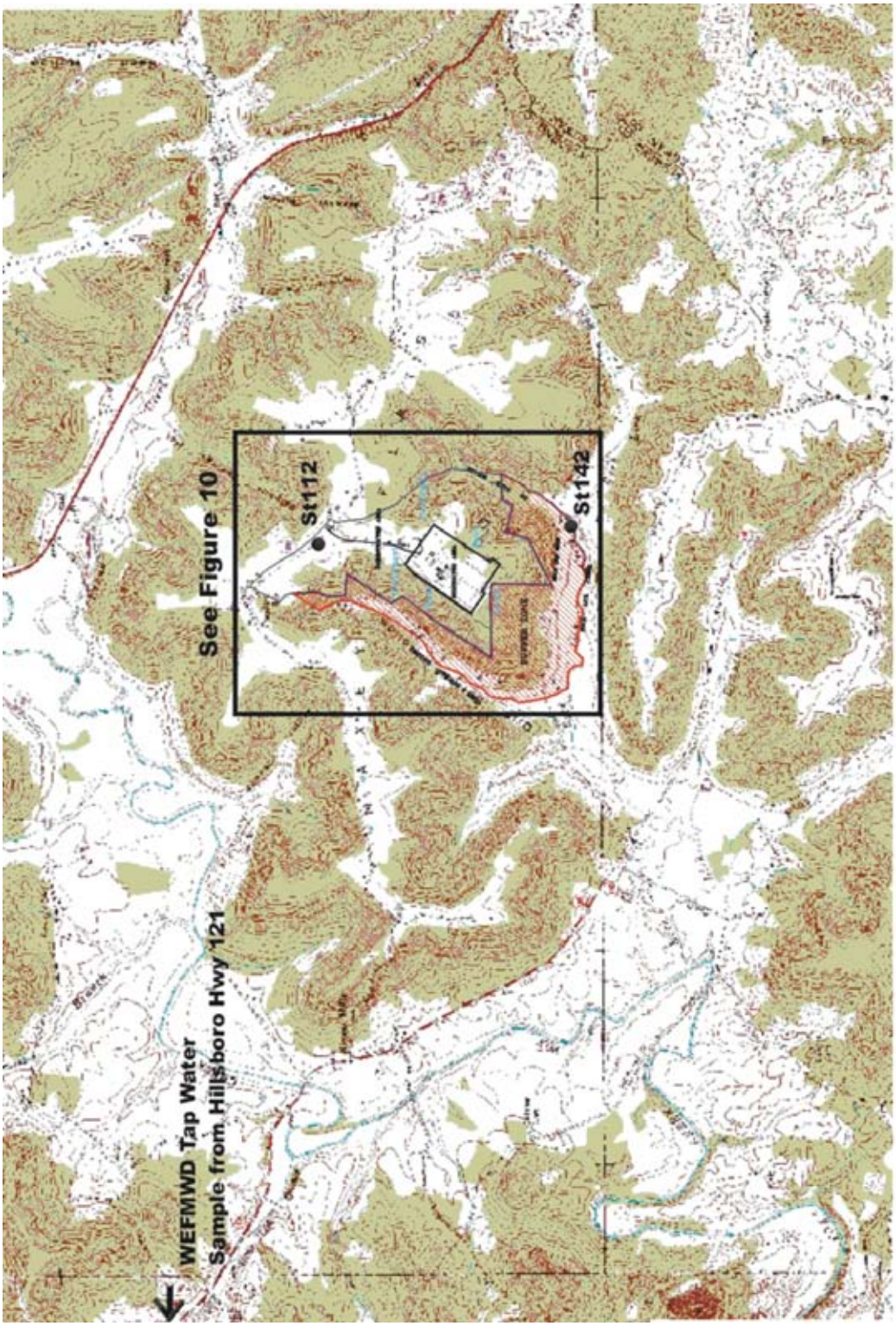

Figure 2. Background and off-site groundwater and drinking water locations

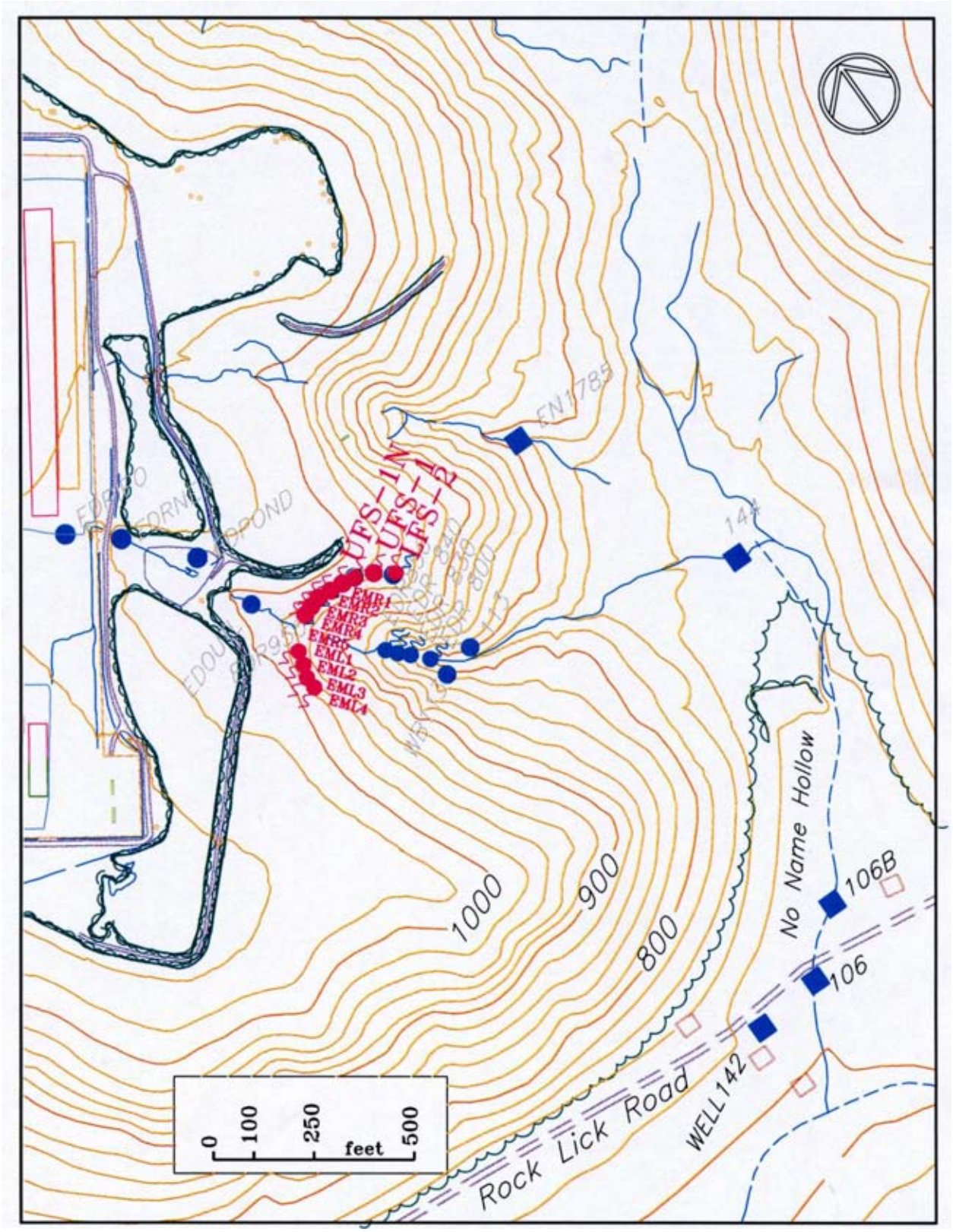

Figure 3. East Drain Hillside seep sampling locations.

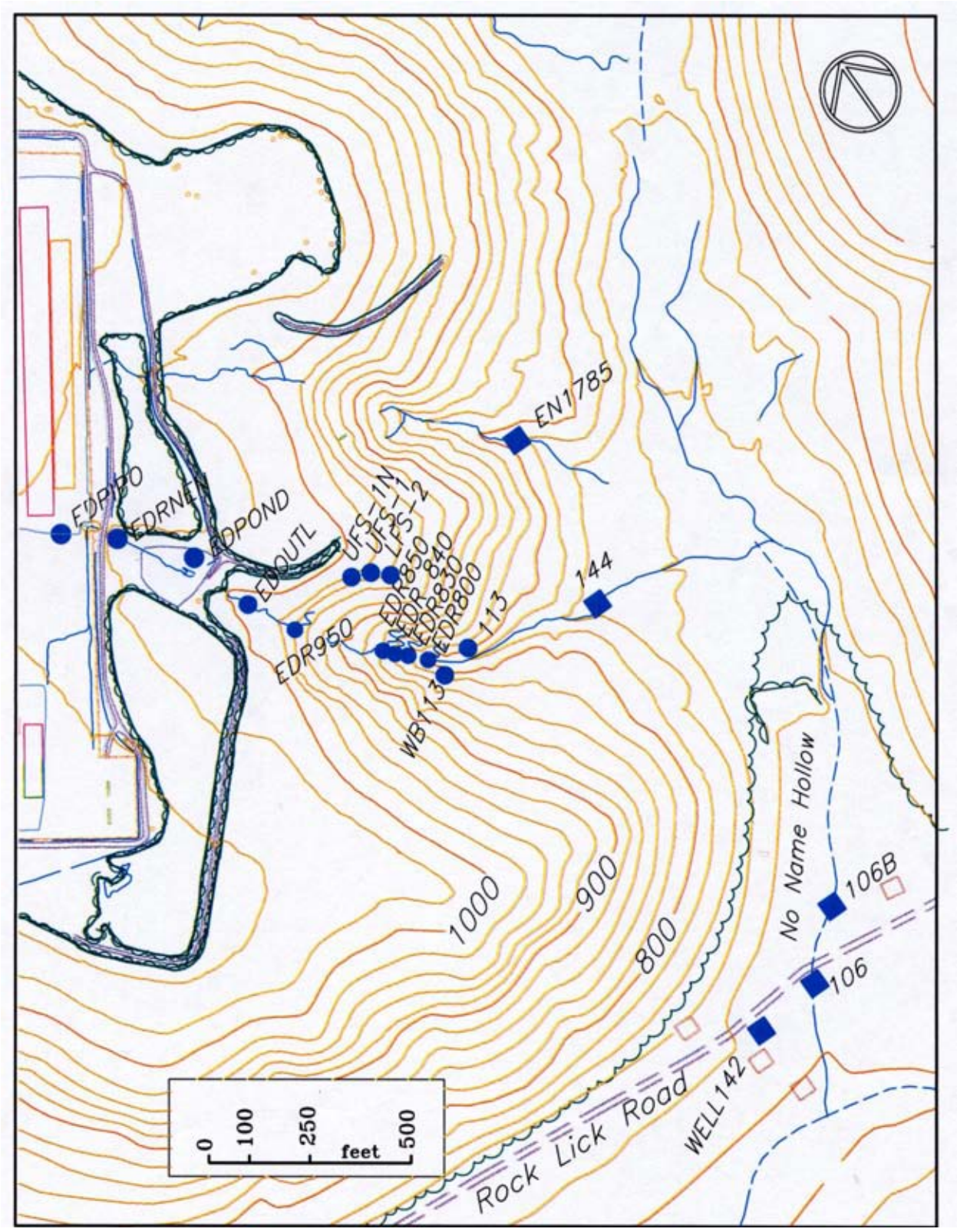

Figure 4. East Drain Hillside surface-water sampling locations.

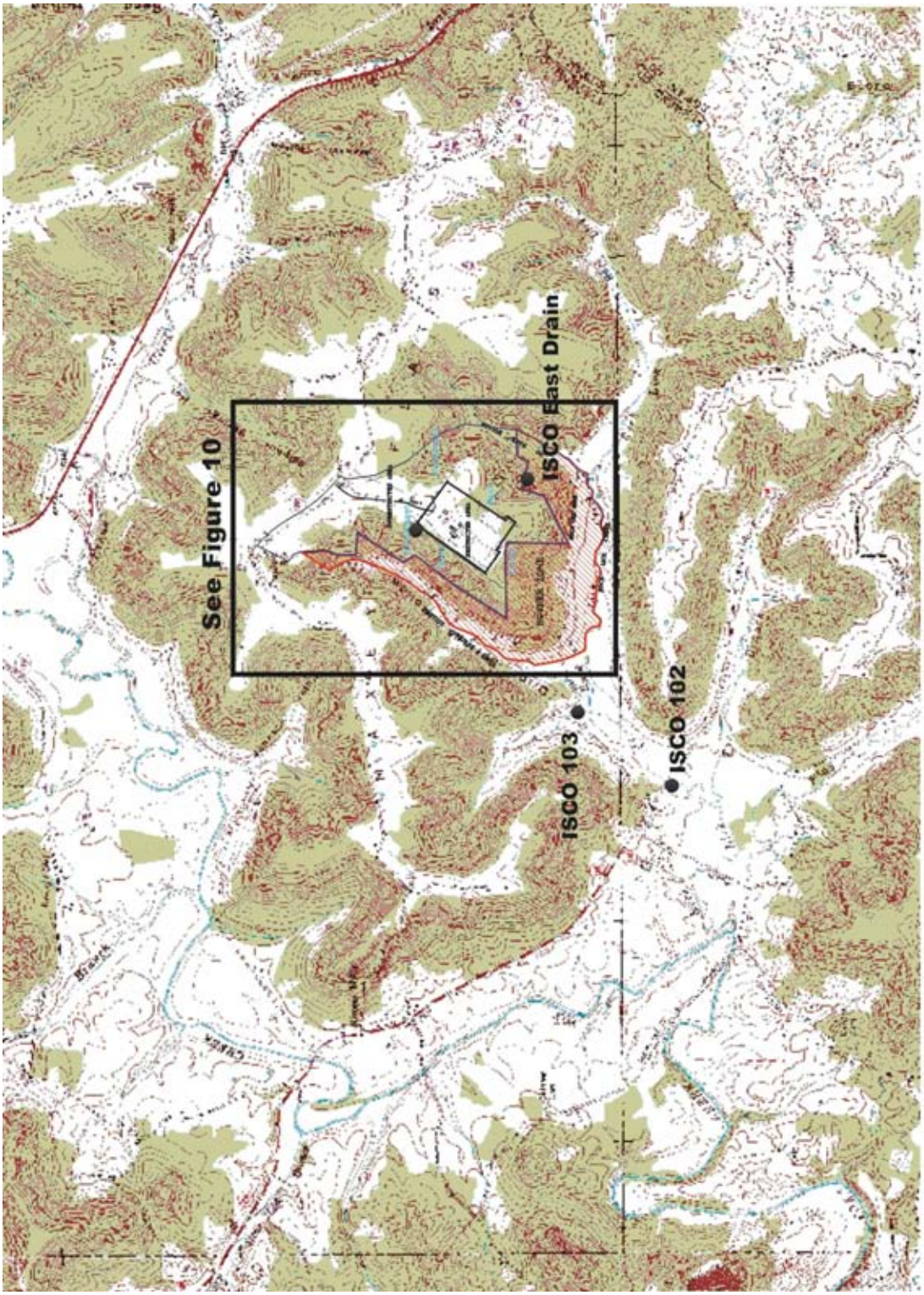

Figure 5. Automated surface water sampling locations (ISCO East Drain = EDRN)

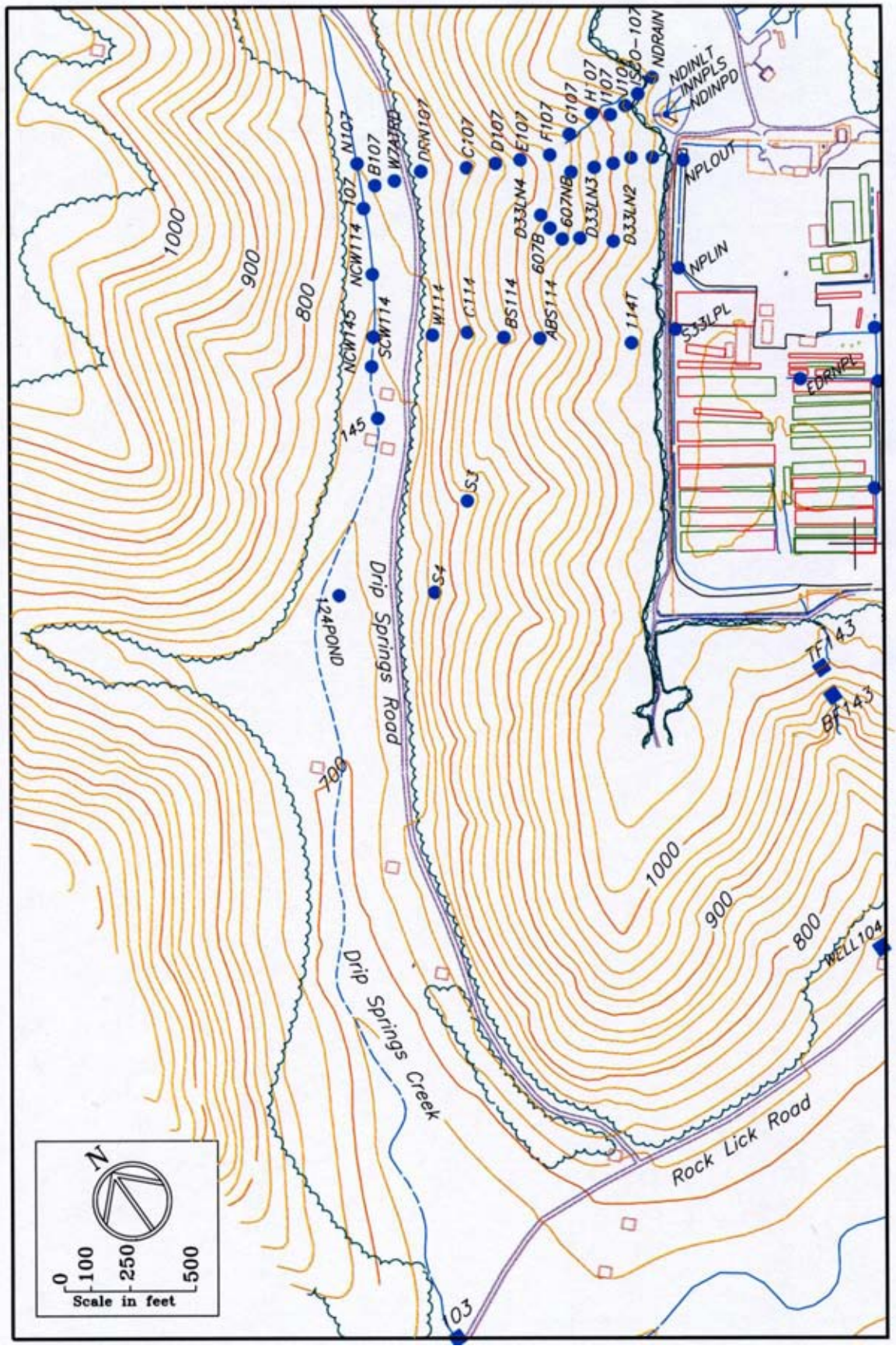

Figure 6. West Hillside surface-water sampling locations.

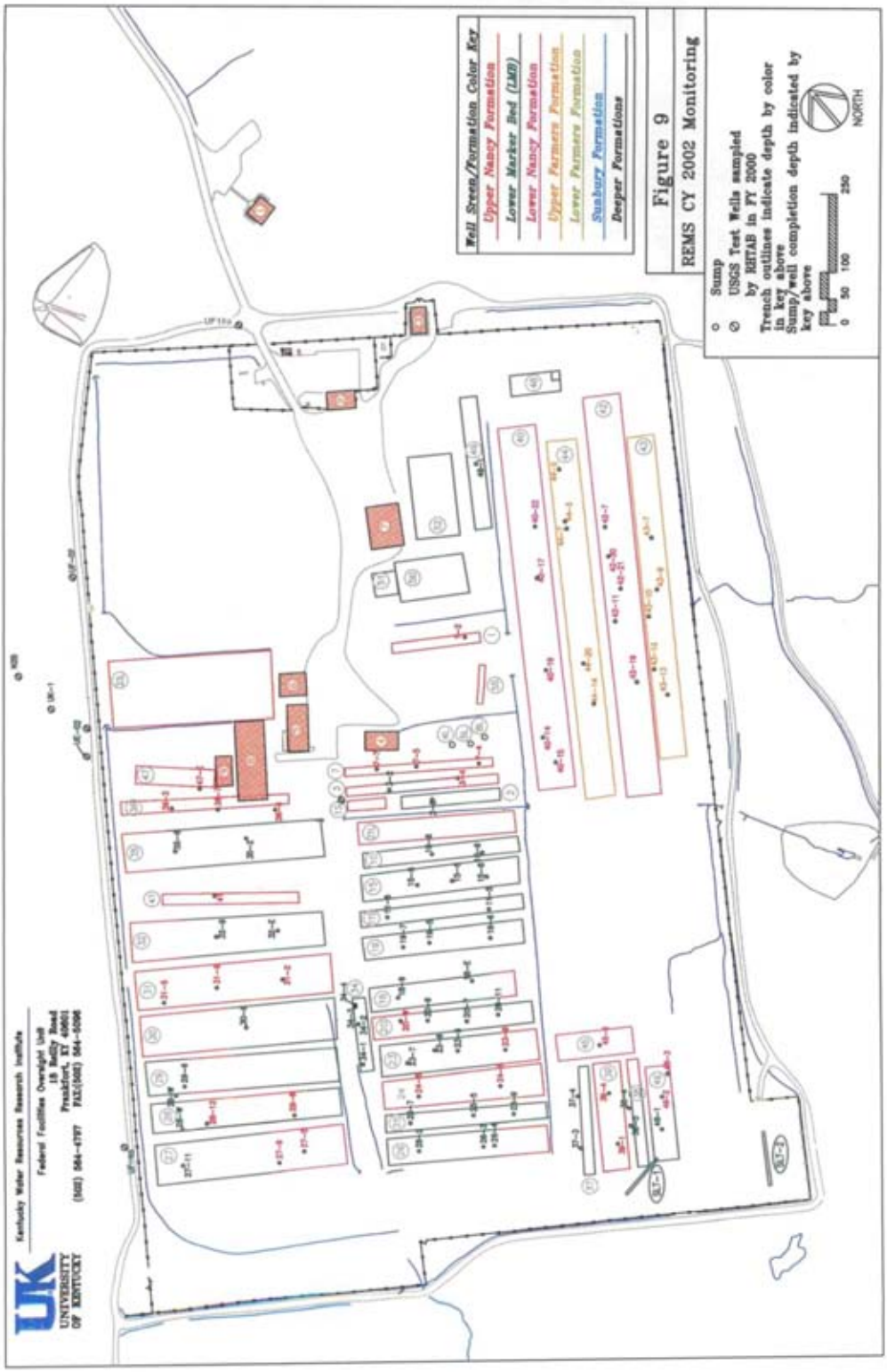

Figure 7. USGS Test Well Sampled in CY 2009

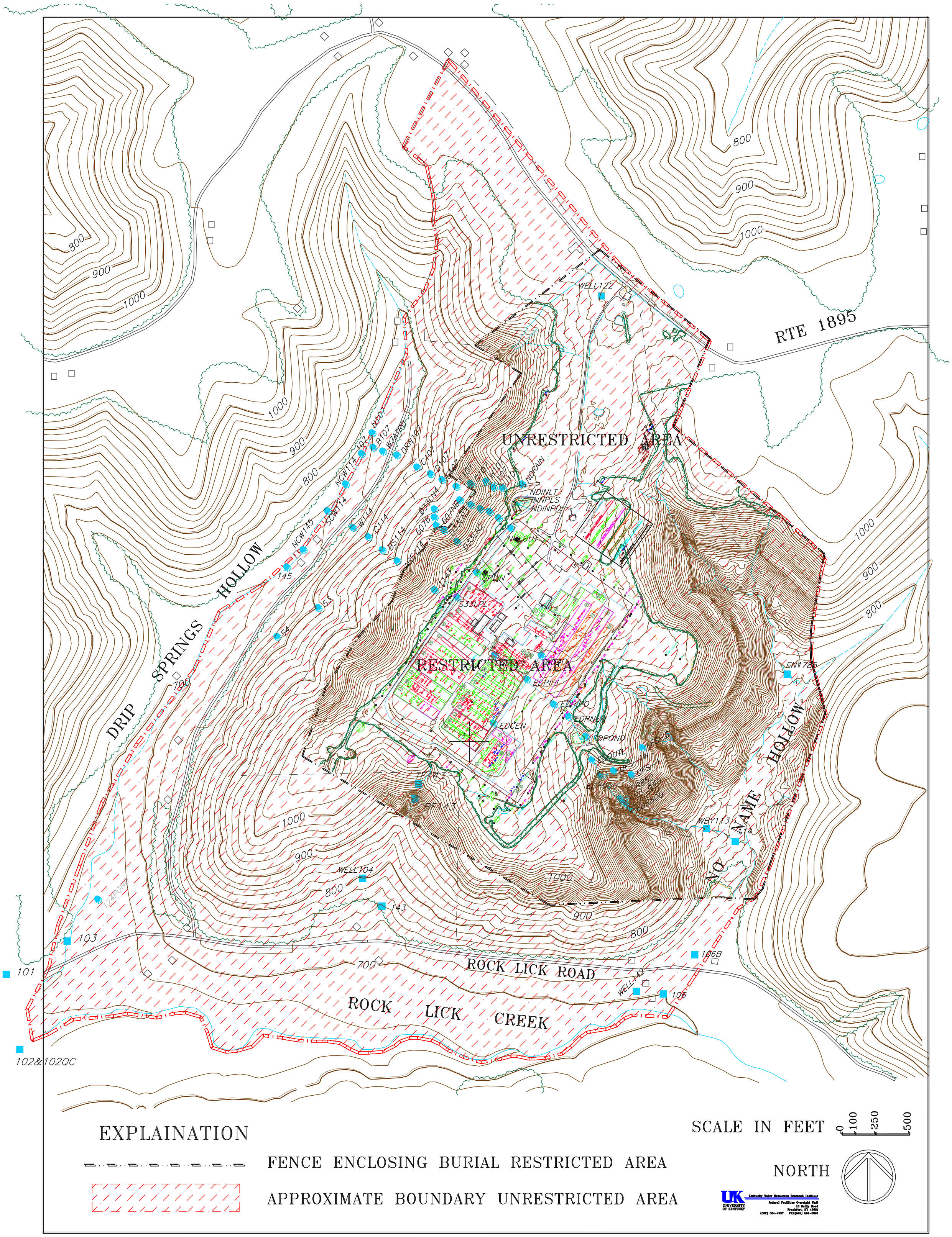

Figure 8. Maxey Flats Nuclear Disposal Site Area Map.

APPENDIX 5 – Maxey Flats Data Summaries